

189470

Investigating Fatal Child Abuse and Neglect

Performed Under Contract
Fox Valley Technical College
Criminal Justice Department
Appleton, Wisconsin

Acknowledgments

The *Investigating Fatal Child Abuse and Neglect* training program was jointly developed by the United States Department of Justice, Office of Juvenile Justice and Delinquency Prevention and Fox Valley Technical College, Appleton, Wisconsin.

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INVESTIGATING FATAL CHILD ABUSE AND NEGLECT

Agenda

Day One

8:00 a.m. – 8:30 a.m.

**Welcome
Announcements
Introduction of Students**

8:30 a.m. - 12:00 noon

Overview of Fatal Child Abuse and Neglect

This module will provide the students with information on an overview of fatal child abuse and neglect. This will include a review of current statistics and the reasons why true prevalence of fatal maltreatment is probably underestimated. The differences between fatal maltreatment and typical homicides will be discussed. The most common type of fatal child abuse and fatal neglect cases will be illustrated using case examples. Sudden Infant Death Syndrome will be discussed.

12:00 noon - 1:00 p.m.

Lunch Break

1:00 p.m. - 4:30 p.m.

Continuation of Overview of Fatal Child Abuse and Neglect

Day Two

8:00 a.m. - 12:00 noon

Investigation of Fatal Child Abuse and Neglect

This module will provide the students with information on the investigation of fatal child abuse and neglect. This will include information on the initial response as well as the subsequent interviews of witnesses and medical professionals. The importance of report writing and courtroom testimony will be discussed. Actual case examples will be used to demonstrate the learning objectives.

12:00 noon - 1:00 p.m.

Lunch Break

Day Two (continued)

1:00 p.m. – 2:00 p.m.

Continuation of Investigation of Fatal Child Abuse and Neglect

2:00 p.m. - 2:15 p.m.

Break

2:15 p.m. - 4:30 p.m.

Crime Scene and Forensic Evidence

This module will demonstrate the forensic evidence found at the crime scene, at the death location, and the vehicles used to transport the child. The evidence value will be demonstrated to help solve the cases.

Day Three

8:00 a.m. - 10:00 a.m.

The Role of CPS in Child Fatality and Homicide Investigations

This module will provide discussion on the role of Child Protective Services in the investigation of child fatality and homicide investigations and demonstrate the importance of conducting joint investigations between law enforcement and social work. This module will also illustrate the necessity for open communication and dialog between all agencies involved in a multi-disciplinary approach to the service provision and prosecution of such cases.

10:00 a.m. –10:15 a.m.

Break

10:15 a.m. –12:00 noon

Conducting Interviews and Interrogations in Child Fatality Cases

This module will discuss investigative techniques and strategies necessary for building a solid criminal case against the perpetrator. The instructor will provide the students with an overview and understanding of the problems and dynamics encountered by investigators in child fatality investigations. Topics to be covered include: Miranda vs. non-Miranda issues, custodial vs. non-custodial interviews, methodology of detailed fact gathering to which helps establish care, custody and control issues, taped interviews vs. non-taped interviews, themes of interviews to pursue, documenting inconsistencies, and recognizing clinical indicators during the interview.

12:00 noon – 1:00 p.m.

Lunch Break

Day Three (continued)

1:00 p.m. - 2:00 p.m.	<i>Continuation of Conducting Interviews and Interrogations in Child Fatality Cases</i>
2:00 p.m. - 2:15 p.m.	Break
2:15 p.m. - 4:30 p.m.	Medical Aspects of Child Fatality Investigations The instructor will describe the basic anatomy of the various organ systems, the bio-mechanical nature of injuries to these organs, and the approach to distinguishing between accidental and inflicted injuries. By looking at the medical reasons for child deaths, the instructor will describe the approach to recognizing and diagnosing child fatalities. The instructor will explain the significance of the findings at autopsy of child victims of abuse and neglect.

Day Four

8:00 a.m. – 12:00 noon	<i>Continuation of Medical Aspects of Child Fatality Investigations</i>
12:00 noon - 1:00 p.m.	Lunch Break
1:00 p.m. - 4:30 p.m.	Prosecution of Child Fatalities The instructor will present issues (common and not so common) arising from the investigation and prosecution of fatal child abuse and neglect cases. This module will demonstrate the significance of the prosecutor-investigator team in child fatality investigations and the relationship between the prosecutor and child support constituencies. It will also cover salient aspects of child fatality prosecutions from investigation through trial and sentencing.

Day Five

8:00 a.m. – 10:00 a.m.	<i>Continuation of Prosecution of Child Fatalities</i>
10:00 a.m. – 10:15 a.m.	Break

Day Five (continued)

10:15 a.m. – 11:45 a.m.

Case Management and Model Approaches to Inter-Agency Collaboration

This module is designed to provide students with information and model approaches to aid them in the development of internal and community based collaborative systems to improve their response to a wide range of child protection issues. While child fatalities represent an important area for cooperation between agencies, this module expands the students' focus to include a wide range of child protection issues that should be incorporated into a comprehensive community-based collaborative approach.

11:45 a.m. -

Evaluations Closing

In order to receive the attendance certificate, participants are expected to participate in all sections. Any exceptions to this policy must be approved by the Fox Valley Technical College representative on site.

**Fox Valley Technical College
800-648-4966**

INVESTIGATING FATAL CHILD ABUSE AND NEGLECT

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7. Prosecution of Child Fatalities
8. Case Management and Model Approaches to Inter-Agency Collaboration

INVESTIGATING FATAL CHILD ABUSE AND NEGLECT

Mission Statement

The purpose of this training is to provide professionals from law enforcement, child protective services, victim witness, child advocacy centers, medical/nursing/EMS, prosecutorial/legal, and coroner/justice of peace/medical examiner with comprehensive training on the detection, intervention, investigation, and prosecution of cases involving fatal child abuse and neglect.

Overview of Fatal Child Abuse and Neglect

Investigating Fatal Child Abuse and Neglect

*Presented by
Lt. Bill Walsh
Dallas Police Department*

CPD/Cheney-Walsh

Mom charged with killing 2 girls

**Mom Pleads Guilty To
Killing Her 6 Children**

**Father Charged In
Slaying Of Girl, 6**

**Man Held
In Death
Of Toddler**

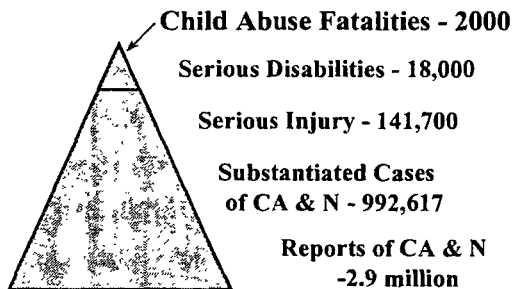
Mother receives 20 years in toddler's death

**Baby bathed 35 years in son's death
in scalding water dies**

**Child abuse deaths up
71% in '98, study finds**

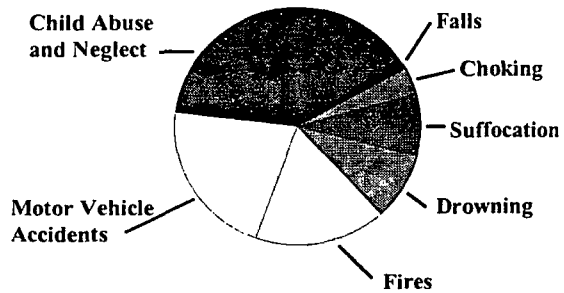
CPD/Cheney-Walsh

A Nation's Shame



CPD/Cheney-Walsh

A Nation's Shame



Overview of Child Maltreatment

◆ From 1993-97

- overall crime rate decreased 21%
- reports of child abuse increased by 8%

Overview of Child Maltreatment

◆ National Crime Victimization Study * per 1,000 U.S. households:

- 8 aggravated assaults
- 13 car thefts
- 4.2 robberies
- 1.5 rapes
- 47 child abuse incidents

* 1998

Overview of Fatal Abuse

- ◆ Estimated that 1200 children die of abuse or neglect per year (some say 2000 per year)
- ◆ Approximately 4 children per day
 - 75 % are less than 4 yrs. old
 - 40 % are less than 1 yrs. old

CPS Chapman-Walsh 3.7

Table 3
Breakdown of Child Maltreatment Fatalities:
% Distribution by Category

	1996	1997	1998	Average
Prior or Current Contact with CPS	42% (21 states)	41% (22 states)	36% (19 states)	40%
Deaths due to Neglect	40% (29 states)	42% (32 states)	45% (26 states)	42%
Deaths Due to Abuse	55% (29 states)	51% (32 states)	51% (26 states)	52%
Deaths Due to Neglect and Abuse	5% (29 states)	7% (32 states)	4% (26 states)	5%
Deaths to Children under Five Years Old	81% (28 states)	78% (31 states)	78% (26 states)	79%
Deaths to Children under One Year Old	40% (27 states)	38% (31 states)	38% (26 states)	39%

1998 50 State Survey by Prevent Child Abuse America

CPS Chapman-Walsh 4

Overview of Fatal Abuse

- ◆ Child homicide cases are increasing
 - homicide rate for children under 4 yrs. old is at 40 year high
(Population Reference Bureau cited in A Nations' Shame)
 - the rate of child maltreatment fatalities confirmed by CPS agencies has risen steadily over past 12 years
(1998 Prevent Child Abuse America)

CPS Chapman-Walsh 5

Fatal Abuse Statistics

- ◆ Under reporting or different reporting criteria
 - Law enforcement - UCR system
 - CPS agencies – state central registries
 - Medical community - death certificates

CPH-100000-WAbk-10

Fatal Maltreatment in California

- ◆ Audit by California State Child Death Review Council of 1996 child deaths found:
 - 137 abuse/neglect related deaths in the Crime Reports Homicide File
 - 62 deaths as abuse/neglect related in the Vital Statistics Death Records
 - 52 abuse/neglect related deaths in the Child Abuse Central Index
- ◆ They concluded there were actually **152** abuse/neglect related deaths that year

CPH-100000-WAbk-11

Fatal Abuse Statistics

- ◆ Numbers may only reflect cases known to CPS agencies

CPH-100000-WAbk-12

Fatal Abuse Statistics

- ◆ **1998 Annual Fifty State Survey**
 - No estimate for fatalities in 1998
 - Only 37 states were able to provide fatality data for 1998

CTA Document: Wabsh-1

Fatal Abuse Statistics

- ◆ **Failure to recognize abuse and neglect related deaths**
 - no autopsy
 - no national standards for child autopsies or child death investigations
 - no medical examiner system in some states
 - accident vs. neglect vs. criminal neglect

CTA Document: Wabsh-1

Nationally, medical professionals have conducted at least three detailed studies of children's deaths from external causes over the last two decades. Each, using data from such differing locales as Chicago, New York City and Missouri, has found that deaths from maltreatment have been underreported by at least 50 percent.

CTA Document: Wabsh-1

Fatal Abuse Statistics

- ◆ **North Carolina Study** (JAMA 8/4/99)
 - Retrospective study of child abuse homicides from 1985-1994
 - 60% of homicides incorrectly coded by vital statistics
 - Estimated nationally there were 6494 more child abuse homicides in 1985-1996 than indicated in vital statistics

CPL/Andrew Walsh-16

Fatal Abuse Statistics

- ◆ Lack of information sharing among agencies
- ◆ Improper death investigations
- ◆ Professional denial of incidence of fatal abuse

CPL/Andrew Walsh-17

Fatal Abuse Statistics

- ◆ Child's disappearance may not be known or properly investigated
- ◆ Child's body may not be found

CPL/Andrew Walsh-18

Fatal Abuse Statistics

- ◆ Child's disappearance may not be known or properly investigated
- ◆ Child's body may not be found
- ◆ Parent's may fabricate child's abduction

CT1-Overview-10444-12

Increase in Fatal Cases

- ◆ Increased professional expertise in all involved disciplines
 - Law enforcement, CPS, Medical, DA's
 - » seminars, articles
- ◆ More autopsies being conducted

CT1-Overview-10444-20

Increase in Fatal Cases

- ◆ Increased risk factors for children
 - substance abuse, crack cocaine, economy, family isolation
- ◆ More Child Death Review Teams
 - State
 - Local
 - National Center on Child Fatality Review

CT1-Overview-10444-21

Fatal Abuse Victims

- ◆ **Physical development**
 - much smaller than caretakers
- ◆ **Unique anatomy**
- ◆ **Lack of verbal skills**

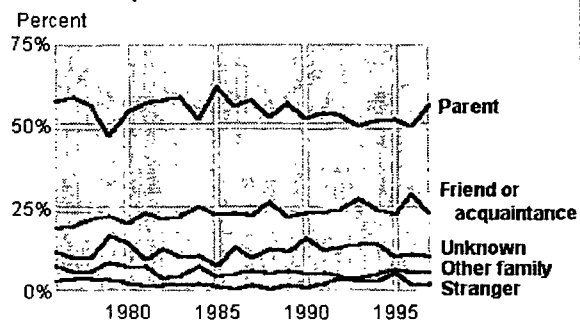
CPJ, Domestic Violence 22

Fatal Abuse Victims

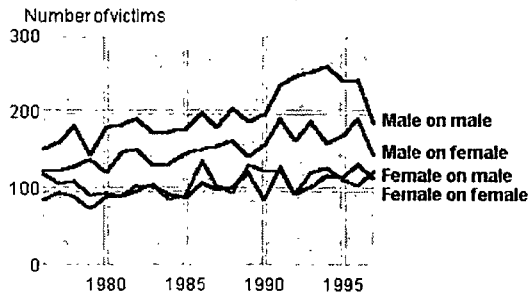
- ◆ **Total dependence on caretaker**
 - children must be fed, supervised
- ◆ **Relative social isolation**
 - too young for school, church, sports

CPJ, Domestic Violence 23

Homicides of children under age 5 by relationship with the offender, 1976-97



Homicides of children under age 5 by gender of victim and offender, 1976-97



CTE Answer: Web 21

Neonaticide

- ◆ Defined as the murder of a child within the first 24 hrs. of life by act or omission
- ◆ Usually committed by mother alone
- ◆ Child usually not physically assaulted

CTE Answer: Web 26

Neonaticide

- ◆ May or may not have been intent for child to die
- ◆ Child may die from:
 - exposure to weather
 - drowning
 - smothering
 - starvation
 - animal attack

CTE Answer: Web 27

Neonaticide

- ◆ If child found, burden of proof is to prove child was born alive, not stillborn

CT1-Current-Mid6-79

Abuse Related Deaths

- ◆ Chronic abuse
 - » child abused over time, dies from combination of injuries or a head injury
- ◆ Impulsive abuse
 - » child dies incident to assault or after a period of time

CT1-Current-Mid6-79

Neglect Related Deaths

- ◆ Physical neglect
- ◆ Medical neglect
- ◆ Negligent supervision

CT1-Current-Mid6-79

Abuse Related Deaths

- ◆ As children get older,
 - the list of possible offenders increases
 - and the causes of death vary

CTA Course: Module 11

Abuse Related Deaths

CARETAKERS FOR NEWBORNS

Mother (Girlfriend)



Father (Boyfriend)

CTA Course: Module 11

Abuse Related Deaths

MORE CARETAKERS AS THE CHILD GETS OLDER

Mother Siblings Baby-sitters Daycare Staff



Father Relatives Friends Neighbors

CTA Course: Module 11

Abuse Related Deaths

NEWBORNS AND INFANTS

Abandonment

● —————→ TIME

Head Injuries

CTE Curriculum Module 11

Abuse Related Deaths

AS THE CHILD GETS OLDER

Abandonment Suffocation Burn Injuries

● —————→ TIME

Head Injuries Abdominal
Injuries Negligent
Supervision

CTE Curriculum Module 11

Abuse Related Deaths

- ◆ **Craniocerebral trauma (head) is the most common cause of death in physically abused children**
- ◆ **Internal injuries are the second leading cause of death, often found in older children**

CTE Curriculum Module 11

Typology

- ◆ Battered Child
- ◆ Impulse or Anger Homicide
- ◆ Punished Child
- ◆ Gentle Homicide
- ◆ Neglect Deaths

CTFL Classroom 11/16/16, 17

Fatal Child Abuse vs. Homicide

- ◆ Usually no witnesses, or accomplices
 - may have someone who failed to protect, report
 - no opportunity to turn accomplices against one another

CTFL Classroom 11/16/16, 18

Fatal Child Abuse vs. Homicide

- ◆ Usually no weapon involved
 - hands, feet, shaking, hot water, starvation, drowning
 - no physical evidence to connect weapon to suspect

CTFL Classroom 11/16/16, 19

Fatal Child Abuse vs. Homicide

◆ Usually little physical evidence

- no fingerprints
- No blood splatters
- no DNA
- no trace evidence

CT14070000-10000-01

Fatal Child Abuse vs. Homicide

◆ Difficult to prove motive or intent

- why would someone hurt a baby?
- was it intentional?
- was it reckless?
- was it an accident?
- was it neglect?
- does it qualify as criminal neglect?

CT14070000-10000-01

Fatal Child Abuse vs. Homicide

◆ Prosecution depends heavily on
medical evidence

- confusing, technical testimony for jury
- testimony and opinions of several medical specialists
- may be decided by “battle of the medical experts”

CT14070000-10000-01

Fatal Child Abuse vs. Homicide

- ◆ Prosecution depends on proving a circumstantial evidence case
 - only the defendant could have committed the fatal abuse
 - guilt must be *“beyond a reasonable doubt”*
 - Defense only has to convince there is another explanation or another responsible party

CTH/terrym/10/06/07

Fatal Child Abuse vs. Homicide

- ◆ Victim may not have visible external injuries
 - death may appear natural
 - autopsy may not be conducted
 - delay in investigation starting

CTH/terrym/10/06/07

Fatal Child Abuse vs. Homicide

- ◆ Investigation complicated by CPS involvement
 - requires coordination and communication between police and CPS
 - different agency missions and goals
 - different decision making processes

CTH/terrym/10/06/07

Fatal Child Abuse vs. Homicide

- ◆ Investigation may be conducted by someone unfamiliar with dynamics of child abuse and death investigation
- ◆ Deceased child may be moved from the location

CPA/Coroner/Website

Battered Child Syndrome

- ◆ Repeated acts of intentional trauma inflicted on young children that are clearly identifiable as non-accidental
- ◆ Child tends to have injuries about the head, commonly it is the cause of death

CPA/Coroner/Website

Battered Child Syndrome

- ◆ Child may have concurrent evidence of neglect, malnourishment, old injuries
- ◆ Battered Child Syndrome evidence is admissible in court
 - Estelle v. Mc Guire, 1991, 112 US 475

CPA/Coroner/Website

Battered Child Syndrome

- ◆ May delay seeking medical attention
- ◆ Caretakers' explanation for injuries is vague, and/or inconsistent
- ◆ Caretakers may blame injury on child's clumsiness, other siblings, accident

CTC Course Workbook

Battered Child Syndrome

- ◆ Caretakers' history provided to medical staff is not consistent with clinical findings
- ◆ Child may or may not be a singled out or "targeted" for abuse

CTC Course Workbook

Impulse or Anger Homicides

- ◆ Sudden, impulsive act of violent assault resulting in fatal injuries to the child
 - shaking
 - punching and/or kicking
 - striking with an object
 - throwing

CTC Course Workbook

Impulse or Anger Homicides

- ◆ Aside from fatal injuries, child may appear relatively well cared for and normal
- ◆ May be a delay in seeking medical attention
- ◆ Caretakers' history provided to medical staff is not consistent with clinical findings

CT147 Impulse or Anger Homicides 22

Impulse or Anger Homicides

- ◆ Important to *“lock”* caretakers into their story early in the investigation
- ◆ Important that caretakers not be alerted to the implausibility of their story

CT147 Impulse or Anger Homicides 31

Impulse or Anger Homicides

- ◆ Impulse murders may be more common than Battered Child cases
- ◆ Offenders very likely to confess if handled properly

CT147 Impulse or Anger Homicides 34

Shaken Baby Syndrome

- ◆ SBS results from severe, repetitive shaking
- ◆ Injury may occur w/o impact to the skull
- ◆ Crying is often cited as the *"trigger event"*

CT1-Quizzes-Midb-11

Shaken Baby Syndrome

- ◆ Major injury is to child's brain from violent shaking
- ◆ Rapid angular acceleration-deceleration forces
- ◆ Child usually held by upper arms or chest facing caretaker

CT1-Quizzes-Midb-16

Shaken Baby Syndrome

- ◆ Force needed is severe, requires upper body strength
- ◆ Fatal in @ 25 % of the cases
- ◆ Observer would know that the forces involved were severe and life threatening

CT1-Quizzes-Midb-17

Shaken Baby Syndrome

◆ Medical findings include:

- Bilateral retinal hemorrhages (90% of time)
- Subdural or Subarachnoid hemorrhages
- Cerebral edema (brain swelling)
- Shearing of nerve fibers in brain white matter (Diffuse axonal injury)
- “Black Brain” on MRI or CT scan
- bruises and other external signs of abuse
- Skull fracture

CTD-Coverman-Walsh 34

Shaken Baby Syndrome

◆ After the assault, there is almost always an immediate change in the child's condition, symptoms include;

- loss of alertness and/or consciousness
- inability or unwillingness to eat, vomiting
- irritability, unresponsiveness, lethargy
- breathing difficulties
- coma and/or seizures
- death

CTD-Coverman-Walsh 34

Abusive Head Trauma

◆ Craniocerebral trauma (head) is the most common cause of death in physically abused children

- second only to MV related injuries as a cause of death in children

CTD-Coverman-Walsh 34

Abusive Head Trauma

- ◆ Injuries may not be externally visible
- ◆ Child may present clinically with:
 - vomiting, inability or unwillingness to eat
 - drowsiness, irritability
 - respiratory problems
 - coma, shock, seizure

CTU/Donner-Winkel

Abusive Head Trauma

- ◆ There is no specific diagnostic pattern of inflicted head trauma.
- ◆ Diagnosis is based on the history and the clinical findings

CTU/Donner-Winkel

Abusive Head Trauma

- ◆ Children's unique anatomy makes them especially vulnerable :
 - relatively large head & brain with high water content
 - more space between brain and skull
 - child's weight
 - undeveloped neck muscles

CTU/Donner-Winkel

Head Injuries

- ◆ A child that has “raccoon eyes” may actually have a head injury at the base of the skull.

CTH-Coverage-Walk-4d

“Red Flag” Stories from Caretakers

- ◆ Child was unexpectedly found dead, but not consistent with SIDS
- ◆ Child suddenly turned blue, stopped breathing
- ◆ Child suffered a sudden seizure event
- ◆ Child was hurt by improper CPR
- ◆ Child hurt themselves, or hurt by sibling

CTH-Coverage-Walk-4d

“Red Flag” Stories from Caretakers

- ◆ Child was killed falling down stairs
- ◆ Child fell from a low height (< 4 ft.)
- ◆ Child was hit on head by a fallen object
- ◆ Child was choking so caretaker shook/hit the child on the back

CTH-Coverage-Walk-4d

Fatal Falls

- ◆ Dr. Chadwick's trauma center study
 - 317 children <5 yrs.
 - » 7 deaths in 100 children involving falls < 4 ft.
 - » 1 death in 118 children involving falls 10-45 ft.

CTV-Coverage-Walks-17

Fatal Falls

- ◆ Dr. Chadwick's trauma center study
 - 317 children <5 yrs.
 - » 7 deaths in 100 children involving falls < 4 ft.
 - » 1 death in 118 children involving falls 10-45 ft.

CTV-Coverage-Walks-18

Fatal Falls

- ◆ Dr. Chadwick's trauma center study
 - 317 children <5 yrs.
 - » 7 deaths in 100 children involving falls < 4 ft.
 - » 1 death in 118 children involving falls 10-45 ft.

CTV-Coverage-Walks-19

Fatal Falls

- ◆ Dr. Chadwick's second trauma center study

- 523 children studied

- » inflicted injuries were excluded

- » 188 children fell > 10 ft.

- » longest fall was 40 ft.

- » no children died

CPD Learning Module 70

Fatal Falls

- ◆ Falls < 20 ft. are usually not fatal

- ◆ Falls < 4 ft. are very unlikely to cause brain & CNS injury

- ◆ Stairways falls do not usually result in life threatening injuries

- similar to a series of small falls, unless a child is in a walker

- ◆ The contact surface does make a difference

- carpet, wood, concrete, hard object

CPD Learning Module 71

Chest Injuries

- ◆ Majority of children with rib fractures are < 2 yrs. old.

- ◆ Rib fractures are the most common type of abusive fractures in children

- ◆ Posterior (back) rib fractures are the most commonly found

- ◆ It is very unlikely that improper CPR is the cause of rib fractures in children

CPD Learning Module 72

Internal Injuries

- ◆ High mortality rates due to delayed medical treatment resulting from:
 - delay in presentation of child
 - inaccurate or false history provided by caretaker
 - inability of child to give information
 - injuries may not be externally visible

CTH/Chomson/Whish 71

Children's Anatomy

- ◆ Smaller blood volumes
 - hemorrhages are worse
- ◆ Internal organs are close to one another
 - a single impact may injure > one organ
- ◆ Abdominal wall covered by undeveloped muscles and little fat
- ◆ The chest has flexible ribs that allows greater compressibility

CTH/Chomson/Whish 74

Internal Injuries

- ◆ Caused by:
 - direct impacts
 - » punching
 - » kicking
 - » stomping
 - indirect shearing forces
 - » rapid deceleration of the body
 - ◆ child thrown into the wall

CTH/Chomson/Whish 75

Internal Injuries

- ◆ Second leading cause of fatal injuries
- ◆ 40-50 % mortality rate
- ◆ May not be externally visible
- ◆ Liver is the most commonly injured solid organ due to abuse
- ◆ Kidney is the second most commonly injured solid organ due to abuse

CTP Overview: Week 5

Internal Injuries

- ◆ Hollow visceral organs can rupture due to compression
 - stomach, intestine
- ◆ Intestinal injuries are common abusive injuries
 - especially small intestine
- ◆ Small bowel injuries are difficult to diagnose, thus significant morbidity and mortality rates

CTP Overview: Week 7

Internal Injuries

- ◆ Clinical picture
 - vomiting (often bilious)
 - dehydration may occur
 - abdominal pain
 - distended stomach
 - coma, shock
 - peritonitis
 - delayed onset of symptoms
 - (1 hr. to 1 day)

CTP Overview: Week 7

Fractures

◆ Fractures suggestive of abuse:

- multiple fractures
- fractures of different ages
- fractures that lack plausible history or explanation

◆ Fractures commonly due to accidents:

- clavicle
- shafts of the long bones
- linear skull fractures (except in infants)

Neglect

◆ Most prevalent form of child maltreatment reported

◆ Neglect is the caretaker's failure to meet the child's needs in terms of food, shelter, medical care or safekeeping

◆ Neglect is involved in @ 1/2 of fatal incidents

Neglect

◆ Neglect is a continuum of care



Neglect

◆Physical

- Inadequate nutrition
- Inadequate supervision
- Abandonment

CTF Form W-44-1

Neglect

◆Medical

- Failure or delay to seek needed health care
- Refusal to allow medical treatment

CTF Form W-44-1

Neglect

◆Subjective determination

- Child and caretaker's age, development, health
- ◆ May not be a criminal matter unless child is injured or endangered
- ◆ Community standards must be applied

CTF Form W-44-1

Neglectful Supervision

- ◆ Failure to properly supervise a child that results in injury or death
- ◆ Subjective determination
 - Was it an accident?
 - Was it a preventable accident?
 - Was it neglect?
 - Was it criminal neglect?
 - Should it be prosecuted?

CTD-Crimson-Wildcat

Manners of Death

- ◆ Natural
- ◆ Accidental ←
- ◆ Homicide ←
- ◆ Suicide ←
- ◆ Undetermined ←

CTD-Crimson-Wildcat

Sudden Infant Death Syndrome

- ◆ SIDS is defined as:
 - "The sudden death of an infant under one year of age which remains unexplained after a complete postmortem investigation, including ;
 - » an autopsy
 - » an examination of the scene of death
 - » and a review of the case history "

CTD-Crimson-Wildcat

(NICHD 1989)

Sudden Infant Death Syndrome

- ◆ In U.S., leading cause of death for infants 1 month to 1 year
- ◆ Second only to congenital anomalies as the leading overall cause of death for all infants

CTU Learning Modules

Sudden Infant Death Syndrome

- ◆ Annual SIDS deaths is greater than all the following combined for children up to age 14
 - Cancer
 - Heart Attack
 - Pneumonia
 - Dystrophy
 - Child Abuse
 - AIDS
 - Cystic Fibrosis
 - Muscular

CTU Learning Modules

Sudden Infant Death Syndrome

- ◆ @ 5,000 SIDS deaths/year
- ◆ Boy/girl ratio: 60-70% / 30-40%
- ◆ African and Native American children die at 2-3 times the rate for Anglo children

CTU Learning Modules

Sudden Infant Death Syndrome

- ◆ 90% are less than 6 months old
- ◆ Peak incidence at 2-4 months
- ◆ More frequent in winter months
- ◆ More frequent in multiple births

CPD Course - Week 5-11

Sudden Infant Death Syndrome

- ◆ Diagnosis of exclusion
- ◆ Autopsy necessary for diagnosis
- ◆ Common history of apparently normal child
 - being fed
 - put to sleep
 - later found dead

CPD Course - Week 5-11

Sudden Infant Death Syndrome

- ◆ Cause is still unknown, many theories
 - brain abnormalities
 - metabolic disorders
 - apnea
 - upper airway obstruction

CPD Course - Week 5-11

Risk Factors for SIDS

◆ **Environmental and behavioral influences that may contribute to SIDS, but in and of themselves are not causes**

- **Prone sleeping position (face down)**
- **Mothers who smoke (3x risk)**
- **Passive smoke**

CTE Center Walsh MI

Risk Factors for SIDS

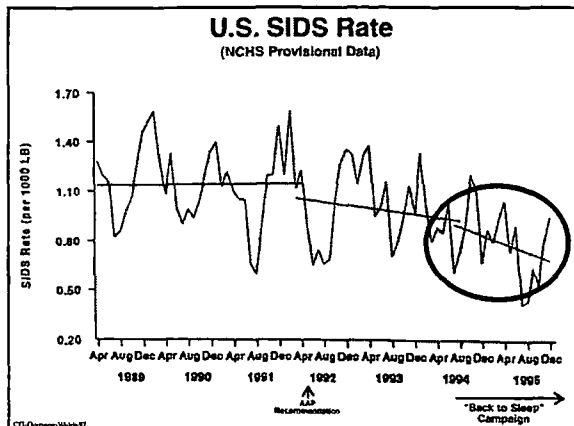
- **First time mothers < 20 yrs. old**
- **Late or no prenatal care**
- **Complications during Pregnancy**
- **Prematurity or low birth weight**

CTE Center Walsh MI

SIDS is Not

- ◆ **Child abuse**
- ◆ **Hereditary**
- ◆ **Contagious**
- ◆ **Caused by baby shots**
- ◆ **Caused by suffocation, vomiting or choking**

CTE Center Walsh MI



Physical Characteristics

- ◆ No sign of external injury
- ◆ Natural appearance
- ◆ Rigor Mortis (body stiffness)
- ◆ Lividity (settling of blood)

Physical Characteristics

- ◆ Frothy drainage from nose or mouth
- ◆ Normal growth/development
- ◆ Normal hydration and nutrition

Benefit of the Doubt

- ◆ Dr. Harry Wilson's "*Rule of Three*" of sudden unexpected infant deaths
 - First death probably a SIDS event, i.e., a natural death
 - Second death probably should be ruled as an undetermined death
 - Third death should be strongly considered as a possible homicide

CTF/Coroner/Module 100

SIDS or Homicide?

- ◆ Autopsy
- ◆ Thorough death scene investigation
- ◆ Review of the victim's and family's history

CTF/Coroner/Module 101

SIDS or Homicide?

- ◆ Infant older than one year of age
- ◆ Any signs of non-accidental trauma
- ◆ Previous "*near miss SIDS*" events or unexplained disorders affecting this child or siblings

CTF/Coroner/Module 102

SIDS or Homicide?

- ◆ Other unexplained child deaths in the same family
- ◆ Suspect confession
- ◆ Autopsy rules manner of death as homicide

CTF Curriculum Module 101

Investigating Fatal Maltreatment

- ◆ Witness Interviews
- ◆ Crime Scene Processing
- ◆ Autopsy
- ◆ Records check
 - Child Protective Services
 - Law Enforcement
 - Medical
- ◆ Suspect Interviews and Interrogations

CTF Curriculum Module 101

Investigating Fatal Child Abuse

- ◆ Burden is to prove that *only* the defendant had the exclusive opportunity to inflict the child's injuries

CTF Curriculum Module 101

Investigating Fatal Neglect

- ◆ **Burden to prove defendant failed to act reasonably in providing care or supervision of child and that failure resulted in child's death**

CPA Course WAAB 106

Common Defenses

- ◆ **Natural death**
- ◆ **Accident**
 - playing rough
 - fall injury (killer couch)
- ◆ **Self-inflicted or inflicted by a sibling**

CPA Course WAAB 107

Common Defenses

- ◆ **Over-discipline**
- ◆ **SODDI**
 - “Some other dude did it.”
 - Timing
- ◆ **Unexplained**

CPA Course WAAB 108

Paramedics

- ◆ Name, badge #, shift
- ◆ What was said on 911 Call
 - obtain audio recording
- ◆ History given by caretaker
 - exact quotes if possible

CPD-Operations-Walsh-179

Paramedics

- ◆ Observations at the scene
- ◆ Medical care provided
 - CPR
 - IV drip
- ◆ Copy of run sheet
- ◆ Written statements

CPD-Operations-Walsh-180

LT. BILL WALSH

Youth & Family Crimes Division
Dallas Police Department
106 S. Harwood St. Rm. 225
Dallas, Texas 75201
214-670-5936
214-670-3957 Fax
800-381-4779 Pager
bill.walsh@ci.dallas.tx



CPD-Operations-Walsh-181

***Investigation of Fatal
Child Abuse and Neglect***

Investigating Fatal Child Abuse and Neglect

By:

Detective Brian Killacky

Chicago Police Department

CT1A2Start-1

*A society can be fairly
judged by how it treats its
children. Caring for and
guiding them to maturity is
its most essential work, for
they are the means by
which it survives.*

CT1A2Start-2

Child Fatalities

- ◆ Fall injuries
- ◆ Shaking Baby Syndrome
- ◆ Battered Child Syndrome
- ◆ Suffocation
- ◆ Strangulation
- ◆ Drowning
- ◆ Arson
- ◆ Abducted and murdered
- ◆ Murder of a fetus
- ◆ Starvation

CT1A2Start-3

Child Fatalities

- ◆ Homicide/Suicide
- ◆ Shot
- ◆ Stabbed
- ◆ Mass Murder
- ◆ Serial Murder
- ◆ Contract Murder
- ◆ Drug induced
- ◆ Poisoning
- ◆ Hanging

CT1-101000-1

Patterns to Consider

- ◆ Physical/Sexual Abuse
- ◆ Nutritional Deprivation
- ◆ Intentional Poisoning or Drugging
- ◆ Missing/Found Children

CT1-101000-1

Patterns to Consider

- ◆ Neglect
 - Medical Care
 - Supervision
- ◆ Emotional Abuse

CT1-101000-1

Motives to Consider

- ◆ Anger/violence
- ◆ Power/control
- ◆ Sexual gratification
- ◆ Crime of revenge
- ◆ Crime of opportunity

CT1-32.indd 7

Child Death Investigation

- ◆ Victimology
- ◆ Caretaker's history
- ◆ Witness interviews
- ◆ Circumstances of the event
- ◆ Crime scene search
- ◆ Records check

CT1-32.indd 8

Child Death Investigation

- ◆ Medical Care
- ◆ Autopsy
- ◆ Suspect interrogation
- ◆ Report writing
- ◆ Case preparation
- ◆ Prosecution

CT1-32.indd 9

Corpus Delicti

- ◆ **Proof that a crime occurred**
 - **TWA Flight 800**
 - » investigation proved no crime occurred
 - **Oklahoma City Bombing**
 - » investigation proved a crime did occur

CPJ 820461-19

Initial Response

- ◆ **Treat all child death scenes as possible homicides until investigation proves otherwise**
- ◆ **Only autopsy can determine manner and cause of death**
 - Internal injuries are often only detected upon autopsy

CPJ 820461-41

Initial Response

- ◆ **Treat the location as a crime scene**
- ◆ **Detain and separate those people present**
- ◆ **Determine their relationship to child**

CPJ 820461-12

Interviewing Witnesses

- ◆ Separate witnesses ASAP
- ◆ Interview separately
- ◆ Get information, don't give it
- ◆ Note *Res Gestae* statements
- ◆ Note any *alibis* offered

CT-122b-1-12

Initial Response

- ◆ Make required notifications
 - Child Protective Services
 - Medical Examiner
 - Coroner or Justice of the Peace
 - Crime Scene Search
 - Additional cover elements

CT-122b-1-13

The Deceased Child

- ◆ Who found the child?
- ◆ Where?
- ◆ When?
- ◆ What did they do?
- ◆ Any attempts at CPR?

CT-122b-1-14

The Deceased Child

- ◆ Was 911 called?
 - By whom?
 - Obtain 911 recording
- ◆ Was the child transported?
 - By whom?
 - Where is the vehicle?

CT1-420a-1-04

The Deceased Child

- ◆ In what position found?
 - Face up?
 - Face down?
 - Was airway obstructed?
 - Natural or anguish posture
 - Position of limbs

CT1-420a-1-07

The Deceased Child

- Was there anything near the child that could have caused the child to suffocate?
 - » Toys
 - » Pillows
 - » Plastic bags

CT1-420a-1-08

The Deceased Child

- Does the crime scene appear staged?
- Has the area been cleaned up?

CT1-22b-1-17

The Deceased Child

- ◆ Note the following:
 - Any obvious injuries
 - Presence of blood
 - Presence of vomit
 - Disturbance of clothing

CT1-22b-1-2

The Deceased Child

- ◆ Was the child:
 - Moved?
 - Bathed?
 - Posed?
 - Dressed or changed?
 - » Was this possibly an attempt to destroy evidence?

CT1-22b-1-21

The Deceased Child

- ◆ Did child have any medical problems?
- ◆ Was the child currently ill?
- ◆ Obtain all of child's medications
- ◆ Make note of any other medications around

CT1-22Rev1-22

The Deceased Child

- ◆ Did the child have any recent falls, traumas or accidents?
 - Attempt to learn of any, but do not suggest this
 - Were there any witnesses to these events?
 - Can they be corroborated?

CT1-22Rev1-22

The Deceased Child

- ◆ Obtain information on the most recent medical care
- ◆ Was child a planned birth?
- ◆ Is there insurance on the child?
 - How much?

CT1-22Rev1-22

Interviewing Caretakers

- ◆ Are there any other siblings?
 - Alive?
 - » They should be interviewed
 - » They should be examined for injuries
 - Is there a child protection issue?
 - » Should CPS remove them?

CP1-22bety-23

Interviewing Caretakers

- Information on the deceased?
 - » What were the circumstances of the death?
 - » Obtain official records
 - ◆ Child Protective Services
 - ◆ Law Enforcement
 - ◆ Medical providers
 - ◆ Medical Examiner

CP1-22bety-24

Interviewing Caretakers

- ◆ How, when, and by whom notified
- ◆ Was any person alone with child?
 - Is this normal?
 - How long?
- ◆ Where were other caretakers?
- ◆ Who is primary caregiver?

CP1-22bety-25

Note Behaviors

- ◆ **Attitude**
 - angry, sad, upset,
- ◆ **Emotional state**
 - hysterical, depressed
- ◆ **Evidence of intoxication**
 - Drugs, alcohol

CT1-2204-1-20

Interviewing Caretakers

- ◆ **Obtain medical release**
- ◆ **Obtain consent to search**
- ◆ **Obtain information for probable cause for search warrant**

CT1-2204-1-20

Interviewing Witnesses

- ◆ **Do not conduct in-depth interviews at the scene**
- ◆ **Obtain verbal statements first**
 - make them *commit* to a story
- ◆ **Obtain formal statements later**
 - written affidavits or
 - electronically recorded

CT1-2204-1-20

Formal Statements

- ◆ “Locks them into their story”
 - Timing
 - Their actions
 - Descriptions and observations of events
 - Preview of possible alibis & defenses

CT1A2064 v.01

Formal Statements

- ◆ May provide important information for subsequent
 - Corroboration or rebuttal
 - Interview
 - Interrogation
 - Impeachment at trial

CT1A2064 v.01

Interviewing Witnesses

- ◆ Begin with open ended questions
 - Encourage narrative answers to get overview
- ◆ Later use direct questions
 - Elicits specific details not offered
- ◆ Ask them what they think happened, solicit opinions

CT1A2064 v.01

Interviewing Witnesses

- ◆ Ask about things not discussed
 - “What didn’t I ask that you think I should know”?
- ◆ Obtain good contact information
- ◆ Consider taking their picture

CT1-420a6 v.24

Interviewing the Suspect

- ◆ Prior acts of child abuse
- ◆ Experience caring for children
- ◆ History of substance or alcohol abuse
- ◆ How long have they been around the child?

CT1-420a6 v.25

Interviewing the Suspect

- ◆ Failure or delay in getting medical attention (red flag!)
- ◆ History of violence, quick to lose temper?
- ◆ Opportunity to inflict injuries
 - exclusive care, custody, control

CT1-420a6 v.26

“Red Flag” Stories

- ◆ Child was unexpectedly found dead
 - Circumstances not consistent with a SIDS event
- ◆ Caretakers have no explanation or idea why child is injured

CFI 428bch-27

“Red Flag” Stories

- ◆ Child suddenly turned blue, stopped breathing
 - No reason found upon examination
- ◆ Child suffered a sudden, unexpected seizure event
 - No prior medical problems
 - This may be only part of real story

CFI 428bch-28

“Red Flag” Stories

- ◆ Child was seriously hurt by improper CPR or by horseplay
- ◆ Child was seriously hurt by themselves or a sibling

CFI 428bch-29

“Red Flag” Stories

- ◆ Child was fatally injured falling down a flight of stairs
- ◆ Child fell from a low height
 - Less than 4 ft. (couch, bed, lap)

CPY 32864-08

“Red Flag” Stories

- ◆ Child was choking so caretaker shook/hit the child on the back causing serious injuries

CPY 32864-11



Doctors

- ◆ Nature and extent of current injuries
- ◆ Presence of old injuries
- ◆ General medical condition
- ◆ Prognosis

CT1-02004-01

Doctors

- ◆ History given by caretaker
 - Exact quotes if possible
 - Does it match injuries?
 - Has it been consistent?

CT1-02004-01

Doctors

- ◆ Was there a delay in seeking medical attention?
 - Reason given by caretakers
 - Would it have been obvious from the child's symptoms that they needed medical attention?
 - Did it contribute to child's death?

CT1-02004-01

Doctors

- ◆ Clinical course of current injuries
 - What symptoms would there be?
 - When would symptoms have shown?
 - Does caretaker history match clinical findings?

CT1A2004-04

Doctors

- ◆ Doctor's opinion
 - Differential diagnosis
 - Accident vs. inflicted
 - Timing of injury
- ◆ Written affidavit

CT1A2004-07

Autopsy

- ◆ Medico-legal autopsy necessary to determine cause and manner of death
- ◆ Internal trauma often only visible at autopsy

CT1A2004-08

Autopsy

- ◆ Investigator should attend autopsy if possible
 - Share info with medical examiner
 - » What did witnesses say
 - » What did suspect say
 - Learn info from medical examiner
 - » Nature and extent of injuries
 - » Evidence of old injuries

CTA 2011 p. 19

Medical Examiner

- ◆ Cause & manner of death
 - Examples
 - » Homicide by blunt force injury
 - » Accidental by drowning

CTA 2011 p. 20

Medical Examiner

- ◆ Potential for successful medical intervention if no delay
- ◆ Does caretakers' statements match their findings
- ◆ Any previous deaths in family?

CTA 2011 p. 21

Medical Examiner

- ◆ When will final ruling be made?
- ◆ Any additional lab tests to be done?
- ◆ Preliminary and final autopsy report

CT1-A23b-01

Possible Witnesses

- ◆ First responders
- ◆ Neighbors, friends
- ◆ Medical professionals
 - Paramedics, other first responders
 - ER doctor, nurses, admitting staff
 - Family doctor, Public Health staff
 - Neighbors, landlords

CT1-A23b-01

Possible Witnesses

- ◆ Agency professionals
 - CPS workers, police
 - Day care, school
- ◆ Siblings and other children in the home
- ◆ Baby-sitters
- ◆ Ex-boy/girl friends
- ◆ Ex-spouses

CT1-A23b-01

Paramedics

- ◆ Name, badge #, shift
- ◆ What was said on 911 Call
 - obtain audio recording
- ◆ History given by caretaker
 - exact quotes if possible

CT1-02061 v-01

Paramedics

- ◆ Observations at the scene
- ◆ Medical care provided
 - CPR
 - IV drip
- ◆ Copy of run sheet
- ◆ Written statements

CT1-02061 v-06

Possible Witnesses

- ◆ Parents (legal)
- ◆ Parents (biological)
- ◆ Caretakers
- ◆ Siblings
- ◆ Relatives

CT1-02061 v-05

Physical Abuse

- ◆ Examine surface on which “*fall*” is reported to have occurred
 - Photograph and measure distances
 - Note and or collect surface material (wood, concrete, carpet)
 - Examine for tissue, blood

CT1-02041-1-01

Physical Abuse

- ◆ Evidence of motive for abuse of child
 - Soiled underwear, bedding, diapers
 - Child’s medication (health problems)
- ◆ Items used to discipline child
 - Belts, hangers, ropes, paddles

CT1-02041-1-01

Physical Abuse

- ◆ Evidence of blood or attempts to clean it up
 - Bathroom, kitchen
 - Floor, walls
 - Furniture
 - Trash cans

CT1-02041-1-01

Burn Injuries

- ◆ Seize/photograph items consistent with pattern of contact burn
 - Clothing iron
 - Cigarette lighter
 - Curling iron

CTF-1226a-1

Burn Injuries

- ◆ Photograph and measure sinks, tubs, stoves, heat sources
- ◆ Check thermostat setting on water heater
- ◆ Examine for evidence of tissue

CTF-1226a-2

Neglect Cases

- ◆ Determine condition/cleanliness of
 - Sleeping area
 - Child's clothing
- ◆ Determine presence of insects, rats, drugs, firearms and other hazards
- ◆ Look for evidence of drug and alcohol abuse

CTF-1226a-3

Neglect Cases

- ◆ Note/document/photograph general living conditions
- ◆ Determine if following are working
 - Water, heat
 - Toilet, stove, refrigerator
- ◆ Determine availability and condition of food appropriate for child

CPH 2020-01-04

SIDS

- ◆ List and seize all drugs, medications
- ◆ Examine sleeping area
 - Soft bedding
 - Pillows
 - Waterbed

CPH 2020-01-04

SIDS

- ◆ Any “*near miss*” SIDS events with this child or others”
- ◆ Any history of other child deaths?

CPH 2020-01-04



Current Through December 31, 1998

Child Abuse and Neglect State Statutes Series

Investigations

Number 14
Authorization for Joint Investigations

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Administration for Children and Families
Administration on Children, Youth and Families
Children's Bureau

NATIONAL CLEARINGHOUSE ON CHILD ABUSE AND NEGLECT INFORMATION
330 C Street, SW • Washington, DC 20447 • (703) 385-7565
Outside Metropolitan Area: (800) FYI-3366
<http://www.calib.com/nccanch>

NATIONAL CENTER FOR PROSECUTION OF CHILD ABUSE
99 Canal Center Plaza, Suite 510 • Alexandria, VA 22314 • (703) 739-0321
<http://www.ndaa-apri.org>

Joint Investigations

Unlike other criminal investigations, child abuse investigations involve more than one governmental agency, which creates the possibility of lack of coordination and redundant investigations. As a result many states authorize law enforcement officials and child protective service case workers to coordinate their investigations of child abuse. In some states joint investigations are mandatory, while other states statutes create a framework within which the separate agencies work voluntarily.

**Legislation Requiring or Authorizing Joint Investigations
and Cooperation Between Law Enforcement and
Child Protection Agencies in Child Abuse Cases
(Current through December 31, 1998)**

Alabama	Ala. Code § 12-15-76 (1995) Ala. Code § 26-16-13 (1992)
Arkansas	Ark. Code Ann. § 12-12-503 (Michie Supp. 1997) Ark. Code Ann. § 12-12-509 (Michie Supp. 1997)
California	Cal. Penal Code § 11166.3(a) (West 1992)
Colorado	Colo. Rev. Stat. § 19-3-308 (1998)
Connecticut	Conn. Gen. Stat. Ann. § 17a-106 (1997)
Delaware	Del. Code Ann. tit. 16, § 906 (Supp. 1998)
Florida	Fla. Stat. Ann. ch. 39.302 (Supp. 1998) Fla. Stat. Ann. ch. 39.306 (Supp. 1998)
Georgia	Ga. Code Ann. § 19-15-2 (Supp. 1998)
Hawaii	Haw. Rev. Stat. Ann. § 587-21 (Michie Supp. 1998)
Illinois	55 Ill. Comp. Stat. Ann. § 80/3 (West Supp. 1998) 55 Ill. Comp. Stat. Ann. § 80/4 (West Supp. 1998)
Kansas	Kan. Stat. Ann. § 38-1523 (Supp. 1997)
Kentucky	Ky. Rev. Stat. Ann. § 431.600 (1998) Ky. Rev. Stat. Ann. § 431.650 (1998) Ky. Rev. Stat. Ann. § 431.660 (Banks-Baldwin Supp. 1997)

Louisiana	La. Children's Code art. 501 (West Supp. 1999) La. Children's Code art. 503 (West Supp. 1999)
Maryland	Md. Code Ann., Fam. Law § 5-706 (Supp. 1998)
Michigan	Mich. Stat. Ann. § 25.248(8) (Lexis Supp. 1998)
Minnesota	Minn. Stat. Ann. § 626.556(10) (West Supp. 1999)
Missouri	Mo. Rev. Stat. § 660.520 (Supp. 1999)
Nebraska	Neb. Rev. Stat. § 28-728 (Supp. 1998)
Nevada	Nev. Rev. Stat. § 432B.260 (1997)
New Hampshire	N.H. Rev. Stat. Ann. § 169-C:38 (Supp. 1998)
New Mexico	N.M. Stat. Ann. § 32A-1-3 (Michie 1995)
New York	N.Y. Soc. Serv. Law § 34-a (McKinney 1992 & Supp. 1999)
North Carolina	N.C. Gen. Stat. § 7A-544 (1995)
North Dakota	N.D. Cent. Code § 50-25.1-05 (Supp. 1997) N.D. Cent. Code § 54-12-04.2 (Supp. 1997)
Ohio	Ohio Rev. Code Ann. § 2151.421 (Anderson Supp. 1998)
Oregon	Or. Rev. Stat. § 418.747(1) (1997)
Tennessee	Tenn. Code Ann. § 37-1-611 (1996)
Utah	Utah Code Ann. § 62A-4a-409 (Supp. 1998)
Virginia	Va. Code Ann. § 63.1-248.17 (Michie 1995)
Washington	Wash. Rev. Code Ann. § 26.44.035 (West Supp. 1999)
West Virginia	W. Va. Code § 49-6A-9 (1998)
Wisconsin	Wis. Stat. Ann. § 48.981 (West Supp. 1998)
Wyoming	Wyo. Stat. Ann. § 14-3-204 (Michie 1997)

**Summary of Legislation Requiring or Authorizing Joint Investigations
and Cooperation Between Law Enforcement and Child
Protection Agencies in Child Abuse Cases
(Current through December 31, 1998)**

ALABAMA**Ala. Code § 12-15-76 (1995)**

In addition to all other current requirements for investigating and reporting child abuse and neglect, law enforcement agencies shall investigate complaints alleging offenses committed against children by alleged out-of-home perpetrators. The Department of Human Resources shall cooperate with law enforcement agencies in interviewing the alleged abuse of children.

Ala. Code § 26-16-13 (1992)

Law enforcement agencies of this state, social service agencies of this state, and state and local departments of human resources shall share information concerning investigations of suspected or actual child abuse or neglect when the sharing of such information is necessary to prevent or discover abuse or neglect of children.

ARKANSAS**Ark. Code Ann. § 12-12-503 (Michie Supp. 1997)**

Severe maltreatment means sexual abuse, sexual exploitation, acts or omissions which may or do result in death, abuse involving the use of a deadly weapon, bone fracture, internal injuries, burns, immersions, suffocation, abandonment, medical diagnosis of failure to thrive, or causing a substantial and observable change in the behavior or demeanor of the child.

Ark. Code Ann. § 12-12-509 (Michie Supp. 1997)

If the Department of Human Services receives notification of suspected child maltreatment that contains an allegation of severe maltreatment, the department shall initiate an investigation in cooperation with law enforcement agencies and the prosecuting attorney within 24 hours.

CALIFORNIA**Cal. Penal Code § 11166.3(a) (West 1992)**

In each county the law enforcement agencies and the county welfare or social services department shall develop and implement cooperative arrangements in order to coordinate existing duties in connection with the investigation of suspected child abuse cases. The local law enforcement agency having jurisdiction over a reported case shall report to the county welfare department that it is investigating the case within 36 hours after starting its investigation.

COLORADO**Colo. Rev. Stat. § 19-3-308 (1998)**

The county department shall be the agency responsible for the coordination of all investigations of all reports of known or suspected incidents of intrafamilial abuse or neglect. The county department shall arrange for such investigations to be conducted by persons trained to conduct either the complete investigation or such parts thereof as may be assigned. The county department shall conduct the investigation in conjunction with the local law enforcement agency, to the extent a joint investigation is possible and deemed appropriate, and any other appropriate agency. The county department may arrange for the initial investigation to be conducted by another agency with personnel having appropriate training and skill. The county department shall provide for persons to be continuously available to respond to such reports. Contiguous counties may cooperate to fulfill the requirements of this subsection.

If a local law enforcement agency receives a report of a known or suspected incident of intrafamilial abuse or neglect, it shall forthwith attempt to contact the county department in order to refer the case for investigation. If the local law enforcement agency is unable to contact the county department, it shall forthwith make a complete investigation and may institute appropriate legal proceedings on behalf of the subject child or other children under the same care.

Local law enforcement agencies shall have the responsibility for the coordination and investigation of all reports of third-party abuse or neglect by persons ten years of age or older. Upon receipt of a report, if the local law enforcement agency reasonably believes that the protection and safety of a child is at risk due to an act or omission on the part of persons responsible for the child's care, such agency shall notify the county department of social services for an assessment regarding neglect and dependency. In addition, the local law enforcement agency shall refer to the county department of social services any report of third-party abuse or neglect in which the person allegedly responsible for such abuse or neglect is under age ten. Upon the completion of an investigation, the local law enforcement agency shall forward a copy of its investigative report to the county department of social services.

CONNECTICUT**Conn. Gen. Stat. Ann. § 17a-106 (1997)**

All law enforcement officials, courts of competent jurisdiction, school personnel and all appropriate state agencies providing human services in relation to preventing, identifying, and investigating child abuse and neglect shall cooperate toward the prevention, identification and investigation of child abuse and neglect.

DELAWARE**Del. Code Ann. tit. 16, § 906 (Supp. 1998)**

The child protection system shall seek to promote the safety of children and the integrity and preservation of their families by conducting investigations and/or family assessments in response to reports of child abuse or neglect. The system shall endeavor to coordinate community resources and provide assistance or services to children and families identified to be at risk, and to prevent and remedy child abuse and neglect.

Division staff shall contact the appropriate law enforcement agency upon receipt of any report requiring an investigation under this section and shall provide such agency with a detailed description of the report received. The appropriate law enforcement agency shall assist the Division in the investigation or provide the Division, within a reasonable time, an explanation detailing the reasons why it is unable to assist. Notwithstanding any provision of the Delaware Code to the contrary, to the extent the law enforcement agency with jurisdiction over the case is unable to assist, the Division may request that the Delaware State Police exercise jurisdiction over the case and upon such request the Delaware State Police may exercise such jurisdiction.

Multidisciplinary services shall be used whenever possible in conducting the investigation or family assessment and services approach, including the services of law enforcement agencies, the medical community, and other agencies, both public and private. The Division and the Attorney General's Office shall cooperate with law enforcement agencies and the Family Court to develop training programs to increase the ability of Division personnel, court personnel, and law enforcement officers to investigate suspected cases of abuse and neglect.

FLORIDA**Fla. Stat. Ann. ch. 39.302 (West Supp. 1998)**

The department shall conduct a child protective investigation of each report of institutional child abuse, abandonment, or neglect. Upon receipt of a report which alleges that an employee or agent of the department, or any other entity or person acting in an official capacity, has committed an act of child abuse, abandonment, or neglect, the department shall immediately initiate a child protective investigation and orally notify the appropriate state attorney, law enforcement agency, and licensing agency. These agencies shall immediately conduct a joint investigation, unless independent investigations are more feasible. Each agency conducting a joint investigation shall be entitled to full access to the information gathered by the department in the course of the investigation. In all cases, the department shall make a full written report to the state attorney within 3 days after making the oral report. A criminal investigation shall be coordinated, whenever possible, with the child protective investigation of the department. Any interested person who has information regarding the offenses described in this subsection may forward a statement to the state attorney as to whether prosecution is warranted and appropriate. Within 15 days after the completion of the investigation, the state attorney shall report the findings to the department and shall include in such report a determination of whether or not prosecution is justified and appropriate in view of the circumstances of the specific case.

The department shall notify the state attorney and the appropriate law enforcement agency of any other child abuse, abandonment, or neglect case in which a criminal investigation is deemed appropriate by the department.

Fla. Stat. Ann. ch. 39.306 (Supp. 1998)

The department shall enter into agreements with the jurisdictionally responsible county sheriffs' offices and local police departments that will assume the lead in conducting any potential criminal investigations arising from allegations of child abuse, abandonment, or neglect. The written agreement must specify how the requirements of this chapter will be met. For the purposes of such agreement, the jurisdictionally responsible law enforcement entity is authorized to share Florida criminal history information with the district personnel, authorized agent, or contract provider directly responsible for the child protective investigation and emergency child placement. Criminal justice information provided by such law enforcement entity shall be used only for the purposes specified in the agreement and shall be provided at no charge. Notwithstanding any other provision of law, the Department of Law Enforcement shall provide to the department electronic access to Florida criminal justice information which is lawfully available and not exempt, only for the purpose of child protective investigations and emergency child placement. As a condition of access to such information, the department shall be required to execute an appropriate user agreement addressing the access, use, dissemination, and destruction of such information and to comply with all applicable laws and regulations, and rules of the Department of Law Enforcement

GEORGIA

Ga. Code Ann. § 19-15-2 (Supp. 1998)

Each county shall be required to establish a child abuse protocol as provided in this Code section. The chief superior court judge of the circuit in which the county is located shall establish a child abuse protocol committee which shall include representatives from the following: the office of the sheriff; the county department of family and children services; the office of the district attorney; the juvenile court; the magistrate court; the county board of education; the county mental health organization; the office of the chief of police of a county in counties which have a county police department; the office of the chief of police of the largest municipality in the county; the county board of health, which shall designate a physician to serve on the committee; and the office of the coroner or county medical examiner. The chief superior court judge shall designate a representative from a local citizen or advocacy group which focuses on child abuse awareness and prevention.

The committee shall adopt a written child abuse protocol which shall be filed with the Division of Family and Children Services of the Department of Human Resources and the State-wide Child Abuse Prevention Panel, a copy of which shall be furnished to each agency in the county handling the cases of abused children. The protocol shall be a written document outlining in detail the procedures to be used in investigating and prosecuting cases arising from alleged child abuse and the methods to be used in coordinating treatment programs for the perpetrator, the family, and the child.

The purpose of the protocol shall be to ensure coordination and cooperation between agencies involved in a child abuse case so as to increase the efficiency of all agencies handling such cases, to minimize

the stress created for the allegedly abused child by the legal and investigatory process, and to ensure that more effective treatment is provided for the perpetrator, the family, and the child.

HAWAII

Haw. Rev. Stat. Ann. § 587-21 (Michie Supp. 1998)

Upon receiving a report that a child is subject to imminent harm, has been harmed, or is subject to threatened harm, the department shall cause such investigation to be made as it deems to be appropriate. In conducting the investigation the department may enlist the cooperation of appropriate law enforcement authorities for phases of the investigation for which they are better equipped, and the law enforcement authority may conduct and provide to the department the results of a criminal history record check concerning an alleged perpetrator of imminent harm, harm, or threatened harm to a child and interview a child who is the subject of an investigation without the prior approval of and without the presence of the child's family, including temporarily assuming protective custody of the child for the purpose of conducting the interview, if the action is deemed necessary and appropriate under the circumstances by the department and a police officer.

ILLINOIS

55 Ill. Comp. Stat. Ann. § 80/3 (West Supp. 1998)

Each county shall establish a Child Advocacy Advisory Board that shall adopt a written child sexual abuse protocol. The purpose of the protocol shall be to ensure coordination and cooperation among all agencies involved in child sexual abuse cases so as to increase the efficiency and effectiveness of those agencies, to minimize the stress created for the child and his or her family by the investigatory and judicial process, and to ensure that more effective treatment is provided for the child and his or her family. In preparing the protocol, the Advisory Board shall consider an interdisciplinary, coordinated systems approach to the investigation of child sexual abuse which shall include, at a minimum; (i) an interagency notification procedure; (ii) a dispute resolution process between the involved agencies when a conflict arises on how to proceed with the investigation of a case; (iii) a policy on interagency decision-making; and (iv) a description of the role each agency has in the investigation of the case

55 Ill. Comp. Stat. Ann. § 80/4 (West Supp. 1998)

A Children's Advocacy Center may be established to coordinate the activities of the various agencies involved in the investigation, prosecution and treatment referral of child sexual abuse. Every Center shall include an interdisciplinary, coordinated systems approach to the investigation of child sexual abuse.

KANSAS

Kan. Stat. Ann. § 38-1523 (Supp. 1997)

When a report of child abuse or neglect indicates that there is serious physical injury to or serious

deterioration or sexual abuse of the child and that action may be required to protect the child, the investigation shall be conducted as a joint effort between the Department of Social and Rehabilitation Services and the appropriate law enforcement agency or agencies, with a free exchange of information between them. If a statement of a suspect is obtained by the law enforcement agency, a copy of the statement shall be provided to the Department of Social and Rehabilitation Services on request.

Suspected child abuse or neglect which occurs in an institution operated by the Secretary of Social and Rehabilitation Services shall be investigated by an agent under the direction of the Attorney General.

Any other suspected child abuse or neglect by persons employed by the state Department of Social and Rehabilitation Services shall be investigated by the appropriate law enforcement agency under the direction of the appropriate County or District Attorney, and not by the state Department of Social or Rehabilitation Services.

If a dispute develops between agencies investigating a reported case of child abuse or neglect, the appropriate County or District Attorney shall take charge of, direct and coordinate the investigation.

Law enforcement agencies and the Department of Social and Rehabilitation Services shall assist each other in taking action which is necessary to protect the child regardless of which party conducted the initial investigation.

Elementary and secondary schools, the state Department of Social and Rehabilitation Services and law enforcement agencies shall cooperate with each other in the investigation of reports of suspected child abuse or neglect. Administrators of elementary and secondary schools shall provide to employees of the state Department of Social and Rehabilitation Services and law enforcement agencies access to a child in a setting on school premises determined by school personnel for the purpose of the investigation of a report of suspected child abuse or neglect. To the extent that safety and practical considerations allow, law enforcement officers on school premises for the purpose of investigating a report of suspected child abuse or neglect shall not be in uniform.

KENTUCKY

Ky. Rev. Stat. Ann. § 431.600 (1998)

Each investigation of reported or suspected sexual abuse of a child shall be conducted by a specialized multidisciplinary team composed, at a minimum, of law enforcement officers and social workers from the Cabinet for Human Resources. Additional team members may include Commonwealth's and county attorneys, mental health professionals, medical professionals, victim advocates, educators, and other related professionals, as necessary, operating under protocols governing roles, responsibilities, and procedures developed by the Kentucky Multidisciplinary Commission on Child Sexual Abuse and promulgated by the Attorney General as administrative regulations.

Local protocols shall be developed in each county or group of contiguous counties by the agencies and persons specified in this section. These protocols shall be approved by the Kentucky Multidisciplinary Commission on Child Sexual Abuse. If adequate personnel are available, each Commonwealth's attorney's office and each county attorney's office shall have a child sexual abuse specialist. Commonwealth's attorneys and county attorneys, or their assistants, shall take an active part in

interviewing and familiarizing the child alleged to have been abused, or who is testifying as a witness, with the proceedings throughout the case, beginning as early as practicable in the case. If adequate personnel are available, Commonwealth's attorneys and county attorneys shall provide for an arrangement which allows one lead prosecutor to handle the case from inception to completion to reduce the number of persons involved with the child victim. Commonwealth's attorneys and county attorneys and the Cabinet for Human Resources shall minimize the involvement of the child in legal proceedings, avoiding appearances at preliminary hearings, grand jury hearings, and other proceedings when possible. Commonwealth's attorneys and county attorneys shall make appropriate referrals for counseling, private legal services, and other appropriate services to ensure the future protection of the child when a decision is made not to prosecute the case. The Commonwealth's attorney or county attorney shall explain the decision not to prosecute to the family or guardian, as appropriate, and to the child victim.

Ky. Rev. Stat. Ann. § 431.650 (1998)

The Kentucky Multidisciplinary Commission on Child Sexual Abuse is hereby created. The commission shall be comprised of the following members: the commissioner of the Department for Social Services or a designee; the commissioner of the Department for Mental Health and Mental Retardation Services or a designee; one family service worker who is employed by the Department for Social Services to provide child protective services, who shall be appointed by the secretary of the Cabinet for Human Resources; one therapist who provides services to sexually abused children, who shall be appointed by the secretary of the Cabinet for Human Resources; the commissioner of the Kentucky State Police or a designee; one law enforcement officer who is a detective with specialized training in conducting child sexual abuse investigations, who shall be appointed by the secretary of the Justice Cabinet; one employee of the Administrative Office of the Courts appointed by the Chief Justice of the Supreme Court of Kentucky; two employees of the Attorney General's Office who shall be appointed by the Attorney General; one Commonwealth's attorney who shall be appointed by the Attorney General; the commissioner of the Department of Education or a designee; one school counselor, school psychologist, or school social worker who shall be appointed by the commissioner of the Department of Education; and one former victim of a sexual offense or one parent of a child sexual abuse victim who shall be appointed by the Attorney General.

Appointees shall serve at the pleasure of the appointing authority but shall not serve longer than four years without reappointment. The commission shall elect a chairperson annually from its membership.

Ky. Rev. Stat. Ann. § 431.660 (Banks-Baldwin Supp. 1997)

The Kentucky Multidisciplinary Commission on Child Sexual Abuse shall prepare and issue a model protocol for local multidisciplinary teams regarding investigation and prosecution of child sexual abuse; review and approve protocols prepared by local multidisciplinary teams; advise local multidisciplinary teams on the investigation and prosecution of child sexual abuse; receive data on child sexual abuse cases collected by the Prosecutors Advisory Council and issue annual reports; collect data on the operation of local multidisciplinary teams; seek funding to support special projects relating to the operation of local multidisciplinary teams; receive and review complaints regarding local multidisciplinary teams, and make appropriate recommendations; recommend to the Governor, Legislative Research Commission, and Supreme Court changes in state programs, legislation, administrative regulations, policies, budgets, and treatment and service standards which may facilitate effective intervention of child sexual abuse cases and the investigation and prosecution of perpetrators

of child sexual abuse, and which may improve the opportunity for victims of child sexual abuse to receive treatment.

The Kentucky Multidisciplinary Commission on Child Sexual Abuse may, within budget limitations, establish and maintain necessary offices, appoint employees, and prescribe the duties and compensation for the appointed employees.

LOUISIANA

La. Children's Code art. 501 (West Supp. 1999)

The legislature finds that the establishment of the Children's Advocacy Clearinghouse and the development of a coordinated protocol by the Louisiana Commission on Law Enforcement and Administration of Criminal Justice for the processing of child sex abuse cases among the various responsible agencies is in the best interest of the children of Louisiana.

La. Children's Code art. 502 (West Supp. 1999)

The Children's Advocacy Clearinghouse is hereby created and established under the jurisdiction of the Louisiana Commission on Law Enforcement and Administration of Criminal Justice in the office of governor.

La. Children's Code art. 503 (West Supp. 1999)

The Louisiana Commission on Law Enforcement and Administration of Criminal Justice shall: assist local law enforcement and prosecutorial agencies in the development of programs, resources, or expertise which will promote the detection and prosecution of offenders committing crimes against children; provide information, relative to child sexual abuse, child sexual abuse programs, including programs dealing with prevention, detection, and treatment of sex abuse to various units of state and local government and other interested parties; assist units of local government and qualified private nonprofit institutions in identifying sources of funding to begin the operation of coordinated children's advocacy programs in the state; and report findings and recommendations to the Interagency Council on the Prevention of Sex Offenses.

MARYLAND

Md. Code Ann., Fam. Law § 5-706 (Supp. 1998)

Promptly after receiving a report of suspected abuse or neglect, the local department or the appropriate law enforcement agency, or both, if jointly agreed on, shall make a thorough investigation of a report of suspected abuse to protect the health, safety, and welfare of the child or children. The local department shall make a thorough investigation of a report of suspected neglect to protect the health, safety, and welfare of the child or children.

Within 24 hours after receiving a report of suspected physical or sexual abuse and within 5 days after receiving a report of suspected neglect or suspected mental injury, the local department or the

appropriate law enforcement agency shall: see the child; attempt to have an on-site interview with the child's caretaker; decide on the safety of the child, wherever the child is, and of other children in the household; and decide on the safety of other children in the care or custody of the alleged abuser.

On request by the local department, the local State's Attorney shall assist in the investigation.

The local department, the appropriate law enforcement agencies, the State's Attorney within each county and Baltimore City, the department's office responsible for child care regulation, and the local health officer, shall enter into a written agreement that specifies standard operating procedures for the investigation and prosecution of reported cases of suspected abuse.

The agencies responsible for investigating reported cases of suspected sexual abuse, including the local department, the appropriate law enforcement agencies, and the local State's Attorney, shall implement a joint investigation procedure for conducting joint investigations of sexual abuse.

The joint investigation procedure shall: include appropriate techniques for expediting validation of sexual abuse complaints; include investigation techniques designed to decrease the potential for physical harm to the child, and decrease any trauma experienced by the child in the investigation and prosecution of the case; and establish an ongoing training program for personnel involved in the investigation or prosecution of sexual abuse cases.

Within 10 days after the local department or law enforcement agency receives the first notice of suspected abuse, the local department or law enforcement agency shall report to the local State's Attorney the preliminary findings of the investigation.

Within 5 business days after completion of the investigation of suspected abuse, the local department and the appropriate law enforcement agency, if that agency participated in the investigation, shall make a complete written report of its findings to the local State's Attorney.

MICHIGAN

Mich. Stat. Ann. § 25.248(8) (Lexis Supp. 1998)

The department shall cooperate with law enforcement officials, courts of competent jurisdiction, and appropriate state agencies providing human services in relation to preventing, identifying, and treating child abuse and neglect; shall provide, enlist, and coordinate the necessary services, directly or through the purchase of services from other agencies and professions; and shall take necessary action to prevent further abuses, to safeguard and enhance the child's welfare, and to preserve family life where possible.

In conducting its investigation, the department shall seek the assistance of and cooperate with law enforcement officials within 24 hours after becoming aware that 1 or more of the following conditions exist: (a) abuse or neglect is the suspected cause of a child's death; (b) the child is the victim of suspected sexual abuse or sexual exploitation; (c) abuse or neglect resulting in severe physical injury to the child requires medical treatment or hospitalization; (d) law enforcement intervention is necessary for the protection of the child, a department employee, or another person involved in the

investigation;(e)the alleged perpetrator of the child's injury is not a person responsible for the child's health or welfare.

Law enforcement officials shall cooperate with the department in conducting investigations. The department and law enforcement officials shall conduct investigations in compliance with the protocol adopted and implemented.

In each county, the prosecuting attorney and the department shall develop and establish procedures for involving law enforcement officials as provided in this section. In each county, the prosecuting attorney and the department shall adopt and implement a standard child abuse and neglect investigation and interview protocol using as a model the protocol developed by the governor's task force on children's justice.

MINNESOTA

Minn. Stat. Ann. § 626.556(10) (West Supp. 1999)

If a report of child abuse alleges a violation of a criminal statute involving sexual abuse or physical abuse or neglect or endangerment, the local law enforcement agency and local welfare agency shall coordinate the planning and execution of their respective investigation and assessment efforts to avoid a duplication of fact-finding efforts and multiple interviews. In cases of alleged child maltreatment resulting in death, the local agency may rely on the fact-finding efforts of a law enforcement investigation to make a determination of whether or not maltreatment occurred.

MISSOURI

Mo. Rev. Stat. § 660.520 (Supp. 1999)

A special team within the Department of Social Services shall assist the county multi-disciplinary teams to develop and implement protocols for the investigation and prosecution of child sexual abuse cases, assist in the investigation of child sexual abuse cases, upon the request of local law enforcement agencies, prosecutors, or the division of family services staff.

NEBRASKA

Neb. Rev. Stat. § 28-728 (Supp. 1998)

The Legislature finds that child abuse and neglect are community problems requiring a cooperative complementary response by law enforcement, the Department of Health and Human Services, and other agencies or entities designed to protect children. It is the intent of the Legislature to create a child abuse and neglect investigation team in each county or contiguous group of counties and to create a child abuse and neglect treatment team in each county or contiguous group of counties. The child abuse and neglect investigation team shall develop protocols which, at a minimum, shall include procedures for conducting joint investigations of child abuse and other child abuse and neglect matters which the team deems necessary; ensuring that a law enforcement agency will participate in the investigation; conducting joint investigations of other child abuse and neglect matters which the team

deems necessary; reducing the risk of harm to child abuse and neglect victims; ensuring that the child is in safe surroundings, including removing the perpetrator when necessary; sharing of case information; and how and when the team will meet.

The child abuse and neglect treatment team shall develop protocols which, at a minimum, shall include procedures for case coordination and assistance, including the location of services available within the area; case staffings and the coordination, development, implementation, and monitoring of treatment plans; reducing the risk of harm to child abuse and neglect victims; assisting those child abuse and neglect victims who are abused and neglected by perpetrators who do not reside in their homes; and how and when the team will meet.

NEVADA

Nev. Rev. Stat. § 432B.260 (1997)

An agency which provides protective services and a law enforcement agency shall cooperate in the investigation, if any, of a report of abuse or neglect of a child.

NEW HAMPSHIRE

N.H. Rev. Stat. Ann. § 169-C:38 (Supp. 1998)

All law enforcement personnel and Bureau of Children (a division of the Department of Health and Human Services) employees shall cooperate in limiting the number of interviews of a child victim and, where appropriate, shall conduct joint interviews of the child. Employees of the Bureau shall share with the investigating police officers all information in their possession which it is lawful for them to disclose to a law enforcement agency. Investigating police officers shall not use or reveal any confidential information shared with them by the Bureau except to the extent necessary for the investigation and prosecution of the case.

NEW MEXICO

N.M. Stat. Ann. § 32A-1-3 (Michie 1995)

The Children's Code shall be interpreted and construed to provide for the cooperation and coordination of the civil and criminal systems for investigation, intervention and disposition of cases, to minimize interagency conflicts and to enhance the coordinated response of all agencies to achieve the best interests of the child victim.

NEW YORK

N.Y. Soc. Serv. Law § 34-a (Mckinney 1992 & Supp. 1999)

Each social services district shall prepare a multi-year consolidated services plan encompassing adult services and children's services.

The regulations promulgated pursuant to this division shall require the multi-years services plan to include a summary of the understanding between the local social services district and the District Attorney's office, which outlines the cooperative procedures to be followed by both parties in investigating incidents of child abuse and maltreatment, consistent with their respective obligations for the investigation or prosecution of such incidents.

NORTH CAROLINA

N.C. Gen. Stat. § 7A-544 (1995)

The Director of the Department of Social Services, or his/her staff, may consult with the available state or local law-enforcement officers who shall assist in the investigation and evaluation of the seriousness of any report of abuse or neglect when requested by the Director.

NORTH DAKOTA

N.D. Cent. Code § 50-25.1-05 (Supp. 1997)

If a report of suspected child abuse or neglect alleges a violation of a criminal statute involving sexual or physical abuse, the Department of Human Services and an appropriate law enforcement agency shall coordinate the planning and execution of their investigation efforts to avoid a duplication of fact finding efforts and multiple interviews.

N.D. Cent. Code § 54-12-04.2 (Supp. 1997)

The child sexual abuse investigation and prosecution team consists of an Assistant Attorney General, an agent of the state Bureau of Criminal Investigation, and a licensed social worker employed by the attorney general. On request of any state's attorney, the team shall assist, within the limits of legislative appropriation and available staff resources, with the investigation and prosecution of child sexual abuse cases.

OHIO

Ohio Rev. Code Ann. § 2151.421 (Anderson Supp. 1998)

Each public children services agency shall prepare a memorandum of understanding that is signed by all of the following: juvenile judges in the county, the county peace officer, all chief municipal peace

officers within the county, other law enforcement officers handling child abuse and neglect cases in the county, the prosecuting attorney of the county, and the county department of human services.

A memorandum of understanding shall set forth the normal operating procedure to be employed by all concerned officials in the execution of their respective responsibilities and shall have as two of its primary goals the elimination of all unnecessary interviews of children who are alleged to be abused and, when feasible, providing for only one interview of a child who is alleged to be abused.

A memorandum of understanding shall include all of the following: the roles and responsibilities for handling emergency and non-emergency cases of abuse and neglect; standards and procedures to be used in handling and coordinating investigations of reported cases of abuse and neglect, methods to be used in interviewing a child who is alleged to be abused or neglected; and standards and procedures addressing the categories of persons who may interview the child who is alleged to be abused.

OREGON

Or. Rev. Stat. § 418.747(1) (1997)

The District Attorney in each county shall be responsible for developing interagency and multidisciplinary teams which shall develop a written protocol for investigation of child abuse cases and for interviewing child abuse victims. All investigations of child abuse and interviews of child abuse victims shall be carried out by appropriate personnel using these protocols and procedures.

TENNESSEE

Tenn. Code Ann. § 37-1-611 (1996)

To the fullest extent possible, the Department of Children's Services shall cooperate with and seek cooperation of all appropriate public and private agencies, including health, education, social services, and law enforcement agencies, and courts, organizations, or programs providing or concerned with children's services related to the prevention, detection, intervention, or treatment of child sexual abuse. All state, county, and local agencies have a duty to give such cooperation, assistance, and information to the Department as will enable it to fulfill its responsibilities.

UTAH

Utah Code Ann. § 62A-4a-409 (Supp. 1998)

The family services division shall use an interdisciplinary approach whenever possible in dealing with reports of suspected child abuse. For this purpose the division shall convene appropriate interdisciplinary "child protection teams" to assist it in its protective, diagnostic, assessment, treatment, and coordination services. A representative of the division shall serve as the team's coordinator. Members of the team shall serve at the coordinator's invitation, and whenever possible, the team shall include representatives of health, mental health, education, law enforcement agencies, and other appropriate agencies or individuals.

VIRGINIA**Va. Code Ann. § 63.1-248.17 (Michie 1995)**

All law enforcement departments and other state and local departments, agencies, authorities and institutions shall cooperate with each Child Protective Services Coordinator of a local department and any multi-disciplinary teams in the detection and prevention of child abuse.

WASHINGTON**Wash. Rev. Code Ann. § 26.44.035 (West Supp. 1999)**

If the Department of Social and Health Services or a law enforcement agency responds to a complaint of alleged child abuse or neglect and discovers that another agency has also responded to the complaint, the agency shall notify the other agency of their presence, and the agencies shall coordinate the investigation and keep each other apprised of progress. The Department, each law enforcement agency, each County Prosecuting Attorney, each City Attorney, and each court shall make as soon as practicable a written record and shall maintain records of all incidents of suspected child abuse reported to that person or agency.

WEST VIRGINIA**W. Va. Code § 49-6A-9 (1998)**

The state department shall establish or designate in every county a local child protective services office to develop a protection plan which may involve law-enforcement officers or the court. To carry out the purposes of this article, all departments, boards, bureaus and other agencies of the state or any of its political subdivisions and all agencies providing services under the local child protective service plan shall, upon request, provide to the local child protective service such assistance and information as will enable it to fulfill its responsibilities.

WISCONSIN**Wis. Stat. Ann. § 48.981 (West Supp. 1998)**

The county department responsible for investigating reports of suspected child abuse or neglect shall cooperate with law enforcement officials, courts of competent jurisdiction, tribal governments and other human service agencies to prevent, identify and treat child abuse and neglect.

WYOMING**Wyo. Stat. Ann. § 14-3-204 (Michie 1997)**

The local child protective agency shall cooperate, coordinate and assist with the prosecution and law enforcement agencies in investigating a report of suspected child abuse or neglect. When the best interests of the child requires court actions, the agency shall contact the county and prosecuting attorney to initiate legal proceedings and assist the county and prosecuting attorney during the proceedings.

Death at a Hospital

- ◆ Child transported to, or left at (or near) a hospital emergency room
 - Who brought the child in?
 - » Was child left with “second party”?
 - Who transported the child?
 - Where is the transport vehicle?

CT1-30000001

Death at a Hospital

- What was the child wearing?
- Where are the clothes now?
- What was child’s condition upon arrival?
- Is this the first time medical care was attempted?

CT1-30000002

Death at a Hospital

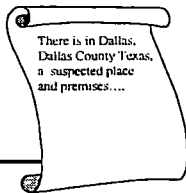
- ◆ Who did intake on child?
 - Identify and interview this person
 - What history was given?
 - Obtain their report

CT1-30000003

Death at a Hospital

- What was the child wearing?
- Where are the clothes now?
- What was child's condition upon arrival?
- Is this the first time medical care was attempted?

CP1-420a-1-74



Search Warrants

CP1-420a-1-71

Grounds for a Search Warrant

- ◆ Describing the person and/or the place to be searched
- ◆ Describing the items to be seized

CP1-420a-1-72

Grounds for a Search Warrant

- ◆ Written complaint by a police officer
- ◆ Stating sufficient facts to show probable cause a crime has been committed

CP1-32b-1-73

Search Warrants

- ◆ Based upon facts and circumstances, the reasonable man would believe that evidence of a specific crime would be found in a particular place within a reasonable time

CP1-32b-1-74

Probable Cause

- ◆ Defined as:
 - reasonable and prudent information, concerning such facts and circumstances as would warrant a reasonable man to believe that a crime has been committed

CP1-32b-1-75

Investigator's "*Expertise*"

- ◆ Should never be the sole basis for a search warrant
- ◆ Can be used to add a more professional scope to the investigation
- ◆ Can be used to justify the seizure of additional items of evidence

CTI-626a-1-76

Report Writing

- ◆ Reports must be:
 - Accurate
 - Thorough
 - Current
 - Complete

CTI-626a-1-77

Report Format

- ◆ Information on victim
 - Full name and DOB
 - Birth records
 - Medical records
 - Circumstances of death
 - CPS or police reports
 - Photographs

CTI-626a-1-79

Report Format

◆ Autopsy information

- Copy of final autopsy report
- Cause and manner of death
- Evidence of old injuries
- Photographs

CP1-622a-1-79

Report Format

◆ Information on family members

- Full name and DOB's
- Home and work addresses
- Records of previous child abuse and neglect
- Domestic violence

CP1-622a-1-80

Report Format

- Drug or alcohol abuse
- Criminal histories
- Copies of statements

◆ Children

- Full names and DOB's
- Copies of statements
- Medical evaluations
- Current location if not at home

CP1-622a-1-81

Report Format

◆ Witness information

- Full name and DOB
- Home and work addresses
- Copy of statements
- Criminal history

CT1-328a01.ppt

Report Format

◆ Suspect information

- Full name and DOB
- Criminal history
- Copies of statement and confession
- Relationship to child
- Current location (jail, bond)
- Photograph

CT1-328a01.ppt

Report Format

◆ Police Records

- Date and time notified
- Date and time responded
- Investigators assigned

CT1-328a01.ppt

Report Format

◆ Police Records

- General progress reports
- Timeline
- Original reports and supplements
- Evidence analysis
- Crime scene photographs

CT1-02041-1

Report Format

◆ Court Records

- Charges filed
- Court assigned
- All subpoenas
- Copies of prosecution report
- Defense motions

CT1-02041-2

Report Format

- Search warrant and affidavit
- Search warrant return
- Property or evidence inventory

CT1-02041-3

Courtroom Testimony

- ◆ Professional demeanor
- ◆ Knowledge of case facts
- ◆ Listen to the question
- ◆ Answer the question, do not volunteer information
- ◆ Use plain language

CT1-02berty-02

Impeachment

- ◆ Omission
- ◆ Contradiction

CT1-02berty-02

Criminal Charging

- ◆ Information
- ◆ Complaint
- ◆ Grand Jury Indictment

CT1-02berty-02

Necessary Investigator Skills

- ◆ Objectivity and neutrality
- ◆ Ability to cultivate information
- ◆ Ability to interview witnesses
- ◆ Ability to interrogate suspects

CP1-220a1-p10

Necessary Investigator Skills

- ◆ Knowledge of people and places
- ◆ Ability to work with outside agencies and personnel
 - Child Protective Services
 - Medical community
 - District Attorneys

CP1-220a1-p10

Necessary Investigator Skills

- ◆ Ability to recognize crime scenes
- ◆ Knowledge of children and child abuse
 - Child development
 - Inflicted vs. accidental injuries
 - Relevant medical and legal issues

CP1-220a1-p10

Necessary Investigator Skills

- ◆ Ability to write good reports
- ◆ Ability to testify in court
- ◆ Ability to remain professional

CP1-2014-1-10

Necessary Investigator Skills

- ◆ Accurate and Complete Report Writing
- ◆ Thorough Case Preparation
- ◆ Ability to Testify in Court
- ◆ Comparable Conviction and Arrest Rates
- ◆ Outside Interests

CP1-2014-1-10

Successful Investigations

Practical knowledge (Street Smarts)
Ability to collect evidence
Ability to interview witnesses
Ability to interrogate suspects
Ability to write accurate reports
+ Ability to testify in court
= Successful Investigations

CP1-2014-1-10

Who the Victims Were

Age

Under 1 year old	13
1-4 years old	18
5-9 years old	5
10-14 years old	25

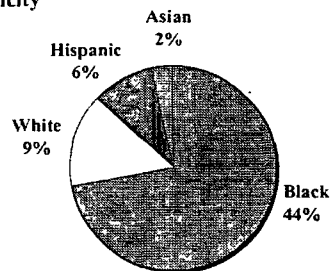
Gender

Male	35
Female	26

CPY-422647-07

Who the Victims Were

Race/Ethnicity



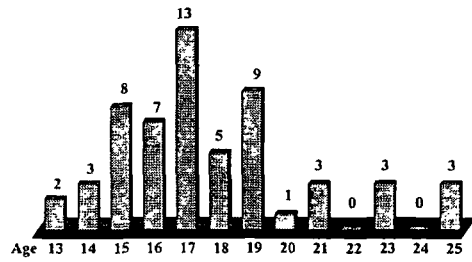
CPY-422647-08

How They Died

Shot	30
Beaten	15
Shaken	5
Strangled	4
Stabbed	2
Burned	1
Drowned	1
Hanged	1
Scalded	1
Starved	1

CPY-422647-09

Age of Victims' Mothers When First Pregnant*



*Not necessarily pregnant with victim. Age of four mothers unavailable.

CT-2000-1-100

Crime Scene and Forensic Evidence



THE CRIME SCENE AND FORENSIC EVIDENCE

Presented by
Arthur M. Bohanan
Knoxville Police Department

CTI Crime Scene Bohanan 1

Upon Arrival

- ◆ Administer first aid if necessary
 - Remember preservation of life is first priority
- ◆ Identify and protect the crime scene

CTI Crime Scene Bohanan 2

Upon Arrival

- ◆ Request appropriate assistance
 - Ambulance
 - Medical examiner
 - Additional cover elements

CTI Crime Scene Bohanan 3

Identify Everybody

- ◆ At or in the scene
- ◆ Nearby bystanders who may have been a witness
- ◆ Separate all witnesses

CTI Crime Scene Notebook

Identify Everybody

- ◆ Who is suspect and what is their relationship to child victim
- ◆ Obtain statements ASAP

CTI Crime Scene Notebook

Crime Scene Preservation

- ◆ Identification of the crime scene perimeters
 - Interview first responders for details of what they seen and heard upon arrival

CTI Crime Scene Notebook

Crime Scene Preservation

- Single vs. multiple scenes for same crime
- Extended scene as along a highway or roadway
- Move or touch **ONLY** what is absolutely necessary

©2011 Crime Scene Solutions 2

Control Scene

- ◆ Clear **ALL** non-essential personnel from the scene
- ◆ Render the area safe from suspect and others
- ◆ Medical personnel/coroner must be cautioned about specific evidence not to touch

©2011 Crime Scene Solutions 3

Initial Observations

- ◆ Who, where, what, when, how
- ◆ Look, listen, smell
- ◆ Make mental notes until they written down

©2011 Crime Scene Solutions 4

Walk Thru

- ◆ To determine need for:
 - additional evidence personnel
 - forensic equipment
 - blood kits
 - alternate light source
 - other equipment

CPA Crime Scene Notebook 43

Secure the Area

- ◆ Request enough uniformed officers to secure the area, large or small
- ◆ Consider the weather, traffic flow and view from the public and media

CPA Crime Scene Notebook 44

Entry to the Crime Scene

- ◆ ONLY essential personnel allowed inside the crime scene
- ◆ ONLY the necessary medical personnel should be inside the perimeter

CPA Crime Scene Notebook 45

Entry to the Crime Scene

- ◆ Station officer with sign-in log for all personnel entering and leaving the crime scene

CTA Crime Scene Subunit 11

Condition of the Location

- ◆ Note if residence is clean, cluttered, or filthy
- ◆ Dust spots or marks may provide beneficial information when properly noted

CTA Crime Scene Subunit 11

Condition of the Location

- ◆ Don't flush commode or allow responders to use
- ◆ Don't open windows/doors before notation and photos
- ◆ Inspect doors and windows for signs of forced entry

CTA Crime Scene Subunit 11

Caution!

- ◆ Locate police equipment away from the vital area within the crime scene
- ◆ Don't unplug or use phone
- ◆ Don't unplug answering machine or caller ID box

CSI Crime Scene Response 14

Common Sense

- ◆ Limit personnel in the crime scene to those necessary
- ◆ Officials should not be seen in the official photos
- ◆ Police equipment should not be seen in the photos

CSI Crime Scene Response 17

Documenting the Crime Scene

- ◆ Photograph long, mid range and close-ups
- ◆ 35MM, digital and Polaroid
- ◆ Videography
- ◆ Using low lux
- ◆ Use both scaled and non-scaled in all close-ups

CSI Crime Scene Response 18

Recognition of Evidence

- ◆ If a bio-hazard zone, everything must be considered hazardous
- ◆ Always use universal safety precautions

CTL-Crime Scene Reference 19

Systematic Search

- ◆ Grid or block search
- ◆ Use only experienced crime scene investigators
- ◆ Conduct a systematic organized search of the entire scene
- ◆ Sketch all evidence in the scene

CTL-Crime Scene Reference 20

Documentation

- ◆ Assign one person to take accurate notes for each crime scene investigator
- ◆ Each item touched must be bagged and tagged

CTL-Crime Scene Reference 21

Documentation

- ◆ Re-glove to prevent cross contamination of evidence
- ◆ Tagging should be done by note takers with “clean gloved hands”

CTI Crime Scene Reference 22

Documentation

- ◆ Prevent contamination of the outside of the bag and tags
- ◆ Evidence bags should be collected in a clean area inside the scene until the entire scene is completed

CTI Crime Scene Reference 22

Minute Evidence

- ◆ Bag/tag items that:
 - are in the way
 - that may be lost or altered
 - so that the full investigation continue

CTI Crime Scene Reference 22

Lividity

- ◆ Discoloration of the body
- ◆ Caused by gravity
- ◆ Pooling of blood to lowest area of the body if not moved
- ◆ ALL discoloration **MUST BE** recorded as the body is first observed

CTI-Culture Notes-Booklet-23

Rigor Mortis

- ◆ Body becomes stiff due to chemical reaction in the muscles
- ◆ Begins in the small muscles of the face and goes downward
- ◆ Relaxes in the same order

CTI-Culture Notes-Booklet-24

Body Temperature

- ◆ Body temperature drops 1 ½ degrees the first 4 hours
- ◆ Than it drops one degree until it attains surrounding temperature
- ◆ Clothing, wet/dry conditions, contact surface impact rate of change

CTI-Culture Notes-Booklet-25

Trace Evidence

- ◆ Hairs and fibers
 - animal or human
- ◆ Fabric
- ◆ Foods or medicine
- ◆ Paint or paint chips

CSI Crime Scene Investigation, 2e

Trace Evidence

- ◆ Glass/wood
- ◆ Body fluids and body waste
- ◆ Bite marks/other bruises
 - color of injury may indicate a timetable of events

CSI Crime Scene Investigation, 2e

Trace Evidence

- ◆ Animal vs. child bite marks
- ◆ Ear prints/lip prints
- ◆ Foot, shoe or tire impressions
- ◆ Drugs
 - legal and illegal

CSI Crime Scene Investigation, 2e

Burn Patterns

◆Dry burn

- shadow
- outline of hot area

CPD Crime Scene Reference 21

Burn Patterns

◆Wet burn

- splatter
- flow
- immersion
- area of body

CPD Crime Scene Reference 22

Pattern Recognition

◆Pattern may indicate weapon

- Hand
- Belt
- Coat hanger
- Extension cord

CPD Crime Scene Reference 23

Special Attention

- ◆ Light blood/dust shoe prints or prints in body fluids can easily be destroyed
- ◆ Hairs and fibers may become detached from evidence or lost in windy conditions

CTE Crime Scene Notebook 21

Special Attention

- ◆ Latent finger/palm prints
- ◆ Blood fingerprints/palmprints
- ◆ Hairs and fibers
- ◆ Body fluids
- ◆ Wet or damp items

CTE Crime Scene Notebook 21

Body Fluids

- ◆ Blood
 - drops
 - spatters
 - blood trail/drag marks
- ◆ Seminal fluids
- ◆ Saliva
- ◆ Other fluids

CTE Crime Scene Notebook 21

Hazards

- ◆ Guns and ammo
- ◆ Knives
- ◆ Broken glass
- ◆ Syringes and other sharp items

CTI Crime Scene Software 17

Appropriate Containers

- ◆ Document each item with who, what, when and where
- ◆ Use plastic bags **ONLY** on wet, dripping items
- ◆ Use hard containers for sharp items

CTI Crime Scene Software 18

Chain of Custody

- ◆ Each item must be properly marked by **EVERY** person touching the item
- ◆ Security must be maintained on **ALL** evidence **ALL** the time
- ◆ Maintain an accurate record of all evidence

CTI Crime Scene Software 19

Preservation of Evidence

- ◆ **Wet or bloody evidence**
 - check chain of custody tags and
 - completely air dry in approved drying area away from other evidence
 - re-bag when completely dried
- ◆ **Submit for appropriate analysis**

CPIC Crime Scene Advisor v2

Preservation of Evidence

- ◆ **Blood and bodily fluids**
 - Must be refrigerated ASAP after proper documentation
 - Must be maintained at proper temperature

CPIC Crime Scene Advisor v2

All Evidence at the Scene

- ◆ **Secure all evidence**
- ◆ **Secure all equipment**
- ◆ **Walk through of area**
- ◆ **Secure or release scene**

CPIC Crime Scene Advisor v2

Summary

- ◆ **ALL evidence MUST be:**
 - Recognized
 - Collected
 - Preserved

CPA Crime Scene Response Kit

Summary

- ◆ **WE may collect today and may not analyze for years, until the proper technology advances for impartial results**

CPA Crime Scene Response Kit

Stop!

- ◆ **The offender before he strikes again!**
- ◆ **Identify and collect ALL the evidence!**
- ◆ **Keep abreast of the latest technology and learn from experiences that we may get better at our most important job**

CPA Crime Scene Response Kit

Stop!

◆SMILE!!

◆BE KIND TO EACH
OTHER!!

©2000 by [illegible]

***The Role of CPS in Child Fatality
and Homicide Investigations***

The Role Of CPS In Child Fatality And Homicide Investigations

Ina G. Fernandez
Supervisor, Prevention Services
Fairfax County Department of Family Services

CH-CPS / Fernandez 1

Vision Statement

- To facilitate the investigative process between law enforcement and social work so that desired outcomes are produced

CH-CPS / Fernandez 2

Who Are Child Protective Services Workers?

- Social Workers
- Investigators/Detectives
- Therapists
- Crisis Counselors
- Teachers
- Helpers
- Healers
- Advocates

CH-CPS / Fernandez 3

National Association Of Social Workers Code Of Ethics

The primary mission of the social work profession is to enhance human well being and help meet the basic needs of all people, with particular attention to the needs and empowerment of people who are vulnerable, oppressed and living in poverty...social workers promote social justice and social change with and on behalf of clients...

CPI-CPS Form 100-1

Core Values Associated With The Mission Of Social Work

- Service
- Social Justice
- Dignity and Worth of the Person
- Importance of Human Relationships
- Integrity
- Competence

CPI-CPS Form 100-2

When does CPS Investigate Cases of Suspected Abuse and Neglect

- The alleged victim is under 18 years of age
- The suspected abuser or neglecter is a caretaker
- The alleged abuse is defined by state and local law

CPI-CPS Form 100-3

Goals And Objectives In Conducting Joint Investigations

- Gather information to produce accurate conclusion
- Adjudicate individuals who have been convicted of child homicide
- Be completely prepared with all relevant evidence
- Have open and honest dialog between both agencies

CH-CPS 1 example 1

Goals And Objectives In Conducting Joint Investigations

- Be knowledgeable of the laws and regulations which govern each agency
- Ensure joint and cross-training
- Conduct joint investigations on all serious child abuse cases

CH-CPS 1 example 2

Why Team A Case?

- Two sets of eyes and ears are better than one
- Ensure the right hand knows what the left hand is doing
- More is accomplished in a shorter amount of time

CH-CPS 1 example 3

Why Team A Case?

- Ability to speak to collateral contacts simultaneously
- Limited need to re-interview
- CPS is able to speak to a suspect once an attorney has been retained

CH-CPS-Fernando-10

Why Team A Case?

- Suspect/collaterals may feel more comfortable speaking to one person over the other
- Maximize the use of two different areas of expertise
- We are all working towards the same goal

CH-CPS-Fernando-11

States With Codes Authorizing or Requiring Joint Investigations

Names of States		
Alabama	Louisiana	Ohio
Arkansas	Maryland	Oregon
California	Michigan	Tennessee
Colorado	Minnesota	Texas
Connecticut	Missouri	Utah
Delaware	Nebraska	Virginia
Florida	Nevada	Washington
Georgia	New Hampshire	West Virginia
Hawaii	New Mexico	Wisconsin
Illinois	New York	Wyoming
Kansas	North Carolina	
Kentucky	North Dakota	

CH-CPS-Fernando-12

States With NO Codes Authorizing or Requiring Joint Investigations

Names of States	
Alaska	New Jersey
Arizona	Oklahoma
Idaho	Pennsylvania
Indiana	Rhode Island
Iowa	South Carolina
Maine	South Dakota
Massachusetts	Vermont
Mississippi	Washington DC
Montana	

CPA-CPS Form 100-13

Georgia State Code

Georgia Code Ann.

19-15-2(h) provides that child abuse protocol committees shall establish joint work efforts between law enforcement and child abuse agencies in child abuse investigations

CPA-CPS Form 100-14

Texas State Code

Texas Code Ann.

261.3301(7)(f)(Vernon 1999) states that "[a]n investigation of a report to the Department of serious physical or sexual abuse of a child shall be conducted jointly by an investigator from the appropriate local law enforcement agency and the department or agency responsible for an investigation..."

CPA-CPS Form 100-15

Virginia State Code

Virginia Code Ann.

63.1-248.6(E)(5) states the Department "shall report immediately to the attorney for the Commonwealth and the local law enforcement agency and make available to them the records of the Department when abuse or neglect is suspected..."

CPH-CPS-F-annex-16

Action Plan

- Meet before the investigation starts/strategize
- "Know what you know"
- Be informed about the other department's capabilities/limitations/laws that govern

CPH-CPS-F-annex-17

Available Options

- Joint investigations
- Multi-disciplinary teams
- Child fatality review teams
- Child advocacy centers
- Prevention

CPH-CPS-F-annex-18

Recommendations

- Joint and cross training
- Memorandums of Agreement
- Be open and honest

CHCPS Form 100-1.9

Benefits

- No misunderstandings
- Everyone is aware of his/her role
- No blurred boundaries

CHCPS Form 100-20

FAIRFAX COUNTY POLICE DEPARTMENT

OPERATIONS PROTOCOL WITH

THE DEPARTMENT OF FAMILY SERVICES

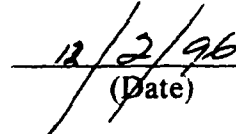
I. POLICY


The Child Services Unit of the Fairfax County Police Department is established as the entity with primary responsibility for investigative coordination with the Department of Family Services in instances of the physical and/or sexual abuse of children. Whenever necessary, the Child Services Unit will be augmented by other sections of the Major Crimes Division. The Child Services Unit will work closely with the Department of Family Services in cases involving caretaker relationships. The goals of this protocol shall be supported by the following procedures:

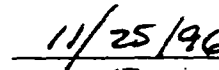
- An initial review of allegations will be made by the Department of Family Services to obtain an overview of the nature of the violation, such as: proper jurisdiction, time frame of event, information on the victim and alleged abuser.
- The Department of Family Services shall be contacted immediately in cases where DFS has jurisdiction when the cases first come to police attention.
- DFS shall contact the Child Services Unit Supervisor, or in his absence, a CIB Major Crimes Supervisor in cases involving serious injury, death, or sexual crimes involving recent penetration. An investigator will be assigned for immediate investigation.
- Cases of sexual abuse shall be referred by the DFS worker to the Child Services Unit Supervisor. Appropriate cases will be assigned to an investigator for a joint investigation.
- Cases involving physical abuse shall be evaluated by a DFS Supervisor prior to contacting CIB. If a case appears to be prosecutable, contact will then be made with the Child Services Unit Supervisor for review and assignment.
- Decisions to offer polygraph examinations to suspects and victims will rest with the Child Services Unit Supervisor and the Police Polygraph Section.
- The Child Services Unit investigator will be responsible for controlling and coordinating cases of abuse which are likely to culminate in criminal prosecution.

- The Office of the Commonwealth's Attorney will remain the final decision-making authority when determining if a case will be prosecuted criminally.
- Whenever possible, interviews of victims and suspects will be conducted jointly in a team approach by the Child Services Unit and DFS.
- DFS and Police representatives will attend regular meetings to discuss ongoing cases, training, and other issues of concern.
- Sufficient notice will be provided to the Child Services investigator by the DFS worker on civil petitions, as well as the name of the County Attorney assigned to the case. This will allow the investigator to liaison with the County Attorney and review evidence pertinent to the petition, as well as protect evidence which may be needed in a later criminal trial.


Suzanne C. Manzo, Director
Fairfax County Department of Family Services


(Date)


Colonel M. Douglas Scott
Chief of Police
Fairfax County Police Department


(Date)



National Association of Social Workers CODE OF ETHICS

Effective January 1, 1997

Preamble

The primary mission of the social work profession is to enhance human well being and help meet the basic human needs of all people, with particular attention to the needs and empowerment of people who are vulnerable, oppressed, and living in poverty. A historic and defining feature of social work is the profession's focus on individual well being in a social context and the well being of society. Fundamental to social work is attention to the environmental forces that create, contribute to, and address problems in living.

Social workers promote social justice and social change with and on behalf of clients. "Clients" is used inclusively to refer to individuals, families, groups, organizations, and communities. Social workers are sensitive to cultural and ethnic diversity and strive to end discrimination, oppression, poverty, and other forms of social injustice. These activities may be in the form of direct practice, community organizing, supervision, consultation, administration, advocacy, social and political action, policy development and implementation, education, and research and evaluation. Social workers seek to enhance the capacity of people to address their own needs. Social workers also seek to promote the responsiveness of organizations, communities, and other social institutions to individuals' needs and social problems.

The mission of the social work profession is rooted in a set of core values. These core values, embraced by social workers throughout the profession's history, are the foundation of social work's unique purpose and perspective:

- service
- social justice
- dignity and worth of the person
- importance of human relationships
- integrity
- competence.

This constellation of core values reflects what is unique to the social work profession. Core values, and the principles that flow from them, must be balanced within the context and complexity of the human experience.

Purpose of the NASW Code of Ethics

Professional ethics are at the core of social work. The profession has an obligation to articulate its basic values, ethical principles, and ethical standards. The *NASW Code of Ethics* sets forth these values, principles, and standards to guide social workers' conduct.

The *Code* is relevant to all social workers and social work students, regardless of their professional functions, the settings in which they work, or the populations they serve.

The *NASW Code of Ethics* serves six purposes:

1. The *Code* identifies core values on which social work's mission is based.
2. The *Code* summarizes broad ethical principles that reflect the profession's core values and establishes a set of specific ethical standards that should be used to guide social work practice.
3. The *Code* is designed to help social workers identify relevant considerations when professional obligations conflict or ethical uncertainties arise.
4. The *Code* provides ethical standards to which the general public can hold the social work profession accountable.
5. The *Code* socializes practitioners new to the field to social work's mission, values, ethical principles, and ethical standards.
6. The *Code* articulates standards that the social work profession itself can use to assess whether social workers have engaged in unethical conduct. NASW has formal procedures to adjudicate ethics complaints filed against its members.¹ In subscribing to this *Code*, social workers are required to cooperate in its implementation, participate in NASW adjudication proceedings, and abide by any NASW disciplinary rulings or sanctions based on it.

¹For information on NASW adjudication procedures, see *NASW Procedures for the Adjudication of Grievances*.

The *Code* offers a set of values, principles, and standards to guide decision making and conduct when ethical issues arise. It does not provide a set of rules that prescribe how social workers should act in all situations. Specific applications of the *Code* must take into account the context in which it is being considered and the possibility of conflicts among the *Code*'s values, principles, and standards. Ethical responsibilities flow from all human relationships, from the personal and familial to the social and professional.

Further, the *NASW Code of Ethics* does not specify which values, principles, and standards are most important and ought to outweigh others in instances when they conflict. Reasonable differences of opinion can and do exist among social workers with respect to the ways in which values, ethical principles, and ethical standards should be rank ordered when they conflict. Ethical decision making in a given situation must apply the informed judgment of the individual social worker and should also consider how the issues would be judged in a peer review process where the ethical standards of the profession would be applied.

Ethical decision making is a process. There are many instances in social work where simple answers are not available to resolve complex ethical issues. Social workers should take into consideration all the values, principles, and standards in this *Code* that are relevant to any situation in which ethical judgment is warranted. Social workers' decisions and actions should be consistent with the spirit as well as the letter of this *Code*.

In addition to this *Code*, there are many other sources of information about ethical thinking that may be useful. Social workers should consider ethical theory and principles generally, social work theory and research, laws, regulations, agency policies, and other relevant codes of ethics, recognizing that among codes of ethics social workers should consider the *NASW Code of Ethics* as their primary source. Social workers also should be aware of the impact on ethical decision making of their clients' and their own personal values and cultural and religious beliefs and practices. They should be aware of any conflicts between personal and professional values and deal with them responsibly. For additional guidance social workers should consult the relevant literature on professional ethics and ethical decision making and seek appropriate consultation when faced with ethical dilemmas. This may involve consultation with an agency-based or social work organization's ethics committee, a regulatory body, knowledgeable colleagues, supervisors, or legal counsel.

Instances may arise when social workers' ethical obligations conflict with agency policies or relevant

laws or regulations. When such conflicts occur, social workers must make a responsible effort to resolve the conflict in a manner that is consistent with the values, principles, and standards expressed in this *Code*. If a reasonable resolution of the conflict does not appear possible, social workers should seek proper consultation before making a decision.

The *NASW Code of Ethics* is to be used by NASW and by individuals, agencies, organizations, and bodies (such as licensing and regulatory boards, professional liability insurance providers, courts of law, agency boards of directors, government agencies, and other professional groups) that choose to adopt it or use it as a frame of reference. Violation of standards in this *Code* does not automatically imply legal liability or violation of the law. Such determination can only be made in the context of legal and judicial proceedings. Alleged violations of the *Code* would be subject to a peer review process. Such processes are generally separate from legal or administrative procedures and insulated from legal review or proceedings to allow the profession to counsel and discipline its own members.

A code of ethics cannot guarantee ethical behavior. Moreover, a code of ethics cannot resolve all ethical issues or disputes or capture the richness and complexity involved in striving to make responsible choices within a moral community. Rather, a code of ethics sets forth values, ethical principles, and ethical standards to which professionals aspire and by which their actions can be judged. Social workers' ethical behavior should result from their personal commitment to engage in ethical practice. The *NASW Code of Ethics* reflects the commitment of all social workers to uphold the profession's values and to act ethically. Principles and standards must be applied by individuals of good character who discern moral questions and, in good faith, seek to make reliable ethical judgments.

Ethical Principles

The following broad ethical principles are based on social work's core values of service, social justice, dignity and worth of the person, importance of human relationships, integrity, and competence. These principles set forth ideals to which all social workers should aspire.

Value: Service

Ethical Principle: Social workers' primary goal is to help people in need and to address social problems.

Social workers elevate service to others above self-interest. Social workers draw on their knowledge, values, and skills to help people in need and to address social problems. Social workers are encouraged to volunteer some portion of their professional skills with no expectation of significant financial return (pro bono service).

Value: Social Justice

Ethical Principle: Social workers challenge social injustice.

Social workers pursue social change, particularly with and on behalf of vulnerable and oppressed individuals and groups of people. Social workers' social change efforts are focused primarily on issues of poverty, unemployment, discrimination, and other forms of social injustice. These activities seek to promote sensitivity to and knowledge about oppression and cultural and ethnic diversity. Social workers strive to ensure access to needed information, services, and resources; equality of opportunity; and meaningful participation in decision making for all people.

Value: Dignity and Worth of the Person

Ethical Principle: Social workers respect the inherent dignity and worth of the person.

Social workers treat each person in a caring and respectful fashion, mindful of individual differences

and cultural and ethnic diversity. Social workers promote clients' socially responsible self-determination. Social workers seek to enhance clients' capacity and opportunity to change and to address their own needs. Social workers are cognizant of their dual responsibility to clients and to the broader society. They seek to resolve conflicts between clients' interests and the broader society's interests in a socially responsible manner consistent with the values, ethical principles, and ethical standards of the profession.

Value: Importance of Human Relationships

Ethical Principle: Social workers recognize the central importance of human relationships.

Social workers understand that relationships between and among people are an important vehicle for change. Social workers engage people as partners in the helping process. Social workers seek to strengthen relationships among people in a purposeful effort to promote, restore, maintain, and enhance the well-being of individuals, families, social groups, organizations, and communities.

Value: Integrity

Ethical Principle: Social workers behave in a trustworthy manner.

Social workers are continually aware of the profession's mission, values, ethical principles, and ethical standards and practice in a manner consistent with them. Social workers act honestly and responsibly and promote ethical practices on the part of the organizations with which they are affiliated.

Value: Competence

Ethical Principle: Social workers practice within their areas of competence and develop and enhance their professional expertise.

Social workers continually strive to increase their professional knowledge and skills and to apply them in practice. Social workers should aspire to contribute to the knowledge base of the profession.

Ethical Standards

The following ethical standards are relevant to the professional activities of all social workers. These standards concern (1) social workers' ethical responsibilities to clients, (2) social workers' ethical responsibilities to colleagues, (3) social workers' ethical responsibilities in practice settings, (4) social workers' ethical responsibilities as professionals, (5) social workers' ethical responsibilities to the social work profession, and (6) social workers' ethical responsibilities to the broader society.

Some of the standards that follow are enforceable guidelines for professional conduct, and some are aspirational. The extent to which each standard is enforceable is a matter of professional judgment to be exercised by those responsible for reviewing alleged violations of ethical standards.

1. Social Workers' Ethical Responsibilities to Clients

1.01 Commitment to Clients

Social workers' primary responsibility is to promote the well being of clients. In general, clients' interests are primary. However, social workers' responsibility to the larger society or specific legal obligations may on limited occasions supersede the loyalty owed clients, and clients should be so advised. (Examples include when a social worker is required by law to report that a client has abused a child or has threatened to harm self or others.)

1.02 Self-Determination

Social workers respect and promote the right of clients to self-determination and assist clients in their efforts to identify and clarify their goals. Social workers may limit clients' right to self-determination when, in the social workers' professional judgment, clients' actions or potential actions pose a serious, foreseeable, and imminent risk to themselves or others.

1.03 Informed Consent

- (a) Social workers should provide services to clients only in the context of a professional relationship based, when appropriate, on valid informed consent. Social workers should use clear and understandable language to inform clients of the purpose of the services, risks related to the services, limits to services because of the requirements of a third-party payer, relevant costs, reasonable alternatives, clients' right to refuse or withdraw consent, and the time frame covered by the consent. Social workers should provide clients with an opportunity to ask questions.
- (b) In instances when clients are not literate or have difficulty understanding the primary language used in the practice setting, social workers should take steps to ensure clients' comprehension. This may include providing clients with a detailed verbal explanation or arranging for a qualified interpreter or translator whenever possible.
- (c) In instances when clients lack the capacity to provide informed consent, social workers should protect clients' interests by seeking permission from an appropriate third party, informing clients consistent with the clients' level of understanding. In such instances social workers should seek to ensure that the third party acts in a manner consistent with clients' wishes and interests. Social workers should take reasonable steps to enhance such clients' ability to give informed consent.
- (d) In instances when clients are receiving services involuntarily, social workers should provide information about the nature and extent of services and about the extent of clients' right to refuse service.
- (e) Social workers who provide services via electronic media (such as computer, telephone, radio, and television) should inform recipients of the limitations and risks associated with such services.
- (f) Social workers should obtain clients' informed consent before audio taping or videotaping clients or permitting observation of services to clients by a third party.

1.04 Competence

- (a) Social workers should provide services and represent themselves as competent only within the boundaries of their education, training, license, certification, consultation received, supervised experience, or other relevant professional experience.
- (b) Social workers should provide services in substantive areas or use intervention techniques or approaches that are new to them only after engaging in appropriate study, training, consultation, and supervision from people who are competent in those interventions or techniques.
- (c) When generally recognized standards do not exist with respect to an emerging area of practice, social workers should exercise careful judgment and take responsible steps (including appropriate education, research, training, consultation, and supervision) to ensure the competence of their work and to protect clients from harm.

1.05 Cultural Competence and Social Diversity

- (a) Social workers should understand culture and its function in human behavior and society, recognizing the strengths that exist in all cultures.
- (b) Social workers should have a knowledge base of their clients' cultures and be able to demonstrate competence in the provision of services that are sensitive to clients' cultures and to differences among people and cultural groups.
- (c) Social workers should obtain education about and seek to understand the nature of social diversity and oppression with respect to race, ethnicity, national origin, color, sex, sexual orientation, age, marital status, political belief, religion, and mental or physical disability.

1.06 Conflicts of Interest

- (a) Social workers should be alert to and avoid conflicts of interest that interfere with the exercise of professional discretion and impartial judgment. Social workers should inform clients when a real or potential conflict of interest arises and take reasonable steps to resolve the issue in a manner that makes the clients' interests primary and protects clients' interests to the greatest extent possible. In some cases, protecting clients' interests may require termination of the professional relationship with proper referral of the client.
- (b) Social workers should not take unfair advantage of any professional relationship or exploit others to further their personal, religious, political, or business interests.
- (c) Social workers should not engage in dual or multiple relationships with clients or former clients in which there is a risk of exploitation or potential harm to the client. In instances when dual or multiple relationships are unavoidable, social workers should take steps to protect clients and are responsible for setting clear, appropriate, and culturally sensitive boundaries. (Dual or multiple relationships occur when social workers relate to clients in more than one relationship, whether professional, social, or business. Dual or multiple relationships can occur simultaneously or consecutively.)
- (d) When social workers provide services to two or more people who have a relationship with each other (for example, couples, family members), social workers should clarify with all parties which individuals will be considered clients and the nature of social workers' professional obligations to the various individuals who are receiving services. Social workers who anticipate a conflict of interest among the individuals receiving services or who anticipate having to perform in potentially conflicting roles (for example, when a social worker is asked to testify in a child custody dispute or divorce proceedings involving clients) should clarify their role with the parties involved and take appropriate action to minimize any conflict of interest.

1.07 Privacy and Confidentiality

- (a) Social workers should respect clients' right to privacy. Social workers should not solicit private information from clients unless it is essential to providing services or conducting social work evaluation or research. Once private information is shared, standards of confidentiality apply.
- (b) Social workers may disclose confidential information when appropriate with valid consent from a client or a person legally authorized to consent on behalf of a client.
- (c) Social workers should protect the confidentiality of all information obtained in the course of professional service, except for compelling professional reasons. The general expectation that social workers will keep information confidential does not apply when disclosure is necessary to prevent serious, foreseeable, and imminent harm to a client or other identifiable person or when laws or regulations require disclosure without a client's consent. In all

instances, social workers should disclose the least amount of confidential information necessary to achieve the desired purpose; only information that is directly relevant to the purpose for which the disclosure is made should be revealed.

(d) Social workers should inform clients, to the extent possible, about the disclosure of confidential information and the potential consequences, when feasible before the disclosure is made. This applies whether social workers disclose confidential information on the basis of a legal requirement or client consent.

(e) Social workers should discuss with clients and other interested parties the nature of confidentiality and limitations of clients' right to confidentiality. Social workers should review with clients' circumstances where confidential information may be requested and where disclosure of confidential information may be legally required. This discussion should occur as soon as possible in the social worker–client relationship and as needed throughout the course of the relationship.

(f) When social workers provide counseling services to families, couples, or groups, social workers should seek agreement among the parties involved concerning each individual's right to confidentiality and obligation to preserve the confidentiality of information shared by others. Social workers should inform participants in family, couples, or group counseling that social workers cannot guarantee that all participants will honor such agreements.

(g) Social workers should inform clients involved in family, couples, marital, or group counseling of the social worker's, employer's, and agency's policy concerning the social worker's disclosure of confidential information among the parties involved in the counseling.

(h) Social workers should not disclose confidential information to third-party payers unless clients have authorized such disclosure.

(i) Social workers should not discuss confidential information in any setting unless privacy can be ensured. Social workers should not discuss confidential information in public or semipublic areas such as hallways, waiting rooms, elevators, and restaurants.

(j) Social workers should protect the confidentiality of clients during legal proceedings to the extent permitted by law. When a court of law or other legally authorized body orders social workers to disclose confidential or privileged information without a client's consent and such disclosure could cause harm to the client, social workers should request that the court withdraw the order or limit the order as narrowly as possible or maintain the records under seal, unavailable for public inspection.

(k) Social workers should protect the confidentiality of clients when responding to requests from members of the media.

(l) Social workers should protect the confidentiality of clients' written and electronic records and other sensitive information. Social workers should take reasonable steps to ensure that clients' records are stored in a secure location and that clients' records are not available to others who are not authorized to have access.

(m) Social workers should take precautions to ensure and maintain the confidentiality of information transmitted to other parties through the use of computers, electronic mail, facsimile machines, telephones and telephone answering machines, and other electronic or computer technology. Disclosure of identifying information should be avoided whenever possible.

(n) Social workers should transfer or dispose of clients' records in a manner that protects clients' confidentiality and is consistent with state statutes governing records and social work

licensure.

(o) Social workers should take reasonable precautions to protect client confidentiality in the event of the social worker's termination of practice, incapacitation, or death.

(p) Social workers should not disclose identifying information when discussing clients for teaching or training purposes unless the client has consented to disclosure of confidential information.

(q) Social workers should not disclose identifying information when discussing clients with consultants unless the client has consented to disclosure of confidential information or there is a compelling need for such disclosure.

(r) Social workers should protect the confidentiality of deceased clients consistent with the preceding standards.

1.08 Access to Records

(a) Social workers should provide clients with reasonable access to records concerning the clients. Social workers who are concerned that clients' access to their records could cause serious misunderstanding or harm to the client should provide assistance in interpreting the records and consultation with the client regarding the records. Social workers should limit clients' access to their records, or portions of their records, only in exceptional circumstances when there is compelling evidence that such access would cause serious harm to the client. Both clients' requests and the rationale for withholding some or all of the record should be documented in clients' files.

(b) When providing clients with access to their records, social workers should take steps to protect the confidentiality of other individuals identified or discussed in such records.

1.09 Sexual Relationships

(a) Social workers should under no circumstances engage in sexual activities or sexual contact with current clients, whether such contact is consensual or forced.

(b) Social workers should not engage in sexual activities or sexual contact with clients' relatives or other individuals with whom clients maintain a close personal relationship when there is a risk of exploitation or potential harm to the client. Sexual activity or sexual contact with clients' relatives or other individuals with whom clients maintain a personal relationship has the potential to be harmful to the client and may make it difficult for the social worker and client to maintain appropriate professional boundaries. Social workers—not their clients, their clients' relatives, or other individuals with whom the client maintains a personal relationship—assume the full burden for setting clear, appropriate, and culturally sensitive boundaries.

(c) Social workers should not engage in sexual activities or sexual contact with former clients because of the potential for harm to the client. If social workers engage in conduct contrary to this prohibition or claim that an exception to this prohibition is warranted because of extraordinary circumstances, it is social workers—not their clients—who assume the full burden of demonstrating that the former client has not been exploited, coerced, or manipulated, intentionally or unintentionally.

(d) Social workers should not provide clinical services to individuals with whom they have had a prior sexual relationship. Providing clinical services to a former sexual partner has the potential to be harmful to the individual and is likely to make it difficult for the social worker and individual to maintain appropriate professional boundaries.

1.10 Physical Contact

Social workers should not engage in physical contact with clients when there is a possibility of psychological harm to the client as a result of the contact (such as cradling or caressing clients). Social workers who engage in appropriate physical contact with clients are responsible for setting clear, appropriate, and culturally sensitive boundaries that govern such physical contact.

1.11 Sexual Harassment

Social workers should not sexually harass clients. Sexual harassment includes sexual advances, sexual solicitation, requests for sex-usual favors, and other verbal or physical conduct of a sexual nature.

1.12 Derogatory Language

Social workers should not use derogatory language in their written or verbal communications to or about clients. Social workers should use accurate and respectful language in all communications to and about clients.

1.13 Payment for Services

(a) When setting fees, social workers should ensure that the fees are fair, reasonable, and commensurate with the services performed. Consideration should be given to clients' ability to pay.

(b) Social workers should avoid accepting goods or services from clients as payment for professional services. Bartering arrangements, particularly involving services, create the potential for conflicts of interest, exploitation, and inappropriate boundaries in social workers' relationships with clients. Social workers should explore and may participate in bartering only in very limited circumstances when it can be demonstrated that such arrangements are an accepted practice among professionals in the local community, considered to be essential for the provision of services, negotiated without coercion, and entered into at the client's initiative and with the client's informed consent. Social workers who accept goods or services from clients as payment for professional services assume the full burden of demonstrating that this arrangement will not be detrimental to the client or the professional relationship.

(c) Social workers should not solicit a private fee or other remuneration for providing services to clients who are entitled to such available services through the social workers' employer or agency.

1.14 Clients Who Lack Decision-Making Capacity

When social workers act on behalf of clients who lack the capacity to make informed decisions, social workers should take reasonable steps to safeguard the interests and rights of those clients.

1.15 Interruption of Services

Social workers should make reasonable efforts to ensure continuity of services in the event that services are interrupted by factors such as unavailability, relocation, illness, disability, or death.

1.16 Termination of Services

(a) Social workers should terminate services to clients and professional relationships with them when such services and relationships are no longer required or no longer serve the

clients' needs or interests.

(b) Social workers should take reasonable steps to avoid abandoning clients who are still in need of services. Social workers should withdraw services precipitously only under unusual circumstances, giving careful consideration to all factors in the situation and taking care to minimize possible adverse effects. Social workers should assist in making appropriate arrangements for continuation of services when necessary.

(c) Social workers in fee-for-service settings may terminate services to clients who are not paying an overdue balance if the financial contractual arrangements have been made clear to the client, if the client does not pose an imminent danger to self or others, and if the clinical and other consequences of the current nonpayment have been addressed and discussed with the client.

(d) Social workers should not terminate services to pursue a social, financial, or sexual relationship with a client.

(e) options for the continuation of services and of the benefits and risks of the options.

2. Social Workers' Ethical Responsibilities to Colleagues

2.01 Respect

(a) Social workers should treat colleagues with respect and should represent accurately and fairly the qualifications, views, and obligations of colleagues.

(b) Social workers should avoid unwarranted negative criticism of colleagues in communications with clients or with other professionals. Unwarranted negative criticism may include demeaning comments that refer to colleagues' level of competence or to individuals' attributes such as race, ethnicity, national origin, color, sex, sexual orientation, age, marital status, political belief, religion, and mental or physical disability.

(c) Social workers should cooperate with social work colleagues and with colleagues of other professions when such cooperation serves the well-being of clients.

2.02 Confidentiality

Social workers should respect confidential information shared by colleagues in the course of their professional relationships and transactions. Social workers should ensure that such colleagues understand social workers' obligation to respect confidentiality and any exceptions related to it.

2.03 Interdisciplinary Collaboration

(a) Social workers who are members of an interdisciplinary team should participate in and contribute to decisions that affect the well-being of clients by drawing on the perspectives, values, and experiences of the social work profession. Professional and ethical obligations of the interdisciplinary team as a whole and of its individual members should be clearly established.

(b) Social workers for whom a team decision raises ethical concerns should attempt to resolve the disagreement through appropriate channels. If the disagreement cannot be resolved, social workers should pursue other avenues to address their concerns consistent with client well-being.

2.04 Disputes Involving Colleagues

- (a) Social workers should not take advantage of a dispute between a colleague and an employer to obtain a position or otherwise advance the social workers' own interests.
- (b) Social workers should not exploit clients in disputes with colleagues or engage clients in any inappropriate discussion of conflicts between social workers and their colleagues.

2.05 Consultation

- (a) Social workers should seek the advice and counsel of colleagues whenever such consultation is in the best interests of clients.
- (b) Social workers should keep themselves informed about colleagues' areas of expertise and competencies. Social workers should seek consultation only from colleagues who have demonstrated knowledge, expertise, and competence related to the subject of the consultation.
- (c) When consulting with colleagues about clients, social workers should disclose the least amount of information necessary to achieve the purposes of the consultation.

2.06 Referral for Services

- (a) Social workers should refer clients to other professionals when the other professionals' specialized knowledge or expertise is needed to serve clients fully or when social workers believe that they are not being effective or making reasonable progress with clients and that additional service is required.
- (b) Social workers who refer clients to other professionals should take appropriate steps to facilitate an orderly transfer of responsibility. Social workers who refer clients to other professionals should disclose, with clients' consent, all pertinent information to the new service providers.
- (c) Social workers are prohibited from giving or receiving payment for a referral when no professional service is provided by the referring social worker.

2.07 Sexual Relationships

- (a) Social workers who function as supervisors or educators should not engage in sexual activities or contact with supervisees, students, trainees, or other colleagues over whom they exercise professional authority.
- (b) Social workers should avoid engaging in sexual relationships with colleagues when there is potential for a conflict of interest. Social workers who become involved in, or anticipate becoming involved in, a sexual relationship with a colleague have a duty to transfer professional responsibilities, when necessary, to avoid a conflict of interest.

2.08 Sexual Harassment

Social workers should not sexually harass supervisees, students, trainees, or colleagues. Sexual harassment includes sexual advances, sexual solicitation, requests for sexual favors, and other verbal or physical conduct of a sexual nature.

2.09 Impairment of Colleagues

- (a) Social workers who have direct knowledge of a social work colleague's impairment that is due to personal problems, psychosocial distress, substance abuse, or mental health difficulties and that interferes with practice effectiveness should consult with that colleague when feasible and assist the colleague in taking remedial action.

(b) Social workers who believe that a social work colleague is incompetent and has not taken adequate steps to address the incompetence should take action through appropriate channels established by employers, agencies, NASW, licensing and regulatory bodies, and other professional organizations.

2.10 Incompetence of Colleagues

(a) Social workers who have direct knowledge of a social work colleague's incompetence should consult with that colleague in taking remedial action.

(b) Social workers who believe that a social work colleague is incompetent and has not taken adequate steps to address the incompetence should take action through appropriate channels established by employers, agencies, NASW, licensing and regulatory bodies and other professional organizations.

2.11 Unethical Conduct of Colleagues

(a) Social workers should take adequate measures to discourage, prevent, expose, and correct the unethical conduct of colleagues.

(b) Social workers should be knowledgeable about established policies and procedures for handling concerns about colleagues' unethical behavior. Social workers should be familiar with national, state, and local procedures for handling ethics complaints. These include policies and procedures created by NASW, licensing and regulatory bodies, employers, agencies, and other professional organizations.

(c) Social workers who believe that a colleague has acted unethically should seek resolution by discussing their concerns with the colleague when feasible and when such discussion is likely to be productive.

(d) When necessary, social workers who believe that a colleague has acted unethically should take action through appropriate formal channels (such as contacting a state licensing board or regulatory body, an NASW committee on inquiry, or other professional ethics committees).

(e) Social workers should defend and assist colleagues who are unjustly charged with unethical conduct.

3. Social Workers' Ethical Responsibilities in Practice Settings

3.01 Supervision and Consultation

(a) Social workers who provide supervision or consultation should have the necessary knowledge and skill to supervise or consult appropriately and should do so only within their areas of knowledge and competence.

(b) Social workers who provide supervision or consultation are responsible for setting clear, appropriate, and culturally sensitive boundaries.

(c) Social workers should not engage in any dual or multiple relationships with supervisees in which there is a risk of exploitation of or potential harm to the supervisee.

(d) Social workers who provide supervision should evaluate supervisees' performance in a manner that is fair and respectful.

3.02 Education and Training

(a) Social workers who function as educators, field instructors for students, or trainers should

provide instruction only within their areas of knowledge and competence and should provide instruction based on the most current information and knowledge available in the profession.

(b) Social workers who function as educators or field instructors for students should evaluate students' performance in a manner that is fair and respectful.

(c) Social workers who function as educators or field instructors for students should take reasonable steps to ensure that clients are routinely informed when services are being provided by students.

(d) Social workers who function as educators or field instructors for students should not engage in any dual or multiple relationships with students in which there is a risk of exploitation or potential harm to the student. Social work educators and field instructors are responsible for setting clear, appropriate, and culturally sensitive boundaries.

3.03 Performance Evaluation

Social workers who have responsibility for evaluating the performance of others should fulfill such responsibility in a fair and considerate manner and on the basis of clearly stated criteria.

3.04 Client Records

(a) Social workers should take reasonable steps to ensure that documentation in records is accurate and reflects the services provided.

(b) Social workers should include sufficient and timely documentation in records to facilitate the delivery of services and to ensure continuity of services provided to clients in the future.

(c) Social workers' documentation should protect clients' privacy to the extent that is possible and appropriate and should include only information that is directly relevant to the delivery of services.

(d) Social workers should store records following the termination of services to ensure reasonable future access. Records should be maintained for the number of years required by state statutes or relevant contracts.

3.05 Billing

Social workers should establish and maintain billing practices that accurately reflect the nature and extent of services provided and that identify who provided the service in the practice setting.

3.06 Client Transfer

(a) When an individual who is receiving services from another agency or colleague contacts a social worker for services, the social worker should carefully consider the client's needs before agreeing to provide services. To minimize possible confusion and conflict, social workers should discuss with potential clients the nature of the clients' current relationship with other service providers and the implications, including possible benefits or risks, of entering into a relationship with a new service provider.

(b) If a new client has been served by another agency or colleague, social workers should discuss with the client whether consultation with the previous service provider is in the client's best interest.

3.07 Administration

- (a) Social work administrators should advocate within and outside their agencies for adequate resources to meet clients' needs.
- (b) Social workers should advocate for resource allocation procedures that are open and fair. When not all clients' needs can be met, an allocation procedure should be developed that is nondiscriminatory and based on appropriate and consistently applied principles.
- (c) Social workers who are administrators should take reasonable steps to ensure that adequate agency or organizational resources are available to provide appropriate staff supervision.
- (d) Social work administrators should take reasonable steps to ensure that the working environment for which they are responsible is consistent with and encourages compliance with the *NASW Code of Ethics*. Social work administrators should take reasonable steps to eliminate any conditions in their organizations that violate, interfere with, or discourage compliance with the *Code*.

3.08 Continuing Education and Staff Development

Social work administrators and supervisors should take reasonable steps to provide or arrange for continuing education and staff development for all staff for whom they are responsible. Continuing education and staff development should address current knowledge and emerging developments related to social work practice and ethics.

3.09 Commitments to Employers

- (a) Social workers generally should adhere to commitments made to employers and employing organizations.
- (b) Social workers should work to improve employing agencies' policies and procedures and the efficiency and effectiveness of their services.
- (c) Social workers should take reasonable steps to ensure that employers are aware of social workers' ethical obligations as set forth in the *NASW Code of Ethics* and of the implications of those obligations for social work practice.
- (d) Social workers should not allow an employing organization's policies, procedures, regulations, or administrative orders to interfere with their ethical practice of social work. Social workers should take reasonable steps to ensure that their employing organizations' practices are consistent with the *NASW Code of Ethics*.
- (e) Social workers should act to prevent and eliminate discrimination in the employing organization's work assignments and in its employment policies and practices.
- (f) Social workers should accept employment or arrange student field placements only in organizations that exercise fair personnel practices.
- (g) Social workers should be diligent stewards of the resources of their employing organizations, wisely conserving funds where appropriate and never misappropriating funds or using them for unintended purposes.

3.10 Labor-Management Disputes

- (a) Social workers may engage in organized action, including the formation of and participation in labor unions, to improve services to clients and working conditions.
- (b) The actions of social workers who are involved in labor-management disputes, job actions, or labor strikes should be guided by the profession's values, ethical principles, and

ethical standards. Reasonable differences of opinion exist among social workers concerning their primary obligation as professionals during an actual or threatened labor strike or job action. Social workers should carefully examine relevant issues and their possible impact on clients before deciding on a course of action.

4. Social Workers' Ethical Responsibilities as Professionals

4.01 Competence

(a) Social workers should accept responsibility or employment only on the basis of existing competence or the intention to acquire the necessary competence.

(b) Social workers should strive to become and remain proficient in professional practice and the performance of professional functions. Social workers should critically examine and keep current with emerging knowledge relevant to social work. Social workers should routinely review the professional literature and participate in continuing education relevant to social work practice and social work ethics.

(c) Social workers should base practice on recognized knowledge, including empirically based knowledge, relevant to social work and social work ethics.

4.02 Discrimination

Social workers should not practice, condone, facilitate, or collaborate with any form of discrimination on the basis of race, ethnicity, national origin, color, sex, sexual orientation, age, marital status, political belief, religion, or mental or physical disability.

4.03 Private Conduct

Social workers should not permit their private conduct to interfere with their ability to fulfill their professional responsibilities.

4.04 Dishonesty, Fraud, and Deception

Social workers should not participate in, condone, or be associated with dishonesty, fraud, or deception.

4.05 Impairment

(a) Social workers should not allow their own personal problems, psychosocial distress, legal problems, substance abuse, or mental health difficulties to interfere with their professional judgment and performance or to jeopardize the best interests of people for whom they have a professional responsibility.

(b) Social workers whose personal problems, psychosocial distress, legal problems, substance abuse, or mental health difficulties interfere with their professional judgment and performance should immediately seek consultation and take appropriate remedial action by seeking professional help, making adjustments in workload, terminating practice, or taking any other steps necessary to protect clients and others.

4.06 Misrepresentation

(a) Social workers should make clear distinctions between statements made and actions engaged in as a private individual and as a representative of the social work profession, a professional social work organization, or the social worker's employing agency.

(b) Social workers who speak on behalf of professional social work organizations should

accurately represent the official and authorized positions of the organizations.

(c) Social workers should ensure that their representations to clients, agencies, and the public of professional qualifications, credentials, education, competence, affiliations, services provided, or results to be achieved are accurate. Social workers should claim only those relevant professional credentials they actually possess and take steps to correct any inaccuracies or misrepresentations of their credentials by others.

4.07 Solicitations

(a) Social workers should not engage in uninvited solicitation of potential clients who, because of their circumstances, are vulnerable to undue influence, manipulation, or coercion.

(b) Social workers should not engage in solicitation of testimonial endorsements (including solicitation of consent to use a client's prior statement as a testimonial endorsement) from current clients or from other people who, because of their particular circumstances, are vulnerable to undue influence.

4.08 Acknowledging Credit

(a) Social workers should take responsibility and credit, including authorship credit, only for work they have actually performed and to which they have contributed.

(b) Social workers should honestly acknowledge the work of and the contributions made by others.

5. Social Workers' Ethical Responsibilities to the Social Work Profession

5.01 Integrity of the Profession

(a) Social workers should work toward the maintenance and promotion of high standards of practice.

(b) Social workers should uphold and advance the values, ethics, knowledge, and mission of the profession. Social workers should protect, enhance, and improve the integrity of the profession through appropriate study and research, active discussion, and responsible criticism of the profession.

(c) Social workers should contribute time and professional expertise to activities that promote respect for the value, integrity, and competence of the social work profession. These activities may include teaching, research, consultation, service, legislative testimony, presentations in the community, and participation in their professional organizations.

(d) Social workers should contribute to the knowledge base of social work and share with colleagues their knowledge related to practice, research, and ethics. Social workers should seek to contribute to the profession's literature and to share their knowledge at professional meetings and conferences.

(e) Social workers should act to prevent the unauthorized and unqualified practice of social work.

5.02 Evaluation and Research

(a) Social workers should monitor and evaluate policies, the implementation of programs, and practice interventions.

(b) Social workers should promote and facilitate evaluation and research to contribute to the

development of knowledge.

(c) Social workers should critically examine and keep current with emerging knowledge relevant to social work and fully use evaluation and research evidence in their professional practice.

(d) Social workers engaged in evaluation or research should carefully consider possible consequences and should follow guidelines developed for the protection of evaluation and research participants. Appropriate institutional review boards should be consulted.

(e) Social workers engaged in evaluation or research should obtain voluntary and written informed consent from participants, when appropriate, without any implied or actual deprivation or penalty for refusal to participate; without undue inducement to participate; and with due regard for participants' well-being, privacy, and dignity. Informed consent should include information about the nature, extent, and duration of the participation requested and disclosure of the risks and benefits of participation in the research.

(f) When evaluation or research participants are incapable of giving informed consent, social workers should provide an appropriate explanation to the participants, obtain the participants' assent to the extent they are able, and obtain written consent from an appropriate proxy.

(g) Social workers should never design or conduct evaluation or research that does not use consent procedures, such as certain forms of naturalistic observation and archival research, unless rigorous and responsible review of the research has found it to be justified because of its prospective scientific, educational, or applied value and unless equally effective alternative procedures that do not involve waiver of consent are not feasible.

(h) Social workers should inform participants of their right to withdraw from evaluation and research at any time without penalty.

(i) Social workers should take appropriate steps to ensure that participants in evaluation and research have access to appropriate supportive services.

(j) Social workers engaged in evaluation or research should protect participants from unwarranted physical or mental distress, harm, danger, or deprivation.

(k) Social workers engaged in the evaluation of services should discuss collected information only for professional purposes and only with people professionally concerned with this information.

(l) Social workers engaged in evaluation or research should ensure the anonymity or confidentiality of participants and of the data obtained from them. Social workers should inform participants of any limits of confidentiality, the measures that will be taken to ensure confidentiality, and when any records containing research data will be destroyed.

(m) Social workers who report evaluation and research results should protect participants' confidentiality by omitting identifying information unless proper consent has been obtained authorizing disclosure.

(n) Social workers should report evaluation and research findings accurately. They should not fabricate or falsify results and should take steps to correct any errors later found in published data using standard publication methods.

(o) Social workers engaged in evaluation or research should be alert to and avoid conflicts of interest and dual relationships with participants, should inform participants when a real or potential conflict of interest arises, and should take steps to resolve the issue in a manner that

makes participants' interests primary.

(p) Social workers should educate themselves, their students, and their colleagues about responsible research practices.

6 Social Workers' Ethical Responsibilities to the Broader Society

6.01 Social Welfare

Social workers should promote the general welfare of society, from local to global levels, and the development of people, their communities, and their environments. Social

workers should advocate for living conditions conducive to the fulfillment of basic human needs and should promote social, economic, political, and cultural values and institutions that are compatible with the realization of social justice.

6.02 Public Participation

Social workers should facilitate informed participation by the public in shaping social policies and institutions.

6.03 Public Emergencies

Social workers should provide appropriate professional services in public emergencies to the greatest extent possible.

6.04 Social and Political Action

(a) Social workers should engage in social and political action that seeks to ensure that all people have equal access to the resources, employment, services, and opportunities they require to meet their basic human needs and to develop fully. Social workers should be aware of the impact of the political arena on practice and should advocate for changes in policy and legislation to improve social conditions in order to meet basic human needs and promote social justice.

(b) Social workers should act to expand choice and opportunity for all people, with special regard for vulnerable, disadvantaged, oppressed, and exploited people and groups.

(c) Social workers should promote conditions that encourage respect for cultural and social diversity within the United States and globally. Social workers should promote policies and practices that demonstrate respect for difference, support the expansion of cultural knowledge and resources, advocate for programs and institutions that demonstrate cultural competence, and promote policies that safeguard the rights of and confirm equity and social justice for all people.

(d) Social workers should act to prevent and eliminate domination of, exploitation of, and discrimination against any person, group, or class on the basis of race, ethnicity, national origin, color, sex, sexual orientation, age, marital status, political belief, religion, or mental or physical disability.

HELPFUL REFERENCES

Improving Joint Investigations of Child Abuse: A Summary Report

Sheppard, D.I.; Zangrillo, P.

Technical Report

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National Center on Child Abuse and Neglect (DHHS), Washington, DC

This report examines the research conducted by the Police Foundation and American Public Welfare Association to determine how investigators from law enforcement and child protective services can improve joint investigations of child abuse. The three components of the study were: (1) national surveys to identify the types of child maltreatment cases that were most likely to be investigated jointly and to assess the benefits of and barriers to effective implementation, (2) case studies to identify approaches that facilitate joint investigations, and (3) models developed for communities to use in designing joint investigation programs. Results from the national surveys indicate that, although joint investigations of child maltreatment allegations were fairly common, there was a need for improved joint investigation programs. The authors list the ten recommendations resulting from the case studies. Three joint investigation program models are described: one model that uses existing resources, the multidisciplinary interview center model, and the child advocacy center model. A list of joint investigation training resources is also included.

A Study to Improve Law Enforcement/Child Protective Services Investigation of Reported Child Maltreatment: Final Report

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Final Report

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National Center on Child Abuse and Neglect (DHHS), Washington, DC

This final report describes a research project that determined how law enforcement and child protection services (CPS) investigators can cooperate with each other to improve joint child abuse case investigations. Section 1 discusses the roles of CPS and law enforcement personnel in child abuse investigations, outlines reasons for promoting joint investigations, presents project goals,

and provides an overview of the project. Section 2 explains the methodology used to conduct the law enforcement and CPS surveys, focusing on the samples, the approach to data analysis, and the sub-grouping variables use in the analysis. Sections 3 and 4 present major findings from the law enforcement and CPS surveys, respectively. Findings focus on the volume and types of child maltreatment cases jointly investigated and the interagency agreements governing joint investigations. Section 5 reports on findings from a combined law enforcement-CPS sample. Findings deal with the types of child maltreatment cases jointly investigated and barriers to and the helpfulness of joint investigations. Section 6 describes the methodology used in the case studies research and the findings from this research. Findings are discussed in terms of the development of joint investigation programs, agreements and criteria for joint investigations, joint investigation activities, the personal attitudes and orientations of investigative staff, and investigative training. Section 7 describes the joint investigation model developed as a result of the findings of the research projects, focusing on their unique and common elements. Guidelines on planning for and implementing these joint program models are provided. Appendixes present copies of the law enforcement and CPS survey instruments, summarize individual case studies, and identify investigation training resources.

The Impact of Joint Law Enforcement/Child Protective Services Investigation in Child Abuse Cases

Tjaden, P.G.; Anhalt, J.

Final Report

29 pp.

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Publication Information:

Center for Policy Research, Denver, CO

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1570 Emerson St.

Denver, CO 80218

(303) 837-1557

cntrpolres@uswest.net

Sponsored by:

National Center for Child Abuse and Neglect (DHHS), Washington, DC

This article summarizes the findings of a study comparing the prevalence and effectiveness of independent child protective services investigations and joint law enforcement-child protective services investigations in cases of suspected child abuse. Using information extracted for child protective services, police, and criminal court records in five jurisdictions, the study found that caseworkers and police officers conducted joint investigations in 53 percent of the 1,828 cases in the sample. Four case characteristics have significant power to predict the occurrence of the joint investigation: a law enforcement reporter, emergency medical treatment to the victim at the time of the report, allegations of serious abuse, and allegations of sexual abuse. Compared to independent investigations, joint investigations take longer and are more thorough than independent investigations. They also result in significantly more protective custody placements, perpetrator departures from the home, perpetrator confessions, victim corroborations, substantiated reports, dependency filings, and criminal prosecutions.

Joint Investigations: A Multidisciplinary Approach

Virginia Child Protection Newsletter

Journal Article

Copyright Winter 1994

Virginia child Protection Newsletter

44:1, 3-7, 16

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This article reviews the role of law enforcement and child protective services in joint investigations. Team structure and effectiveness are described. The article also profiles joint investigation teams in two jurisdictions. Community multidisciplinary teams help to coordinate the response of concerned agencies to cases of child abuse. Specifically, law enforcement and child protective services workers form joint investigation teams to examine cases of child sexual abuse, child fatalities and sometimes cases of severe physical abuse and neglect. The benefits of joint investigation teams include reducing the number of interviews for the child, eliminating duplication of effort, improving quality of evidence, enhancing communication between agencies and facilitating the transition to treatment.

Basic Guide for Evaluation/Investigation of Child Fatalities and Child Abuse and Neglect

Missouri State Dept. of Social Services, Jefferson City—State Technical Assistance Team

Training Material

87pp.

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Publication Information:

Missouri State Dept. of Social Services, Jefferson City—State Technical Assistance Team

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Missouri State Dept. of Social Services

State Technical Assistance Team

P.O. Box 88, 615 Howerton Court

Jefferson City, MO 65103-0088

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(800) 481-1626

Police procedures for investigation of child fatalities and reports of child abuse and neglect are outlined in this document. Procedures for assessing the crime scene, interviewing the child and alleged perpetrator, and cooperating in joint investigations with the Division of Family Services are provided. Officers are instructed to conduct interviews in private, establish rapport with the child, and keep questions simple. Leading questions must be avoided. The document includes a criminal child abuse investigative checklist to ensure that all information is collected about the child's disclosure, medical examination of the child, other witnesses, complainants, child's parents or caretakers, other family members, suspect's family, the suspect, seizure of physical evidence, and other investigative techniques. Sample forms, basic scene photography and sketching, roles and responsibilities of medical examiners, and medical and legal definitions are also provided.

A Safety Net of Bridges: Interagency Coordination of Child Abuse Investigations

Dinsmore, J.

Journal Article

Copyright December 1992-January 1993

National Center for Prosecution of Child Abuse Update

5-6 (12-1):1-2

Interagency coordination can increase the effectiveness of child abuse investigations by reducing duplication of effort and enhancing the quality of evidence for lawsuits or criminal prosecutions. This article describes the benefits of joint efforts between police departments and child protection agencies. A case study is used to illustrate the effects of an uncoordinated system. Barriers to interagency cooperation include differences in terminology and definitions, differences in philosophies and goals, and funding decisions.

Child Protection: The Police Perspective

Walke, C.

Chapter in Book

pp. 194-201

Copyright 1993

Publication Information:

In: Wen, H. and Pritchard, J. (Editors). Good Practice in Child Protection. A Manual for Professionals. London (England), Jessica Kingsley Publishers Ltd.

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Jessica Kingsley Publishers Ltd.

116 Pentonville Rd.

071 833 2307

This chapter examines the role of the police in child protection and discusses police training as it relates to officers' recognizing and understanding where they fit into the child protection process. Issues involved in the training of probationers and other police officers are addressed, and courses for managers are outlined. Key practice-related issues that may need to be addressed in joint police and social services training courses for practitioners are identified. In addition, a suggested exercise for a joint investigation course is described.

Joint Investigations of Child Abuse: Report of a Symposium

Dinsmore, J.

Final Report

29 pp.

July 1993

Publication Information:

Department of Justice, Washington, DC. Office of Justice Programs

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Office of Justice Programs

Washington, DC 20531

Sponsored by:

National Center on Child Abuse and Neglect (DHHS), Washington, DC

This report summarizes the conclusions and recommendations of a symposium of law enforcement and child protective service professionals co-sponsored by NCCAN, the National

Institute of Justice, the Office for Victims of Crime, and the Office of Juvenile Justice and Delinquency Prevention. The symposium focused on efforts to coordinated investigations of child abuse and neglect. Elements of a coordinated system identified by symposium participants include: education of all participating disciplines, consistent reporting practices, elimination of duplicated efforts, and the sensitive treatment of the child victim and his or her family. Obstacles to team investigations and recommended strategies for Federal, State, and local action are discussed.

Colorado Guidelines for Cooperation Between Law Enforcement and Child Protective Services

Grosz, C.; Motz, J.

Booklet

38 pp.

Copyright February 1991

Publication Information:

Colorado State Dept. of Social Services, Denver

Distributed by:

Janet Motz

Colorado Department of Social Services

Child Protection Grants Unit

225 E. 16th Ave.

Suite 480

Denver, CO 80203

(303) 894-7747

Sponsored by:

National Center on Child Abuse and Neglect (DHHS), Washington, DC

This guide is designed for use in integrating law enforcement and child protective services (CPS) for the victims of child maltreatment. Sections explain the consensus-building process, describe the missions of law enforcement and child protective services, summarize Colorado State laws relevant to CPS and law enforcement operations, discuss standards of proof, explain the reporting of suspected child maltreatment cases, identify cases that are recommended for joint investigations, and address the issue of training. Appendices list pertinent citations from the Colorado Criminal Code and the Colorado Children's Code, provide form letters for use between the district attorney and social services, identify criteria for moderate to severe physical abuse, describe situations suggesting the need for protective custody or for an arrest, and present a court order to authorize the interviewing of suspected child maltreatment victims at school.

Combating Child Abuse: Guidelines for Cooperation Between Law Enforcement and Child Protective Services

Besharov, D.J.

Book

48 pp.

Copyright 1990

Publication Information:

Washington, DC, AEI Press

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University Press of America

4720 Boston Way

Lanham, MD 20706

(301) 459-3366

Sponsored by;

National Center on Child Abuse and Neglect (DHHS), Washington, DC

This report describes how law enforcement agencies in cooperation with child protective services can work with community services to combat child abuse and neglect. It is designed to be used in efforts to upgrade law enforcement and child protective services for child abuse and neglect victims. Chapters focus on the joint responsibilities of child protective and law enforcement agencies, clarifying child abuse reporting requirements, assigning investigative responsibility, conducting investigations and building cooperation between child protection and law enforcement agencies. Recommendations are made for improved communication between child protection and law enforcement agencies, public awareness campaigns by both agencies, and amending State laws to require that both agencies develop written agreements and protocols.

The Role of Law Enforcement in Response to Child Abuse or Neglect

Wilson, C.; Pence, D.

Chapter in Book

pp. 37-47

Copyright September 1990

Publication Information:

In: Allen, S. (Editor). Child Protective Investigation Team Training.

Tennessee Univ., Knoxville. Office of Research and Public Service

Distributed by:

Tennessee University

Office of Research and Public Service

Knoxville, TN 37996

This paper discusses the role of law enforcement in response to child abuse or neglect. An overview of the child protection system and the role of law enforcement are presented. The roles of law enforcement professionals focus on roles of prevention and advocacy, reporting, support to Child Protective Services, immediate emergency response, investigative responsibility, and supporting the child victim in preparing for and surviving the experience of prosecution. Law enforcement views child abuse and neglect not as a social problem, but in the context of a criminal offense. Issues related to prosecuting the crimes of child abuse and neglect include the victims' young age, the resemblance of abuse and non-abuse conditions, and the occurrence of the crime in private places. The importance of specialized skills and training are also discussed. The team investigation concept is explored where both CPS and law enforcement work collaboratively sharing information, assigning investigative tasks, and participating in a shared decision making process. The independent goals of each discipline are still met, by the team actively coordinating the process and utilizing the resources available through all involved disciplines. Specific elements identified by participants in a national consensus building conference to facilitate the team approach of CPS and law enforcement are outlined. Recommendations to minimize conflicts between team members are discussed including establishing formal teams on community and state levels, establishing investigative protocols, providing adequate personnel to both agencies, and joint training so as to provide the opportunity to hear the same messages and learn skills together. Specific recommendations include: reach out to the other discipline, share professional information, keep communication open, and confront conflicts openly.

Promoting Coordinated Investigation of Child Abuse

Steele, P.D.; Burris, R.B.

Training Material

118 pp.

Copyright 1990

Publication Information:

New Mexico Univ., Albuquerque. Youth Resource and Analysis Center

Distributed by:

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Institute for Criminal Justice Studies

Youth Resource and Analysis Center

140 Oñate Hall

Albuquerque, NM 87131

(505) 277-3890

Sponsored by:

New Mexico Governor's Juvenile Justice Advisory Committee

This training manual helps professionals in the investigation of suspected child abuse develop a coordinated approach to such an investigation to reduce the trauma to child victims. Training sessions present an overview of the training, describe the civil and criminal systems in New Mexico and address possible areas of coordination and cooperation, address issues in civil and criminal coordination of child abuse investigations, explain how professionals can improve their understanding of other professionals, present structural arrangements that can promote interagency cooperation and coordination, outline methods for developing and refining joint investigation strategies, discuss the local implementation of joint investigations, and address the issue of personal stress related to investigating suspected child abuse cases.

Child Abuse and Neglect. A Professional's Guide to Identification, Reporting, Investigation and Treatment

New Jersey State Governor's Task Force on Child Abuse and Neglect, Trenton

Training Material

458 pp.

Copyright October 1988

Publication Information:

New Jersey State Governor's Task Force on Child Abuse and Neglect, Trenton

Distributed by:

New Jersey Governor's Task Force on Child Abuse and Neglect

1 S. Montgomery St.

CN 717

Trenton, NJ 08625

Written by and for New Jersey professionals, this guide is a comprehensive and easy to use resource for persons working with suspected child abuse victims and their families. Sections include: a model for joint investigations by law enforcement and child protection services, recognizing and reporting institutional abuse, guidelines on the management of child abuse and neglect cases in hospitals, medical examinations of the sexually abused child, the educator's role in child abuse and neglect cases, prosecution of child abuse and neglect cases, victim-witness advocacy, child abuse and neglect in the family court, guidelines on conducting mental health evaluations of child sexual abuse cases, and civil and criminal statutes, rules and regulations regarding child abuse and neglect.

Joint Louisiana/Illinois Child Abuse Inquiry Project. Final Report and Evaluation

Illinois State Dept. of Children and Family Service, Springfield. Child Abuse Inquiry Project

Final Report

138 pp.

Copyright August 9, 1985

Sponsored by:

National Center on Child Abuse and Neglect (DHHS), Washington, DC

This final report describes a joint inquiry project undertaken by the Illinois Dept. of Children and Family Services and the Louisiana Dept. of Health and Human Resources. The project was designed to look at their child protective service department's approaches to investigating child fatalities and find ways to improve their CPS system.

An Interagency Agreement for the Purpose of Coordinating Police and Child Protection Services in Child Abuse and Neglect Cases

Bossier Parish Office of Human Development, LA. Div. of Children, Youth and Family Services
Info Packet or Sheet

14 pp.

Copyright June 14, 1985

Publication Information:

Bossier Parish Office of Human Development, LA. Div. of Children, Youth and Family Services

Distributed by:

State of Louisiana

Bossier Parish

Office of Human Development

Division of Children, Youth and Family Services

Bossier, LA

This document presents the working agreement between the Bossier Parish Office of Human Development and the local law enforcement agency. This agreement specifies the mutually agreed upon terms of their working relationship concerning the protection of children and the investigation of reports of child maltreatment. Sections focus on handling referrals from the law enforcement agency to the Division of Children, Youth and Family Services and referrals from the Division of Children, Youth and Family Services to the law enforcement agency, requesting and providing law enforcement escort on child protection matters, delegating an after-hours emergency initial response to a report of alleged child maltreatment, determining whether to conduct a joint investigation of alleged child maltreatment cases, sharing information and maintaining a written agreement.

Child Abuse and Neglect-Related Fatalities: Implications for CPS

American Humane Association, Englewood, CO

Journal Article

Copyright Summer 1984

Protecting Children

1(2):4-6

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American Humane Association

63 Inverness Dr., E

Englewood, CO 80112-5117

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<http://www.americanhumane.org>

NCCAN-sponsored Child Fatality Demonstration Projects are discussed. The projects evolved from a 1982 Child Fatality Inquiry Work Group convened to develop preliminary definitions for a model child fatality protocol for investigating child fatalities. The New York City Child Fatality Project identifies key events in the lives of children and families before and after the children died from abuse or neglect. Data on 96 deaths during the first half of 1980 were collected from several sources. Findings indicated that 45 of the 96 cases were determined to be the result of abuse or

neglect, 24 were possible cases of abuse or neglect, and 27 were caused by other factors. Abuse alone accounted for 47 percent of the deaths. Neglect accounted for 44 percent, and elements of abuse and neglect accounted for the remaining 9 percent of the cases. New York City will apply the methodology tested in its preliminary study to establish a multidisciplinary team to examine 200 new child deaths caused by trauma, malnutrition, or otherwise suspicious causes, including accidents that may be the result of abuse or neglect. One joint demonstration project, located in Illinois and Louisiana, is developing multidisciplinary independent review committees for examining child fatalities caused by maltreatment. The St. Louis Child Abuse Network has developed a multidisciplinary board of inquiry to identify interventions to prevent child abuse and neglect fatalities. The St. Louis project also provides counseling for child protection workers. Such systematic efforts to examine factors contributing to non-accidental child fatalities will enable child protection agencies to improve their services to prevent nonaccidental child fatalities.

An Assessment of the Use of Independent, Multidisciplinary Review Committees to Examine Child Fatalities Due to Maltreatment in the Joint Louisiana/Illinois Child Fatality Inquiry Project

Joint Louisiana/Illinois Child Fatality Inquiry Project, Springfield, Ill.

22 pp.

Copyright undated

Sponsored by:

National Center on Child Abuse and Neglect (DHHS), Washington, DC

This paper examines the use of independent, multidisciplinary review committees as a model for conducting child death inquiries in two states' child protection service system—Illinois and Louisiana. Similar findings of the committees and recommendations given to both child protection departments are described.

The Multi-Discipline Approach to Child Death Investigations: The Child Fatality Review Team Concept

Bodiford, E.

Proceedings Paper

pp. 432-451

Copyright July 13-16, 1996

Publication Information:

In: 1996 Crimes Against Children Seminar. 8th Annual Seminar of the Dallas Dept. of Police; the Dallas Children's Advocacy Center, Dallas, TX

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Dallas Children's Advocacy Center

3611 Swiss Ave.

(214) 818-2602

Sponsored by:

Jewish Women International, Washington, DC

This paper provides an overview of the Texas statewide system for multidisciplinary review of child deaths. Child Fatality review teams are formed at the local level and coordinated by the State Child Fatality Review Team Committee. The overall goals of the review system are to collect accurate data about the causes of death of children and promote a public health approach to reduce the number of preventable deaths. The teams are also designed to improve collaboration among concerned agencies and improve investigation and prosecution. Team members include representatives from the offices of police, sheriff, child protective services, criminal prosecutor, medical examiner, and pediatrician. Communities may also appoint members from emergency medical services, mental health providers, public health professionals, child educators, child advocates, and childcare licensing agencies. Local officials or advocates who

are organizing a team should first obtain the commitment of professionals and contact the state review team coordinator for materials and guidance. Core member agencies should be invited to join during the planning stages. The paper describes the role of each team member, team operating procedures, and meeting protocol. A list of national and state organizations and associations available for assistance is provided.

Child Death Investigation Protocols: For Law Enforcement, Justices of the Peace, Medical Examiners, and the Texas Department of Protective and Regulatory Services

Texas State Child Fatality Review Team Committee, Austin

Technical Report

132 pp.

Copyright 1996

Publication Information:

Texas Children's Justice Act Grant Project. Texas State Dept. of Protective and Regulatory Services, Austin

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Texas State Dept. of Protective And Regulatory Services

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Sponsored by:

Texas Children's Justice Act Grant, Austin

These guidelines distributed by the Texas Child Fatality Review Team Committee outline the roles and responsibilities of law enforcement, child protection services, justices of the peace, and medical examiners investigating the death of a child. The protocols emphasize a multidisciplinary approach to reduce duplication of effort and ensure that evidence is collected systematically. The guidelines provide background information about the characteristics of abusers and symptoms of child abuse and neglect. Procedures for collecting evidence from the death scene, conducting a preliminary investigation, interviewing caregivers and victims, and assessing cases for protective services are explained. Sample interagency agreements, investigation checklists, and forms are included, as well as a glossary of medical and legal terms.

***Conducting Interviews and Interrogations
in Child Fatality Cases***

**OJJDP/FVTC
Conducting Interviews &
Interrogations in Child
Fatalities Cases**

Ed Duvall Jr. Deputy Director
Ohio Department of Public Safety
Investigative Unit

CFI-Interrogation-Quest#1

**Miranda vs.
Non-Miranda?**

Can you access your Legal Advisor 24/7?

CFI-Interrogation-Quest#2

**Custodial vs.
Non-Custodial?**

Is the suspect really free to . . .

CFI-Interrogation-Quest#3

GO?

**Then be prepared to articulate
the facts in your reports to
survive a suppression hearing.**

CFI: Interrogation-Quelch-4

**Taped vs.
Non-Taped
Interviews?**

CFI: Interrogation-Quelch-5

TAPE!

CFI: Interrogation-Quelch-6

Do you have
the facts of the
case in order?

CFI-Interrogation-Deck 7

Do you have
the cause of
death?

CFI-Interrogation-Deck 8

Do you have the suspects making
any prior inconsistent statements
to medical providers, hospital
personnel, 911 tapes, EMS,
neighbors, CPS, family?

Did they call anyone before they
called 911?

CFI-Interrogation-Deck 9

Do you know the
dynamics of child
fatalities?

CFI-Interrogation-Deck 10

Is there a smoking gun?
Bloody knife?
Baseball bat?
Boots, belts, etc...

Evidence review:

- > physical
- > medical
- > forensic
- > testimonial

CFI-Interrogation-Deck 11

Are there
signs of blunt
force trauma?

CFI-Interrogation-Deck 12

Are there
indications of
Shaken Baby
Impact Syndrome?

CFI-Interrogation-Quiz-11

Are there signs of
Closed Brain
Injuries?

CFI-Interrogation-Quiz-14

Are there signs of
Immersion Burns?

CFI-Interrogation-Quiz-15

Are there signs of
Fail to Thrive?

CFI: Interrogation-Durak-16

Clinical indicators to
look for.....

CFI: Interrogation-Durak-17

Clinical indicators to
listen for.....

CFI: Interrogation-Durak-18

Establishing
CARE...CUSTODY...
and CONTROL... of
the child

CFI Investigation-Quest-18

Establishing a time
line of the child's
last 72 hours...

CFI Investigation-Quest-20

Day One

0100 Hours
0200 Hours
0300 Hours
0400 Hours
0500 Hours
etc....



Day two and three...

CFI Investigation-Quest-21

What was the child doing?
Who was present at home?
Include siblings, names and ages.

Did the child get bathed?
Did the baby's diaper get changed?
Did the baby eat?
Did the baby cry?
Did the baby nap?
Did the baby sleep all night?
When did the baby go to bed?
Listen for explanations of flu like symptoms.

CFI: Interview-Durak-22

**We don't leave our
child with just
anybody!**

CFI: Interview-Durak-23

Interview Setting

- Your turf?
- Their turf?
- Neutral ground?

CFI: Interview-Durak-24

Double team or one-on-one?



**Take notes or
no note taking?**

CFI-Interrogation-Quiz# 25

Setting the Stage

Learn history of suspect

- ▶ childhood
- ▶ state of current relationship
- ▶ employment
- ▶ physical status
- ▶ mental status
- ▶ criminal history
- ▶ how they viewed the victim
- ▶ how they viewed the siblings
- ▶ who are the biological parents

CFI-Interrogation-Quiz# 26

LEGAL Issues

- ▶ Voluntariness of the confession is the fundamental issue in determining admissibility
- ▶ Totality of the circumstances is the test for voluntariness

CFI-Interrogation-Quiz# 27

Sliding Scale

- ▶ Suspect is given an opportunity to confess in a manner that:
 - psychologically acceptable to him/her
 - makes behavior appear less reprehensible
 - minimizes the gravity of the crime
 - transfers some or all of the blame to others
 - allows them to be seen as the "victim"

CFI-Interrogation-Quiz-28

Sliding Scale Fatal Abuse

Less Severe		More Severe
Accidental	vs.	Intentional
Isolated Incident	vs.	Chronic Abuse
Impulsive	vs.	Intentional
"Shaken Baby"	vs.	"Battered Child"
Neglect	vs.	Intentional

CFI-Interrogation-Quiz-29

Listen first, let them tell their story
Now point by point examine what
you are hearing
Lock them into a statement / then
attack inconsistencies

CFI-Interrogation-Quiz-30

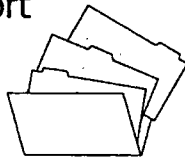
Housekeeping Issues

The setting:



CFI-Interrogation-Deck-11

The files, tapes,
volumes of case
report





CFI-Interrogation-Deck-12


Never, never let
them catch you
bluffing!


Can we use deception?

CFI-Interrogation-Deck-13

cigarettes 

candy 

restroom breaks 

coffee 

sandwich

CFI-Information-Detail-34

DOCUMENT

DOCUMENT

DOCUMENT

If it isn't on paper, it didn't happen!

CFI-Information-Detail-35

Anticipate the Defense!

- ▶ Diminished capacity
- ▶ Post partum depression
- ▶ Previous injuries via automobile accidents
- ▶ Previous injuries documented by hospital records

CFI-Information-Detail-36

**Remember, the case doesn't
end with the **arrest**...**

How do you treat the suspect
before, during and after interview?

CFI Information Desk-37

Trial Preparation

- ▶ Reports of investigation
- ▶ Review tapes
- ▶ Review interviews
- ▶ Review evidence

CFI Information Desk-38

Prosecution of Child Fatalities

***CHILD FATALITIES:
A PROSECUTOR'S
PERSEPCTIVE***

**DANIEL ARMAGH
DIRECTOR OF
LEGAL EDUCATION
National Center for Missing
and Exploited Children**

CH-1-1-1

**NATIONAL CENTER FOR
PROSECUTION OF
INTERNET CRIMES
AGAINST CHILDREN***

**(703) 837-6337
TECHNICAL ASSISTANCE
RESEARCH
PUBLICATIONS
TRAINING
darmagh@ncmec.org**

CH-1-1-2

***Basic Characteristics You Should
Recognize in Physical Abuse and
Homicides Involving Children***

- Number one is the discrepant history offered for serious injury
- Have a basic understanding of medical issues involved-what mechanisms cause what injuries
- Intergenerational conduct-about 30%
- Discipline v. abuse (oranges)

CH-1-1-3

Basic Hallmarks of Physical Abuse and Fatalities

- Abuse is escalating in nature-therefore a history usually is involved
- Most cases abuse is obvious, WHODUNIT?
- Multiple injuries in multiple planes of the body, coupled with a discrepant history=child abuse
- Burden of proof is "higher" in caretaker cases

CPH Legal 4

Charging Considerations

- Single injury or pattern of abuse over time?
- Loss of control or determined intent to harm?
- Those who don't intend harm usually feel remorse immediately upon recognizing what their conduct did and admit their actions-making up stories and covering up is excellent evidence of intent to harm

CPH Legal 5

Charging Considerations

- Serious injuries inflicted unintentionally (recklessly or with criminal negligence) may still demand prosecution
- How narrowly can the medical experts identify the "window" in which the injuries had to be inflicted?
- Who was with the child during that window?

CPH Legal 6

*The WHODUNIT-sorting among
multiple possible perpetrators*

- Don't give up until all bases have been touched
- Who has a history of violent conduct toward children? Domestic violence? Investigators should check with family members, prior spouses, significant others, children that lived with suspect

CHL 1007

WHODUNIT?

- As to prior suspicious injuries to this or other children, is there a pattern showing one caretaker was usually in control when injuries occurred?
- Who allegedly found the child "ill" or in distress, or dead?

CHL 1008

WHODUNIT?

- Who has offered the discrepant history? Keep in mind that if one person caused the abuse/death and the other knows about it, they both may tell the same stupid stories!
- Which caretaker may have had "motive" to harm the child? Unwanted pregnancy, product of rape, insurance policy?

CHL 1009

WHODUNIT?

- Who has the physical capability to inflict the injuries ?
- Who has shown age-inappropriate expectations of the child?
- Does one of the caretakers offer "I was beaten as a child and I would never to this...?"
- One caretaker critical of others discipline?

CPL Page 10

Mental State and Actus Reus

- Medical experts will tell you how much force and what type of force caused the injuries-then that information must be translated into the state's theory
- It is no defense that the defendant did not know exactly what was happening neurologically to know the risk of harm

CPL Page 11

Mental State and Actus Reus

- Nature of the act may often prove what intent or knowledge was involved
- Suffocation can occur unintentionally, such as keeping a child quiet-such acts are at least reckless. In most cases of suffocation, there is evidence of prior abuse and some evidence of motive to end the victim's life

CPL Page 12

Emotional Abuse

- Should there be criminal culpability for emotional abuse?
- Utah-2nd degree felony creating a severe developmental delay in child through any conduct
- Studies show neglect, demeaning or psychological terrorism can result in more severe problems than physical abuse

CPH Page 12

Medical Examiner unable or unwilling to assign a cause of death

- It is still possible to get convictions in those cases through use of prior misconduct evidence and through excluding the possibility of natural or accidental causes of death

CPH Page 14

AUTOPSY

- Ask medical examiner to determine effects of malnutrition on the ultimate cause of death. Many deaths are classified from natural causes with malnutrition as a secondary cause.
- "But For" test - cases that list cause of death from natural causes with malnutrition as a secondary cause can still be prosecuted if the child would not have died *but for* the complications of malnutrition.

CPH Page 15

Unique Aspects of Child Homicide Cases

- Different causes of death
- Different physiology
- Non-simultaneous times of injury or death
- Victim is moved, often several times
- Multiple scenes
- Preservation of scenes
- Background information on social pathology

CFI Legal 13

Anticipate the Defense- think like a defense attorney

- Accidental fall (generally head and abdomen trauma)
- Common medical findings: subdural, epidural and subarachnoid bleeds coupled with retinal hemorrhages
- Document age, location and condition of all injuries to the child

CFI Legal 11

Scene Investigation

- Photographs, diagrams, and videotapes of all possible scenes within window of opportunity-don't rely solely on the child's history
- Measurements of all surfaces from which child could have fallen; document condition of surrounding area
- Remove items for doctors to evaluate

CFI Legal 12

Search Warrant Information

- Preference for warrant over consent
- Items most often requested; Medical records, appointment calendars, birth certificates, marriage records, food containers and food, soiled diapers, insurance records on all children,
- Trace evidence, bedding, suspects and victim clothing, occupancy documents, photos

CH 1 page 18

Child 's Body as Crime Scene

- Photograph all surfaces of the body, especially hands and feet, tops and bottoms (parachute reflex)
- Document presence and absence of injuries
- ABFO bar scale, color bar and color background

CH 1 page 20

Suspect Interview

- Establish rapport
- History, medical and social
- If no confession, lock them into 72 hr frame
- Video tape demonstration of exactly how child was injured
- 911 call is important
- Clinical course of injury by suspect critical

CH 1 page 21

Suspect Interrogation

- Systematic method of obtaining information through questioning, confrontation, and persuasion
- Accusatory by design and nature
- Voluntariness of the confession is issue- totality of the circumstances is test for voluntariness

CH 14 p 22

Who else should be questioned?

- First responders-medics, EMTs
- Emergency department personnel
- Treating physicians
- Medical examiner

CH 14 p 23

What to Ask

- What did you hear or see upon arrival?
- Where was child victim located?
- Who was with the child?
- What was being done?
- Demeanor of caretaker?
- Did they change anything?
- Move anything? Inflict any injuries?

CH 14 p 21

What to Ask

- Notice anything unusual?
- What was said to them, by whom?
- What medical education did you give caretaker?
- First doctor to see victim; did they talk to caretakers, what time, what questions, what was their comments, demeanor?

CH 1 page 23

Assessment

- Determine the doctors level of experience
- If appropriate, determine mechanism, timing and level of force necessary to inflict each injury-do not try to lock them into a specific hour by hour time frame-use a clinical course of injury
- Within a reasonable degree of medical certainty

CH 1 page 24

Shaken Baby Syndrome

Miscellaneous:

- ⇒ Rapid development of neurological impairment
- ⇒ High incidence of death
- ⇒ Injuries may be produced by shaking alone; however, over 50% of fatal shaking w/impact

CH 1 page 25

Shaken Baby Syndrome

Miscellaneous:

- ⇒ Not trivial force ... equivalent to 50-60 m.p.h. -- auto accident or fall from several story building
- ⇒ Rapid changes in child's behavior should be apparent

CP11-95-25

Outcome and Prognosis of Whiplash Shaken Infant Syndrome: Late Consequences After A Symptom-Free Interval

Bonnier, Nassogne & Evard, 37 Dev. Med. Child
Neurol. 943-956 (1995)

CP11-95-25

Bonnier et al., Outcome and Prognosis of Whiplash Shaken Infant Syndrome

- ❖ 13 children with WSIS followed for 4-14 years after injury (1 died in acute period)
- ❖ 7 without sign-free interval remained severely and permanently abnormal
- ❖ Other 6 initially appeared to have full recovery based on normal follow-up examination 2 months post shaking
- ❖ All but one became disabled after delay ranging from 6 months to 5 years
- ❖ No favorable prognosis possible before 6

CP11-95-25

Bonnier et al., Outcome and Prognosis of Whiplash Shaken Infant Syndrome

- ❖ Mental retardation in 5 of 6 cases, all 5 required special education
- ❖ Severe behavioral disorders in 3 of 6
- ❖ Pervasive developmental disorder in 2
- ❖ Other findings included psychomotor retardation, impairment of cranial growth, delayed hemiparesis
- ❖ Short term studies also had poor outcomes
- ❖ Authors conclude that long term prognosis & outcome in WSIS is severe in most cases

CH 1, pg 28

Williams, R.A., Injuries in Infants and Small Children Resulting from Witnessed and Corroborated Free Falls, 31(10) Journal of Trauma 1350 (1991).

- ➔ 106 children under 3 with witnessed and corroborated falls by someone besides caretaker
- ➔ Only 3 serious but not life threatening injuries from falls under 10 ft.
- ➔ 53 children under 3 with uncorroborated falls
- ➔ 18 had severe injuries and 2 deaths from falls under 5 ft.

CH 1, pg 28

Starling, S.P., Holden, J.R. & Jenny, C., Abusive Head Trauma: The Relationship of Perpetrators to Their Victims, 95 Pediatrics 259 (1995).

- ➔ 151 children with abusive head trauma
- ➔ 23% mortality; 55% varying degrees of neurological impairment at discharge
- ➔ Male perps outnumbered women 2.2:1
- ➔ Fathers (37%), boyfriends (20.5%), female baby-sitters (17.3%), mothers (12.6%)
- ➔ 36 of 37 confessed perpetrators were present at onset of symptoms

CH 1, pg 33

Starling, S.P., Holden, J.R. & Jenny, C., Abusive Head Trauma: The Relationship of Perpetrators to Their Victims, 95 Pediatrics 259 (1995).

- ➡ 90 children (60%) had both subdural hematomas and retinal hemorrhages
- ➡ 15 (10%) had subdurals and associated injuries and 46 (30%) had subdurals, retinal hemorrhages & associated injuries

CP1, page 26

Shaken Baby Syndrome

- ★ Rapid development of neurological impairment with severe or fatal head injury; decreased level of consciousness or unconsciousness
- ★ Identifies when injury occurred; drastic changes in child's behavior should be readily apparent; narrows class of perpetrators
- ★ Frequent presence of old subdurals, fx's
- ★ High incidence of death

CP1, page 28

Doctors Make Mistakes Too

- ✚ Competent investigations supplement the medical opinion - they are not dictated by them
- ✚ Research on "Missed Abusive Head Trauma" showed misdiagnosis in 31% of cases
- ✚ Appearances of suspects are deceiving

CP1, page 26

Restricting the Time of Injury in Fatal Inflicted Head Injuries

**K. Y. Willman et al., 21(10) Child Abuse
& Neglect 929-940 (1997)**

CPA Logo 27

Willman et al., Restricting the Time of Injury in Fatal Inflicted Head Injuries

Subjects:

- 95 Children - all under 16 years of age
- Fatal Accident
- Blunt Head Injury
- No Spinal Cord or Brainstem Transection
- Witnessed; EMS Response
- Pedestrian 33%; Passenger 30%;
Bicycle 26%; Skateboard/Skates 10%

CPA Logo 28

Willman et al., Restricting the Time of Injury in Fatal Inflicted Head Injuries

Definitions:

©Survival Time: earliest documented time post-
injury ... time pronounced dead

©Lucid Interval: conscious, GCS 14-15

CPA Logo 29

Willman et al., Restricting the Time of Injury in Fatal Inflicted Head Injuries

Findings:

- ***Med. survival time: 6.1 Hours (29min - 139d)***
- ***SAH 76%, SDH 53%, EDH 15%***
- ***Brain contusion 55%***
- ***Skull fracture 55%***
- ***Brain edema 47%***
- ***Severe head injury (GCS 3-8) 90% SOI***

CPH 49840

Willman et al., Restricting the Time of Injury in Fatal Inflicted Head Injuries

Findings:

- ***1 lucid interval (EDH only)***
- ***13 others with EDH did not have this***
- ***1 other child had modest improvement (GCS 6 – 10)***
- ***Aside from one case, no normal consciousness after the head injury***

CPH 49841

Willman et al., Restricting the Time of Injury in Fatal Inflicted Head Injuries

Implications:

- ☒ ***Children who die of head injury rarely appear normal after the injury***
- ☒ ***Fatal head injury occurred after child last seen appearing normal***
- ☒ ***Expect caregiver to seek help ASAP***
- ☒ ***If delay, suspect abuse***

CPH 49842

Smith, W.L. & Alexander, R.C.
Physical Parameters of SBS

- ➡ 27 adults given models of three weights: 3 kg (newborn); 8 kg (10 month-old); 13 kg (2 year-old) and asked to shake them as long and hard as possible
- ➡ Median duration of shaking was: 30 secs. (3 kg), 18 secs. (8 kg), 15 secs. (13 kg)
- ➡ Males & females did not differ in length of shaking for 3 kg but did for other weights with males able to shake longer

CP1 Legal-43

Smith, W.L. & Alexander, R.C.
Physical Parameters of SBS

- ➡ Shaking rates were 3.4/sec. (3 kg), 2.3/sec. (8 kg), 2.3/sec. (13 kg)
- ➡ Average distance traveled by subjects hands was 25 centimeters (10 inches)
- ➡ Even at 13 kg. median duration of 15 secs. greatly exceeds the 2-3 sec. minimum estimated time necessary for SBS
- ➡ Women capable of causing similar forces
- ➡ D's may shake harder because angry

CP1 Legal-44

U.S. v. Gaskell
985 F.2d 1056 (11th Cir. 1993)

- > Defense argued doctor's demonstration of force necessary to produce victim's SBS injuries using a rubber mannequin was irrelevant and prejudicial
- > Defense objection that doll was not similar in size, weight and neck rigidity to victim; more force needed in demonstration to produce head movement on doll than on victim; doctor conceded this on cross-x

CP1 Legal-45

Illinois v. Holmes,
616 N.E.2d 1000 (Ill. App. 3d 1993)

"We conclude that a rational trier of fact could not have found the D guilty of first degree murder. Here the evidence was insufficient to show that the D knew his actions could cause death or great bodily harm."

CP1-Legal-6

Illinois v. Holmes,
616 N.E.2d 1000 (Ill. App. 3d 1993)

"The evidence showed the D had only a seventh grade education and the death was caused by a one-time shaking. The D testified that he did not know shaking a child could kill a child... the D and his wife both testified that he did not intend to harm Crystal... no evidence was introduced which showed the D knew his actions could cause Crystal's death."

CP1-Legal-7

Illinois v. Holmes,
616 N.E.2d 1000 (Ill. App. 3d 1993)(Dissent)

- The D repeatedly lied to the paramedics & police claiming the victim slipped out of his arms and fell to the floor
- The D changed his story during the trial
- "After reviewing the extensive medical testimony... combined with the D's wife's statement, it is clearly evident the D has never yet told the truth about his daughter's death."

CP1-Legal-8

Illinois v. Holmes,***616 N.E.2d 1000 (Ill. App. 3d 1993)(Dissent)***

- The D's wife provided a statement to the police at the hospital: "He came in there and snatched her out of my arms... I tried to take her from him... then he called me a fuck'n bitch and slung the baby's bottle at me. Then that's when he kicked me in the gut."

Q Where was the baby at that time?

A She was sitting on the floor crying.

CPA Legal 21

Illinois v. Holmes,***616 N.E.2d 1000 (Ill. App. 3d 1993)(Dissent)***

Q Did the D do anything to the baby at that time?

A He just picked her up and shook her and told her she better stop crying.

Q How hard did he shake her?

A Pretty hard, made her feel it. She stopped crying. It scared her more than anything.

Q What were his exact words to the baby?

A Fuck'n shut up. Fuck'n shut up.

CPA Legal 21

Illinois v. Holmes,***616 N.E.2d 1000 (Ill. App. 3d 1993)(Dissent)***

Q Is this the only time you observed your husband shake your daughter?

A No.

Q What other time did he shake her?

A Early this morning and last night too. [Earlier] he had her out of bed... I heard her screaming and he was changing her diaper... and I asked him if he fed her yet. He said 'No bitch' so I went and fixed her bottle and that's when he was shaking her.

CPA Legal 21

Illinois v. Holmes,***616 N.E.2d 1000 (Ill. App. 3d 1993)(Dissent)***

A [Later] he came in and yanked her out of my arms and said he wanted her. So I followed them... and she started crying again, so he kind of like tossed her on the floor and told me to leave her the fuck alone because I was the one that spoiled her... And that's when he began to shake her again and told her to fuck'n shut up.

Q Has he ever struck, shook or thrown her before this date?

A Yeah

CP-1 Legal 52

Illinois v. Holmes,***616 N.E.2d 1000 (Ill. App. 3d 1993)(Dissent)***

Q Can you describe the way he grabbed and shook her?

A He picked her up and grabbed her tight and started shaking the piss right out of her.

Q Was the baby being held by the arms alone when he shook her?

A He was squeezing so hard her elbows were going into her ribs. She was screaming.

CP-1 Legal 53

Illinois v. Holmes,***616 N.E.2d 1000 (Ill. App. 3d 1993)(Dissent)***

- Doctors identified older rib fx's and fx's to the arms and legs which were consistent with shearing type forces produced by shaking
- The baby was markedly underweight
- Doctors testified the child's prior injuries indicated a pattern of abuse over a long period of time.

CP-1 Legal 54

Illinois v. Ripley,
685 N.E.2d 362 (Ill. App. 3d 1997)

- D claimed insufficient evidence showing he intentionally or knowingly injured baby
- D is presumed to intend the probable consequences of his acts, and a great disparity in size and strength between a defendant and the victim as well as nature of injuries may be considered.
- Holmes was wrongly decided.
- Severity of injuries completely inconsistent with D's claimed lack of mens rea

CH Lapid 88

"There is no disagreement among professionals in the field that the violent shaking, whether or not it is accompanied by an impact, is not a casual act but rather one that would indicate to a rational observer that severe injury was being inflicted on the child."

Wilbur L. Smith, Abusive Head Injury,
 7 APSAC Advisor 16 (1994).

CH Lapid 88

"While the author does not advocate mild shaking of babies or throwing babies up in the air, the violence of the abusive shaking is several orders of magnitude greater than any of these playful activities..."

Wilbur L. Smith, Abusive Head Injury,
 7 APSAC Advisor 16 (1994).

CH Lapid 87

***Lazoritz, S., The "Shaken" Infant:
Historical Aspects and Characteristics***

- ➔ 51 cases of abusive traumatic brain injury
- ➔ Boys victimized twice as often
- ➔ 18% admitted to shaking by discharge date
- ➔ 20% alleged accidental fall < 3 ft.
- ➔ 31% denied any trauma at all
- ➔ 26% of kids in E.R. within prior week for symptoms such as vomiting, possible seizures, ear infections, irritability, turning blue and lethargy.

CRJ 1992

***Lazoritz, S., The "Shaken" Infant:
Historical Aspects and Characteristics***

- ➔ 60% had retinal hemorrhages, 20% didn't and 20% had no ophthalmological exam
- ➔ 25% had old & new subdural hematomas
- ➔ 45% had a fracture of some kind
- ➔ 25% mortality
- ➔ Fathers and mother's boyfriend most common perpetrator
- ➔ Cases crossed all socioeconomic boundaries

CRJ 1992

HEAD INJURIES

**Head Injuries in Very Young
Children: Mechanisms, Injury
Types and Ophthalmologic
Findings in 100 Hospitalized
Patients Younger Than 2
Years of Age. Pediatrics, Vol.
90, No. 2 August 1992**

CRJ 1992

HEAD INJURIES

Pediatrics, Vol. 90, No. 2

August 1992

"... [E]xcept for those (blunt head injuries) caused by motor vehicle accidents and falls from extreme heights, they are almost always benign..."

CH 1 page 41

DEATHS FROM FALLS IN CHILDREN: HOW FAR IS FATAL?

Chadwick, et al, 31 Journal of Trauma 1353 (1991)

<u>Fall Height (feet)</u>	<u>No. of Cases</u>	<u>% of Total</u>
1-4	100	35.3
5-9	65	23.0
10-14	75	26.5
15-19	24	8.5
20-29	17	6.0
30-45	2	0.7
Total Cases	283	

CH 1 page 42

Case Fatality Rate By Fall Height

<u>Fall Height (ft)</u>	<u>Number</u>	<u>Total</u>	<u>% Fatality</u>
1-4	7	100	7.0
5-9	0	65	0.0
10-45	1	118	0.8
Total	8	283	2.8

Chadwick, et al, *How Far Is Fatal?*

CH 1 page 43

Fatalities From Short Falls

Type of Fall

Standing Fall	2
Fall From Bed or Table	2
Fall Down Stairs	1
Fall in Arms of Adult	2

Chadwick, et al, *How Far Is Fatal?*

CR1199-08

Abdominal Trauma

Two Basic Mechanisms:

①Crushing of solid organs (liver, spleen, pancreas) of the upper abdomen against the vertebral bodies or bony thorax as a result of a blow to upper abdomen;

②Sudden Compression of hollow abdominal viscera (intestines, stomach, colon, bladder) against the vertebral column as a result of a blow to the abdomen.

CR1199-08

Abdominal Trauma

High Mortality Rate:

- ☐ **Severity of injuries to vital organs;**
- ☐ **Delay in seeking appropriate medical care;**
- ☐ **Delay in correct diagnosis/misleading history;**
- ☐ **Brisk hemorrhage;**
- ☐ **Young age of victims (6 mos - 3 yrs).**

CR1199-08

Abdominal Trauma

Symptoms and Presentation:

- *Often present w/nonspecific abdominal complaints and w/o history of trauma*
- *Vomiting*
- *Fever*
- *Abdominal pain/tenderness/distention*
- *Diminished bowel sounds*
- *Indicators of obstruction/peritonitis*

CH11pg42

Abdominal Trauma

Specific Organ Injuries:

Liver

- *Most common abdominal injury due to abuse;*
- *Most often due to blows to upper abdomen;*
- *Severity ranges from from asymptomatic to life threatening.*

CH11pg48

Abdominal Trauma

Specific Organ Injuries:

Spleen

- *Often caused by accidental trauma;*
- *Infrequently reported as a result of abuse;*
- *Generally protected due to it's position under the ribcage;*
- *Severity of injuries range from minor to life threatening.*

CH11pg49

Abdominal Trauma

Specific Organ Injuries:

Pancreas

- ☛ *Occurs with some frequency;*
- ☛ *Results from blunt trauma to the upper abdomen;*
- ☛ *Body of pancreas overlies the spine and can be crushed with significant blows;*
- ☛ *Injury usually results in pancreatitis.*

CH 14-27

Abdominal Trauma

Specific Organ injuries:

Kidney, Bladder, Urinary Tract

- ☛ *Caused by severe blows to the flank;*
- ☛ *Because kidneys well-protected, trauma is usually associated w/injuries to other abdominal organs;*
- ☛ *Bladder injuries unusual;*
- ☛ *Most renal injuries are managed conservatively/do not require surgery.*

CH 14-27

Abdominal Trauma

Specific Organ Injuries:

Stomach

- ☛ *Not as frequent an injury;*
- ☛ *More common if the child has a full stomach at the time of the trauma;*
- ☛ *Children will exhibit rapid manifestation b/c of pain associated w/gastric spasms and the noxious effects of gastric acid in the peritoneum.*

CH 14-27

Munchausen Syndrome By Proxy

“Munchausen Syndrome By Proxy occurs when a parent or guardian falsifies a child’s medical history or alters a child’s laboratory test or actually causes an illness or injury in a child in order to gain medical attention for the child which may result in innumerable harmful hospital procedures”.

Zunwalt & Hirsch, Pathology of Fatal Child Abuse and Neglect, in Child Abuse and Neglect, 276 (R.Helfer & R.Kempe, eds. 4th ed. 1987).

CHL 1987-2

Munchausen Syndrome By Proxy

“MSBP may be defined as the cluster of symptoms and/or signs, circumstantially related, in which (1) illness in a child is simulated (faked) and/or produced by a parent or someone who is in loco parentis; and (2) the child presents for medical assessment and care, usually persistently, often resulting in multiple procedures; and

CHL 1987-2

Munchausen Syndrome By Proxy

“(3) knowledge about the etiology of the child’s illness is denied by the perpetrator; and (4) acute symptoms and signs in the child abate when the child is separated from the perpetrator.”

Rosenberg, D., Munchausen Syndrome By Proxy, in Child Abuse: Medical Diagnosis and Management (R.Reece, ed. 1994)

CHL 1987-2

Victim

- Vulnerable, special, at risk kind of child
- Usually preverbal
- Absent of classic battered child signs
- Clinical picture eludes diagnosis
- Minimal response to classical treatment
- Dramatic improvement when away from caretaker

CPH 1 page 78

Perpetrator's Characteristics

- Parent/relative/caretaker (almost always mother)
- Medical knowledge/access (27% have nursing backgrounds)
- Model mom-develops social network at hospital
- Meets own needs through child
- Resistant to treatment once discovered/denial even in face of direct proof

CPH 1 page 77

Continuum of Involvement

- Doctor shopping/excessive medical visits
- Falsification of history
- Induced physical findings
- Death; 5-15% mortality
- Review entire medical record with physician, insurance history of family

CPH 1 page 78

Continuum

- Look for patterns-unusual symptoms, recurrent illnesses, caretaker's presence
- Nurses notes are critical
- When hospitalized, restrict access
- Videotaping-statutes and hospital
- Time line of child's illnesses

CHL 1998-19

“Persons who intentionally falsify history, signs or symptoms in a child to meet their own self-serving psychological needs have been diagnosed with Factitious Disorder by Proxy...”

Ayoub, C.C. & Alexander, R.A., Definitional Issues in Munchausen Syndrome by Proxy, 11(1) APSAC Advisor 7 (1998)

CHL 1998-20

“Factitious Disorder by Proxy is a psychiatric disorder which is applied to a person who intentionally falsifies signs or symptoms in a victim (usually, but not always a child).

Ayoub, C.C. & Alexander, R.A., Definitional Issues in Munchausen Syndrome by Proxy, 11(1) APSAC Advisor 7 (1998)

CHL 1998-21

"It should be emphasized that there is NO particular psychological profile or checklist of symptoms that definitely confirm or exclude this diagnosis; there are common patterns, which should be examined on a case by case basis."

Ayoub, C.C. & Alexander, R.A., Definitional Issues in Munchausen Syndrome by Proxy, 11(1) APSAC Advisor 7 (1998)

CH 1998-02

"While lying is a critical component of Factitious Disorder by Proxy, it is felt that these adults have the ability not only to lie, but to impostor. They simulate a caring and believable parent and convince others of their cause while simultaneously engaging in behavior harmful both to the child and to the professionals involved."

Ayoub, C.C. & Alexander, R.A., Definitional Issues in Munchausen Syndrome by Proxy, 11(1) APSAC Advisor 7 (1998)

CH 1998-02

"The resulting distorted relationship between mother and child is the consequence of the child's victimization, driven by the mother's psychiatric disorder."

Ayoub, C.C. & Alexander, R.A., Definitional Issues in Munchausen Syndrome by Proxy, 11(1) APSAC Advisor 7 (1998)

CH 1998-02

"However...there is a compulsive quality to the behavior, such that even in the face of discovery and possibly dire consequences, these mothers are unable to stop themselves... these mothers in therapy have indicated their awareness of the need to stop their behaviors but also their lack of self-control. Additionally, some level of dissociation exists."

Parnell, T.F., "Munchausen Syndrome by Proxy Syndrome", (Sage, 1998)

CH-Lup-88

"Finally, the issue of intentionality arises... the behaviors appear to be carefully planned and consciously concealed... My own clinical experience also suggests these mothers know exactly what they are doing when they perpetrate these behaviors. In treatment, mother-perpetrators have acknowledged, described and discussed their intents."

Parnell, T.F., "Munchausen Syndrome by Proxy Syndrome", (Sage, 1998)

CH-Lup-88

Munchausen Syndrome By Proxy

Characteristics:

- ⇒ **Caretaker engages in behavior to gain attention and sympathy for selves**
- ⇒ **Potentially severe medical and emotional consequences for the child**

CH-Lup-88

Munchausen Syndrome By Proxy

Characteristics:

- ⇒ Equal distribution of male and female victims; most are infants and toddlers
- ⇒ Abuse generally confined to one sibling at a time

CPH Legal 28

Munchausen Syndrome By Proxy

Characteristics:

- ⇒ Four basic types of scenarios:
 - ✓ Exaggerated, false history/illness
 - ✓ Altered lab specimens/records
 - ✓ Assault on child to produce symptoms
 - ✓ Deliberate poisoning

CPH Legal 29

Munchausen Syndrome By Proxy

Characteristics:

- ⇒ Older children may adopt false symptoms as own
- ⇒ Symptomology in child generally progresses in severity; frequently results in death

CPH Legal 30

Munchausen Syndrome By Proxy

List of Categories:

- ① Perceived Illness
- ② Doctor Shopping
- ③ Enforced Invalidism
- ④ Fabricated Illness
- ⑤ Help Seeker
- ⑥ Active Inducer
- ⑦ Doctor Addict

CP1-Lys041

Munchausen Syndrome By Proxy

Common Symptoms and Causes:

- ♦ Bleeding from various sites
- ♦ Neurological symptoms
- ♦ Rashes
- ♦ Fevers
- ♦ Gastrointestinal disorders

CP1-Lys042

Munchausen Syndrome By Proxy

Common Symptoms and Causes:

- ♦ Poisoning
- ♦ Toxicological screening
- ♦ Search of perpetrator's home
- ♦ Extensive review of past medical records vital

CP1-Lys043

Munchausen Syndrome By Proxy

Characteristics of Perpetrator:

- Almost always mother
- Loneliness/isolation
- Perceived as loving and caring
- Spends excessive time w/child
- Refuses to leave hospital

CPH Legal 06

Munchausen Syndrome By Proxy

Characteristics of Perpetrator:

- Insists child only responds to her caretaking
- Appears less concerned than hospital staff
- Familiar w/medical terms

CPH Legal 06

Munchausen Syndrome By Proxy

Characteristics of Perpetrator:

- Father has low profile; doesn't visit; frequent job travel
- Physical symptoms resolve when child removed
- Parent tolerates invasive procedures

CPH Legal 06

Munchausen Syndrome By Proxy

Red Flags:

- Persistent or recurrent illnesses that cannot be explained
- Lab results and physical findings that are at variance w/general health of child

CH 1 page 47

Munchausen Syndrome By Proxy

Red Flags:

- "Never seen anything like this before"
- Symptoms that don't occur when away from caretaker
- Particularly attentive caretaker in hospital

CH 1 page 48

Munchausen Syndrome By Proxy

Red Flags:

- Unconcerned caretaker
- Non-responding symptoms
- Polymicrobial bacteria
- Atypical episodes of SIDS; claimed "near miss" SIDS

CH 1 page 49

Sudden Infant Death Syndrome (SIDS)

"The sudden death of an infant under one year of age which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and a review of the clinical history."

**American Academy of Pediatrics (1994).
Distinguishing SIDS from Child Abuse Fatalities.**

CPH Legal 108

Sudden Infant Death Syndrome (SIDS)

Generally:

- ⊙ SIDS far more common than infanticide
- ⊙ 5000-7000 SIDS; 1200-1500 homicides
- ⊙ Most common cause of death for children between 1-12 mos.

CPH Legal 109

Sudden Infant Death Syndrome (SIDS)

Generally:

- ⊙ 80% occur before 5 mos. of age;
90% by 6 mos.
- ⊙ 60%-70% boys; 30%-40% girls
- ⊙ More common in winter months

CPH Legal 110

Sudden Infant Death Syndrome (SIDS)

Generally:

- ⊙ Less than 5% of apparent SIDS deaths are due to abuse
- ⊙ Mass.SIDS center stats: in 806 sudden, unexpected infant deaths from 1982 to 1990, only 5 cases (0.6%) fatal child abuse

CPH 149-103

Distinguishing SIDS from Homicide

“The appropriate professional response to any child death is compassionate, empathetic, supportive and non-accusatory. At the same time it is vital to discover the cause of death if possible. Unless there is a history of significant antecedent illness or there are obvious injuries, the parents can be told that death appears to be due to

CPH 149-104

Distinguishing SIDS from Homicide

“SIDS, but that only with a thorough scene investigation, post-mortem examination, and review of the records can other causes be excluded.”

**American Academy of Pediatrics (1994).
Distinguishing SIDS from Child Abuse
Fatalities.**

CPH 149-105

Distinguishing SIDS from Homicide

Features raising possibility of homicide:

- ❶ Previous episodes of apnea in same person's presence;
- ❷ Previous unexplained medical disorders such as seizures;
- ❸ Age at death of over 6 months;

CPI Legal 115

Distinguishing SIDS from Homicide

Features raising possibility of homicide:

- ❹ Prior history of abuse;
- ❺ Prior unexpected/unexplained child deaths in family;
- ❻ Prior law enforcement/CPS involvement re violence

CPI Legal 117

Distinguishing SIDS from Homicide

Death should be ruled SIDS when:

- A complete autopsy is done and finding are compatible w/SIDS
- No evidence of head trauma, cervical cord injury, retinal hemorrhage or asphyxia
- No trauma on skeletal survey

CPI Legal 118

***MEETING UNTRUE
DEFENSES IN CHILD
PHYSICAL ABUSE CASES***

**Presented by
Daniel Armagh
Director
National Center for Missing and
Exploited Children**

CPA 1992-10

HEAD INJURIES

***Head Injuries in Very Young Children:
Mechanisms, Injury Types and
Ophthalmologic Findings in 100
Hospitalized Patients Younger Than 2
Years of Age.***

Pediatrics, Vol. 90, No. 2 August 1992

CPA 1992-11

RESOURCE

**The Quarterly Child Abuse
Medical Update**

***The Institute for Professional
Education, Massachusetts Society for
the Prevention of Cruelty to Children
43 Mount Vernon Street
Boston, MA 02108***

CPA 1992-11

***National Center for Missing
and Exploited Children***

→ **Training**

 **Technical Assistance**

 **Publications**

CP-1 Legal-112

PROBABLE DEFENSES

⇒ **Discipline**

⇒ **Accident**

⇒ **Self-Inflicted**

⇒ **SODDI**

⇒ **Cultural Norm**

⇒ **Lack of Intent**

⇒ **Religious Tenets**

⇒ **Reasonable Doubt**

CP-1 Legal-113

GROUND RULES

⇒ **Begin meeting from beginning**

⇒ **Analyze to determine defense**

⇒ **Defendant's statements**

⇒ **Supporter's statements**

⇒ **Analyze at every phase**

⇒ **Review case for weaknesses**

CP-1 Legal-114

Verification & Corroboration

⇒ **Prompt Investigation**

- * Interview witnesses
- * Scene
- * Injuries

CP 1 page 113

Verification & Corroboration

⇒ **Importance of Experts**

- * nature of injuries
- * timing of injuries
- * mechanism of injuries
- * clinical course of injuries
- * how scene and statements fit
- * child development

CP 1 page 114

DISCIPLINE

VICTIM'S CONDUCT
DEFENDANT'S CONDUCT

CP 1 page 117

ACCIDENT

***Injuries inconsistent with
explanation
Foreseeable nature of injuries***

CS Legal-118

SELF-INFLICTED

***Expert testimony re: child
development
Expert testimony re:
mechanism of injury***

CS Legal-118

SODDI

- ***“other dude” not capable***
- ***timing of injuries***
- ***inconsistencies***

CS Legal-118

CULTURAL NORM

- ⇒ Conduct not culturally accepted
- ⇒ Culturally accepted but illegal

CPL Legal 121

LACK OF INTENT

- * expert re: mechanism
- * expert re: amount of force
- * surrounding circumstances

CPL Legal 122

RELIGIOUS TENETS

- ⇒ relevance of religion
- ⇒ religious exemption?
- ⇒ caretaker's history
- ⇒ life in danger

CPL Legal 123

REASONABLE DOUBT

- * show what happened
- * show how it happened
- * show where
- * show who
- * show why

CP1 Legal 124

SCOPE OF THE PROBLEM

- Neglect and Failure to Thrive
- Parents and caretakers are the overwhelming majority of perpetrators in neglect and failure to thrive cases
- At least 2000 deaths *reported* each year
- Professionals are generally poorly trained and not prepared to properly investigate and accurately diagnose these cases
- 18,000 children permanently disabled
- 142,000 children seriously injured

CP1 Legal 125

PERPETRATOR PROFILE

- Majority of perpetrators are fathers/male caretakers - absolute domination of child's environment, including mother
- Most programs target women but do not address domestic violence issues
- Very strong correlation between family violence and FTT or Neglect

CP1 Legal 126

PERPETRATOR PROFILE

- Statistical data on family violence and child abuse
- Battered women are much more likely to abuse their children
- Should we prosecute battered women who abuse or fail to protect their children?
- Feminist perspectives

CPH Legal 127

1.8 - 4 million women are victimized by d.v.

- *How Violent Are American Families? Estimates from the National Violence Resurvey and Other Studies.* Finkelhor, D., Kirkpatrick, J.T.

CPH Legal 128

Statistical Data on Family Violence and Child Abuse

- 3.3 - 10 million children witness domestic violence each year.
- *Children of Battered Women.* Jaffe, P., Wolfe, D. (Sage 1990)
- Child Abuse is present in 30 - 70% of families in which there is spouse abuse. The severity of abuse usually parallels the severity of the domestic violence.

CPH Legal 129

Massachusetts

- DHSS study revealed that 32% of their child protection cases also involved domestic violence. Hangen, E. D.S.S. *Interagency Domestic Violence Team Pilot Project Data Evaluation - Boston, Mass. Dept. of Social Services.*

CHL Legal 128

Battered Women Abusing Children

- Mothers are **eight** times more likely to hurt their children when they were being battered than when they were safe from violence. *Lenore Walker (1984)*
- Children in homes where domestic violence occurs are physically abused or seriously neglected at a rate of 1500% higher than the national average. *Physical Violence In American Families, Straus, M.A.*

CHL Legal 128

Domestic Violence and Failure to Thrive

- Children are in nearly 50% of all homes where police respond to domestic violence
- 70% of all women in shelters have children with them, 20% have three or more.
- In 40% of child abuse cases, there is also a battered women.
- Pregnancy is a prime time for the onset of domestic violence, with the abdomen or stomach prime targets.

CHL Legal 128

FTT and Domestic Violence

Testimony before Congress disclosed that nearly 50% of abusive husbands batter their pregnant wives, and that as a result these women are four times more likely to bear low birth weight infants and experience difficulty in post birth maturation if sent back to a hostile environment of domestic violence. *ABA Report on The Impact of Domestic Violence on Children* (1994).

CFR Legal 122

FTT and Domestic Violence

Reports suggest that more babies are born with birth defects as a result of the mother being battered than all diseases and illnesses for which we now immunize pregnant women combined. *Chiles, L. Death Before Life: The Tragedy of Infant Mortality. Report of the National Commission to Prevent Infant Mortality.*

CFR Legal 123

Should Battered Mothers Be Prosecuted for Child Abuse?

Theories of prosecution against the mother:

- neglect of the child
- direct abuse of the child
- failure to protect the child from harm
- inflicting emotional harm on the child
- failure to report abuse

CFR Legal 125

FTT Scenarios

- Being present when the child is abused and failing to intervene
- Failure to seek out medical aid for the child after the abuse
- Leaving the child alone with a known abuser
- Failing to take care of the child's basic necessities of life or emotional well being because abuser is jealous, threatens harm or the child is singled out for abusive treatment

CFL 1996-138

Should we Prosecute Battered Women?

- There is no empirical data that battered women are incapable of protecting their children

CFL 1996-137

In Interest of A.D.R., 524 N.E. 2d 487 (ILL. App. Dist. 1989)

- *Father's repeated physical abuse of mother for seven years created injurious environment to child's welfare supporting neglect or abuse petition. Court did not need to wait until child became a victim of physical abuse or until repeated beatings caused permanent emotional damage to the child.*

CFL 1996-136

*In re Theresa "CC", 576 N.Y.S.
2d 937 (1991)*

Parental rights of both parents terminated based upon court finding that both had engaged in mutual domestic violence in front of the children for many years impeding the children's ability to thrive and develop in the appropriate manner.

CPH Legal 128

*State v. G.P., N.W. 2d 477
(Neb. 1990)*

Parental rights of non-abusing mother terminated based upon her failure to protect her children from abusive acts by father. Mother claimed a victim of domestic violence and fear prevented her from protecting children or leaving. Court noted the mother returned to abusive environment of her own volition and even after serious abuse of children, stated she would not leave her husband.

CPH Legal 128

Child Abuse and Feminism

- Liberal Feminism-until equal
- Radical Feminism-powerless people
- Cultural Feminism-nurturing role of women
- Hedonic Feminism-must first deal with the legacy of violence against women before women can be held responsible.

CPH Legal 128

Shaken Baby Syndrome

- Children who are abused by shaking are often neglected for substantial periods of time before medical treatment is sought
- 25% are fatal and the survivors often suffer serious chronic injuries
- Investigators should always be sensitive to acute injuries which have not received appropriate and timely medical attention

CPH Legal 112

FAILURE TO THRIVE

- FTT defines children whose growth is significantly under developmental norms established for a child's age and gender
- Organic causes for FTT caused by medical conditions
- Non-organic causes are caused by withholding necessary sustenance. FTT is the developmental outcome for severe malnutrition (starvation).

CPH Legal 113

FAILURE TO THRIVE

- Intervention - physicians report a % of FTT to child protective services
- Smaller % of cases are reported to law enforcement: usually advanced stages of malnutrition or dead of related causes.
- MDT pro-active approach can prevent some FTT cases
- Profiling "at risk" families

CPH Legal 114

NEGLECT

- Environments which are inappropriate
- Filthy - poor hygiene
- Crack house parties
- Drugs given or accessible by children
- Weapons
- Failure to protect from abuse of various origins

CP Legal 148

CULPABILITY

- Non-criminal culpability from ignorance or poverty
- Exhaustive investigation required to establish type of culpability
- Refer to the appropriate agency and have a follow up protocol

CP Legal 149

CULPABILITY

- Criminal culpability requires evidence that establishes guilt beyond a reasonable doubt that the defendant(s) caused the child's condition due to intentional, knowing, reckless or criminally negligent acts or omissions of "caregivers."

CP Legal 151

SUCCESSFUL PROSECUTIONS

- Thorough investigation
- Professionally conducted and documented interviews of: attending physicians, social services caseworker, medical staff, medical examiner, caregiver(s), family members, neighbors and persons with knowledge of child's life (especially last days)
- Obtaining background assessments - social/ medical and prompt scene investigation

CPH 146-148

SCENE INVESTIGATION

- Consent search
- Cooperative state
- Sensitivity but thorough investigation
- Serve search warrant
- Sign consent release for child's medical records
- Release of all children's records

CPH 146-147

SCENE INVESTIGATION

- Relevant (even if peripheral) is important
- age appropriate food in the house?
- milk bottles? cans of formula? mixing instr?
- document and photograph cabinets, counter tops, refrigerators, freshness of foods-both adult and children's.
- used and unused diapers-stools in diapers can indicate infections, last meal, content, last change of diaper-retrieve dirty laundry

CPH 146-148

***Medical Aspects of Child Fatality
Investigations***

The Roles of Health Care Professionals, Emergency Medical Technicians and Medical Examiners

CTE Medical Scenario 1

Causes of Fatalities

Distinguishing between
accidental and inflicted
injuries

CTE Medical Scenario 2

Definitions

An accident is an event that occurs
incidentally, casually or by chance

An inflicted injury is one that occurs
voluntary and conscious control.
Inflicted injuries may be intentional
or unintentional.

CTE Medical Scenario 3

Questions to ask to help separate
accidental from inflicted injuries:

- What is the age of the patient?
Development determines what kinds of injuries are likely.
- Is the history plausible? Could this injury have occurred as recounted by the caretaker?
- Does the history change with changing information given to the caretaker?
- Does the history change when related in subsequent accounts by other family members?

CT5 Medical Record

Questions to ask to help separate
accidental from inflicted injuries:

- Are there non-familial eye-witnesses to the event?
- Was the injury described by the caretaker actually unwitnessed by the caretaker? ("Did you see this happen?")
- Is the demeanor of the caretaker defensive, belligerent, hostile, passive or unconcerned and not in keeping with the patient's condition?
- Is the social situation in which the event occurred a high-risk environment?
- Mostly importantly, what else could have caused the observed injuries?

CT5 Medical Record

Common suspicious stories in fatal
child abuse cases:
Kirschner's "Dirty Dozen"

1. Child fell from a low height
2. Child fell and struck head on floor or furniture, or hard object fell on child
3. Unexpectedly found dead (age and circumstances not appropriate for SIDS)
4. Child choked while eating and was therefore shaken or struck on chest or back
5. Child suddenly turned blue or stopped breathing, and was shaken to revive
6. Sudden seizure activity

CT5 Medical Record

Common suspicious stories in fatal
child abuse cases:
Kirschner's "Dirty Dozen" (con't)

7. Aggressive or inexperienced resuscitation efforts to a child who suddenly stopped breathing
8. Alleged traumatic event a day or more prior to the terminal event
9. Caretaker slipped or tripped while carrying child
10. Injury inflicted by sibling
11. Child left alone in dangerous situation (bathtub) for just a few moments
12. Child fell down stairs (or in a walker, or other baby equipment)

CTE Medical Notes 7

Physical Abuse Types Head

CTE Medical Notes 8

The key points in the anatomy of the
head consist of the following layers:

- Scalp
- Subgaleal space
- Skull
- Epidural space
- Dura mater
- Subdural space
- Bridging veins
- Pia-arachnoid
- Parenchyma
- Axons and Dendrites
- Myelin
- Brainstem
- Ventricles

CTE Medical Notes 9

Mechanisms of Injury

Hymel has outlined a model that explains isolated acceleration injuries:

- Head was injured by impulsive loading without impact (whiplash)
- Head was struck by a deformable, moving object over a large surface area leading to marked head acceleration
- Head was moving rapidly and contacted a deformable material over a large surface area

In addition to these acceleration injuries, the head can also be compressed in a vise-like situation.

CPH Model of Abuse 10

Shaken Baby Syndrome (SBS) Shaken Impact Syndrome (SIS)

The terms shaken baby syndrome (SBS) and shaken impact syndrome (SIS) refer to the signs and symptoms, as well as the clinical, radiographic and sometimes autopsy findings resulting from violent shaking of an infant or young child.

CPH Model of Abuse 11

Shaken Baby Syndrome (SBS) Shaken Impact Syndrome (SIS)

- Most common cause of mortality from physical abuse
- Accounts for the most long term disability in infants and young children due to physical abuse
- Age of victims ranges from newborn to approximately 4 years of age
- Majority of cases occur before the infants' first birthday
- Average age of victim is between 3 and 8 months

CPH Model of Abuse 12

**Shaken Baby Syndrome (SBS)
Shaken Impact Syndrome (SIS)**

- The usual trigger for shaking is inconsolable crying by the infant
- The perpetrator loses control and grabs the infant, either by the thorax, the upper arms or the neck, and violently shakes the baby
- The time of shaking varies, usually ranging from 5 seconds to 15 or 20 seconds

CTB Medical Review 11

**Shaken Baby Syndrome (SBS)
Shaken Impact Syndrome (SIS)**

Shaking and the sudden deceleration of the head at the time of impact do several things:

- The veins that bridge from the brain to the dura, which is fixed to the inside of the skull, are stretched and, exceeding their elasticity, tear open and bleed, creating the subdural hematoma
- The brain strikes the inner surface of the skull, causing direct trauma to the brain substance
- The deeper structures of the brain, the axons, can be broken, shearing off during the commotion to the brain
- The lack of oxygen during shaking causes further irreversible damage to the brain substance
- Damaged nerve cells release chemicals which add to the oxygen deprivation and cause further damage to adjacent nerve cells

CTB Medical Review 12

**IT IS THESE INJURIES TO THE
BRAIN, NOT THE BLEEDING
UNDER THE DURA OR
ARACHNOID MEMBRANES, THAT
CAUSE THE SIGNS, SYMPTOMS
AND COURSE OF SHAKEN
BABY/SHAKEN IMPACT
SYNDROME**

CTB Medical Review 13

Concomitant with the destruction of brain tissue are other injuries...

- The most significant of these are the retinal hemorrhages
- Skull fractures may be seen when there has been sufficient impact
- Posterior rib fractures may be seen reflecting the compression of the chest during shaking and the movement of the rib cage
- Bruising of the skin of the head, face and other parts of the body

CTM Medical Notes 16

Resulting Signs & Symptoms

- Decreased responsiveness
- Irritability
- Lethargy and limpness
- Convulsions
- Vomiting
- Increased breathing rate
- Low body temperature and low heart rate
- Coma with fixed and dilated pupils
- Death

CTM Medical Notes 17

Crush Injuries

These injuries cause injuries to the brain by static loading as opposed to acceleration/deceleration injuries.

When the head is crushed, such as when the head is run over by a vehicle, the skull and brain absorb the energy and may be severely or mildly damaged depending on the forces involved.

However, the brain does not undergo the commotion associated with shaking and impact and so the injury patterns may be quite different.

CTM Medical Notes 18

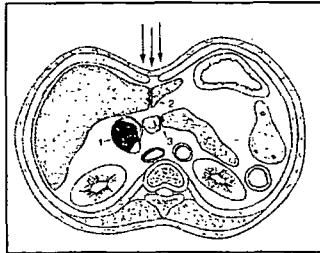
Penetrating Injuries

Gunshots, knives, blunt implements may cause penetrating injuries to the contents of the cranium.

These are more easily diagnosed than the victim of shaking or shaking with impact because of the nature of the lesions.

CTH Medical Notes 17

Physical Abuse Types Abdomen



CTH Medical Notes 20

Abdominal Cavity

SOLID	HOLLOW
liver spleen pancreas kidneys	stomach, duodenum, jejunum, small intestine, large intestine, bladder, ureters

*Large and small blood vessels and nerves supply all of the organs & these are subject to injury as well

CTH Medical Notes 21

Mechanisms of Injury

Blunt abdominal trauma (e.g., a fist, foot, instrument, or appliance) strikes the abdomen and can cause trauma to the organ by direct contact or by forcing the organ against a hard surface. Direct blows disrupt the integrity of the solid organ. Hollow viscera are usually injured by sudden impingement against the abdominal portion of the spinal column.

CT1 Medical Page 22

Distinguishing Between Accidental and Inflicted Injuries

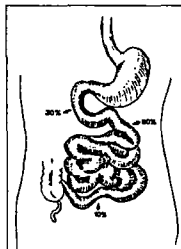
	<u>Accidental</u>	<u>Inflicted</u>
Median Age	7 yrs. 8 mo.	2 yrs. 6 mo.
History	Motor vehicle	Discrepant history
Medical Care	Prompt	Delayed
Organ Involved	Solid	Hollow
Mortality Rate	21%	53%

Ledbetter et al studied 156 children under 13 years of age with abdominal injuries

CT1 Medical Page 23

Order of Frequency of Involved Organs in Inflicted Injury:

1. Small Intestine
 - 30% duodenum
 - 60% jejunum
 - 10% terminal ileum
2. Liver
3. Pancreas



CT1 Medical Page 24

Physical Abuse Types Thoracic

The thorax is the rib cage and all the internal organs contained within it.

- Heart and great vessels going to and from the heart
- Lungs and the mediastinum containing blood vessels
- Nerves
- Esophagus
- Trachea
- Diaphragm

CPA Manual Page 23

Mechanisms of Injury

Direct impacts, penetrations and compressions are the principle types of forces causing injury to the thorax.

Direct major impacts can cause disturbance of cardiac rhythm leading to death, spontaneous rupture of the lung or hemorrhaging.

Compressions of the rib cage can cause fractures of ribs, contusions and/or lacerations of the thoracic structures, bleeding and collections of blood within the pleural or pericardial membranes.

Penetrating injuries can cause punctures of the lungs, heart or pericardial sac, massive hemorrhaging from heart or great vessels, or rupture of the esophagus, hypopharynx or trachea.

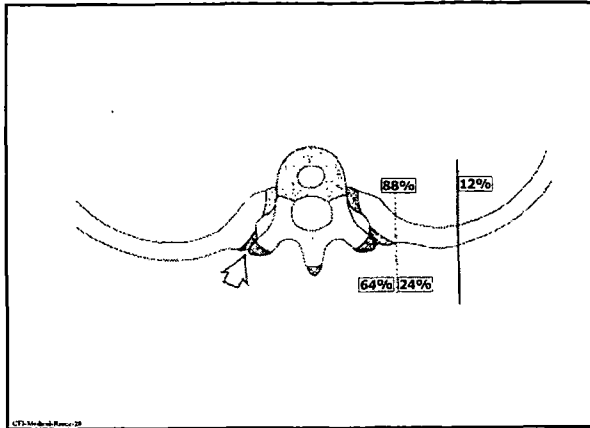
CPA Manual Page 24

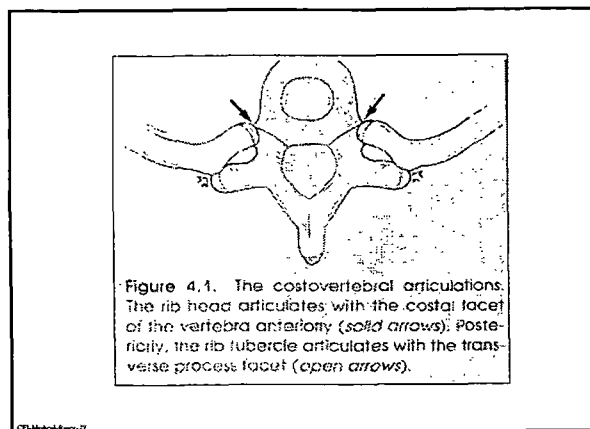
Distinguishing Between Accidental and Inflicted

Certain types and locations of thoracic injuries make them more likely to be inflicted than accidental;

- Posterior rib fractures. These fractures are caused by forcing the posterior arcs of the ribs to migrate past the horizontal plane of the spine levering the rib attachment to the body of the vertebra against the transverse process of the vertebra, creating a characteristic fracture that is unlikely to be produced in any other fashion.

CPA Manual Page 25





Distinguishing Between Accidental and Inflicted (con't)

- Hypopharyngeal perforation. Perforation of the posterior pharynx or upper esophagus in an infant or small child are unlikely accidents unless there is a clear history of the child having fallen with a sharp object in the mouth. These lesions, when treated early, should pose no threat to life, but if left untreated, can lead to infection, pneumothorax and death.

Distinguishing Between Accidental and Inflicted (con't)

- Chylothorax This unusual interruption of the lymphatics within the thorax allows milky chyle to leak into the thoracic cavity and, although not in itself likely to cause death, suggests significant trauma. When seen in a child death case, unless there is a history of motor vehicle crash or a fall from more than 3 stories, chylothorax is a highly suggestive sign of inflicted injury.

CPD Medical Review 11

Burns Anatomy of the Skin

The skin consists of the superficial layer, the epidermis, and the deeper layer, the dermis. Epidermal appendages include sweat glands, hair follicles, and the sebaceous (oil) glands. Both layers are richly supplied with blood vessels and nerves.

CPD Medical Review 12

Classification of Burn Injuries

First Degree	Involves only the superficial layer of the epidermis and is characterized by redness only
Second Degree	Extends into the dermis causing blistering and tissue loss
Third Degree	Entire dermis and appendages are damaged. Because the nerves are destroyed, areas of third degree burn have no pain sensation
Fourth Degree	Extends beyond the subcutaneous tissue into the muscles, bones and joints

CPD Medical Review 13

Classification of Burn Injuries

- Second degree burns are also called partial thickness burns
- Third and fourth degree burns are also called full thickness burns

CPA Medical Review 34

Mechanism of Injury; Distinguishing between Accidental and Inflicted

Immersion Burns

CPA Medical Review 35

Immersion Burns

These burns are characterized by sharply demarcated margins of the burn, uniformity of the burn with sparing of skin surface by skin folds or protection from the burning agent. These burns most often involve the upper and lower extremities and the buttocks.

CPA Medical Review 36

Dry Contact Burns

These burns are uniform in degree of burn, often involve exposed surfaces of the body (arms, legs, hands, feet) and are associated with discrepant histories.

CTB Medical Burns 11

Chemical Burns

These are burns associated with acid or alkali substances and may involve the skin or the internal organs, particularly the mouth, throat, esophagus or tracheo-bronchial tree.

CTB Medical Burns 12

Pattern Burns

Burns that conform to heated elements such as irons, grills, curling irons, cigarette lighters, or stove heating elements may be accidental or inflicted. The age of the child and the location of the burn, coupled with the history of how the burn occurred will in most cases be sufficient to make the distinction between accident and abuse.

CTB Medical Burns 13

Physical Abuse Types

Skeletal Injuries

CPA Medical Review 48

Factors increasing the likelihood that a fracture in childhood is due to abuse:

- Young age
 - Up to 70% of abusive fractures occur in infants under 1 year of age
 - 80% of all inflicted fractures are found in babies under 18 months of age
- Children with disabilities and/or history of prematurity are at increased risk
- Associated other injuries
- More than one fracture
- Fractures in multiple locations
- Fractures in various stages of healing

CPA Medical Review 49

The skeletal survey is useful in children 2 years of age in which there is a suspicion of physical abuse of any kind.

The survey includes:

- Skull: frontal and lateral views
- Spine: frontal and lateral projections
- Chest
- Extremities: Separate views of upper and lower extremities

CPA Medical Review 50

Humerus

- Common in abuse
- Usually in the middle or lower third of the shaft
- Elbow fractures more common in accidents, especially in older children, but if seen in children under 3 years of age, abuse should be considered

CTF Medical Review 41

Femur

- 60% of femoral fractures in children under 1 year are from abuse
- 20% of femoral fractures in children between 2-3 years of age are from abuse
- In another study, 31% of femoral fractures in children under 3 years of age were from abuse
- Femoral fractures arising from accidental causes are most often associated with major acceleration/deceleration injuries or major blunt trauma. Motor vehicle crashes are the major cause.
- The type of fracture cannot be used to distinguish accidental from abusive. (Spiral fractures occur as the result of torsional forces that can be seen in accidents or abuse.)

CTF Medical Review 42

Metaphyseal Fractures

- The Classic Metaphyseal Lesion (CML) is diagnostic of abuse. No other mechanism of injury can cause this fracture.
- The fracture is across the zona spongiosa, the thinnest portion of the end of the long bones. It forms a disc-like fragment which can look like chips or a bucket-handle depending on the plane of projection of the x-ray beam.

CTF Medical Review 43

Mechanism of Production of the CML

CTB Medical Records

Clavicle

- Commonly fractured long bone in both inflicted and accidental injury, usually in the middle third of the bone
- Accidental fractures of the medial or lateral third are uncommon in the under-3 year old, but can result from shaking

CTB Medical Records

Rib Fractures

(See Thoracic injuries)

CTB Medical Records

Vertebral fractures due to compression of vertebral bodies during shaking with hyper-extension or hyper-flexion

CT1: Medical History-01

Dating Fractures

- Four stages to bone injury: Soft callus formation occurs 10-14 days after fracture and can be seen as cottony shadows around the fracture line
- Skull fractures do not undergo callus formation and aging of these fractures is unreliable

CT1: Medical History-01

Differential Diagnosis

- Accidental fractures
- Obstetrical trauma
- Prematurity
- Nutritional deficiencies such as rickets
- Metabolic disorders such as Menke's syndrome
- Drug toxicity making the bones fragile
- Neuromuscular disorders such as cerebral palsy (CP)

CT1: Medical History-01

Differential Diagnosis (con't)

- Skeletal dysplasias such as osteogenesis imperfecta. (A new entity has been described by Paterson that he has called "Temporary Brittle Bone Disease" for which there is no scientific evidence. It is often used in the courts as a defense ploy in cases of abusive multiple fractures.)
- Neoplasms such as leukemia

CPA Medical Query-12

Specificity of Fractures for Abuse

When to suspect abuse:

- Metaphyseal fractures in children under 2 years of age
- Posterior rib fractures
- Medial or lateral clavicular fractures
- Scapular fractures
- Spine fractures
- Sternum fractures

CPA Medical Query-12

Specificity of Fractures for Abuse

Highly suspicious for abuse:

- Multiple fractures, especially bilateral fractures (fractures of long bones on both sides)
- Repetitive fractures in the same child
- Fractures to the hands or feet

CPA Medical Query-12

Specificity of Fractures for Abuse

Histories suspicious for abuse:

- Delay in seeking medical attention
- Discrepant history - the history does not make sense when assessing the injury
- Fractures in varying stages of healing
- Extremity plus skull fracture
- Intracranial injuries plus skull fracture
- Any fracture in a child under 2 years of age should be investigated for the possibility of abuse

CTN Medical Notes-11

Neglect

The failure to meet the child's need in terms of food, clothing, shelter, medical care, safekeeping, nurturance and education. Neglect accounts for nearly half of all reports and half of all child fatalities due to child maltreatment.

CTN Medical Notes-16

Physical Neglect Exposure

Failure to provide food, shelter and/or clothing appropriate to the weather are examples of this form of neglect.

CTN Medical Notes-17

Failure to Thrive

- Failure to thrive due to the withholding of food is the most extreme form of physical neglect
- Child's growth deviates from the norms of the child's age and sex due to malnutrition
- Most common risk factors are poverty and substance abuse
- Abusive failure to thrive must be distinguished from other forms of FTT where there are social or medical factors contributing to or responsible for the FTT
- Unusual dietary habits due to parental practices based on fad diets, ignorance, or splinter religious or cultural groups

CTN Medical Neglect 18

Medical Neglect

Immunization failures or lapses are one form of this type of neglect and rarely can be implicated as a cause of child fatality. Instances where this might occur are cases of tetanus (lockjaw), poliomyelitis, measles, mumps, hepatitis, or diphtheria leading to death.

CTN Medical Neglect 19

Medical Neglect (con't)

Non-compliance with medical advice is a more common cause for child fatality due to medical neglect. In cases of life-threatening illnesses such as diabetes, cancer, asthma or cystic fibrosis, or to infectious diseases such as meningitis or sepsis, or refusal of life-saving surgical procedures, failure to follow established and accepted proven medical treatments leading to a child's death are considered examples of medical neglect.

CTN Medical Neglect 20

Medical Neglect (con't)

Certain religious practices are responsible for child fatalities. There are well-documented cases of deaths in the Christian Science Church because of refusal of usual medical care.

There are at least 17 religious sects where deaths have occurred because of bizarre beliefs in healing by faith. Examples of these churches include the Faith Assembly, End Time Ministries and Faith Tabernacle Church.

CTE Model 4-Review 41

Medical Neglect (con't)

Cultural practices are responsible for directly producing child fatalities as well as delaying or refusal of accepted medical practices for a variety of illnesses and conditions leading to death. These practices include coin rubbing, moxibustion, female genital mutilation, caida de mollera and cupping.

CTE Model 4-Review 2

Supervisory Neglect

House fires are responsible for a significant number of child fatalities. Some of these are due to caretakers who have left their children alone in a dwelling and the house catches fire due to the children playing with matches, cigarette lighters or appliances.

CTE Model 4-Review 42

Supervisory Neglect (con't)

Bathtub and bucket drownings cause child deaths on a regular basis. A child left unsupervised in a bathtub while the caretaker leaves to answer the phone, attend to some other activity or simply due to ignorance or laziness may drown. A certain percentage of these bathtub drownings are intentional.

CTI Medical Supply, Ltd.

Supervisory Neglect (con't)

Dangerous baby equipment has led to deaths. The U.S. Consumer Safety Commission has ascertained at least one death per year due to infant walkers.

Walkers are implicated by some caretakers when the real injuries are due to physical abuse and the walker is used as an excuse for the injuries.

CTI Medical Supply, Ltd.

Supervisory Neglect (con't)

Automobile seat restraints.

The failure to secure infants and children in proper seat restraints has resulted in child fatalities.

CTI Medical Supply, Ltd.

Supervisory Neglect (con't)

Exposure to drugs and drug environments.

There are numerous reports of passive drug exposures being responsible for child injuries and some fatalities. Some caretakers have administered drugs to children for a variety of reasons, including a desire to keep the child quiet, to put them to sleep, or from a perverted desire to give the child the same pleasure they are enjoying. Living in a drug environment has also led to child deaths by exposing the child to the dangers of the paraphernalia of drug abuse (caustic ingestions of free basing agents) and the dangers of drug dealers.

CTN Medical Page 47

Munchausen by Proxy (MBP)

MBP is a cluster of symptoms and/or signs where:

- An illness in a child is faked and/or produced by a parent
- The child is presented for medical assessment and care, usually persistently, often resulting in multiple medical procedures
- Knowledge about the etiology of the child's illness is denied by the perpetrator, and
- Acute symptoms and signs in the child abate when the child is removed from the perpetrator

CTN Medical Page 48

Manifestations

The most common manifestations are:

- Apnea (cessation of breathing)
- Seizures
- Recurrent vomiting
- Recurrent diarrhea
- Muscular weakness
- Neurological problems
- Bleeding disorders
- Complaints of sexual abuse

CTN Medical Page 49

Manifestations

Because of the need on the part of the perpetrator to keep the child ill, the perpetrator, usually the child's mother, will escalate the illness simulation or production to keep the medical providers' attention. In some cases, the perpetrator will go too far, causing the child's death.

CFR Medical Report 20

Poisonings

The administration of toxic agents to a child has been responsible for child fatalities. The exact number of such events is unknown since no records are kept in a uniform fashion across the United States. When this is suspected, and the offending agent is known, tests can be run to confirm their presence. When the agent is unknown, toxicology screens may determine the agent is in the blood or urine. However, most screens miss a large number of toxic drugs due to the large number of new drugs constantly being manufactured either legally or illegally.

CFR Medical Report 21

Suffocation

It is difficult to determine how many child fatalities are due to intentional suffocation since postmortem examinations cannot, in most instances, identify the mechanism of hypoxic damage to the brain. The pathologist can determine whether or not hypoxia has occurred but cannot be certain as to how it came to be.

CFR Medical Report 22

Strangulation

Strangulation injuries can lead to hypoxia and death. External evidence is often present, but many strangulation deaths are said by caretakers to be due to window shade pulls, cords in or around cribs or playpens, or garments. If there are clear indications of manual strangulation, such as finger marks around the neck, the cause is more identifiable. Close cooperation with the pathologist doing the postmortem investigation should lead to more clearly delineated causes.

CTE Medical Series 73

Unusual Manifestations of Abuse

- Fatal pepper aspiration
- Microwave burnings
- Needle insertions
- Forced coin ingestions

CTE Medical Series 74

Recognition & Diagnosis

Physical Examination

- General visual inspection
- Vital signs
- Measurements, developmental assessments
- Location of lesions
- Pattern of lesions
- Discrepancy between caretaker history and physical findings

CTE Medical Series 75

Ancillary Studies

Radiology

- Specificity of fractures
- CT/MRI/Plain radiographs
- Skeletal survey

CP-Model 2, Rev. 75

Laboratory

- Hemogram
- Urinalysis
- Chemistries
- Enzymes
- Toxicology

CP-Model 2, Rev. 77

Sudden Death in Infancy

	Consistent With SIDS	Less Consistent With SIDS	Highly Suggestive or Diagnostic of Child Abuse
History surrounding death	Apparently healthy infant fed, put to bed. Found lifeless. Silent death. EMS resuscitation unsuccessful.	Infant found apneic. EMS transports to hospital. Infant lives hours to days. Substance abuse, family illness.	History atypical for SIDS. Discrepant history. Unclear history. Prolonged interval between bedtime and death.

CFI-Medical-Reece-78

Sudden Death in Infancy

	Consistent With SIDS	Less Consistent With SIDS	Highly Suggestive or Diagnostic of Child Abuse
Age at death	Peak 2-4 mo. 90% <7 mo. Range 1-12 mo.	8-12 mo.	>12 mo

CFI-Medical-Reece-79

Sudden Death in Infancy

	Consistent With SIDS	Less Consistent With SIDS	Highly Suggestive or Diagnostic of Child Abuse
PE and laboratory studies at time of death	Serosanguinous watery, frothy or mucoid nasal discharge. PM lividity in dependent areas. Possible marks on pressure points of body. No skin trauma. Well-cared-for baby.	Organomegaly of viscera. Stigmata of disease process (PE, laboratory, x-ray)	Cutaneous injuries. Traumatic lesions of body parts (conjunctiva, fundi, scalp, intraoral, ears, neck, trunk, anogenital extremities, malnutrition, neglect. Fractures.

CFI-Medical-Record-80

Sudden Death in Infancy

	Consistent With SIDS	Less Consistent With SIDS	Highly Suggestive or Diagnostic of Child Abuse
History of pregnancy, delivery and infancy	Prenatal care-minimal to maximal. Frequent history of cigarette use during pregnancy. Some future SIDS victims are premature or LBW. Subtle defects in state, feeding, cry, neurological status (hypotonia, lethargy, irritability). Less postneonatal height and weight gain. Twins, triplets. Spitting, GE reflux. Thrush, pneumonia, illnesses requiring hospitalization, tachypnea, tachycardia, cyanosis. Usually: no signs of antecedent difficulty.	Prenatal care-minimal to maximal. History of recurrent illnesses and/or multiple hospitalizations. "Sickly" or "weak" baby. Specific diagnosis of organ system disease.	Unwanted pregnancy. Little or no prenatal care. Late arrival for delivery. Birth outside of hospital. Few or no well baby care. No immunizations. Use of cigarettes, drugs/alcohol during and after pregnancy. Baby described as hard to care for or to "discipline." Deviant feeding practices.

CFI-Medical-Record-81

Sudden Death in Infancy

	Consistent With SIDS	Less Consistent With SIDS	Highly Suggestive or Diagnostic of Child Abuse
Death scene investigation	Crib, bed in good repair. No dangerous bedclothes, toys, plastic sheets, pacifier strings, pellet pillows. No cords, bands for possible entanglement. Accurate description of position with attention to possible head/neck entrapment. Normal room temperature. No toxins, insecticides. Good ventilation, furnace equipment	Defective crib/bed. Use of inappropriate sheets, pillows, sleeping clothes. Presence of dangerous toys, plastic sheets, pacifier cords, pellet pillows. Co-sleeping. Poor ventilation, heat control. Presence of toxins, insecticides. Unsanitary conditions.	Chaotic unsanitary crowded living conditions. Evidence of drugs/alcohol. Signs of terminal struggle in crib, bed, bedclothes or other equipment. Discovery of blood-stained bedclothes. Evidence of hostility by caretakers. Discord between caretakers. Display of violence between caretakers. Admission of harm. Accusations.

CFI-Medical-Record-82

Sudden Death in Infancy

	Consistent With SIDS	Less Consistent With SIDS	Highly Suggestive or Diagnostic of Child Abuse
Previous infant deaths in family	First unexplained and unexpected infant death	One previous unexpected or unexplained infant death.	More than one previous unexplained or unexpected infant death

CFI-Medical-Record-83

Sudden Death in Infancy

	Consistent With SIDS	Less Consistent With SIDS	Highly Suggestive or Diagnostic of Child Abuse
Autopsy findings	No adequate cause of death at PM. Normal: skeletal survey, toxicology, chemistry studies (blood sugar may be high, normal or low), microscopic examination, metabolic screen. Presence of: large numbers of intrathoracic petechiae; dysmorphic, dysplastic or anomalous lesions; gliosis of brainstem; sphincter dilation. Occasionally subtle changes in liver, including fatty change and extramedullary hematopoiesis.	Subtle changes in liver, adrenal, myocardium. Few or no intrathoracic petechiae.	Traumatic cause of death (IC or visceral bleeding). External bruises, abrasions, or burns. No intrathoracic petechiae. Malnutrition. Fractures. Subgaleal hematoma. Abnormal body chemistry values (NA, C1, K, BUN, sugar; liver, pancreatic enzymes; CPK). Abnormal toxicology.

CFI-Medical-Review-84

Sudden Death in Infancy

	Consistent With SIDS	Less Consistent With SIDS	Highly Suggestive or Diagnostic of Child Abuse
Previous CPS or LE involvement	None	One	Two or more. One or more family member arrested for violent behavior.

CFI-Medical-Review-85

Documentation

- Critical role in documentation
- Rules for documentation
 - Legibility
 - Objectivity
 - Non-judgmental
 - No editorial comments
 - Photodocumentation when possible

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The Autopsy and the Pathologist's Perspective

CT1 Medical Notes 47

Relationships between health care professionals, emergency medical technicians, law enforcement and prosecution

- Concept of a multi-disciplinary team
- Legal constraints of confidentiality
- Participation on child death review teams
- Serving as expert witness

CT1 Medical Notes 48

The key points in the anatomy of the head consist of the following layers:

- **Scalp** (Hair, skin, subcutaneous tissue, muscle)
- **Subgaleal space** (under the scalp)
- **Skull** (cranial bones) In the infant and young child the skull consists of a group of bones joined by sutures lines of a cartilaginous nature. The anterior fontanelle (soft spot) is formed by the non-union of bones on the top of the head where the bones have not joined together as yet.
- **Epidural space.** This is a potential space lying just beneath the skull and just above the dura mater,
- **Dura mater.** This is the outer membrane lying over the brain. It has large veins (dural sinuses) and small veins coursing through its substance. A large front-to-back sinus, the **superior sagittal sinus**, collects venous blood and ultimately returns it to the heart.
- **Subdural space.** This is the potential space just below the dura mater.
- **Bridging veins.** These multiple small veins carry blood from the surface of the brain through the subarachnoid space and the subdural space to the collection system of sinuses within the dura mater.
- **Pia-arachnoid.** This web-like membrane (hence the name arachnoid) enshrouds the curvatures of the brain (the sulci and gyri) and contains the cerebrospinal fluid.
- **Parenchyma.** This is the brain substance itself.
- **Axons and Dendrites.** Each nerve cell (neuron) has a number of dendrites, which lead impulses to the cell, and one axon, leading impulses from the cell.
- **Myelin.** This is the “insulation” of the nervous system and is not fully developed until about age 18 months. Because of the infant’s under-developed myelin, and because the infant’s brain contains 25% more water, its brain is much softer than the adult brain..
- **Brainstem.** This is the collection of nerve tracts and other central nervous system components leading from the brain to the spinal cord.
- **Ventricles.** A system of “aqueducts” within the brain which secrete, store and circulate cerebrospinal fluid.

Shaken baby syndrome/shaken impact syndrome (SBS/SIS)

The terms shaken baby syndrome (SBS) and shaken impact syndrome (SIS) refer to the signs and symptoms, as well as the clinical, radiographic and sometimes autopsy findings resulting from violent shaking of an infant or young child. SBS/SIS are often used interchangeably and are synonymous with other descriptive terms used in the earlier scientific literature such as whiplash shaken infant syndrome and shake/slam syndrome.

There are no firm statistics regarding the actual incidence of SBS/SIS since there are no central reporting registries to collect these data. However, estimates have been made based on clinical experience and extrapolated figures from hospitals caring for children. Estimates range from annual figures as low as 600 cases per year in the United States to as high as 1400. It is known that it is the most common cause of mortality from physical abuse and accounts for the most long term disability in infants and young children due to physical abuse. The age of the victims ranges from the newborn period to approximately 4 years of age. The majority of cases occur before the infants' first birthday and the average age of the victim is between 3 and 8 months of age.

The usual trigger for shaking is inconsolable crying by the infant. Frustrated by attempts to console the baby, the perpetrator loses control and grabs the infant, either by the thorax, the upper arms or the neck, and violently shakes the baby. The time of the shaking varies, usually ranging from 5 seconds to 15 or 20 seconds. During the shaking, the head rotates wildly on the axis of the neck creating multiple forces within the head. The infant stops crying and stops breathing, causing decreased oxygen supply to the body, particularly to the brain. The infant brain, having a much higher water content than the adult brain, is much softer than the adult brain. The absence of myelination, the "insulation" of the nerve cells acquired during development of the nervous system, contributes to the relative softness of the brain. These factors make the brain more gelatinous and during shaking is more easily distorted and compressed within the skull.

Shaking and the sudden deceleration of the head at the time of impact do several things:

1. The veins that bridge from the brain to the dura, which is fixed to the inside of the skull, are stretched and, exceeding their elasticity, tear open and bleed, creating the subdural hematoma.
2. The brain strikes the inner surface of the skull, causing direct trauma to the brain substance.
3. The deeper structures of the brain, the axons, can be broken, shearing off during the commotion to the brain.
4. The lack of oxygen during shaking causes further irreversible damage to the brain substance.
5. Damaged nerve cells release chemicals which add to the oxygen deprivation and cause further damage to adjacent nerve cells.

The combined effect is massive traumatic destruction of the brain tissue, leading to immediate brain swelling and causing enormous increases in the pressure within the skull. The swelling compounds the problem, since swelling causes compression of blood vessels and decreases the oxygen supply to the brain.

IT IS THESE INJURIES TO THE BRAIN, NOT THE BLEEDING UNDER THE DURA OR ARACHNOID MEMBRANES, THAT CAUSE THE SIGNS, SYMPTOMS AND COURSE OF SHAKEN BABY/SHAKEN IMPACT SYNDROME.

Concomitant with the destruction of brain tissue are other injuries. The most significant of these are the retinal hemorrhages. These are variable but are usually multiple and involve several layers of the retina. Skull fractures may be seen when there has been sufficient impact. Posterior rib fractures may be seen reflecting the compression of the chest during shaking and the movement of the rib cage past the horizontal plan of the back, levering the ribs against the transverse processes of the vertebral bodies. Bruising of the skin of the head, face and other parts of the body may be seen, but are not invariable. It is uncommon to see injuries to the neck or spinal column or of the spinal cord.

Symptoms and physical findings are variable, depending on the length and severity of the shaking and whether or not the infant was thrown onto a surface. The syndrome can be seen as a continuum from a short duration of shaking with little or no impact to severe shaking with major impact. The resulting signs and symptoms may run the gamut from decreased responsiveness, irritability, lethargy and limpness – through convulsions, vomiting from increased intracranial pressure, increased breathing rate, low body temperature and low heart rate – to coma with fixed and dilate pupils – to death.

Accidents and Abuse: How to Tell the Difference

Abstract

Definitions of an accident and abuse are discussed along with questions to be asked to separate the accidental from the inflicted injury. The importance of the basic approach in history taking, thorough physical examinations and the judicious use of ancillary services of radiology and laboratory are emphasized. Common suspicious stories offered to explain injuries and the pitfalls the clinician should avoid are discussed. An approach to understanding how an injury could happen is provided, using elements of the injury such as location, pattern and history. These facts are then viewed in the context of the known studies on similar injuries to specific organ systems and a determination made as to the likelihood of the injury being accidental or abusive in origin.

Learning Objectives

- To differentiate accidents from inflicted injuries
- To learn those questions which help to separate the accidental from inflicted injury
- To learn the elements of the history, physical examination, and ancillary testing which bear upon the diagnosis of inflicted injury
- To understand the principles of the biomechanics of injury as they relate to inflicted injuries
- To be aware of suspicious stories in fatal child abuse cases, and the costly errors in the diagnostic process

Outline

1. Definitions
2. Questions to ask to separate the accidental from the inflicted injury
3. Taking the History
 - a) The importance of a complete medical history
 - b) The Team Approach
 - c) The Physical Examination
 - d) Imaging Methods
 - e) Laboratory Tests
4. Kirschner's "Dirty Dozen" Common suspicious stories in fatal child abuse cases.
5. Twelve costly errors in the diagnostic process
6. Distinguishing between accidental and inflicted injuries-An Organ System Approach
 - a) Cutaneous injuries
 - b) Head injuries
 - c) Visceral injuries
 - d) Skeletal injuries
7. History of the circumstances of injury
 - a) Falls
 - b) Bunk bed injuries
 - c) Stairway falls
 - d) Motor vehicle accidents
 - e) Other circumstances - playground injuries, toys, etc.
 - f) Walker injuries
8. The Biomechanics of injury
 - a) Skeletal injuries
 - i) Long bones
 - ii) Toddler Fractures
 - iii) Rib fractures
 - iv) Metaphyseal fractures
 - b) Visceral injuries
 - c) Head injuries
 - d) Cutaneous injuries
 - i) Bruises, abrasions, lacerations
 - ii) Burns
9. Bibliography

Definitions

An accident is defined as an event that occurs incidentally, casually or by chance. It is presumed that such an event was at least consciously unintentional and that if such circumstances are under conscious control an attempt would have been made to avert the anticipated future course of events.

An intentional event or action is one that occurs voluntarily and assumes conscious - or perhaps even unconscious - control, reflecting an underlying conflict or impulse.

There is a continuum in possible child abuse cases from what appears to be a volitional act to what appears to be a chance event. The decision as to which it is must be made taking into account:

- the setting of the event — social context, location of encounter
- the biases of the observer and reporter
- the type of injury – the likelihood of the observed injuries being the result of an accident
- the future risk to the child

Questions to ask to help separate the accidental from the inflicted injury

1. What is the age of the patient?

Developmental stages determine what kinds of injuries are likely to be seen.

- What can they do?
- What are they likely to be doing?
- Is the child described as hyperactive, daredevil, combative, obstreperous?
- Does the child have a high “annoyance potential” and more likely to be disciplined harshly?

2. Is the history plausible?
3. Does the history change with changing information supplied to the caretaker?
4. Does the history change when related in subsequent accounts by other family members or by the original historian?
5. Are there non - familial eye - witnesses to the event?
6. Was the injury described as unwitnessed by the caretaker?

7. Is the demeanor of the caretakers defensive, belligerent, or hostile Is it passive and not in keeping with the seriousness of the patient's condition?
8. Is the social situation in which the injury occurred a high risk environment?
Are any of the following present?
 - a) Community or intrafamilial violence
 - b) substance abuse
 - c) chaotic living conditions
 - d) poverty
 - e) social isolation
 - f) transient life style
 - g) mental health aberrations
 - h) discord amongst family members
9. What else could produce this clinical picture?

Taking the History

1. The importance of a complete initial medical history.
 - a) Pregnancy, labor, delivery for information about early medical problems possibly bearing on the present condition
 - b) Past medical history, with particular attention to previous emergency room visits or admissions to the hospital
 - c) Family history, especially with regard to bleeding, clotting disorders, genetic diseases, other children with illnesses or childhood deaths in the family
 - d) Exploration of the social milieu
2. Interviewing techniques.
 - a) Importance of listening, not interrupting
 - b) The "Columbo Approach" - requests for clarification with an "I don't understand attitude".

3. The “Team Approach”
 - a) Combined interviewing with law enforcement, social workers
 - b) Separate interviewing of medical, social work, law enforcement
 - c) Conferring with the other history - takers, sharing of information
 - d) Importance of communication and availability of hospital personnel and law enforcement, child protection agencies to one another
4. The Physical Examination
 - a) The importance of the complete physical examination
 - b) Location, location, location
 - c) Head
 - 1) external marks,
 - 2) under the hair, behind the ears,
 - 3) the intra - oral exam
 - 4) neck
 - 5) Ears - pinna, eardrums,
 - 6) Eyes - bruises around the eyes, funduscopy exam
 - d) Chest - grab marks, tender areas, bruises
 - e) Abdomen - distensions, tender areas, bruises
 - f) Extremities - bruises, tender joints, bones
 - g) Ano - genital exam
 - tissue damage of perianal, anal structures
 - bruises, bite marks of external genitalia
 - scrotal hematoma
 - hymenal, posterior fourchette and clitoris tissue changes

5. Imaging Methods

- a) Photodocumentation
- b) Plain radiographs
 - i) specificity of fractures for abuse
 - ii) skeletal survey components
 - iii) healing times for fractures
 - iv) skull radiographs
 - v) chest radiographs
- c) CT (computerized tomography of head, trunk, spine)
- d) MRI (magnetic resonance imaging)
- e) Bone scan (radionuclide scanning)
- f) Ultrasonography

6. Laboratory Tests

- a) Complete blood count
- b) Electrolytes, Renal function tests (BUN, creatinine)
- c) Urinalysis, Liver function studies
- d) Pancreatic enzymes
- e) Muscle enzymes
- f) Cultures of blood, urine, spinal fluid
- g) Blood clotting studies
- h) Stool test for blood
- i) Arterial blood gases,
- j) Toxicology
- k) Cultures for STD if indicated

Kirschner's "Dirty Dozen" common suspicious stories in fatal child abuse cases

1. Child fell from a low height
2. Child fell and struck head on floor or furniture, or hard object fell on child
3. Unexpectedly found dead (age and circumstances not appropriate for SIDS)
4. Child choked while eating and was therefore shaken or struck on chest or back
5. Child suddenly turned blue or stopped breathing, and was then shaken
6. Sudden seizure activity
7. Aggressive or inexperienced resuscitation efforts to a child who suddenly stopped breathing.
8. Alleged traumatic event day or more prior to death
9. Caretaker tripped or slipped while carrying child
10. Injury inflicted by sibling
11. Child left alone in dangerous situation (e.g. bathtub) for just a few moments
12. Child fell down stairs

Twelve costly errors in the diagnostic process

1. A desire not to make the diagnosis
2. Failure to assemble past information on medical conditions and all medical encounters
3. Too great reliance on information developed by others
4. Transference-countertransference with custodial parent
5. Over or under-interpretation of physical findings
6. Over or under interpretation of behavioral finding
7. Failure to know about conditions mistaken for abuse
8. Faulty laboratory techniques resulting in either false positives or false negative reports
9. Use of interviewing techniques easily challenged in court
10. Impatience in arriving at a diagnostic conclusion
11. Failure to understand normative data with regard to child development
12. Failure to prepare adequately for court appearances.

Identifying Intentional Injuries - an Organ System Approach

Location, Pattern, Knowledge of Incidence, History

A. The Skin

1. Location

Inflicted	Accidental
Upper arms	Shins
Trunk	Iliac crests
Upper anterior legs	Lower arms
Sides of face	Prominences of spine
Ears	Forehead
	Facial scratches in infants (fingernails)
	Lacerations under chin
Hair pulling (alopecia)	
Neck	
Buttocks	
Abdominal wall	
Intra - oral	
Soles of feet	
Palms of hands	
Genitalia	

2. Pattern

- Slap marks
- Finger impressions
- Grasp marks of face, extremities, thorax
- Frenulum tears
- Bite marks
- Belts, buckle
- Wire loop marks
- Spoons, brushes, shoes

- Coat hangers
- Bizarre marks (tattoo, rattan)
- Imprints of grills, other heated instruments
- Immersion burns (stocking, glove, doughnut)
- Cigarette burn marks
- Ligature marks (ankles, wrist, neck)
- Gag Marks

3. Incidence studies

20 % of burns in childhood are due to inflicted injury

4. History of injury - concept of discrepant history

B. Head injury (Excluding skull fractures)

1. Location

- Subgaleal hematoma - tearing of veins by traction
- Epidural hematoma - usually due to fall on sharp object leading to skull fracture impinging on middle cerebral artery or its branches
- Subdural / subarachnoid bleeding - due to severe head trauma
- Intracerebral injury - can be penetrating injury or due to severe trauma
- Bilateral blackeyes - severe direct trauma to eyes or racoon eyes resulting from diffusion of blood from basilar skull fracture or subgaleal hematoma.

2. Pattern

- In absence of external evidence, probably due to SBS/Shaken Impact Syndrome
- With external trauma, could be due to direct blow or to Shaken Impact Syndrome
- Evidence of blunt or sharp trauma from an identified or unidentified weapon
- Association with retinal hemorrhages, skeletal injuries

3. Incidence studies

- More mortality and morbidity from head injuries than from any other form of physical child abuse
- In inflicted injury deaths, intracranial injury is found in 60 %
- Seventy percent of children with abusive head injury have skeletal injuries
- Retinal hemorrhages present in over 90 % of SBS / SIS
- Cutaneous bruising in 1/3 of cases

4. History of injury

- Severe head injury without a witnessed history
- Discrepant history

C. Visceral Injuries

1. Location

a. Order of involvement in inflicted injury:

- Hollow viscus (small intestine)
- Liver
- Pancreas
- Scrotal hematomas
- Hypopharynx
- Mesenteric tears
- Kidneys (seldom involved)
- Stomach (rarely involved)

b. Order of involvement in inflicted injury:

- Duodenum - 30 %
- Jejunum - 60 %
- Terminal ileum - 10 %

2. Pattern

- Intramural hematoma
- Fractures of left lobe of the liver, other sites of liver laceration
- Fracture of the pancreas across the vertebral column with subsequent development of pancreatic pseudocysts
- Splenic rupture

3. Incidence studies

- Eleven percent of visceral injuries in children under 13 are inflicted
- Visceral injuries from abuse occur in younger children, had poor histories, delayed medical treatment in abused children, and the inflicted injuries occurred to hollow viscera more often than to solid organs.
- Mortality rates in inflicted versus accidental visceral injuries were 53% versus 21%

4. History

Most often discrepant in inflicted injuries (attributed to falls, or unwitnessed) and opposed to accidental where most injuries were due to motor vehicle accidents.

D. Skeletal Injuries

1. Location

- **Skull** - Inflicted injury fractures are more often complex, cross suture lines, are depressed, or are diastatic.
- **Extremities** - In children under 2, the most common inflicted fractures are in the femur, the humerus, the tibia and the ribs.
- **Ribs** - Posterior rib fractures are highly specific for child abuse
- **Metaphyseal fractures** are highly specific for child abuse

2. Pattern

- Very little can be discerned from the type of fracture - eg, spiral fractures are no more specific for abuse than are transverse fractures
- As noted above, the more severe the type of skull fracture, the more likely it is to be due to child abuse

3. Incidence studies

- The reported frequency of fractures associated with child abuse ranges from 11 % - 55 %
- 43 % of skeletal injuries are unsuspected clinically
- Up to 70 % of inflicted fractures occur in children under the age of one year
- 80 % of abuse fractures are found in infants less than 18 months of age
- 2 % of accidental fractures are found in children under 18 months of age

4. The history is of paramount importance in deciding whether the proffered mechanism of injury could have caused the injury.

Specificity of Radiologic Findings

High specificity:

- Metaphyseal lesions
- Posterior rib fractures
- Scapular fractures
- Spinous process fractures
- Sternal fractures

Moderate specificity:

- Multiple fractures, especially bilateral
- Fractures of different ages
- Epiphyseal separations
- Vertebral body fractures and subluxations
- Digital fractures
- Complex skull fractures

Common, but low specificity:

- Clavicular fractures
- Long bone shaft fractures
- Linear skull fractures

*Moderate and low specificity lesion become high when history of trauma is absent or inconsistent with injuries.

From Kkeinman PK: Diagnostic Imaging in child abuse. Baltimore, Williams and Wilkins, 1987.

History of the Circumstances of Injury

Injuries in Children Resulting from Falls:

Falls from Heights less than 36 inches

A. Helfer et al (1977)

- Children under 5 years of age
- 176 incidents (reported by questionnaire)
- 37 insignificant injuries
- 6 injuries -3 fractured clavicles, 2 skull fractures, one fractured humerus
- None of the 161 children suffered any serious life threatening injuries

85 incidents in hospital

- 57-no injury
- 17-small cuts, abrasions, and/or bloody noses
- 20-bump and / or bruise
- 1- skull fracture with no serious sequelae

B. Nimityongskul et al (1987)

- 76 children- in hospital, injuries minor
- Conclusion from both studies: CA should be suspected when the cause of a serious head injury is said to be a fall from a short height (<36")

C. Barlow et al (1983)

- 61 children: half 4 years or less
- 100% survival < 3 stories
- 14 died: half from falls 5-6th floors
 - * 11 "Severe brain injury"
 - ◇ 1 SDH
 - ◇ 11 Concusion
 - * 3 Visceral injury

D. Williams et al (1991)

106 non - caretaker witnessed falls

- 15 - no injuries (7 falls > 10 feet)
- 77 - bruises, abrasions, simple fractures (43 falls > 10 feet)
- 14 - intensive care injuries (falls 5 - 40 feet)
- 1 - fatality (fall 70 feet)

No life - threating injuries in 3 falling < 3 feet.

E. Musemeche (1991)

70 children falling > 10 feet (mean 2 stories)

50% 3 years and younger

no correlation between height and injuries

no fatalities

39 head trauma

2 SDH

3 EDH

F. Smith, et al (1975)

66 children (4 months - 15 years) injured in falls

- 50% of cases were falls 12 feet or less
- 50% of cases were < 5 years, peak incidence 2 years

Injuries:

- 2 SDH (age & height of fall not specified)
- 10 Skull fracture (7 in falls > 36 inches)
- 26 UE fracture
- 10 LE fracture
- 0 rib fracture or cervical spine
- 0 retinal hemorrhages described

G. Chadwick, et al (1991)

At first glance the study by Chadwick et al would seem to contradict the earlier findings that no serious injuries occurred as the result of falling short distances.

Purpose:

To determine the relationship of historical fall height to mortality and to assess the reliability of historical fall height.

- 317 cases-
- 100 where the fall was historically < 4 feet.
- 7 died in falls under 4 feet-all from head injury
 - ⇒ 2 from standing fall
 - ⇒ 2 from bed or table
 - ⇒ 1 fall down stairs-unwitnessed
 - ⇒ 2 fall from arms of adult
 - ⇒ 81% were treated and released from the ED

In the stairway fall, the child also had massive head injury, small round bruises on both arms, bruising of the labia majora and one on the inner thigh.

In the other six cases the histories were so discrepant for the degree of head injury and other findings of multiple injuries that the diagnosis of child abuse was inescapable.

Bunk Bed Falls

Selbst and colleagues studied bunk bed injuries in 1990.

- 68 children fell from bunk beds-upper bunks
- 71 % happened during the day

Injuries Locations:

- Head-52 %
- Lower extremity-13 %
- Face-12 %
- Upper extremity-10 %
- Mouth/teeth-4 %
- Eye-4 %
- Buttocks-3 %
- Trunk-2 %
- Multiple injuries-9 %
- No child suffered neck, genital, internal injuries

Stairway Falls

Joffe and Ludwig:

363 falls downstairs-ages 1 month to 18.7 years- median 38m

- No injury-10 %
- Minor injury-80 %
- Major soft tissue, concussion, fractures-13 %
- No life threatening injuries or multiple injuries
- Injuries in the younger age group were almost all head

Mechanism of Injury

Falls on stairs are comprised of one major fall, usually less than 4 feet and a series of minor falls as the child tumbles down the stairs.

Motor Vehicle Accidents (MVA)

In motor vehicle accidents, the history is usually reliable since emergency medical personnel are usually involved along with police. There are several circumstances, however, where child maltreatment should be considered even in MVA's:

- 1) Where the child is brought to the E.R. with the caretaker's claim that the observed injuries are due to an MVA, but there is no police or EMS corroboration or witness.
- 2) Where the MVA is because of reckless behavior or drug/alcohol related accident.
- 3) Where a child restraint (car seat) was not used.

Playground Equipment

Multiple injuries from playground equipment are reported annually. The same principles apply to injuries claimed to be caused by playground equipment as to other injuries - plausibility of the injuries being consistent with the history, and the literature on injuries from playground equipment.

Walker Injuries

- 29,000 walker / jumper injuries seen in United States ER's in 1991
- US Consumer Product Safety Commission - 1 death annually

Medical Studies on Walker Injuries

Yr	# Subjects	# CHI	# Skull Fx	# IC	Fatalities
82 -K	47	NR	5	0	0
82 -F	21	1	0	0	0
84 -W	38	0	0	0	0
84 -S	52 (Q)	0	3	0	0
86 -R	139	93	19	0	0
91 -P	19	10	9	0	0

Walker Injuries 1980 - 1991 US Product Safety Commission

Head injuries in US Annually (average) = 8541

- injury types:
- concussion
- contusions
- fractures
- hematoma (unspecified)

Death Certificate Information US Product Safety Commission

- SAH due to “jumping up and down in walker”- autopsy
- Asphyxiation - no autopsy
- Anoxic encephalopathy - autopsy
- Walker rolled down driveway, overturned - autopsy
- Fell - stumbled over walker - hip fracture - no autopsy
- Encephalopathy - suffocation, accidental - no autopsy

50% autopsy rate

Walker Injury Deaths - 1980 - 1991 US Product Safety Commission

- 13 deaths in 12 years
- 5 asphyxiation / suffocation / strangulation
- 4 drowned (3 toilet, 1 swimming pool)
- 3 “falls” while in walker
- 1 infant died while in walker - possible SIDS

Message: better death investigation

The Biomechanics of Injury

A. Skeletal Lesions

Long bone fractures

Femoral Fractures

Beals and Tufts analyzed 80 femoral fractures in children under 4 years:

- Violent accidental trauma: 8.5 %
- Pathologic fractures: 12.5 %
- Child abuse: 30 %
- Less violent accidental trauma: 50 %

Anderson studied 117 children with 122 femoral fractures:

- 18 children under 13 months-
- 83 % abused
- 24 children under 24 months- 79 %
- Older children- accidental fractures predominated

Gross and Dalton's studies show roughly the same proportions

Dalton et al looked at the femoral fractures in 3 Michigan hospitals:

138 children under 3 years of age with femoral fractures

- Accidents- 22 %
- Pathologic- 8 %
- Abuse- 10 %
- Uncertain- 60 %

After social service involvement in 36 cases, 22 were changed from uncertain to abuse so that the total after investigation was 36 representing 26 % of the total. Post hospital information added another 7 to the total, making the figure 31 %.

No significant correlation could be found between the type of fracture (spiral, transverse, etc.) and the subgroup of causation.

Children under 1 year of age were over represented in the abuse category.

Thomas et al (1991)

Reported in a study involving 39 children under the age of 3 years with either humeral or femoral fractures, that:

- 20 of 39 were of inflicted origin
- In 11 of 14 humeral fractures, abuse was the cause with the other 3 being supracondylor, resulting from falls on elbow
- 9 of 25 fractures of the femur were abusive in origin
- 60% of fractures of the femur in children under 1 year of age were inflicted

Toddler Fractures

Definition: A spiral or oblique undisplaced mid or distal tibial fracture with an intact fibula in a child from 9 months to 3 years of age. These are usually seen in children who are able to walk and may result from trivial or unwitnessed injuries. The child will refuse to bear weight on the affected leg, or will limp on that limb. Radiographs of the lower extremity may show an oblique fracture in the lower half of the tibia. In a recent study by Skravat et al, (1996) a review of 21 cases showed the following:

- Presenting symptom was “unable to bear weight” in 20/21
- In 15 of 21, the initial diagnosis was either definite or suspected toddler fracture
- In 6 of 21, the initial radiograph failed to demonstrate the fracture

Rib fractures

- 5-27% of fractures in abused children
- Most rib fractures in infants and children are abusive in origin
- Rib fractures only very rarely result from CPR
- In the absence of intrinsic bone disease or major trauma, rib fractures are specific for abuse
- Mechanism of production is compression of the thoracic cage.
- Most abusive rib fractures are posterior
- Fractures are ventral, excluding direct dorsal blows
- Posterior rib fractures result from AP compression of the thorax thought to be the result of using the thorax as the "handle" during violent shaking or other battering

Metaphyseal fractures

For years, since Caffey's original description of these lesions, the classic bone abnormality said to be diagnostic in child abuse, has been the metaphyseal fractures known as corner fractures or metaphyseal flags, metaphyseal inflections, avulsion fractures, bucket handle fractures or metaphyseal fragmentation. Recently, Kleinman has offered a new explanation for these lesions. It is based on the histologic study of the distal metaphysis. The fundamental histologic lesion is one of microfractures through the most immature portion of the metaphyseal primary spongiosa. The fracture plane is a disc-like bony fragment that, depending on the projection of the x-ray beam, appears as isolated corner fragments, or as bucket handle images.

In the combined studies of Helfer and Nimityongskul where 337 children were studied, the conclusions were that falling from a height of 36 inches causes no serious injuries; CA should be suspected in a child with a serious head injury when the cause of injury is reported to be a fall from a bed, sofa or crib.

Visceral Injuries

Ledbetter and colleagues reported on the diagnostic and surgical implications of child abuse:

- 156 children < 13 years of age with blunt abdominal trauma
- 139 accidental-89 %
- 17 abuse-11 %

In comparing the accidental group to the abuse group, he found:

	Accident	Abuse
Median Age	7 years, 8 months	2 years, 6 months
History	Usually MVA	Discrepant History
Medical care	Prompt	Delayed
Organ	Solid (61 %)	Hollow viscous (65 %)
Mortality rate	21 %	53 %

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Medical Evaluation of Physical Abuse

Abstract

Two separate domains exist in cases of physical injury where child abuse could be the pathogenesis. The first domain- a strictly medical one- requires a medical or surgical diagnosis followed by a management strategy. The second domain requires a decision as to whether the observed phenomenon is due to inflicted injury, a medical disease process or an unintentional injury. Traditional medical and surgical approaches are the central concerns in the first domain and optimal management is required to obtain the best short term outcome here. Within the second domain lies the challenge of securing the best comprehensive outcome for the child and family and requires the skills and wisdom of the interdisciplinary team both at the hospital and the community levels.

Learning Objectives

- To list the incidence and prevalence of child maltreatment.
- To differentiate unintentional injuries from abuse
- To describe abusive head injuries, using laboratory and imaging studies
- To describe skeletal injuries, including elements of the skeletal survey
- To describe cutaneous injuries, including bruising and burns
- To define non-accidental poisoning
- To diagnose Munchausen Syndrome by Proxy

Outline

- I. Incidence and Prevalence of Physical Child Abuse**
- II. Accidents or Abuse? (Unintentional or abusive)**
- III. Questions which will help separate the unintentional from the inflicted injury**
- IV. Head Injuries**
- V. Data Collection**
- VI. Laboratory Studies (Table I)**
- VII. Imaging Studies**
- VIII. Abdominal and Thoracic Injuries**
 - A. Types of Thoracic and Abdominal Injuries (Table II)**
- IX. Skeletal Injuries**
 - A. Elements of the Skeletal Survey (Table III)**
- X. Dating of Fractures (Table IV)**
- XI. Cutaneous Injuries**
 - A. Location of Cutaneous Injuries (Table V)**
- XII. Burns**
 - A. Accidental versus Inflicted Burns (Table VI)**
- XIII. Poisoning**
 - A. Clinical Indicators of Abuse by Poisoning (Table VII)**
- XIV. Munchausen Syndrome by Proxy**

Incidence and Prevalence of Physical Child Abuse

In 1994, it was estimated that 3.4 million children were reported to public social service agencies for abuse and/or neglect. This represents a 132% increase over the last decade. Approximately 1200-2000 children die from child abuse annually. In 1990, 27% of the reports were for physical abuse, 46% for neglect, 15% for sexual abuse, 9% for emotional maltreatment, and 4% for other forms of maltreatment. Reports from daycare or foster care represented less than 1% of the total reports. The definition of physical abuse in Public Law 93-247 is as "The physical or mental injury, sexual abuse, negligent treatment, or maltreatment of a child under the age of eighteen by a person who is responsible for the child's welfare under circumstances which indicate the child's health or welfare is harmed or threatened thereby." Neglect occurs when a caretaker responsible for a child either deliberately or by extraordinary inattentiveness permits a child to suffer or fails to provide one or more of the conditions generally deemed essential for developing a person's physical, intellectual or emotional capacities. A child is physically neglected when his/her needs for food, shelter or clothing are omitted; emotionally neglected when he/she is denied nurturing qualities necessary for sound personality development; medically neglected when usual and locally accepted minimum levels of preventive, diagnostic or therapeutic medical services are not provided by parents or guardians; and educationally neglected when a caretaker fails to insure education as provided by state law.

Accidents or Abuse?

An accident is defined as an event that occurs incidentally, casually or by chance. It is presumed that such an event was at least consciously unintentional and that if such circumstances are under conscious control an attempt would have been made to avert the anticipated future course of events. An intentional event or action is one that occurs voluntarily and assumes conscious - or perhaps even unconscious- control, reflecting an underlying conflict or impulse.

In possible child abuse cases there is a continuum from what appears to be a volitional act to what appears to be a chance event. The decision as to which it is must be made taking into account the setting of the event (social context, location of encounter), the biases of the observer and the reporter, the type of injury (likelihood of observed injury(ies) being due to an accidental mechanism), and the future risk to the child if that is at all predictable.

The approach, however, both to the medical or surgical diagnosis and to the determination of the etiology of the observed condition, is a traditional medical one: accurate and comprehensive historical investigation, thorough physical examination, discerning selection of laboratory and imaging modalities to establish the extent and complexity of the disease state and how it came to be.

Questions which will help separate the accidental from the inflicted injury:

1. *What is the age of the patient?*

Developmental stages of childhood determine what kinds of injuries are likely to be seen. The motor skills of the child determine what the child could have done to incur injury. What can they do at a particular stage of development? What are they likely to be doing? What are the normal behaviors of a child at particular ages? Is the child "hyperactive" either in the eyes of his/her caretakers or in actual fact? Is the child a "daredevil"? Is the child obstreperous, combative or possessive of a "high annoyance potential" and therefore more likely to be disciplined harshly?

2. *Is the history plausible? Could this injury have been sustained in the manner described?*

3. *Does the history change with changing information supplied to the caretaker?*

Adjustments in the account of the injury may be made by caretakers to fit the evolving information indicating the tailoring of the history to fit the new information.

4. *Does the history change when related in subsequent accounts by other family members?*

5. *Are there non-familial eyewitnesses to the injury?*

6. *Was the injury not witnessed by the caretaker?*

The lack of information as to how a serious injury has occurred should raise the index of suspicion for an abusive origin.

7. *Is the demeanor of the caretakers defensive, belligerent, hostile, or passive and not in keeping with the seriousness of the patient's condition?*

8. *Is the social situation in which the injury occurred a high risk environment?*

The presence of community or intrafamilial violence, substance abuse, chaotic living arrangements, poverty, social isolation, transient life styles, mental health aberrations, or discord amongst family members are red flags.

9. Can the described mechanism of injury account for the observed injury?

The concept of the discrepant history is a central one in distinguishing between accidental and inflicted injury. Often the injury is explained by claiming that a fall has caused the injury. A large literature has emerged that discounts falls from short distances being responsible for serious injuries, but short falls- downstairs, off beds, couches, tables, in baby walkers, and even out of first story windows or porches- are often cited as the mechanisms of injury for serious injuries in abuse cases. The role of torsion must be considered in fractured bones, and it should be remembered that for a torsion injury to exist, one end of a long bone must be fixed and tremendous torsional force be applied to the long axis of the bone to cause such injuries. The issue of how much force is required to produce injuries must be addressed and a conclusion reached on the basis of information derived from the literature on trauma victims.

10. What else could produce the clinical picture?

The differential diagnosis must be explored to consider both medical conditions that could produce the observed injury or condition and appropriate testing be carried out to exclude non-accidental causes of the injury. (See below)

Head Injuries

More fatalities and long term morbidity are due to abusive head injury than from any other form of physical abuse. The types of abusive head injuries range from asymptomatic swelling through mild to moderate bruising, skull fracture, to intracranial bleeding and diffuse axonal shearing injury and brain swelling resulting in stupor, coma and death.

When a child under 3 years of age comes for medical care with a serious head injury without a readily apparent major trauma history (motor vehicle accident, fall from heights over 10 feet), the chances of this being an inflicted injury are quite high.

Data Collection

While a seriously head-injured child is being evaluated and treated medically, it is crucial for a detailed, analytical- but not challenging or accusatory- history to be obtained from the caretakers. The person collecting the history should ideally be someone with experience in child abuse cases and one who does not have immediate responsibility for the medical treatment required by the child. It is the rule that abusing parents will tell a misleading story about how the "accident" happened and are sometimes quite inventive in describing the event. Thus, the skill of interviewing becomes an important foundation on which to build the diagnostic formulation. Gentle probing, with inquiries and request for clarification on questionable portions of the history- sometimes called "the Columbo approach", often will elucidate the mechanism of injury and show discrepancies in the history.

The history of the pregnancy, labor and delivery, neonatal course, as well as a history of family diseases is important, with particular attention to bleeding and clotting disorders, neurological diseases, metabolic and bone disease, or other genetic conditions of the family. This comprehensive evaluation will save returning to the caretakers for missing data as the

case ages. The past medical history of the child, including previous injuries and serious illnesses or hospitalizations, along with a review of systems should be obtained. Exploration of the social milieu with attention to the living arrangements and the relationships of household members should be done.

The physical examination of the child with a head injury runs the risk of ignoring less urgently compromised organ systems. Bleeding visceral organs are the most glaring and potentially disastrous omissions, but overlooking cutaneous injuries can deprive the diagnostician of important clinical data because of the fleeting nature of these injuries. Likewise, inspection of the oral cavity looking for intraoral lesions is important as is a search for hidden head lesions under the hair. The neck should be carefully inspected for signs of injury (strangulation, hand or finger bruising). The presence of bruises on the back, thighs, or in the perineum should also be noted. Photodocumentation of such injuries is highly desirable.

The examination of the fundi is of utmost importance. This should be carried out ideally by pupillary dilation and indirect ophthalmoscopic inspection, but in lieu of that capability, by direct ophthalmoscopy. Although retinal hemorrhages are the most common finding in child abuse, other lesions may also be seen. These include retinal detachment, optic nerve injury and cupping of the optic nerve secondary to raised intracranial pressure. Although retinal hemorrhages are not pathognomonic of inflicted head trauma, they are present in a high percentage of abuse cases and not present in most accidental head trauma, and are seldom seen in children who had undergone cardiopulmonary resuscitation.

Laboratory Studies

Children with head trauma severe enough to be admitted to the hospital should also have laboratory studies to support diagnoses of associated trauma in other organ systems, to anticipate hematologic and biochemical alterations sometimes attendant to head trauma, and also to seek for the manifestations of their neurological status. These studies are displayed in Table I

Table I

CBC with morphology, serial hematocrits
Serum electrolytes, BUN, creatinine, serum and urine osmolality
Urinalysis
Liver function studies (AST, ALT, alkaline phosphatase)
Serum and urinary amylase
Creatine phosphokinase (CPK)
Cultures of blood, urine, cerebrospinal fluid (if safe to perform lumbar puncture)
PT, PTT, platelet count
Stool for blood
Arterial blood gases

Imaging Studies

In most instances of moderate to severe head injury, the first imaging modality should be Computerized Tomography (CT) scanning without contrast since it is readily available in most hospitals and can be performed safely with life support systems operating during the procedure. Bone windows should be employed along with the standard scan. Plain radiographs of the skull will usually show existing skull fractures better than CT. Magnetic resonance imaging (MRI) is ordinarily used as a confirmatory test rather than an initial one due to the longer scan times and need for life support, but MRI gives superior detail in showing parenchymal changes and smaller subdural hematomata.

CT scans of the abdominal viscera are valuable when liver function studies show elevation of the transaminases and/or there is reason to believe hepatic damage is present. Likewise, if splenic or renal tearing is suspected, CT will delineate these injuries (See Abdominal Trauma, below).

Skeletal surveys are recommended in serious head trauma since the diagnosis of abuse may be made or supported if unsuspected or occult traumatic injuries are found in other parts of the appendicular skeleton. Such accompanying skeletal fractures are seen in roughly half of the cases of abusive head injury. Posterior rib fractures are present in some cases of shaken infants and can be demonstrated either with bone scintigraphy for fresh fractures or with follow-up thoracic films in 10- 14 days to see callus formation at the site of these fractures.

The types of injuries in serious abusive head injury include skull fractures (see below, Skeletal injuries), subdural or subarachnoid bleeding, cerebral edema, diffuse axonal shearing injuries, parenchymal tears and contusions, and injuries to the cervical spinal cord. The shaken baby syndrome (shaken-impact syndrome) occurs in babies, usually under one year of age but described in children as old as 2 years of age, and consists of violent shaking and/or shaking plus impact. Recent data have supported the concept that shaking and impact by throwing the child against a surface and resultant deceleration are

the responsible forces producing the subdural hematoma, diffuse axonal shearing and consequent cerebral edema leading to raised intracranial pressure. Whether shaking alone or shaking plus impact are required to cause the damage is being debated, but the clinical picture is one of neurological devastation resulting in death in 27% and long term neurological morbidity in the majority (57-65%) of the survivors.

Abdominal and Thoracic Injuries

The second most common cause of fatality in child physical abuse, abdominal and thoracic injuries account for between 6 and 8 percent of all physical abuse. The vast majority of these are abdominal injuries. Reported fatality rates, however, are between 40 and 50 percent of these cases.

Features that distinguish accidental abdominal injuries from abusive ones were reported by Ledbetter. He found that abusive abdominal injuries:

1. were more common in younger children (median age 2.6 versus 7.8 years in accidental)
2. had vague histories accounting for the abusive abdominal injuries while 70% of the injuries in the accidental group were due to motor vehicle accidents and 20% to falls from great heights.
3. had delayed medical care in contrast to the accidental group where there was prompt care.
4. involved injuries to hollow viscera most often whereas a solid organ was more often injured in the accidental group.
5. had a higher mortality rate (53%) as compared to 21% in the accident cases.

There is a hierarchy of injury to the abdominal organs, with hollow viscera being the most common. Ninety percent of these are in the duodenum or jejunum and the remainder are in the terminal ileum. The second most common organ for abusive injury is the liver, particularly the more midline portion, and the third most common is the pancreas. The signs and symptoms of abdominal injury can be quite striking, with distention, exquisite tenderness, vomiting, shock or unconsciousness. Most children with abdominal injuries, either inflicted or accidental, have no obvious abdominal wall injuries. Some children have only minimal signs and symptoms, or there are injuries to other parts of the body making attention to the abdomen less of a priority. Rapid deterioration can occur if blood loss is not identified and treated.

Laboratory Studies (See Table I)

Imaging Studies

The preferred initial study to diagnose abdominal or thoracic injury is the plain radiograph. Two frontal views of the abdomen, one supine and one erect, are recommended. If the child is too ill to obtain an erect view, a horizontal beam cross table lateral can be used. If obstruction, perforation, pneumoperitoneum, hemoperitoneum, or ascites are present, this technique will usually identify them. If there is obstruction, contrast media can be used to localize the lesion. Barium is the preferred contrast medium unless perforation is suspected in which case a water-soluble contrast medium should be used. A frontal view of the chest is recommended for possible thoracic injuries, including rib fractures. A skeletal survey should also be obtained at the earliest possible opportunity, especially in severely injured children, since future opportunities may not occur and important forensic evidence may be lost. Obviously, the clinical condition of the child must determine the performance of the studies.

Contrast studies for the genitourinary tract are rarely indicated since the advent of CT scanning, but a voiding cystourethrogram (VCUG) may be needed if lower urinary tract ruptures need delineation.

The CT scan is the most useful imaging technique for evaluation of solid organ injuries by demonstrating alteration in the architecture of these organs. Contrast studies are better for showing hollow organ lesions and the CT depends in these cases on the presence of extravasation or a leak of contrast material which is usually an indication for surgical exploration. Most intramural hematomata without perforation do not require intervention but resolve with supportive care unless there are bleeding complications.

Types of Thoracic and Abdominal Injuries (Table II)

Organ	Injury	Signs/Symptoms/Diagnostic Findings
Hypopharynx	Traumatic Perforation	Feeding Difficulty
Esophagus		Coughing, Blood-tinged Sputum Palatal Abrasion Sloughing lesion pharynx Interstitial emphysema, mediastinitis Rib fractures on x-ray
Stomach	Traumatic perforation	Shock and collapse Distended abdomen Free peritoneal air
Duodenum	Blunt abdominal trauma	High intestinal obstruction Gastric dilation Vomiting
Jejunum, ileum	Blunt trauma to..	Possible peritonitis perforation secondary to Obstruction
Colon, rectum,	Anal penetration	Lower abdominal pain Pain, constipation
Genitourinary tract	Sexual abuse Sadistic Abuse	Bruising, abrasions, tears to external genitalia Rupture of bladder
Liver	Blunt trauma	Abdominal distention Shock, collapse Elevated Transaminases (AST, ALT) CT evidence of injury
Spleen	Blunt Trauma	Peritoneal irritation Blood loss, shock Associated rib fractures CT evidence of injury
Pancreas	Deep epigastric blunt trauma	Abdominal distention, tenderness Elevated amylase CT evidence of injury

Skeletal Injuries

The true incidence of skeletal injuries in child abuse is unknown, although estimates of fractures in abused children under 1 year of age is as high as 70%. Nearly half of these are unsuspected clinically and almost half involve more than one bone. The vast majority (80%) of abuse fractures are seen in children under 18 months and only 2% of fractures in this age group are of accidental origin. The importance of the skeletal survey, especially in children with head and visceral injuries, cannot be overstated in suspected child abuse cases under the age of 2 years because of the high likelihood of discovery of unsuspected fractures.

Extremity fractures are the commonest abusive fractures and certain types of fractures are more specific for an abusive origin than others. The metaphyseal fracture of the long bones has long been identified as the most specific for inflicted injury, considered pathognomonic for abuse. This so-called "corner fracture", "bucket handle fracture", "metaphyseal flag" or "metaphyseal fragmentation fracture" has recently been studied and shown to be a planar fracture through the primary spongiosa region of the end of the long bones, producing a disc-like fragment at this site. This fractured portion of the bone, depending upon the projection of the x-ray beam, will appear as a fragment (corner fracture) or a semi-lunar loop (bucket-handle). The torsional force required to produce these lesions are those associated with the shaken baby syndrome or the application of rotational vectors to the long bones.

The most common long bone fracture in child abuse involves the diaphysis, occurring four times more frequently than metaphyseal fractures. The femur, humerus and tibia are the long bones most often affected by transverse or oblique/spiral fractures but there are no specific types or locations for abusive fractures, emphasizing the need for careful history - taking, attention to the age of the child and use of the skeletal survey for children under 2 years of age. Toddler fractures - accidental oblique fractures of the tibia in the 9 month to 3 year old child- can occur without the knowledge of caretakers and produce symptoms of limp,

disinclination to bear weight on the affected leg, or pain on standing. Fractures due to abuse also commonly involve the clavicle and forearms. Fractures of the hands and feet, scapulae, and pelvis are unusual in child abuse.

Rib fractures, often unsuspected clinically and discovered by skeletal surveys, nevertheless constitute up to a quarter of fractures seen in abuse. Most of these are posterior fractures, occurring near the costovertebral articulation, owing to the levering action of the costovertebral transverse process articulating surface. The second most common location is in the midaxillary line. The fracture line in posterior fractures is usually on the anterior (visceral) surface of the rib while the fracture line in the midaxillary fracture is on the outer surface of the rib. Because these fractures are produced by compressions of the thorax while the child is being held during shaking or forcefully picked up in anger by a caretaker, they are often multiple and bilateral. Overlying bruises of the thoracic wall may be observed, but often are absent. Unless the fractures have been present long enough to produce callus, they may not be discernible on plain radiography and it is in these cases that bone scintigraphy is most useful.

Vertebral body fractures are being diagnosed more frequently as these fractures are seen to be more common than once thought. These fractures are anterior vertebral body compression fractures and are thought to be caused from hyperflexion during shaking or other violent handling.

Skull fractures are grossly classified into simple and complex categories. Simple fractures are linear and do not cross suture lines; complex fractures are multiple, crossing suture lines, displaced, comminuted, diastatic or are depressed. Complex fractures do not result from trivial trauma and although they can be the result of accidental trauma, such trauma nearly always has a consistent history. Complex skull fractures alleged to have been acquired by falls from short heights or in unwitnessed falls are highly suspicious for abuse.

Imaging Techniques

The skeletal survey is the preferred diagnostic technique for suspected child abuse. Although radionuclide scintigraphy has certain useful applications (acute subtle fractures, rib fractures), it is not without inherent technical shortcoming and is dependent upon the level of competence of the radiologist interpreting it. Table III details the views recommended for the skeletal survey

Table III
Elements of the Skeletal Survey

Skull: Frontal and lateral (lateral to include the cervical spine)
Spine: Frontal and lateral thoracolumbar spine (lateral to include the sternum)
Chest: Frontal (for rib and spinal detail)
Extremities:
Upper: Frontal (to include shoulder and hands*)
Lower: Frontal (to include lower lumbar spine, pelvis and feet)+

*Separate views of the hands and feet in larger infants and children
+ At least two views of each fracture should be obtained.

Dating of Fractures

Physicians are often asked to pinpoint the time of injury in child abuse cases. The ability to narrow the time frame is limited, but there are some precepts of value. O'Connor described the criteria used in dating fractures (Table IV).

Table IV

Category	Early	Peak	Late
1. Resolution of soft tissues	2-5 days	4- 10 days	10-21 days
2. Periosteal new bone	4-10	10-14	14-21
3. Loss of fracture line definition	10-14	14-21	
4. Soft callus	10-14	14-21	
5. Hard callus	14-21	21-42	42-90
6. Remodeling	3 months	1 year	2 years to epiphyseal closure

From: O'Connor, J.F. and Cohen, J. (Ed): Dating Fractures. Diagnostic Imaging in
Child Abuse, Ed.P. Kleinman, Baltimore, Williams & Wilkins, 1987.

Cutaneous Injuries

By far the most common manifestations of child abuse are cutaneous injuries. The types of lesions include bruises, abrasions, lacerations, petechiae, ecchymoses, and burns. The important characteristics of skin lesions when trying to distinguish accidental injuries from inflicted ones are the location, pattern, presence of multiple lesions of different ages and the failure of new lesions to appear during hospitalization or removal of the child from the caretaker.

Table V
Location of Cutaneous Injuries

Inflicted	Accidental
Upper arms	Shins
Trunk	Hips (iliac crest)
Upper anterior legs	Lower arms
Sides of face	Prominences of spine
Ears and neck	Forehead
Genitalia, buttocks	Under chin

Adapted from Pascoe J.M. et al: Patterns of skin injury in non-accidental and accidental injury. *Pediatrics* 1979; 64: 245.

The inflicting instrument may be discerned from the shape of the skin lesion. The typical lesion left by a looped electric cord used for whipping may appear elliptical; a belt, buckle or wire coat hanger leave bruises conforming to their shapes; the human hand may leave parallel linear stress petechiae representing the spaces between the fingers or scalloping lesions conforming to the metacarpal-phalangeal junction; adult human bites leave characteristic lesions which can be measured and compared with the dentition of the alleged

perpetrator, gags leave downturned lesions at the corners of the mouth; lesions around the neck suggest ligatures applied in that location; ligatures applied to wrists and ankles to restrain the child will leave rope burns or pressure lines to those structures. Bruises of the upper arms or in the rib cage suggest encirclement bruises resulting from hard pressure applied during shaking or violent handling.

Dating of bruises is an imperfect science due to the variability of skin color, healing characteristics, location of bruises and varying age groups of the children involved in abuse. Photodocumentation of bruises with color photography with clear identification of the patient and the date the photograph was taken can be of some value in assessing the age of bruises. More information, however, is needed to accurately judge the age of a bruise from its color.

Burns

It is estimated that between 12% and 30% of burns in children are non-accidental and that burns represent approximately 10% of all abuse cases. In one large study of inflicted burns in 1979, 87% were scald burns and 13 percent were flame injuries. The peak age of the burn victims was from 13-24 months. The classic lesion is the immersion burn involving the buttocks, arms or ankles, sustained when a child is held in extremely hot water and producing either a doughnut lesion of the buttocks, sparing the portion of the buttocks resting against the relatively cooler porcelain of the tub, and showing sharp demarcation lines on the upper margins of the hot water-skin interface. This lesion, plus the stocking-glove immersion burns are easy diagnoses since they are so obviously due to restraint of the child. Likewise, burns of the palms and soles are diagnostic for inflicted injury unless the caretaker has an unusually convincing history of a mechanism of injury. Table VI summarizes the distinguishing characteristics of inflicted burns versus accidental burns.

Table VI
Accidental versus Inflicted Burns

	Inflicted	Accidental
History	Burns attributed to sibling Unrelated adult seeks medical care Differing accounts of injury Treatment delay > 24 hours Prior "accidents" No parental concern Lesion incompatible with history	Compatible with observed injury
Location	Buttocks, perineum, genitalia Ankles, wrists Palms, soles	Front of body Random and injury -specific
Pattern	Sharply demarcated edges Stocking-glove distribution Full thickness Symmetrical Burns older than history indicates Burn neglected, infected Numerous lesions of varying ages Pattern of burn consistent with instrument Large area of uniform dry contact burn	Associated irregular splash burns Partial thickness Asymmetrical One traumatic event

Non-accidental burns seem also to carry a higher correlation with social pathology than other forms of child abuse. In Hight's study of non-accidental burns, 27 of the 40 inflicted burn cases were either known to the state's protective service agencies or had been previously admitted with a variety of diagnoses including failure to thrive, poisoning, lead intoxication, fractures, head injuries, and previous burns. Rosenberg's study demonstrated that 19.5% of burns in children under the age of 3 years were of inflicted origin.

Poisoning

Although reports of poisoning of children are small in number, the true incidence is difficult to determine. Sobel called attention to the fact that repetitive accidental poisoning in childhood bore no relationship to home safety but was intimately associated with parental psychopathology and disturbed family relationships. (Bays describes the characteristics of abusive poisoning in her chapter "Child Abuse by Poisoning". In Reece R.M. ed. Child Abuse: Management. 1994. Malvern Pa. Lea and Febiger.)

Table VII
Clinical Indicators of Abuse by Poisoning

Age

Under one year or between 5-10 years

History

Nonexistent, discrepant or changing
Does not fit child's development
Previous poisoning in this child
Previous poisoning in siblings
Does not fit circumstances or scene
Third party, often a sibling, is blamed
Delay in seeking medical care

Toxin

Multiple toxins
Substances of abuse
Bizarre substances

Presentation

Unexplained seizures
Life-threatening events
Apparent sudden infant death syndrome
Death without obvious cause
Chronic unexplained symptoms that resolve
when the child is protected.
Other evidence of abuse or neglect.

Munchausen Syndrome by Proxy

Munchausen Syndrome by Proxy is a bizarre form of child abuse where the child is the victim of a form of mental illness of the mother the psychodynamics of which are poorly understood. It is defined as a circumstance in which 1) illness is simulated or produced by a parent (almost invariably the mother) or someone who is in loco parentis and 2) the child comes for medical assessment and care, usually persistently, often resulting in multiple medical procedures; and 3) knowledge about the etiology of the child's illness is denied by the perpetrator, and 4) acute symptoms and signs in the child abate when the child is separated from the perpetrator.

Rosenberg has tabulated the presenting complaints, the methods of fabrication and the diagnostic strategies one may follow to make the diagnosis of MSBP and these are seen in Table VIII.

Table VIII

Presentation	Method of Simulation and/or Production	Method of Diagnosis
Bleeding	<ol style="list-style-type: none"> 1. Warfarin poisoning 2. Phenolphthalein poisoning 3. Exogenous blood applied 4. Exsanguination of child 5. Addition of other substances (paint, cocoa, dyes) 	<ol style="list-style-type: none"> 1. Toxicology screen 2. Diapers positive 3. Blood group typing (major and minor) 3. ⁵¹Cr labeling of erythrocytes 4. Single blind study 4. Mother caught in the act\ 5. Testing; washing
Seizures	<ol style="list-style-type: none"> 1. Lying 2. Poisoning <ul style="list-style-type: none"> • Phenothiazines • Hydrocarbons • Salt • Imipramine 3. Suffocation/carotid sinus pressure 	<ol style="list-style-type: none"> 1. Other MSBP features/retrospective 2. Analysis of blood, urine, IV fluid, milk 3. Witnessed 3. Forensic photos of pressure
CNS depression	<ol style="list-style-type: none"> 1. Drugs <ul style="list-style-type: none"> • Lomotil • Insulin • Chloral hydrate • Barbiturates • Aspirin • Diphenhydramine • Tricyclic antidepressants • Acetaminaphen • Hydrocarbons 2. Suffocation 	<ol style="list-style-type: none"> 1. Assays blood, gastric contents, urine, IV fluid; analysis of insulin type 2. See "apnea," "seizures"
Apnea	<ol style="list-style-type: none"> 1. Manual suffocation 2. Poisoning <ul style="list-style-type: none"> • Imipramine • Hydrocarbon 3. Lying 	<ol style="list-style-type: none"> 1. Patient with pinch marks on nose 1. Video camera (hidden) 1. Mother caught 1...Diagnosis of exclusion 2. Toxicology (gastric/blood) 2. Chromatography of IV fluid 3. Diagnostic process of elimination
Diarrhea	<ol style="list-style-type: none"> 1. Phenolphthalein/other laxative poisoning 2. Salt poisoning 	<ol style="list-style-type: none"> 1. Stool/diaper positive 2. Assay formula/gastric content
Vomiting	<ol style="list-style-type: none"> 1. Emetic Poisoning 2. Lying 	<ol style="list-style-type: none"> 1. Assay for drug 2. Admit to hospital
Fever	<ol style="list-style-type: none"> 1. Falsifying temperature 2. Falsifying chart 	<ol style="list-style-type: none"> 1. Careful charting, re-checking 2. Careful charting, re-checking 2. Duplicating temperature chart in nursing station
Rash	<ol style="list-style-type: none"> 1. Drug Poisoning 2. Scratching 3. Caustics applied/painting skin 	<ol style="list-style-type: none"> 1. Assay 2. Diagnosis of exclusion 3. Assay/wash off

The goal of the diagnostic process is to gather evidence that the illness is simulated or faked. The strategy of this process is to gather the team of caregivers in the hospital setting and discuss the evolving information on a regular basis. It is wise to alert the child protection agency, law enforcement and the prosecuting attorney's office that such a case is being investigated and sometimes to involve them at the outset in that investigation. Child psychiatry and child psychology should be added to the team if they are not already engaged and the hospital legal counsel, if not a member of the child protection team, should also attend the meetings. Covert video surveillance is sometimes employed in these cases and when that is being done it should be done with the full understanding of the ward team and the hospital administration and legal department. There are arguments about the use of covert video surveillance but those who favor its use argue that the goal of the hospital should be to diagnose and protect children and there are sometimes no other options than to collect data in this fashion. Extremely careful notes in the chart (or alternate record) are essential because the details are the most important ingredients in the formulation of the diagnosis. When the cases come before a court, it is essential that all involved with that proceeding are prepared to present their information and are sure of their facts. The ultimate outcome of the child's well-being will rest on this. Seldom does an opportunity to diagnose MSBP on a subsequent admission occur.

The long-term outcome of cases of MBP is poorly researched due to the disappearance of the families and the short history of the condition. It is hoped that in the next decade we will have a better understanding of the parental psychopathology as well as more information as to what happens to these unfortunate children.

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Fatal Child Abuse and Sudden Infant Death Syndrome: A Critical Diagnostic Decision

Abstract

Distinguishing between an unexpected infant death due to sudden infant death syndrome (SIDS) and one due to fatal child abuse challenges pediatricians, family physicians, pathologists, and child protection agencies. If child abuse is suspected, the physician must fulfill mandated legal obligations to report the case to the appropriate authorities. Coroners, medical examiners and pathologists have the added responsibility of rendering a medicolegal opinion as to the cause and manner of death.

Learning Objectives

- To review historical inquiries into the Sudden Infant Death phenomena
- To define SIDS
- To describe the clinical presentation of SIDS
- To cite the incidence and epidemiology of SIDS
- To distinguish between SIDS and fatal child abuse
- To describe the role of the autopsy
- To delineate the clinical radiographic study in SIDS
- To identify the importance of death scene investigation to the overall postmortem examination
- To describe criteria for distinguishing SIDS from fatal child abuse and other medical conditions
- To recommend improved practices for determining cause and manner of unexpected infant deaths

Outline

- I. Child Protection Needs**
- II. Historical Background**
- III. Definition of SIDS**
- IV. Clinical Presentation of SIDS**
- V. Incidence and Epidemiology of SIDS**
- VI. Distinguishing Between SIDS and Child Abuse**
- VII. Role and Importance of the Autopsy**
- VIII. Radiographic Studies**
- IX. Death Investigation: Scene Investigation and Past Medical History**
- X. Criteria for Distinguishing SIDS from Fatal Child Abuse and Other Medical Conditions**
- XI. Child Death Review Teams**
- XII. References**

Child Protection Needs

Child protection agencies need to ensure that other children in the home are not at risk. Law enforcement personnel and prosecutors need to proceed if the law has been broken. All agree that the state of our knowledge in this area is incomplete and ambiguity exists in some cases. For everyone concerned, it is necessary and desirable, within the limits of our capability, to know the cause and manner of an infant death. This process requires application of current knowledge, a desire to know the reasons for the deaths, the resources necessary to conduct essential procedures, and the sensitivity and wisdom to perform the task without causing distress to innocent family members.

Historical Background

The history relevant to this presentation is a relatively short one. In the first half of this century, searching for the reasons infants die was the lonely province of a few clinicians, researchers, and pathologists who examined the retrospective traces of infant deaths. Bergman recounts the slow progression of knowledge about sudden unexpected infant death in the pathologists laboratories and morgues where Werne and Garrow and then Adelson and Kinney proposed etiologies for "crib death" other than suffocation. Since the 1950s the pediatric pathologist Marie Valdes-Dapena has been the most consistent researcher, educator, and translator of scientific information about SIDS to the clinical community and the lay public, and her recent review summarizes this material. Parents who had lost their infants began to press the question "Why did my baby die?" forming several grassroots organizations to raise public awareness and stimulate legislative activity to foster research and to provide centers for information and counseling for bereaved parents. Now called the SIDS Alliance, these efforts continue to spur research and greater public understanding of SIDS.

Simultaneously, the issue of child abuse was being confronted by a heretofore denying medical community. In 1946 John Caffey published an account of multiple fractures and subdural hematomas followed in 1953 by Silverman's postulation that these injuries were the result of unrecognized trauma.

Adelson's 1961 paper entitled "Slaughter of the Innocents" added to the factual information about fatal child abuse. In 1962, C. Henry Kempe coined the phrase the "Battered Child Syndrome" and further raised the consciousness of the medical community about the unpleasant truth that infants and children were being physically abused and killed.' The stage was being set for a controversy about death in infancy, its causes, and the possibility of caretakers' culpability for those deaths.

In 1972 a young African-American couple whose infant died suddenly and unexpectedly were charged with criminal neglect. Despite autopsy findings that were consistent with SIDS and no signs of neglect or abuse, the medical examiner indicated that the baby had died of abandonment and neglect. Although the charges were later dismissed, the couple spent six months in jail because of their inability to post bond. But misattribution of death can also occur at the other extreme. An egregious series of lapses and errors of judgment occurred in the case of Mary Beth Tinning, who was charged with smothering her adopted infant daughter. During the inquiry into this death, it was discovered that eight other of her biological children had died and their deaths had been attributed to SIDS or "natural causes." News accounts of this case raised public awareness about the possibility of infant murders' being mistaken for crib death or other medical conditions. It is against this background that the need for an objective and integrated approach to the diagnosis is seen. Whenever an unexplained death occurs in infancy, the question of fatal child abuse must be addressed.

Definition of SIDS

In 1989, the National Institute of Child Health and Human Development promulgated the following definition of SIDS: "The sudden death of an infant under one year of age which remains unexplained after the performance of a complete postmortem investigation, including an autopsy, an examination of the scene of death and review of the case history."

Clinical Presentation of SIDS

Typically, SIDS is suspected when an apparently previously healthy baby, usually younger than 6 months of age (peaking between 2 and 4 months of age), is found dead in bed in the early morning prompting an urgent call for emergency help. Emergency personnel respond and initiate cardiorespiratory resuscitation in the home and continue it on the way to the hospital, where the baby is finally pronounced dead. The infant's medical history is usually unremarkable. In many cases a history of a recent routine pediatric visit is elicited. The immediate antecedent history indicates that the baby had been fed his or her usual formula or breast milk and had been put to bed. At varying intervals the parents or other caretaker had checked the baby, who appeared to be normal, but later the baby had been discovered lifeless. No outcry had been heard and the baby had been found in the position in which he had been placed at bedtime or naptime. Evidence of terminal motor activity such as clenched fists may be seen and there may be some serosanguinous, watery, frothy, or mucoid discharge coming from the nose and mouth. The face and dependent portions of the body may have reddish-blue mottling due to postmortem lividity.

Incidence and Epidemiology of SIDS

In the United States approximately 5000 infants succumb to SIDS, annually a rate of about 1:4 per 1000 live births. For white infants, this is a rate of 1.24 per 1000 live births; for African-American infants the rate is 2.26 per 1000 livebirths.

Incidence figures from other parts of the world vary from 0.036 to 6.3 per 1000 livebirths. The role of race and ethnicity are unclear but Kraus and Bultreys, in a careful review of SIDS and socioeconomic status (SES), concluded that the preponderance of evidence suggests a consistent inverse relation between SIDS and SES. But they cautioned that the SES effect may act as a confounder, effect modifier, or intermediate variable.

SIDS has its peak incidence between 2 and 4 months of age. Very few cases occur in the first week of life, and SIDS cases diminish in number after the third month of life. Approximately 90% of SIDS deaths have occurred by 6 months of age." SIDS is seen more often in boys (60% to 70% vs 30% to 40% in girls); it occurs more frequently in the winter months in both the northern and southern hemispheres, suggesting that temperature alone is not a causative factor 16 ; and it is more frequent in multiple births, with twins and triplets having a rate 2 1/2 times that of singleton babies. The death occurs silently, apparently during sleep.

The absence of a deleterious role of the administration of diphtheria-tetanus-pertussis vaccine has been demonstrated repeatedly. The National Institute of Child Health and Human Development epidemiological study" showed that in 757 SIDS cases there was an increased representation of premature and low birth weight babies and younger mothers; more mothers who smoked cigarettes during pregnancy; more babies who had thrush, pneumonia, and illnesses requiring hospitalization; more subtle neurological abnormalities; and more frequent reports during the neonatal period of tachypnea, tachycardia, cyanotic spells, and vomiting. Autopsy results in this study showed that some of the future SIDS victims had increased extramedullary hematopoiesis, periadrenal brown fat retention, and astroglial ghosis, but these

findings were far from uniform. The study concluded that not one or even combinations of these so-called "risk factors" were powerful enough to be predictive of future SIDS victims.

The issue of recurrent SIDS within a family raises the possibility of genetically determined conditions. It also provokes questions of a forensic nature. In a 14-year study of subsequent siblings of SIDS victims in Norway, and in a Washington State study over 16 years, the SIDS sibling risk was seen to be almost four times that of the SIDS risk among births at large. But when SIDS occurrences among siblings of SIDS cases were compared with those among non-SIDS siblings in maternal age- and birth rank-matched control families, there was no statistically significant difference in SIDS rates or in total infant mortality rates in families with a history of SIDS compared with families with no SIDS. Thus, the notion that having a SIDS baby makes having another more likely was dispelled. With the exclusion from the SIDS statistics of some of the deaths now thought to be due to inborn errors of metabolism, the chances for subsequent SIDS in families seems even less likely.

Distinguishing Between SIDS and Child Abuse

In 1961 Adelson reported on 46 child homicides occurring between 1944 and 1961. Ten children were younger than 1 year of age. Of those, 5 drowned and 3 died of starvation. The causes of death of the other 2 are not described. In 1991 Adelson reported 194 child homicides: 28 occurred before the baby was 1 year old, 16 occurred in infants between 1 month and 1 year, and 7 occurred between 1 month and 6 months of age. All were fatally and obviously battered. Therefore, in this series, there were no cases likely to be confused with SIDS.

Emery and Taylor described a 24-year period in Sheffield, England (1960 to 1984), during which postperinatal deaths (birth to 2 years) were investigated by gathering information about the death scene, obstetric, and pediatric care, reviewing autopsy findings; and conducting extensive home visits. As a result of this process, accidental suffocation was thought to be the cause of death in 10% of these cases, and the possibility of active

intervention on the part of one or both parents was raised in another 10%, a rate consistently double that of overt child abuse in this age group. Specific data on infants between 1 month and 1 year were not reported.

Suggested etiologies for unexpected infant deaths that have been reported include accidental strangulation, intentional suffocation, and Munchausen Syndrome by Proxy. Deaths in infant twins have also been studied extensively, both from the standpoint of the possible increased risk of death in the twin survivor of a SIDS death, and also to ascertain whether there is increased risk of being abused because of twin status. In 1982, Groothuis and coworkers reported on this latter phenomenon after studying 48 families with twins and 124 single-birth families, matched for hospital of delivery, birth date, maternal age, race, and socioeconomic status. Three control (2.4%) and nine twin (18.7%) families had been reported for maltreatment, with one fatality. Siblings of these twins were reported to have been abused more frequently than the twins themselves, and abuse was limited to the twins in only three families. When analyzing the variables in the families studied, the authors concluded that twin status had the greatest impact on the risk of subsequent child abuse, suggesting that the stress of rearing twins, added to the other elements of childrearing in already marginally functioning families, was a significant determinant for subsequent abuse.

Beal, in her summary of the world's literature concerning the phenomenon of SIDS in twins (1956 through 1988), reported that 6 (1%) of 625 of the surviving twins had subsequently died of SIDS. Data concerning the rate of simultaneous twin SIDS are difficult to interpret, but Beal's estimate, based on published series, is 12 of 637 twin infant pairs, or 2% of all twin sets in which SIDS occurs.

In 1985, Christoffel et al examined 43 unexpected deaths in children brought to Children's Memorial Hospital in Chicago during 1980 to 1981. Nine were due to child abuse and in 3 the correct diagnosis was established only by postmortem examination. In the same journal issue, Kirschner and Stein described 10 cases in which the diagnosis of child abuse was made based on incomplete or erroneous medical observation. Five of those cases were

autopsy-proven cases of SIDS. The recording of the clinical physical examinations had described conditions that were either postmortem changes (e.g., lividity, sphincter dilation), misinterpreted skin markings (mongoloid pigmentation), or a physical finding often seen in SIDS deaths (serosanguinous discharge from nose and mouth). These reports emphasize the need for appropriate evaluation both before and after death, including thorough physical examinations, autopsies, and death scene investigation.

In utero toxic influences have long been suspected as contributing to sudden infant death. Hagland and Cnattingius have reported that cigarette smoking during pregnancy is a highly significant risk factor in the pathogenesis of SIDS. Chasnoff et al found in one study that infants born to mothers who use drugs during pregnancy have a 5- to 10-fold increase in the risk of SIDS. Bauchner et al studied the rate of SIDS in infants of cocaine-abusing mothers and in a control group from the same economic sector and 4.9 and 5.6 per 1000- rates that are consistent with other studies of SIDS rates in lower socioeconomic sectors. Bauchner and Zuckerman appropriately raised questions about study methodology when looking at the high incidence of SIDS associated with in utero drug exposure. They cited the need for accurate measurement of drug use by mothers; control for confounding variables such as cigarette smoking, polydrug use, crowded living conditions, race, low SES, prematurity, and low birth weight; an examination of the relationship between the timing and quantity of exposure of cocaine and the outcome of SIDS; and finally, they questioned the use of SIDS as an outcome measure if there is not strict adherence to the definition of SIDS when death ascertainties are made.

The relationship of substance abuse during pregnancy and subsequent child abuse, if not also controlled for similar variables mentioned above, can be misleading. However, in a study of 100 cocaine-exposed infants and matched control infants followed for 2 years at Rainbow Babies and Children's Hospital in Cleveland, OH, 7 have suffered physical injury, 37 have suffered from neglect, and 21 have been placed in substitute care. The SES-matched control group of non-cocaine-exposed infants has had no instances of abuse or neglect. Wallace found that among- 70 crack-using women with children, 34.3% had the Bureau of

Child Welfare involved in their children's lives as a result of the mother's crack use and the neglect or abuse that followed. Thirty-four percent of the children were placed in substitute care and another 15.7% were being cared for by relatives without formal Bureau involvement. A recent report by Famularo et al showed a strong association between substance abuse and child maltreatment. The rates of fatal child abuse directly attributable to substance abuse are unknown, but logic instructs that a fatal outcome is a natural consequence in a proportion of these reported instances of maltreatment.

There are convincing data that at least in some cases, postpartum depression and other psychiatric disturbances, particularly in mothers who had histories of maltreatment themselves, have led to infanticide.

Role and Importance of the Autopsy

Although the autopsy has not elucidated the etiology for SIDS, and despite often equivocal results, it is still considered the sine qua non in determining the cause of sudden and unexpected death in infancy. But acceptance of this precept is not uniformly embraced throughout the United States even now. In Massachusetts, where the autopsy rate for infants has been close to 100% for several years, the data from the Massachusetts SIDS Center show that in 806 sudden, unexpected infant deaths from 1982 through 1990 there have been only 5 cases attributable to fatal child abuse (0.6%).

In addition to the external findings of postmortem lividity and skin mottling often confused with bruising or other skin lesions, Valdes-Dapena has summarized the major morphological findings. Other less frequent lesions have been described. Evidence that respiratory syncytial virus infection produces life-threatening apneic episodes in infants, reports of unexpected deaths of two infants with respiratory syncytial virus infection, together with autopsies consistent with SIDS have raised, once again, the question of the role of infection-this time of viral infection-as a possible factor in SIDS. Cytomegalovirus inclusion-bearing cells were recovered in the extraneural organs of 4 apparently healthy infants who died

suddenly and unexpectedly; the authors also found glial nodules in the brainstems in each of these infants, causing them to speculate that such lesions could have affected neurons responsible for cardiorespiratory control." Huff reported finding cytomegalovirus cells in 7% of 54 "crib death" babies as opposed to 1.2% of 298 babies who had died of other causes. While these figures are not overwhelming, they do argue for a more careful search for such lesions and elucidation of their significance. Norman and colleagues studied 126 sudden unexplained deaths, excluding those due to accidents, child abuse, poisoning, or other explicable conditions. Of the 126, 86 (68%) were typical SIDS and less than 1% of them failed to have intrathoracic petechiae, a putative marker for SIDS whose significance is debated in the literature. Three had infections-granulomatous hepatitis pyelonephritis, and cytomegalovirus-none of which was sufficient to produce death. There were seven known or probable metabolic diseases accounting for a little over 5% of the total. Their belief is that metabolic disease is most likely to be found in families in which there has been more than one child apparently dying of SIDS and in those infants with fatty livers at postmortem examination. The diverse metabolic diseases that can cause sudden infant death include disorders of fatty acid oxidation, organic acids, urea-cycle, amino acids, and carbohydrate metabolism. Current evidence from necropsy studies and from family studies suggests that about 1 in 10 of sudden unexpected deaths in infancy are due to inborn errors of metabolism. Despite the absence of hard data to support this assertion, certain additional steps would add to our knowledge and are recommended for the autopsy: body fluids (urine, blood, vitreous humor, cerebrospinal fluid, bile, and stomach contents) should be obtained and frozen at -80°C; skin samples should be obtained and analyzed; blocks of brain, liver, kidney, heart, muscle, adrenals, and pancreas should be analyzed. Postmortem findings in cases of fatal child abuse demonstrate that the causes of death were injuries to the head or the abdominal viscera, burns, drowning, gunshots, exposure, suffocating, or a combination of these. In contrast to later series, poisoning was not often a factor.

Radiographic Studies

The use of radiographs as an ancillary study in postmortem examinations is routine in most jurisdictions. In most cases where radiographs are used, however, the "babygram" is the standard. Kleinman et al point out that a skeletal survey should be the choice of examination and that properly informed and motivated technologists should be able to obtain high quality postmortem skeletal surveys in most medical examiners offices. The widespread failure to obtain such studies is probably due more to inertia than to actual technical or economic factors. The clinical radiographic study commonly referred to as the "skeletal survey" has been outlined by Kleinman. It consists of numerous projections and is clearly superior to the "babygram" done in most autopsy settings.

Death Investigation: Scene Investigation and Past Medical History

In Adelson and Kinney's 1956 report on 126 infant fatalities, death scene investigations occurred in all but one family. This remarkable adjunct to the postmortem examination was certainly unique at that time and indeed has not been the standard even in the recent past. Smialek and Lambras has observed that by delaying the death scene investigation one may lose accurate documentation of the scene in terms of the environmental risk factors and risk factors associated with sleeping conditions. Prompt interviewing of the discovering caretaker is needed to ascertain details of the infant's situation when first found lifeless. The gathering of information from physicians familiar with the baby and the family and from local child protection agencies should also be accomplished. Stanton and Oakley, reporting on the patterns of illness observed before unexpected infant death, found that 16% of the infants who subsequently died unexpectedly had been previously admitted to a hospital compared with 5.4% of age matched control infants. Nearly half of those who died had been admitted prior to 2 months of age. Child abuse had been diagnosed in 8 of the 71 admitted infants and failure to thrive in 24. The bulk of the other admissions were for infection and loss of consciousness.

In the National Institute of Child Health and Human Development study, to a statistically significant degree, the 757 SIDS babies had more often been sick and had been previously hospitalized. These patterns of illness are important data in the investigation of sudden unexpected infant death.

Taylor and Emery reviewed 65 postperinatal deaths in Sheffield, England, and found that 35 of the infants had had diseases or conditions present before the eighth day of life. Proven nonaccidental injury was seen in two cases, and "gentle battering"- meaning extreme concern in the death review conference because of discrepant histories, social chaos, and a pattern of unusual childrearing practices before death-in three. There were 19 infants certified as "cot deaths" (SIDS).

Criteria for Distinguishing SIDS from Fatal Child Abuse and Other Medical Conditions

	Consistent With SIDS	Less Consistent with SIDS	Highly Suggestive or diagnostic of Child Abuse
History surrounding death	Apparently healthy infant fed, put to bed, Found lifeless. Silent death. EMS resuscitation unsuccessful.	Infant found apneic. EMS transports to hospital. Infant lives hours to days. Substance abuse, family illness.	History atypical for SIDS. Discrepant history. Unclear history. Prolonged interval between bedtime and death.
Age at death	Peak 2-4 mo. 90% <7mo. Range 1-12 mo.	8-12 mo.	> 12 mo.
PE and laboratory studies at time of death	Serosanguinous watery, frothy, or mucoid nasal discharge. PM lividity in dependent areas. Possible marks on pressure points of body. No skin trauma. Well cared for baby	Organomegaly of viscera. Stigmata of disease process (PE, laboratory, X-ray).	Cutaneous injuries. Traumatic lesions of body parts (conjunctiva, fundi, scalp, intraoral, ears, neck, trunk, anogenital extremities, malnutrition, neglect Fractures.
History of pregnancy, delivery and infancy	Prenatal care-minimal to maximal. Frequent history of cigarette use during pregnancy. Some future SIDS victims are premature or LBW. Subtle defects in state, feeding, cry neurological status (hypotonia, lethargy, irritability). Less postneonatal height and weight gain. Twins, triplets. Spitting, GE reflux. Thrush, pneumonia, illnesses requiring hospitalization, tachypnea, tachycardia, cyanosis. Usually: No signs of antecedent difficulty.	Prenatal care-minimal to maximal. History of recurrent illnesses. "Sickly" or "weak" baby. Specific diagnosis of organ system disease.	Unwanted pregnancy. Little or no prenatal care. Late arrival for delivery. Birth outside of hospital. Few or no well baby care. No immunizations. Use of cigarettes, drugs/alcohol during and after pregnancy. Baby described as hard to care for or to "discipline." Deviant feeding practices.
Death scene investigation	Crib, bed in good repair. No dangerous bedclothes, toys, plastic sheets, pacifier strings, pellet pillows. No cords, bands for possible entanglement. Accurate description of position with attention to possible head/neck entrapment. Normal room temperature. No toxins, insecticides. Good ventilation, furnace equipment.	Defective crib/bed. Use of inappropriate sheets, pillows, sleeping clothes. Presence of dangerous toys, plastic sheets, pacifier cords, pellet pillows. Cosleeping. Poor ventilation, heat control. Presence of toxins, insecticides. Unsanitary conditions.	Chaotic unsanitary crowded living conditions. Evidence of drugs/alcohol. Signs of terminal struggle in crib, bed, bedclothes or other equipment. Discovery of blood-stained bedclothes. Evidence of hostility by caretakers. Discord between caretakers. Display of violence between caretakers. Admission of harm. Accusations.

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Previous infant deaths in family	First unexplained and unexpected infant death.	One previous unexpected or unexplained infant death	More than one previous unexplained or unexpected infant death.
Autopsy findings	No adequate cause of death at PM. Normal: skeletal survey, toxicology, chemistry studies (blood sugar may be high, normal, or low), microscopic examination, metabolic screen. Presence of: large numbers of intrathoracic petechiae; dysmorphic, dysplastic, or anomalous lesions; gliosis of brainstem; sphincter dilation. Occasionally subtle changes in liver, including fatty change and extramedullary hematopoiesis.	Subtle changes in liver, adrenal, myocardium. Few or no intrathoracic petechiae.	Traumatic cause of death (IC or visceral bleeding). External bruises, abrasions, or burns. No intrathoracic petechiae. Malnutrition. Fractures. Subgaleal hematoma. Abnormal body chemistry values (Na, Cl, K, BUN, sugar; liver, pancreatic enzymes; CPK). Abnormal toxicology.
Previous CPS or LE involvement	None	One	Two or more. One or more family member arrested for violent behavior.

Child Death Review Teams

The determination of the cause and manner of death in children has been grossly neglected. Twenty years have passed since Bergman' found that only 25% of sudden and unexpected deaths in the United States had the benefit of an autopsy to establish the cause of death in suspected SIDS cases. It is hoped that a contemporary survey would show a better rate, but even then it must be recognized that the autopsy is only one component of a proper approach in establishing the cause of death. Moreover, death ascertainment should be accomplished in all children younger than the age of 18 years, not just in infants. Because this is such an egregious omission in the conduct of the medical, social, and legal stewardship of our children, momentum has been building to analyze childhood deaths by means of child death review teams. This approach has been superbly described in a series of four manuals prepared by the Child Maltreatment Fatalities Project of the American Bar Association Center on Children and the Law and the American Academy of Pediatrics. The information compiled by means of the detailed investigation suggested in these publications will provide the most reliable determination of cause and manner of death.

If child abuse or neglect is a contributory factor in a substantial proportion of unexpected infant deaths, what should be done to minimize mistakes in the ascertainment of the cause and manner of death? The following recommendations are offered:

1. Accurate history-taking by emergency responders and medical personnel at the time of death and made available to the medical examiner or coroner
2. Examination of the dead infant at a hospital emergency department (Often such babies are taken directly to the morgue, depriving the case of clinical appraisal prior to autopsy.)
3. Protocol postmortem examinations within 24 hours of death, including toxicology and metabolic screening when deemed appropriate in the context of the complete evaluation of the infant's death
4. Prompt death-scene investigation by knowledgeable individuals including careful interviews of the household members
5. Collection of previous medical records from all sources of medical care and personal interviews of key medical providers
6. Detailed collection of medical history from caretakers, using a standardized medical history questionnaire
7. Locally based infant death review teams to review the collected data with participation of the medical examiner or coroner in the review
8. Use of accepted diagnostic categories on death certificates as soon as possible after review
9. Prompt informing sessions with parents when the results indicate SIDS or medical causation of death (High-quality medical examiner's offices inform parents of SIDS cases as soon as the results of the gross autopsy findings are available.)
10. Recognition of all the diagnostic elements comprising the decision about infant deaths (Table)
11. Maintenance of a supportive approach to parents during the death review process
12. Adequate funding of this critical process, both for death ascertainment and for the protection of all infants and children
13. Stimulation and support of more research into the etiology of both SIDS and child abuse.

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SCENE INVESTIGATION

- document and photograph presence of pet food in house
- document/ photograph food for adults and other siblings - none for victim
- photograph other children - contrast victim

CP-1 page 151

VICTIM TREATED DIFFERENTLY

- Evidence of maltreatment
- no photographs of victim in the home
- no toys for the victim
- photograph of victim at an earlier time
- insurance policy or premiums on victim

CP-1 page 152

UNDERLYING ORGANIC CONDITIONS

- Identify organic conditions
- Review and analyze victim's medical records for previous diagnosis for FTT
- Interview physician at onset of investigation and again after reviewing all records
- Train medical staff and physician to ask right questions-document same
- Assess for possible defenses
- Caretakers version corroborate or rebuts medical evidence?

CP-1 page 153

PHYSICIAN INTERVIEW

- Medical examiner or attending physician must be trained in collection of evidence and proper diagnosis
- Plot victim on NCHS chart
- Length, weight, head circumference
- FTT = 2 standard deviations below mean for length or weight for age

CH 1, page 174

PHYSICIAN INTERVIEW

- Usually child loses weight first, length second, and head circumference
- Lack of records- victims of FTT have birth weight and weight at referral or death. Physicians reluctant to diagnose FTT on two points.
- Ask for assessment for deviation from normal development - age and gender

CH 1, page 175

PHYSICIAN INTERVIEW

- Most important question-what produced this child's emaciated condition-what is the physician's specific assessment? Document what is said and the basis for their conclusions.

CH 1, page 176

EXCLUDING ORGANIC EXPLANATIONS

- Organic basis? Tests required? If organic, did condition cause emaciation or merely predispose the child against gaining weight?
- Medical history, pre-natal and birth history. Growth history at hospital (24 hrs) and any subsequent admissions
- Feed child in controlled environment and plot growth for a few months-then file

CPH 100-17

EXCLUDING ORGANIC EXPLANATIONS

- Establish whether malnutrition is acute or chronic
- Children rarely are emaciated in a few days.
- Often caretakers will tell you weight lost in last 48 hrs.
- Acute FTT shows signs of emotional deprivation-fetal position, vacant eyes, little response to external stimuli. Document!

CPH 100-18

Concluding Questions for Attending Physician

- What does the physician think of the plausibility of the caretaker's version of the child's feeding history?
- Did parent's actions seem reasonable given the child's condition? Why?
- Criminal charges may be warranted irrespective of organic condition if caretaker failed to get medical attention when child was clearly wasting away

CPH 100-19

CARETAKER INTERVIEW

- Critical - law enforcement if caregiver is willing
- If caretaker invokes, they will probably still answer medical staff questions when child's history is being taken
- Parents/caregivers should be questioned about significant events surrounding conception, rape, pregnancy wanted?

CPH Legal 118

CARETAKER INTERVIEW

- Questions concerning prenatal care, child's disposition, feeding and sleeping habits are important.
- Questions about parenting skills are important to determine whether actions were made out of ignorance or intentional, ie, "Did you feed the baby three times a day?" How was the formula mixed? Diluted?

CPH Legal 119

BIRTH RECORDS

- Birthing classes? Parenting classes?
- Feeding methods taught?
- Any medical problems that would affect child's development adversely?
- Successful prosecution depends on establishing caretaker had the requisite legal competence and mental state to understand the child was wasting away.

CPH Legal 118

DEFENSES

Undiagnosed medical condition:

1. preventable with proper medical care if condition exists at all
2. obvious to a reasonable person child needed medical attention
3. caregiver was legally competent and understood child needed medical attention

CH 140-110

DEFENSES

Poverty:

1. family too poor to obtain necessary food or medical care
2. look for evidence of money spent on non-necessities: alcohol, drugs, cigarettes, cable t.v., or family received public assistance and had access to resources for the baby.

CH 140-110

DEFENSES

Ignorance: caregivers were ignorant of basic child feeding and rearing needs.

1. parenting classes
2. raised other children
3. child survived fine for a period of time
4. other evidence supporting competence

CH 140-110

DEFENSES

Everyone in our family is short-we all grow out of it.

1. Even short children do not waste away
2. Ask physician to adjust chart for premature child.

CPI-L-96-116

DEFENSES

Child was healthy - lost weight rapidly

1. Thorough medical workup should demonstrate whether malnutrition is chronic or acute
2. Very rare that emaciation occurs rapidly

CPI-L-96-117

DEFENSES

Transportation - no means to transport the child to medical care or to purchase food.

Investigation may reveal that caregiver had access to free bus tickets or indigent transportation services connected to a medical center or clinic and chose not to use them.

CPI-L-96-118

AUTOPSY

- Ask medical examiner to determine effects of malnutrition on the ultimate cause of death. Many deaths are classified from natural causes with malnutrition as a secondary cause.
- "But For" test - cases that list cause of death from natural causes with malnutrition as a secondary cause can still be prosecuted if the child would not have died *but for* the complications of malnutrition.

CPH 149-10

AUTOPSY

- Autopsy should document type and condition of food in victim's stomach and intestines to assist in establishing time of death and refute or corroborate caregiver's statement as to when the child was last fed.
- The medical examiner should photograph and note loss of fat tissue and muscle wasting to illustrate the progressive deterioration of the child's condition over time.

CPH 149-116

AUTOPSY

- Calculation of caloric deficit to determine degree of food deprivation. This method was developed by Meade & Brissie, 30 J. Forensic Sci. 1263, (1985) *Infanticide by Starvation*.
- Photographs are critical to proving starvation. Photograph entire body against a non-white background to reduce glare (ABFO Bar - Color)

CPH 149-117

AUTOPSY

- Careful measurements are required both at the time of presentation and at autopsy. Skin tents and cradle caps should be noted and explained within the context of the child's death.

CH 196112

Proving your Case

- Juries are reluctant to believe a parent would starve their child to death
- Prove parents were well aware of child's condition and failed to seek help.
- Impression management of the courtroom.
- Medical and expert testimony - battle of the experts.

CH 196113

Neglect and Failure to Thrive

Generally:

- ☒ **Growth significantly under norms**
- ☒ **Organic - medical cause**
- ☒ **Non-organic - maltreatment**
- ☒ **Severe malnutrition - starvation**

CH 196114

Neglect and Failure to Thrive

Defenses:

- Underlying medical condition
- Poverty
- Lack of parenting skills - ignorance
- Child wouldn't eat - vomiting, diarrhea

CPH 468/175

Neglect and Failure to Thrive

Defenses:

- Congenital - everyone in family is small
- Child healthy until just recently
- Someone else is responsible for caretaking


CPH 468/176

Neglect and Failure to Thrive

Overcoming Defenses:

- ◆ Determine if organic condition
- ◆ Medical tests
- ◆ Child fed in controlled environment
- ◆ Document growth for several months

CPH 468/177

Neglect and Failure to Thrive

Overcoming Defenses:

- ◆ Malnutrition ongoing or recent?
- ◆ Did parents seek medical intervention, advice?
- ◆ Evidence of emotional deprivation
- ◆ Medical records, growth chart

CPH 146-176

Neglect and Failure to Thrive

Overcoming Defenses:

- ◆ Evidence of failure to keep well baby appointments
- ◆ Interview physicians
- ◆ Caretaker interview by physician
- ◆ Interview lay witnesses with access to the child

CPH 146-176

Neglect and Failure to Thrive

Scene Investigation:

- ❖ Consent and/or search warrant
- ❖ Document by inventory, photos and videos
- ❖ Age appropriate food
- ❖ Bottles, cans of formula, mixing instructions

CPH 146-186

Neglect and Failure to Thrive

Scene Investigation:

- ❖ Freshness of food
- ❖ Diapers and dirty laundry
- ❖ Victim treated differently
- ❖ Adult food
- ❖ Pet food
- ❖ Alcohol, drugs, cigarettes

CP Logo 181

Neglect and Failure to Thrive

Scene Investigation:

- ❖ Cable TV, stereo
- ❖ Other children well fed
- ❖ No current photos of victim
- ❖ No toys for victim
- ❖ Overall condition of home
- ❖ Medical care for child

CP Logo 182

Neglect and Failure to Thrive

Other Neglect Cases:

- * Unattended child
- * Factors to consider:
 - age of child
 - time period left unattended
 - parent's awareness of risk
 - past history of similar conduct

CP Logo 183

Neglect and Failure to Thrive

Cause and Manner of Death:

- ⌘ Effects of malnutrition on ultimate cause of death
- ⌘ Natural vs. secondary
- ⌘ "But for" test
- ⌘ Autopsy to document loss of fat tissue, muscle wasting, etc.

CPA Legal 144

BATTERED CHILD SYNDROME

*Kempe, et. al., The Battered Child Syndrome,
181 JAMA 17 (1962)*

"A marked discrepancy between clinical findings and historical data as supplied by the parents is a major diagnostic feature of the Battered Child Syndrome...Subdural hematoma, with or without fracture of the skull...is an extremely frequent finding even in the absence of fractures of the long bones... The characteristic distribution of these multiple fractures and the observation that the lesions are in different stages of healing are of additional value in making the diagnosis."

CPA Legal 145

Estelle v. McGuire

112 S.Ct. 475, 116 L.Ed.2d 385 (1991)

Evidence of Battered Child Syndrome Admissible to Prove:

- Intent
- Absence of Mistake or Accident
- Identity

CPA Legal 146

Estelle v. McGuire

Even if the defendant does not raise “accident” as a defense, evidence of Battered Child Syndrome is admissible to prove intent... “The prosecution’s burden to prove every element of the crime is not relieved by a defendant’s tactical decision not to contest an essential element of the offense.”

CP 1 page 12

Estelle v. McGuire

Battered child syndrome “exists when a child has sustained repeated and/or serious injuries by non-accidental means...Evidence demonstrating BCS helps to prove that the child died at the hands of another and not by falling off a couch, for example; it also tends to establish that the ‘other,’ whoever it may be, inflicted the injuries intentionally.

CP 1 page 16

Estelle v. McGuire

“When offered to show that certain injuries are a product of child abuse, rather than accident, evidence of prior injuries is relevant even though it does not purport to prove the identity of the person who might have inflicted the injuries.”

CP 1 page 18

Estelle v. McGuire

“The proof of battered child syndrome itself narrowed the group of possible perpetrators to the (defendant) and his wife...Only someone regularly ‘caring’ for the child has the continuing opportunity to inflict these types of injuries; an isolated contact with a vicious stranger would not result in this pattern of successive injuries stretching through several months.”

CPA Legal 180

The History, Effectiveness, & Legality of Corporal Punishment

DANIEL ARMAGH

Director

**National Center for Prosecution of
Child Abuse**

CPA Legal 181

ORANGES

CPA Legal 182

How prevalent is CP?

- 90% of young children receive CP
- 33-50% of adolescents receive CP
- 3 million acts of CP in American schools during the 1980's
- 500,000 acts of CP in American Schools during the 1990's (23 states allow CP in the schools)

CR14p-12

How do we hit our children?

- | | |
|-------------------|-------------------|
| • 63% spanked | • 11% whipped |
| • 42% slapped | • 9% arms twisted |
| • 20% ears pulled | • 9% shaken |
| • 9% punched | • 6% kicked |
| • 14% pinched | |

CR14p-13

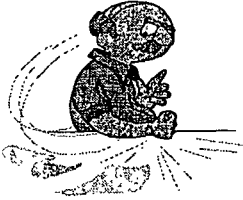
The Prevalence of Objects

In a study of 320 middle class families:

- 83% used corporal punishment
- 35% of the children struck with objects including sticks, paddles, whips, and cords.

CR14p-14

When do we hit our children?

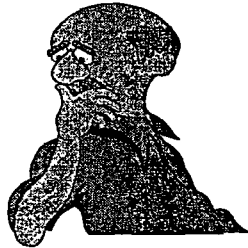


- child out of control
- disobedient
- disrespectful

CP 1 page 176

Why do we hit our children?

- Moral arguments
- Efficacy
- Parent factors: cathartic for parent, single moms need to be as tough as Dad, and it "worked for me."



CP 1 page 177

What are the risks of spanking?

- Spankers more likely to use other forms of CP
- Aversive discipline more likely when parent is angry, depressed, fatigued, stressed
- 1003 Minnesota moms: 44% spanked most often when they had "lost it."

CP 1 page 178

*How long has CP been
accepted?*

- CP practiced
by Egyptians,
Greeks,
Romans.
- The “rule of
thumb.”

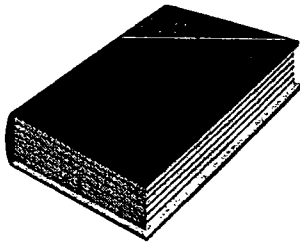


CPH 118

*Corporal Punishment
and American Culture*

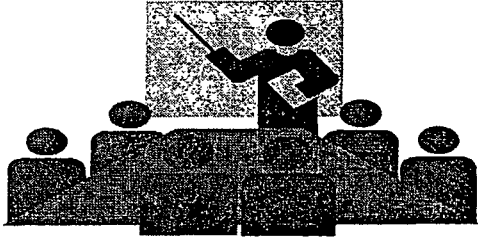
CPH 119

American Literature



CPH 120

American Schools



CS1 Logo 2017

American Religion

- † conservative view
- † moderate view
- † liberal view

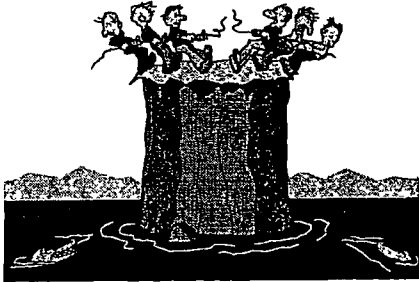
CS1 Logo 2017

The Literature

- Much literature focuses on risks of CP
- Literature condemning spanking is criticized for mixing apples and oranges

CS1 Logo 2017

Can we reach a consensus?



CPH 1-1991-228

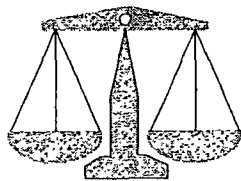
AAP Consensus Statements

- No CP beyond spanking
- No spanking of kids below age of two
- CP of older kids and adolescents not effective
- CP is risk factor for poor outcomes
- Non-corporal discipline works
- Inconclusive data on effect of spanking
- CP in schools not effective

CPH 1-1991-228

When is CP a Crime?

- Majority view: reasonable force
- Minority view: actual malice
- Minnesota view: reasonable force not a defense to the crime of assault



CPH 1-1991-228

When should CP be Prosecuted?

- motive
- emotional harm
- location of blows
- extent of injury
- use of objects
- methodology
- age & size of child
- handicaps of child
- culture and religion
- other means to address CP
- possible retaliation
- wishes of victim
- deterrence
- justification for the CP

CP 1 Sept 20

*Overcoming a
defense of reasonable
force*

CP 1 Sept 20

Voire dire

- objects
- injuries
- accidents/infractions
- age of child
- location of blows

CP 1 Sept 20

Themes

Parental license to discipline is not a license to maim a child.

CPH Legal 211

A child may fear a father's hand, but when the child fears his father, there is danger in the home.

CPH Legal 211

The defendant has the gall to speak of his adherence to the old fashioned virtue of "spare the rod." The defendant apparently pays no allegiance to the old fashioned virtue "pick on someone your own size."

CPH Legal 211

The case in chief

CP 140-214

Medical Experts

- injuries consistent
- degree of force used
- refute bruise easily defense
- danger of particular instruments



CP 140-215

Psychologists

- the harm of witnessing violence
- the harm of disciplinary practices
- common behaviors

CP 140-216

Interrogation

- feelings
- other disciplinary techniques
- effectiveness of other discipline
- details of the rule violated
- who gets punished for violating the rule?
- the pets

CP1 Lys 217

Cross-examination of Defendant

- size differential
- purpose of the discipline
- the number of blows needed
- the need to use objects
- was an assault really necessary
- the love questions

CP1 Lys 218

HOT TOPICS

- Interviewing
- Video-taping
- Munchhausen Syndrome By Proxy (Factitious Disorder)
- Plethysmograph
- Recantation
- Media Backlash
- Computer Assisted Exploitation

CP1 Lys 219

BALANCING THE SCALES FOR CHILDREN

- VERY SERIOUS WAR
- STATE & DEFENDANT
- CHILD & DEFENDANT
- PROSECUTOR & DEFENSE ATTORNEY
- PREPARATION AND TRAINING

CH Legal 228

VERTICAL PROSECUTION

- Number of interviews
- Target for reasonable doubt
- Coordinated approach
- Prevents meeting new professional every time
- Multi-disciplinary teams

CH Legal 231

DEFENSE EXPERTS

- RALPH UNDERWAGER
- RICHARD GARDNER
- WHAT IS THEIR PREVIOUS TESTIMONY?
- WHAT IS THEIR EXPERT BACKGROUND ?
- EDUCATIONAL RELEVANCE?

CH Legal 232

OFFENSIVE DISCOVERY

- Blood Typing
- DNA
- HLA
- HIV Testing
- STD
- Photo Corroboration
- Forensic Computer Analysis

CP11-44-222

PSYCHOLOGY OF THE INVESTIGATOR

- Best of the best
- Think like a defense lawyer
- Think like a predator
- Take the testimonial view of everything you do
- Know your case
- Be organized and concise

CP11-44-224

INVESTIGATION

- Interview or interrogation is critical to case
- Safe environment / be his pal
- Lock him in to the first five stories
- Miranda
- Consent and warrant

CP11-44-225

CORROBORATION

- STING
- NON - CONFESSION
- CONFESSION
- CORPUS DELECTI
- CALL HIS MOM
- INTERVIEW OTHERS
- ANTICIPATE THE DEFENSE

CPH Legal 326

SUBSTANCE OF TESTIMONY

- Competency
- Remember
- Relate
- Communicate
- Truth and lie
- Punishment
- Kentucky v. Stincer 482 u.s. 730

CPH Legal 327

Pitfalls and Trapdoors for the Child Abuse Professional: Testifying In the Courtroom for Case In Chief

DANIEL ARMAGH
Director of Legal Education
National Center for Missing and
Exploited Children

CPH Legal 328

TESTIFYING

IMPRESSION MANAGEMENT

CH 14p 275

Where Your Emotional
Predispositions Exist

Oranges

CH 14p 276

BALANCING THE SCALES FOR CHILDREN

- VERY SERIOUS WAR
- STATE & DEFENDANT
- CHILD & DEFENDANT
- PROSECUTOR & DEFENSE
ATTORNEY
- PREPARATION AND TRAINING

CH 14p 277

THEME DEVELOPMENT

- EARLY IN THE CASE
- 80% OF JURORS MAKE UP THEIR MIND AFTER OPENING STATEMENT
- A THEME IS THE FILTER
- OUT THINK THE OPPONENT BEFORE THE TESTIMONY IS GIVEN

CP-11-199-232

IMPRESSION MANAGEMENT

- *Sound Bite Society*
- *Attention Span Of Jurors*
- *Educational Level Of Jurors*
- *3 Sources Of Expertise*
- *Jurors' "Not Enough Evidence"*
- *Unprofessional Mistakes*

CP-11-199-232



Voir Dire in Child Victim Sex Trials: A Strategic Guide for Prosecutors

**Dr. Nick Maroules and
Charles Reynard, McLean County
State's Attorney**

***Illinois State's Attorneys Appellate Prosecution
Child Witness Project***

CP-11-199-234

Research

Survey of Actual Jurors

80% found children credible

45% very believable

88% had empathy for victims

35% testimony looked rehearsed

CHL 464 225

Research

Survey of Potential Jurors

57%—children more credible than adults

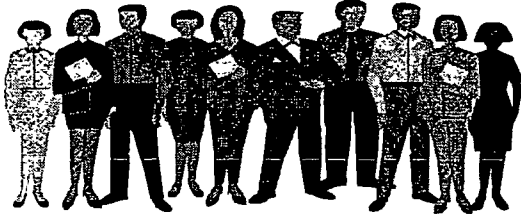
31%—children over 14 should have to resist

70% expected physical evidence

60% expected “definitive” medical evidence

43% felt children sometimes lied

CHL 464 226



***Morison & Greene, Juror and
Expert Knowledge of Child Sexual
Abuse, 16 Child Abuse and Neglect
595 (1992)***

CHL 464 227

Juror and Expert Knowledge

- ➔ Jurors not well informed on many issues
Experts had consensus on
- ➔ Over half the jurors believed children were easily manipulated into making false reports, and were physically damaged by the assault
- ➔ More than one third believed that allegations frequently prove false, and the typical reaction of the victim would include resistance, crying for help, or escape
- ➔ 20% supported stereotype image of the abuser as a "Dirty Old Man"

CPA Legal 228

Juror and Expert Knowledge

- ➔ Many jurors unaware that abusers are typically familiar to the victim; kids at any age are potential victims; boys are frequent targets
- ➔ Over half believed anal or vaginal intercourse to be the most common form of abusive act
- ➔ Jurors much less knowledgeable about the majority of conduct occurring in the home; lack of physical force or aggressiveness used; victims affected differently

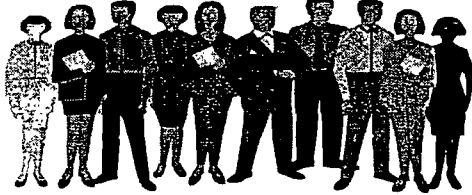
CPA Legal 228

How "Objective" Juries Are Selected

Jurors will be excused if they:

- Know the parties
 - Know the witnesses
 - Know the subject (Skills, training, literature, experience)
 - Know the facts of the case
 - Have been victimized themselves
 - Know someone who has been victimized
- Fairness = Ignorance**

CPA Legal 240



***"The jury system puts a ban upon intelligence and honesty, and a premium upon ignorance, stupidity and perjury."
Mark Twain - Roughing It (1872)***

CPH Legal 201

"The jury which is eventually selected is one which is ignorant of the people involved, the issues involved, and most significantly, of the scientific and psychological aspects which might be crucial to an intelligent interpretation of the evidence they are about to hear."

CPH Legal 202

***Most Significant Source of Stress
for Pediatricians in Child Abuse***

***APPEARANCE IN A COURT
OF LAW
CHILD MALTREATMENT, VOL. 4,
August 1999***

CPH Legal 203

S.A.N.E.

- *You are a what?*
- *You have never been to medical school?*
- *You are not a doctor?*
- *You are not a resident?*
- *You are not a board certified specialist from any medical school training are you, missy?*
- *There is nothing sane at all about you concluding my client sexually assaulted anyone is there?*

CP-1 Legal 206

The “Emotional Psychology” of Testifying

- *My stomach doesn't feel good!*
- *Why didn't I choose another career?*
- *The rhythm of counter-punching*
- *The primrose path - he's not so bad*
- *Get me out of here!*

CP-1 Legal 206

Preparation for Testimony

- *Usually learn by doing-substantially detrimental during the learning curve*
- *Physicians should provide accurate, detailed and legible documentation of their findings*
- *Use non-leading questions when interviewing children: multi-disciplinary team member can be helpful*

CP-1 Legal 206

Preparation for Court

- *Use consultants*
- *Forensic photographs are helpful*
- *Use appropriate laboratory tests that assure a forensic line of evidence*
- *Prepare the technical information in a manner that is understandable for a lay audience*
- *Avoid wherever possible medical jargon, copspeak, Doctorate arrogance, legalease*

CPL 1990-217

FACT BEYOND CHANGE

- *To get a witness to testify against a fact that is true beyond change is the ultimate in cross-examination*
- *Keep the theory of the state's case in mind*
- *Defendant never home alone*
- *Children don't lie*
- *The hymen is always altered*

CPL 1990-200

THREE THINGS

- *Defendant can take the 5th*
- *He can tell the truth about everything*
- *He can lie*
- *How can we expose the lie and where is it coming from*
- *This is always a paradigm for child abuse professionals from defense attorneys*

CPL 1990-215

Pitfalls and Trapdoors

- *Personal opinions v. professional opinions: based on my training, experience and the investigation in this case-...*
- *Answer the question officer (social worker, parole officer, therapist, doctor, child, parent...)- yes or no?!!!!*
- *What is so difficult about answering a simple question with a yes or a no?!!!!*

CPH 1002.20

TESTIFYING

- *You did not see Sarah raped by anyone did you?*
- *(only two eyewitnesses based on my investigation, consultation, counsel)*
- *You have no personal knowledge that anything she told you is true, do you officer?*
- *(based on my investigation (medical assessment of this child, my training and experience, I decline to agree with you/your characterization)*
- *How long have you been a doctor?*

CPH 1002.21

TESTIFYING

- *How long have you investigated/ consulted in child abuse cases? (cutting edge training/protocol)*
- *Shouldn't the police have taken her to the doctor immediately? (72hrs)*
- *Officer / Doctor, you did not tape record or videotape the your consultation did you?*

CPH 1002.22

TESTIFYING

- *You suggested the answers by the type of questions you asked didn't you? Well, we don't know that do we?*
- *The truth is you got all your information from the CPS, mother...*
- *Well, wouldn't you arrive at a different conclusion if the child /patient lied to you? (that hypothetical is not relevant in this case counsel)*

CPL 1 Sept 201

TESTIFYING

- *Isn't it true that children lie about things?*
- *Isn't it true that children dream and fantasize about these things?*
- *Your aware of Sarah's reputation for lying, promiscuity, discipline problems...*

CPL 1 Sept 201

TESTIFYING

- *If you could do it all over...*
- *You would agree this was not a perfect investigation?*
- *What were you trying to hide by not including it in your report? In your testimony?*

CPL 1 Sept 201

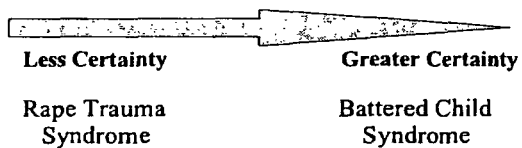
“EXPERTS”

- *WHAT IS THEIR PREVIOUS TESTIMONY?*
- *WHAT IS THEIR EXPERT BACKGROUND ?*
- *EDUCATIONAL RELEVANCE?*
- *Doctor, where is the hymen located?*
- *What would it look like if...*

CPL Legal 288

SYNDROME EVIDENCE

THE CONTINUUM OF CERTAINTY



Myers, EXPERT TESTIMONY DESCRIBING PSYCHOLOGICAL SYNDROMES, 24 Pacific Law Journal 1449 (1993)

CPL Legal 289

Victim from Hell!!!

- *If attacked for memory or veracity, then an expert witness may be used in rehabilitation*

CPL Legal 290

Tactics For Experts

- Prepare, Prepare, Prepare...
- Don't argue with opposing counsel
- Don't advocate - educate
- Don't equivocate
- Confess error when necessary
- Don't hide contrary authority
- Don't look to the attorney for answers on cross - remember you're the expert
- Remember your ethical standards

CH 14 p. 28

APA CODE OF ETHICS

7.04 TRUTHFULNESS AND CANDOR

In forensic testimony and reports, psychologists testify truthfully, honestly, and candidly and consistent with applicable legal procedures, describe fairly the bases for their testimony and conclusions. Whenever necessary to avoid misleading, psychologists acknowledge the limits of their data or conclusions.

CH 14 p. 28

APA CODE OF ETHICS

3.03 AVOIDANCE OF FALSE OR DECEPTIVE STATEMENTS

Psychologists do not make public statements that are false, deceptive, misleading, or fraudulent, either because of what they state, convey, or suggest or because of what they omit, concerning their research, practice, or other work activities...

CH 14 p. 28

Tactics For Experts

- ☛ Don't answer questions unless you understand them
- ☛ Don't let attorney's confine you to yes-no answers
- ☛ Clarify misstatements implied in the question
- ☛ Control your environment
- ☛ Ask to review quotes from sources
- ☛ **TELL THE TRUTH**

CH 1 page 282

“There is hardly anything not palpably absurd on its face that cannot now be proved by some so-called expert.”

Chaulk v. Volkswagen of Am. Inc., 808 F.2d 639, 644
(7th Cir.. 1986)

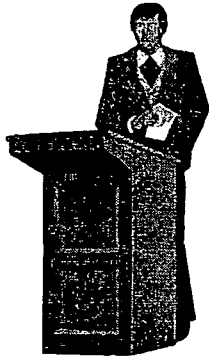
CH 1 page 283

MISUSES OF EXPERTS

- **Offender Profiling**
- **Behavioral Indicators of Abuse**
- **Physical Abuse**
 - Osteogenesis Imperfecta
 - Accidental Falls
 - SIDS
 - Munchausen Syndrome by Proxy
- **Interviewing Critiques and Taint Hearings**
 - Memory and Suggestibility Research
 - CBCA and SVA

CH 1 page 284

**In court,
perceived
credibility is as
important as
actual
credibility.**



CP 1 Legal 28

*Scientific and expert testimony with their
aura of special reliability and
trustworthiness... courts the danger that
the triers of fact will abdicate (their) role
of critical assessment and surrender...
their own common sense in weighing
testimony*

State v. Batangan
799 P.2d 48 (Hawaii 1990)

CP 1 Legal 28

What Experts Can't Say

- ⊗ Witness lying or telling truth
- ⊗ Child abused based on behaviors
- ⊗ Accused guilty or not guilty
- ⊗ Accused does not fit "profile"
- ⊗ Child's statements reliable or not
- ⊗ Statistic's on false or truthful allegations

CP 1 Legal 28

The subject of an expert's testimony must be "scientific...knowledge." The adjective "scientific" implies a grounding in the methods and procedures of science. Similarly, the word "knowledge" connotes more than subjective belief or unsupported speculation.

Daubert v. Merrell Dow Pharmaceuticals

CRJ Legal 708

An additional consideration under Rule 702 - and another aspect of relevancy - is whether expert testimony proffered in the case is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute....whether that reasoning or methodology properly can be applied to the facts in issue.

Daubert v. Merrell Dow Pharmaceuticals

CRJ Legal 708

Rule 702's "helpfulness" standard requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility.

...scientific validity for one purpose is not necessarily scientific validity for other, unrelated purposes.

Daubert v. Merrell Dow Pharmaceuticals

CRJ Legal 708

CRITERIA UNDER DAUBERT

- Whether the theory or technique can be or has been tested.
- Whether the theory or technique has been subjected to peer review or has been published.
- Whether the theory or technique has a known or potential rate of error and what it is.
- The existence and maintenance of standards controlling the technique's operation.
- Whether the theory or technique is generally accepted in the relevant scientific community.

CH 1 page 271

Limits of Research

- Cannot replicate circumstances of abuse
- Cannot replicate circumstances of disclosure
- Results reported in terms of groups
- Individual child may not perform as group
- Statistically significant results Vs. important results
- Results reflect a spectrum of abilities rather than all or nothing

CH 1 page 271

Factors That Vary Across Studies

- Type of recalled event (observations vs. personal experience)
- Form of remembering task (Free recall, recognition)
- Length of delay between event and recall
- Single vs. multiple interviews
- Setting
- Age of children
- Type of questions posed to child

CH 1 page 271

Arguments Against Relevance

- ❶ Unless the research protocol replicates the specific facts of the case in total, no expert can relate research findings to the facts of a particular case, or the abilities of a particular child witness.
- ❷ Research on jurors indicates they already believe that children are highly suggestible; an expert is not needed to reinforce this belief.
- ❸ Highly suggestive interviews themselves undermine reliability in the child's account.

CH 1 page 276

APA CODE OF ETHICS

2.04 USE OF ASSESSMENT IN GENERAL AND WITH SPECIAL POPULATIONS

Psychologists who perform interventions or administer, score, interpret, or use assessment techniques are familiar with the reliability, validation, and related standardization or outcome studies of, and proper applications and uses of, the techniques they use.

CH 1 page 277

Maintain Current CV or Court File

- 100% accuracy above all else
- Not a resume - Relevant data only
 - Degrees
 - Employment
 - Continuing Ed
 - Awards
 - Board Certifications & Licenses
 - Appropriate Articles (Court File)
 - Prior Court Appearances
 - Advisory Boards
 - Editorial Boards
 - Presentations
 - Publications

CH 1 page 278

APA CODE OF ETHICS

2.04 USE OF ASSESSMENT IN GENERAL AND WITH SPECIAL POPULATIONS

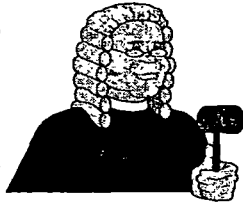
*Psychologists recognize limits to the
certainty with which diagnoses,
judgments, or predictions can be made
about individuals.*

CPA 1991 277

JEOPARDY IN THE COURTROOM: A Scientific Analysis of Children's Testimony

**by Stephen J.
Ceci and Maggie
Bruck**

published by
**American
Psychological
Association**



CPA 1991 278

What the Expert Witness on Children's Suggestibility Should Tell the Court

4. Finally it is important that the court appreciate the complexity of the interrelationships among the factors affecting children's report accuracy. As in most areas of social science, effects are rarely as straightforward as one might wish. For example, even though suggestibility effects may be robust, they are not inevitable, nor are they ineluctably large in magnitude...

Ceci & Bruck, Jeopardy in the Courtroom

CPA 1991 279

"... [W]e focus disproportionately on [children's] weaknesses, because it is our contention that [these weaknesses] are less well understood by experts and nonexperts. . ."



JEOPARDY IN THE COURTROOM

preface at x

CPL 199d 218

"So to repeat, although the literature is skewed toward case studies that entail weaknesses, these are probably not the most common types of cases."



JEOPARDY IN THE COURTROOM

preface at x

CPL 199d 218

What is "within a reasonable degree of medical certainty?"

Doctor, that is not absolutely certain is it?

Its not even near absolutely certain is it ?

It certainly not beyond all reasonable doubt, is it Doctor?

CPL 199d 252

Implications of Testimony

A judge may be more likely to sustain an objection to a physician's testimony when the judge finds the information so complex that it defies understanding and utility in decision making process.

CP 14pt 123

Federal Rule of Evidence 703

"The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence"

you can use other sources not admissible in forming an opinion

CP 14pt 234

"Educating Juror"

- *Jurors do not know sexual abuse is a medical diagnosis*
- *Jurors do not know how quickly the healing process occurs in children*
- *Spontaneous remission of STD*
- *Education is critical, but impression management is paramount*

CP 14pt 345

Myths by "Expert Attorneys"

- *"Medical experts only explain, it is the job of the attorney to convince"*
- *Officers & CPS : "just the facts..."*
- *The reality is that if you do not favorably impress the jury by your "explaining" and thereby convince them you are right and they are wrong, the attorney cannot repair the damage left by the negative impression you leave*
- *Jurors decide cases emotionally*

CS1.1 pg. 258

PLEASE!

*What you tell me in the hallway, let it
resemble closely what you say from
the stand*

CS1.1 pg. 257

Other Tactics

- *Always meet your expert in person*
- *Examine prior transcripts of how you were stupid*
- *Call their expert's boss to give an opposite opinion*
- *Always script questions, but do not allow them to direct your case-remain spontaneous*

CS1.1 pg. 258

SCIENCE OF PERSUASION

- *Societal values*
- *Dominant emotional theme*
- *Primacy and recency*
- *Emotional chronology*
- *65% of all communication is body language*
- *B.F. Skinner*

CPA Legal 108

ART OF PERSUASION

- *Trust and credibility*
- *Demeanor*
- *Relational communications*
- *How does your testimony fit in the overall impression management of the trial?*

CPA Legal 109

PRESENTING YOUR CASE

- *Remember - impression management*
- *Average educational level of jurors*
- *There is no substitute for preparation*
- *Review questions with your prosecutor*
- *Use demonstrative tools*

CPA Legal 110

PRESENTING YOUR CASE

- *Review questions/traps from defense attorney*
- *Find out what part you play in creating the dominant emotional theme for the case*
- *Anticipate what emotional theme the defendant will take*

CP1 Legal 202

PRESENTING YOUR CASE

- *Appearance is professional*
- *Table manners are important*
- *Relational communications*
- *Jurors are always watching*
- *Lunch with defense attorneys, especially nurses, social workers, police, victim witness (rule of sequestration tactic)*
- *Be on time*
- *Professionally package exhibits*

CP1 Legal 203

TESTIFYING

- *Take the question from the attorney and give the answer to the jury*
- *Posture is communication*
- *Avoid copspeak, social worker arrogance, medical jargon, legal jibberish*
- *Do not ramble, answer only the question asked*

CP1 Legal 204

MODIFICATION OF THE COURTROOM

- Comfort level of the victim
- Clear the courtroom during her/his testimony
- U.S. v. Dixon 113 s. ct. 2849
- Comfort friends
- Pro se defendants
- Defense attorneys

CJL 149d 258

TESTIFYING

- *Use words that convey the facts in emotionally compelling ways*
- *Speak loudly and clearly*
- *Do not look to the prosecutor or judge for the answer*
- *Do not argue or lose temper*
- *Do not lie*

CJL 149d 259

CROSS - EXAMINATION

- *Opportunity to create dominant emotional theme*
- *Time of greatest tension and therefore, intense interest of jury*
- *Good trial lawyers are self monitoring*
- *So are good witnesses*

CJL 149d 260

CROSS - EXAMINATION

- *Defense attorneys are trying to score emotional points - at the initial question and the last question - primacy and recency*
- *If they start out easy they are trying to get you to agree with as much as possible*

CPI Legal 208

CROSS - EXAMINATION

- *The whole point is for them to make you look stupid*
- *To get words from you that they can drive home in closing argument*
- *The most difficult witness to cross is the one who is telling the truth and is prepared*

CPI Legal 208

EVIDENCE

- *Investigation judged in its entirety, not just the medical consultation or the investigation*
- *Commissions*
- *Case load*
- *Cases not arrested or founded*

CPI Legal 208

REASONABLE DOUBT

- Inconsistencies
- Delayed report
- No medical evidence
- No eyewitnesses
- No precise dates
- Poor investigation

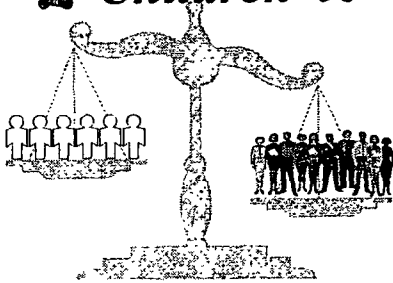
CPH 440-301

REASONABLE DOUBT

- Victim's testimony
- Child is credible
- Demeanor - no one can have doubt based on reason
- In a few short years
- Honor the courage
- Defendant is responsible

CPH 440-301

Balance the Scales for Children



The National Center for Missing and Exploited Children

**PROTOCOL FOR
CHILD-DEATH AUTOPSIES**

**Department Of Social Services
Division of Family Services
State Technical Assistance Team
615 Howerton Court
P. O. Box 88
Jefferson City, MO 65103-0088
314-751-5980
1-800-487-1626**

The following protocol is a guideline for a comprehensive pediatric autopsy when the manner of death is uncertain or suspicious. Clinical judgment is required, on a case-by-case basis, to determine which procedures are performed.

I. INVESTIGATION

A. Review of Records

Prior to beginning the autopsy, ideally all records that are available should be reviewed and all further records that are necessary should be ordered. These records would include all investigative reports, DFS records, police report, paramedic reports, emergency room records and the previous hospital and/or physician's records, including results of laboratory examinations and X-rays. Medical insurance records might be useful in providing information on previous illness, accident or medical treatment.

The medical record is likely to be incomplete due to the emergency situation facing a physician when a severely ill or injured child is brought to the hospital. It is important to discuss with the attending physician, as soon as possible after the death of a child, his or her recollection of not only the injuries but the general clinical

status, history and family situation. The physician should also be queried with regard to resuscitation performed.

B. Family History

Prior to the autopsy, the pathologist should obtain as much of the child's personal history and family history as possible. This should include developmental, medical and social history. This history may give important clues to findings at autopsy and their interpretation. More often than not, this information will be obtained by medical personnel, DFS investigators or law enforcement.

C. Agency Investigation

It is important to have an open line of communication between those agencies responsible for investigation, cause and manner of death determination and possible prosecution. Intense collaboration with the local child fatality review panel is ideal.

D. Scene Investigation

A scene investigation by the pathologist/investigator is often essential in evaluating mechanisms of injury. Furthermore, the home environment including cleanliness, safety hazards, neighborhood, pets, quantity and quality of food, medications, etc., may provide important information in making the cause/manner of death determination.

II. AUTOPSY: GENERAL EXAMINATION

A. Confirm identification, if known

An identification tag should be attached to the body. Identification can be confirmed by a relative or other person who know the child. If the identification of the child is unknown. Footprints should be obtained at the completion of the autopsy. If the body is decomposed or skeletalized, dental, radiologic or anthropologic identification will be necessary.

B. Identification of photographs

Photographs are an essential part of the autopsy record and should be used to document all of the injuries to the child. Each photograph should have a ruler and identification tag present. There should be one photograph of the face for later identification purposes in court. The photographs should systematically cover each region of the body. Individual lesions or groups of lesions must be photographed at close range. A normal focal length lens is not sufficient for proper autopsy photography. A macro lens is essential. Available room light will not provide proper color balance. Either flash or photo-flood light must be used, each with he

film that will provide proper color balance. Several Kodak publications provide guidance for setting up a photographic facility.

C. Examination of Clothing and All Items Accompanying the Body

It is essential that the body be brought to the autopsy suite with the clothing and other associated items undisturbed. The police must be discouraged from removing the clothing at the scene. The clothing and other personal items should be examined and described. This examination should be done in the presence of an evidence technician from the crime laboratory of the appropriate police jurisdiction. Tears, blood stains and the general cleanliness of the clothing should be described.

D. Search for Trace Evidence

A search should be made for hairs, fibers or other trace evidence that may be on the body or clothing. As appropriate, these should be removed prior to removal of the clothing, identified and given to the crime laboratory evidence technicians. The clothing should subsequently be removed and the body again searched for trace evidence. If there is suspicion of sexual abuse, oral, rectal and vaginal swabs should be taken for antigenic typing of semen and/or microbiological studies, as appropriate. The technique used should be established in consultation with crime laboratory personnel. Swabs of bite marks should be taken. These specimens must be obtained prior to washing the body.

E. Radiologic Skeletal Survey

A complete skeletal survey should be done at the start of the autopsy, and the films must be available for review during autopsy. Films should also be reviewed by a radiologist experienced in child trauma whenever possible.

III. EXTERNAL EXAMINATION

In addition to photographs of the body, body charts and diagrams should be prepared to document essential findings at the autopsy.

A. General Appearance

The general appearance of the child should be documented. This should include height and weight, head circumference in children less than two, body stature, the presence or absence of rigor mortis and the locations of post mortem lividity if it is present. A general description of the body is appropriate in any autopsy.

The time of death occasionally cannot be accurately determined. Although drop in body temperature, rise in vitreous potassium and other post mortem events may

give an approximation of the time of death, there are so many biological variables present in such a determination that it is prudent to be circumspect in one's opinion.

B. Cleanliness

Is the child's skin clean? Is there dirt present in skin folds? Is this an acute or chronic status? Poor hygiene may be manifested by severe chronic diaper rash, lichenification of the skin and chronic seborrhea.

C. Nutrition

Nutritional assessment of the child can be made by comparing its height and weight to standard growth curve charts. Include gross description of presence of body fat.

D. Dehydration

Is dehydration present? In young infants, the fontanelle may be depressed. Sunken eyes, poor skin turgor and dry mucosal membranes are gross indicators of dehydration. Vitreous humor electrolyte analysis may show an elevated urea nitrogen and sodium level. Dehydration usually reflects an acute condition.

E. Failure to Thrive

This may be due to metabolic disorders, congenital anomalies or chronic disease. Chronic abuse, nutritional deprivation and emotional neglect can also cause failure to thrive.

F. Congenital Anomalies

Is there evidence of any congenital anomalies? Are there manifestations of a generic disorder or of Fetal Alcohol Syndrome?

G. Any Evidence of Abuse/Neglect

If the child is normal size for age, shows no evidence of dehydration or poor hygiene, and has no evidence of cutaneous or sexual injury, then this should be mentioned as an essential negative finding.

H. Evidence of Sexual Abuse

If there is no physical evidence of sexual abuse, then this should be recorded as an essential negative finding. If there is evidence of sexual abuse, this should be described under evidence of injury to the perineal region, rectum and genitalia.

I. Evidence of Bite Marks

If injuries suspicious of bite marks are present, a forensic odontologist or crime laboratory technician should be consulted prior to proceeding with the autopsy. Failure to observe this rule may cause irretrievable loss of evidence. The skin should not be washed prior to examination of the bite marks since this will prevent attempts at recovery of dried saliva for evaluation. Bite marks should not be excised since any attempt will produce tissue distortion.

IV. EVIDENCE OF EXTERNAL INJURY

Child abuse injuries may be numerous, of different ages, produced by a variety of blunt trauma and other forms of injuries and involve many parts of the body. As a result, describing child abuse injuries can be tedious and confusing to the reader of the protocol if the description is not given in some organized tabulated form. This can be done by separately describing external injuries and internal injuries, by breaking down the description of injuries into various anatomic regions of the body and by separately describing recent injuries, healing injuries and healed injuries.

A. Recent Injuries

These are often best described by anatomic region. The type of injury (contusion, abrasion or laceration) should be identified and dimensions given.

In suspected beating cases, lengthwise incisions through the skin and subcutaneous tissues of the involved anatomic regions should be made to determine the depth to which hemorrhage extends. This provides an indication of the severity of the blunt force used and may also reveal significant soft tissue injury not apparent from examination of the skin surface.

If the injury is patterned, a description of the pattern should supplement the photograph of the injury. Sections through representative lesions should be taken for microscopic examination.

B. Healing Injuries

These should be described in a manner similar to the description of the recent injuries. Sections of representative injuries should be taken for microscopic examination.

C. Healed Injuries

The pattern of scars is frequently characteristic of the type of implements used to produce the injuries. Scars should be recorded in a manner similar to description of other injuries.

V. EVIDENCE OF INTERNAL INJURY

These injuries are often best described by anatomic region. It is important to attempt to date the injuries both grossly and by microscopic examination. Where possible, internal injuries should be correlated with external injuries.

VI. EVIDENCE OF SKELETAL INJURY

This description should be based on X-ray examination and direct examination. Again, it is important to attempt to determine the age of the various lesions.

VII. EVIDENCE OF RESUSCITATION

Evidence of resuscitation must be described. Direct injection of epinephrine into the heart may produce pericardial hemorrhage. Lesions such as rib fractures, intra-abdominal hemorrhage, liver lacerations and other internal injuries should be presumed as not due to resuscitation unless proved otherwise. Even vigorous resuscitation in a young child will rarely, if ever, produce these injuries.

VIII. EVIDENCE OF THERAPY

Prolonged hospitalization may obscure evidence of injury, and even brief hospitalization and therapy may alter the appearance of injuries. All findings related to therapy should be described.

IX. INTERNAL EXAMINATION: GENERAL

This examination should mention positive and negative findings regarding the neck, organs of the chest and organs of the abdomen in regard to antecedent disease or abnormality.

X. SYSTEMS REVIEW

Each organ system should be described separately as with a usual medical autopsy. Special procedures include dissection of the posterior neck region in suspected shaken baby autopsies. It may also be necessary to remove the eyes to examine for evidence of retinal hemorrhage.

XI. MICROSCOPIC EXAMINATION

This should include section of representative injury sites as well as routine sections of internal organs. The injury process evolves much more rapidly in young children than in adults, and this must be considered when dating the age of injuries. The usual time required for resolution of an injury may be affected by the child's state of nutrition, intercurrent infection and coma.

XII. SPECIAL STUDIES

A. Post Mortem Chemistry

Vitreous humor should be saved for appropriate electrolyte and chemistry studies. Serum and cerebral spinal fluid (CSF) should also be saved, as necessary.

B. Toxicology

Samples of blood, bile, urine and gastric contents should be saved for toxicologic analysis. Where unusual drugs or poisons are suspected, other tissues should be saved as appropriate.

C. Microbiology

Where appropriate, specimens of blood, lung, brain or other tissues should be taken for culture.

D. Neuropathology

The brain should be fixed in formalin and dissected after fixation in cases where head injury is apparent or suspected.

E. Other Studies

Other types of studies should be considered as appropriate.

XIII. PATHOLOGIC DIAGNOSIS

The pathologic diagnoses should be listed in a clear and concise manner.

XIV. COMMENT OR OPINION

A brief comment or opinion based on correlation of history, investigative reports, autopsy findings and laboratory studies should indicate the cause of death and the manner of death. Frequently, the final opinion in the case must be deferred until consultation with other involved agencies and a group discussion of the facts in the case. If a decision cannot be reached regarding the cause and/or manner of death, then the death certificate will indicate these to be undetermined. This represents the opinion of the medical examiner/coroner based on all of the information available to him or her.

XV. RADIOGRAPHIC VIEWS FOR SUSPECTED CHILD ABUSE DURING POSTMORTEM EXAMINATIONS

A. Anterior/posterior and lateral skull.

B. Anterior/posterior torso, to include chest, abdomen and pelvis, with penetration adequate to visualize the posterior ribs.

1. For these anatomical areas, a single film is used. Usually a single 14 x 17 accommodates these areas. Occasionally, multiple films may be needed.
2. Decubitus views of the chest may be helpful when there is the possibility of pneumothorax.
3. The decubitus view and/or crosstable view of the chest are additional views useful for diagnosing pneumomediastinum and pneumothorax.
4. In cases of possible perforated viscus, free air in the abdominal cavity can be detected with a ten-minute abdominal film in the upright position or left lateral abdominal decubitus film.

C. Anterior/posterior of the Upper and Lower Extremities

Arms and forearms should be done individually. Because of postmortem flexion contractures, views of the hands and feet are not routinely done.

D. Extremity Joints

Right and left shoulder, elbow, wrist, hip, knees and ankle. Individual anterior/posterior views of these joints with centering over each joint.

E. Lateral View of the Entire Spine

Individual views of the cervical, thoracic and lumbar spine are best for detail. Multiple exposures on a single 14 x 17 film can be done. A cone down view of the cervical spine may be necessary.

F. Other Studies

Sometimes fractures, especially rib fractures, cannot be identified on preautopsy films. Injuries discovered during autopsy are subsequently radiographed. Sometimes it is best to remove the skeletal part for radiographic examination.

***Case Management and Model Approaches
to Inter-Agency Collaboration***

*Improved
decision-making
by better use of
information*

CPI Case Night Rules 1

May 25 - South Lake Hospital

- Fractured nose
- Two black eyes
- Fractured wrist
- Retinal bleeding

ER Doctor Diagnosis CPS Investigator Eval:
• Consistent with fall • Low Risk
 from a bike

CPI Case Night Rules 2

*CPS Investigator to Judge at
Kayla's May 26, 1998 Hearing*

"This supposedly
happened when she fell
from a bicycle while
wearing a helmet...the
story is consistent with
the injuries"

CPI Case Night Rules 3

*Prosecutor to Judge at Kayla's
May 26, 1998 Hearing*

"Kayla's injuries don't meet
the standards for Protective
Custody...this is a case
where you (Judge) should
tear up the petition"

CP-Cases Mgmt Rules-4

***June 23 - Exam
by Bridges Pediatrician***

- Scratches and bruises to back,
chest, abdomen and trunk
- Black eye and mark on her temple
- Wrists had been tied while "spanked"
with a 2 x 4 paddle

CP-Cases Mgmt Rules-5

***June 23 - Exam by Bridges Pediatrician
(continued)***

Father tells pediatrician three different stories

- Tells doctor he sometimes paddles
her and is "hot-headed"
- Tells doctor he "loses control of his
emotions and was abused as a child"

Doctor's Diagnosis

- Child is in imminent danger living with Dad
- Calls DCF but no one calls back

CP-Cases Mgmt Rules-6

June 24	DCF visits Kayla and report injuries are unsubstantiated
June 25	Boy's Ranch officials ask prosecutor to review case to determine if child should be taken into protective custody
June 26	Prosecutor declines to take action - No medical records obtained or reviewed
June 27	Division for Children & Families closes case

CF Case Mgmt-Rule-7

Lake County Grand Jury

"The grand jury applauds the vigilance and perseverance of the Minneola Elementary School, especially in light of the inexplicable lack of vigilance and perseverance of the Department of Children & Families"

CF Case Mgmt-Rule-8

Lake County Grand Jury

"The only heroes in this case are the two teachers and two counselors who made several dozen calls to Children & Family Services to try and save this little girl"

CF Case Mgmt-Rule-8

"I was told the girl had fallen from her bike and had two black eyes." "If I had known one-tenth of what I know today I would not have sent her home!"

--Circuit Judge Jerry Lockett
December 1, 1998

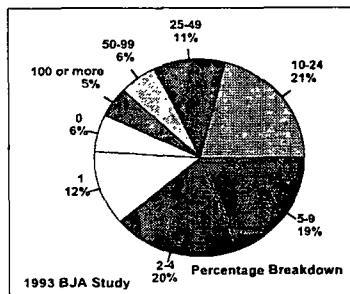
CFI Case Mgmt Rules 10

Florida Department of Children & Families

- 880 investigator positions authorized
- 25% turnover rate
- 40% of the positions are unfilled
- In 1997 500 investigators responded to 122,000 complaints with nearly 200,000 children
- New investigators get 3 months classroom with no field experience

CFI Case Mgmt Rules 11

Law Enforcement Agency Size

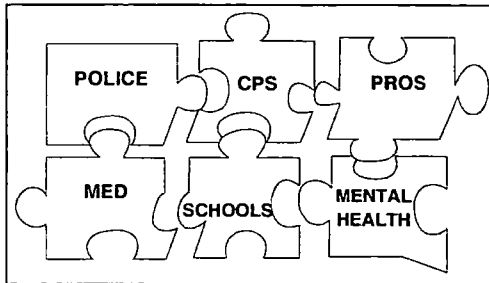


CFI Case Mgmt Rules 12

*Child Death Review
February 10, 1999*

"Officials missed signals
in Kayla's case because
they only saw a piece of
the puzzle"

CD Case Mgmt-Ann-13



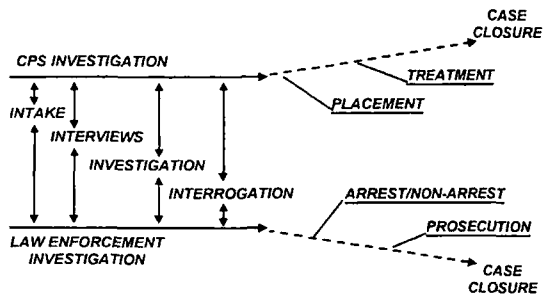
CD Case Mgmt-Ann-14

Benefits of Joint Investigations

- Improved protection and services to children
- Better understanding of roles and responsibilities
- Enhanced information sharing
- More effective use of limited resources
- Enhanced training
- Reduced burnout

CD Case Mgmt-Ann-15

Joint Investigations Fragmented



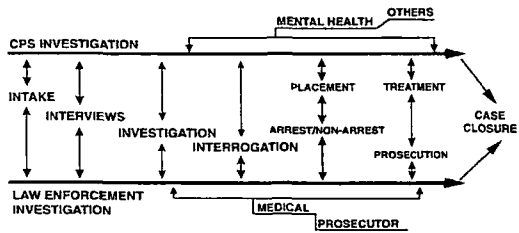
CFI Case Mgmt. Plan-16

Joint Investigation

An investigation that includes cooperative and collaborative activities from the time of the initial report to case closure by any and all agencies involved in the investigation, information sharing and decision-making

CFI Case Mgmt. Plan-17

Joint Investigations Coordinated



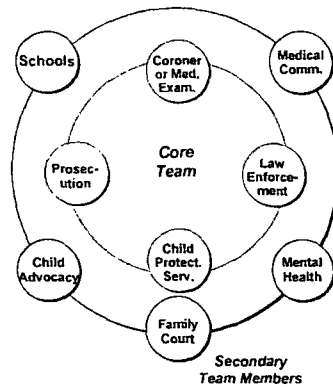
CFI Case Mgmt. Plan-18

*Internal Review by Florida Department
of Children & Families of Kayla's Case*

"The handling of this case
was so disorganized
that nobody had a
complete picture of this
girl's torment"

CFR Case Mgmt Rules 19

**Child
Fatality
Team**



CFR Case Mgmt Rules 20

Child Death Case Review

Information documented through the case
review process should include:

- Dates & times of prior reports/referrals
- Action taken and disposition
- Treatment & services provided
- Court orders - suspect/family/victim
- System failures & recommendations

CFR Case Mgmt Rules 21

What we learn for the Review Process

- ▶ Preventable deaths
- ▶ Enhanced investigations
 - SIDS v. Homicide
- ▶ System breakdowns
- ▶ Provide better services/intervention

CFR-Cases-Input-Form-22

Case Management Central Database

Minimum database requirements:

- ▶ Age of victim
- ▶ Sex
- ▶ Race
- ▶ Cause & manner of death
- ▶ Relationship to suspect

CFR-Cases-Input-Form-23

U.S. Advisory Board on CA & N

Recommendations included:

- ▶ Universal home visits for high risk kids
- ▶ Medical outreach to parents and children
- ▶ Community-based programs for specific high risk neighborhoods
- ▶ Effective public education programs

CFR-Cases-Input-Form-24

What We Can Do

- ▶ Increase training incl. cross-discipline
- ▶ Devote add'l resources across disciplines
 - personnel & equipment
 - time & information
- ▶ Formalize the process
 - inter-agency agreements
 - investigative protocols

CP-Case Mgmt-Rule-25

Informal Working Agreements

- ▶ Roles and responsibilities not clearly defined or understood
- ▶ Fosters suspicion and distrust
- ▶ Increases frustration for workers, victims and families
- ▶ Does not provide for accountability
- ▶ Promotes fragmentation and duplication of services

CP-Case Mgmt-Rule-26

Formal/Written Agreements Benefits

- ▶ Provides clearly defined roles and responsibilities
- ▶ Increases mutual understanding of duties
- ▶ Improves coordination
- ▶ Minimizes conflicts
- ▶ Increases accountability
- ▶ The process builds relationships
- ▶ Assures institutional memory

CP-Case Mgmt-Rule-27

Formal Agreement Types

- ▶ Inter-agency agreement
- ▶ Plan of cooperation
- ▶ Investigative protocols

CP-Case Mgmt-Rule-28

Inter-Agency Agreements Contain:

- ▶ Purpose and goals
- ▶ Roles and responsibilities
- ▶ Joint investigative procedures
- ▶ Case coordination and review
- ▶ Case disposition

CP-Case Mgmt-Rule-29

Formal Agreements/ Protocols

- ▶ Needs assessment
- ▶ Participating agencies
- ▶ Requires input at all levels

CP-Case Mgmt-Rule-30

What We Can Do (con't)

- Create & deliver educational programs
 - Child abuse
 - Domestic violence
 - Home safety
 - School Resource Officers
 - Parent Teacher Organizations
 - Community Resource Officers
 - Public Service Announcements

CFI Case Mgmt Rules-31

Education Target Population

Place special emphasis upon:

- Young adults in late teens & early 20's
- Parents living @ or below poverty level
- Parents who did not finish high school
- Parents reporting they are freq. depressed
- Parents who can't cope with stress
- Parents who report experiencing violence

CFI Case Mgmt Rules-32

What We Can Do (con't)

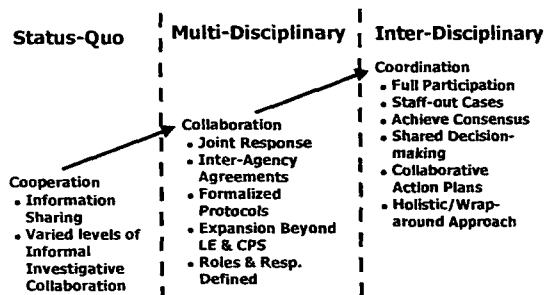
- Work Together
 - Community-based Collaboration
 - Child Advocacy Centers
 - Child Protection Initiatives
 - Inter-Disciplinary Teams
 - Case Staffing & Problem Solving

CFI Case Mgmt Rules-33

Seacoast CAC & the Community Campus

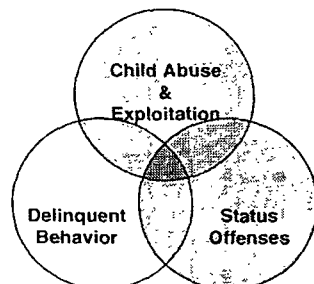
CPA Case Mgmt Rules 34

Child Protection Teams Phases of Development

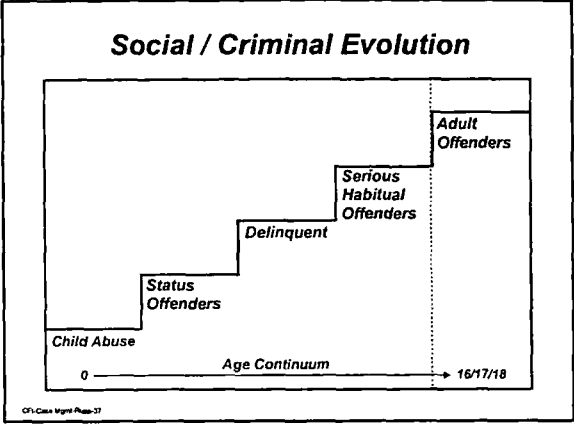


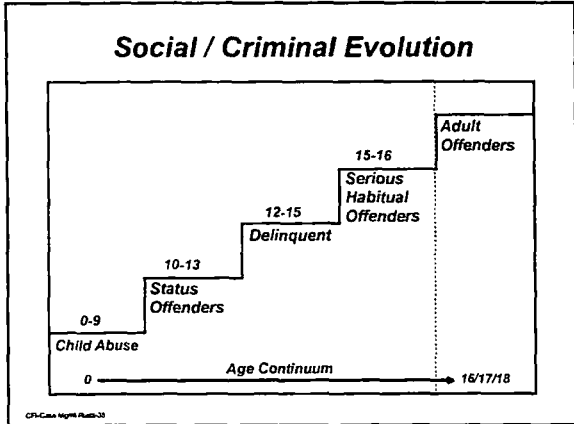
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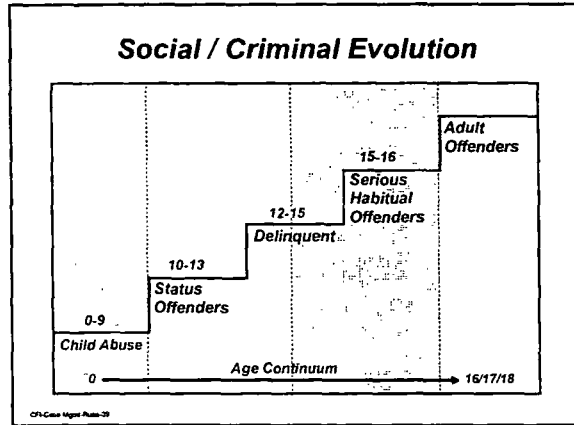
Relationship of Child Protection Issues

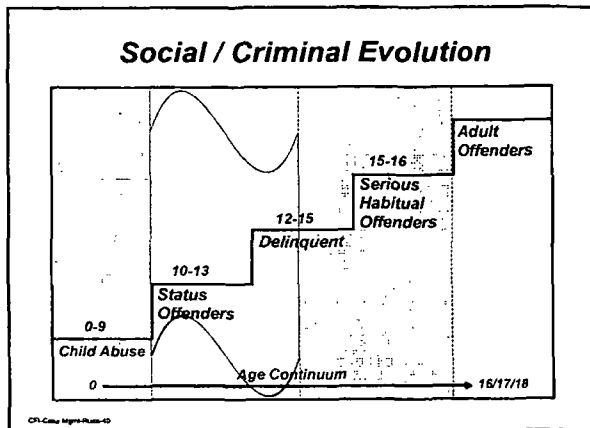


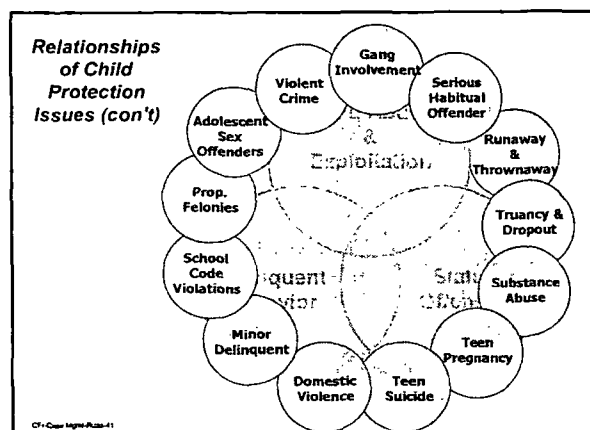
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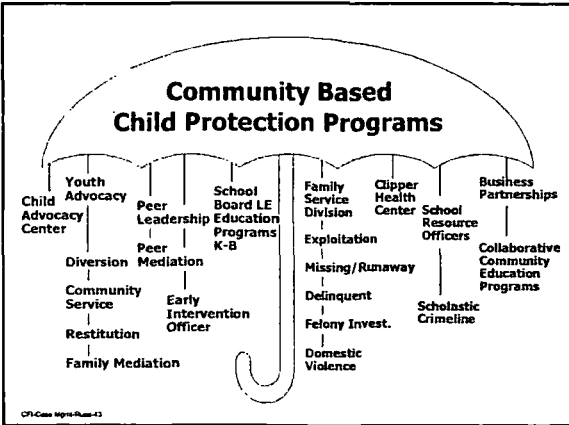


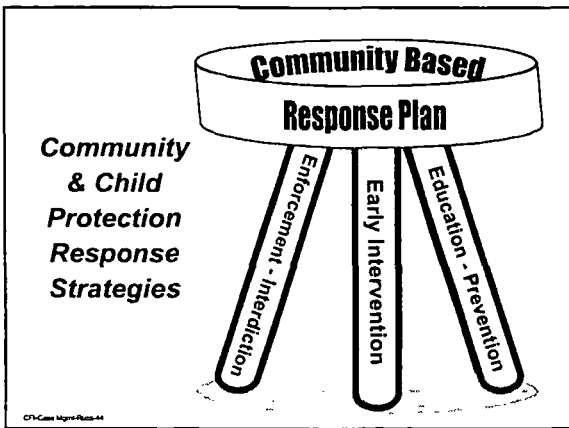


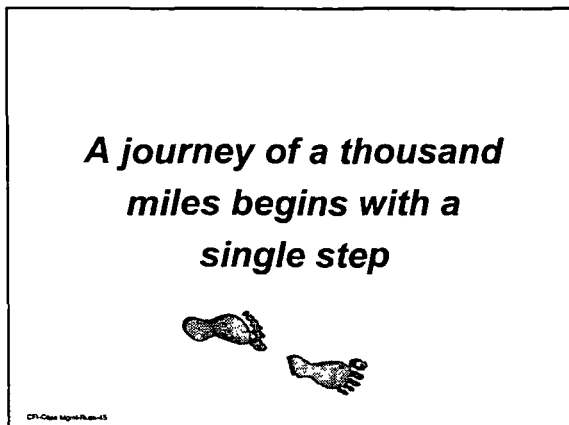
Seacoast Assessment Team Mission Statement

The mission of the Seacoast Assessment Team is to strengthen and protect children, families and the community through an inter-disciplinary team approach which emphasizes early intervention, coordinated investigations and collaborative action plans.

CPI-Cases: Mgmt-Rules-42







Kristie W/F 4'7"/ 70lbs DOB 1/5/90

AGENCY	DATE	COMPLAINT	DISPOSITION
POL	09/11/93	Child Welfare Check	No call back info / Unfounded
POL	02/20/94	Domestic Violence	Boyfriend removed
POL	12/25/94	Domestic Violence	Child taken by Grandmother / Mom PC'd
POL	11/29/95	Child Neglect	Child unsupervised outside / Mom sleeping
POL	05/17/97	Domestic Violence	Boyfriend arrested
POL	11/01/97	Sexual Abuse Investigation	Offender arrested and bailed
POL	11/10/97	Homicide Investigation	Offender arrested / Mother charged for FTP

CFI-Case Mgmt-Russ-46

Kristie W/F 4'7"/ 70lbs DOB 1/5/90

AGENCY	DATE	COMPLAINT	DISPOSITION
CPS	06/09/93	Child Neglect	Unsubstantiated
POL	09/11/93	Child Welfare Check	No call back info / Unfounded
POL	02/20/94	Domestic Violence	Boyfriend removed
CPS	07/04/94	Child Neglect	Child left w/10 yr. old/ CR
POL	12/25/94	Domestic Violence	Child taken by Grandmother / Mom PC'd
CPS	08/17/95	Physical Abuse Referral	Minor injury / Parental Counseling
POL	11/29/95	Child Neglect	Child unsupervised outside / Mom sleeping
CPS	02/06/96	Sexual Abuse Referral	Child denies abuse / Med. Neglect / Unsub.
POL	05/17/97	Domestic Violence	Boyfriend arrested
CPS	08/12/97	Child Neglect	Child taken to PC for 1 night / Mom ref. to MH
CPS	09/15/97	Inappropriate Discipline	Reported to MH counselor
CPS	10/18/97	Mental Health Appointments	Mother counseled re: poss. sanctions
POL	11/01/97	Sexual Abuse Investigation	Offender arrested and bailed
CPS	11/01/97	Sexual Abuse Investigation	Out of home perp. No further involvement
POL	11/10/97	Homicide Investigation	Offender arrested / Mother charged for FTP
CPS	11/10/97	Child Death Investigation	Out of home perp. / Police matter / Case closed

CFI-Case Mgmt-Russ-47

Kristie W/F 4'7" / 70lbs DOB 1/5/90

AGENCY	DATE	COMPLAINT	DISPOSITION
MED	03/16/92	Broken Arm	Reported fall from playground / T&R
CPS	06/09/93	Child Neglect	Unsubstantiated
POL	09/11/93	Child Welfare Check	No call back info / Unfounded
MED	11/15/93	Wet Burn to Feet	Mother counseled about bathtub & hot water
POL	02/20/94	Domestic Violence	Boyfriend removed
CPS	07/04/94	Child Neglect	Child left w/10 yr. old/ CR
POL	12/25/94	Domestic Violence	Child taken by Grandmother / Mom PC'd
CPS	08/17/95	Physical Abuse Referral	Minor injury / Parental Counseling
POL	11/29/95	Child Neglect	Child unsupervised outside / Mom sleeping
CPS	02/06/96	Sexual Abuse Referral	Child denies abuse / Med. Neglect / Unsub.
MED	02/06/96	Sexual Abuse Referral	Negative cultures / Results inconclusive
POL	05/17/97	Domestic Violence	Boyfriend arrested
CPS	08/12/97	Child Neglect	Child taken to PC for 1 night / Mom ref. to MH
CPS	09/15/97	Inappropriate Discipline	Reported to MH counselor
CPS	10/18/97	Mental Health Appointments	Mother counseled re: poss. sanctions
POL	11/01/97	Sexual Abuse Investigation	Offender arrested and bailed
CPS	11/01/97	Sexual Abuse Investigation	Out of home perp. No further involvement
MED	11/10/97	Amb. Transport for Phy. Abuse	Abdominal Injury / Child dies
POL	11/10/97	Homicide Investigation	Offender arrested / Mother charged for FTP
CPS	11/10/97	Child Death Investigation	Out of home perp. / Police matter / Case closed

CFI-Case Mgmt-Russ-48

Kristie W/F 4'7" / 70lbs DOB 1/5/90

AGENCY	DATE	COMPLAINT	DISPOSITION
MED	03/16/92	Broken Arm	Reported fall from playground / T&R
CPS	06/09/93	Child Neglect	Unsubstantiated
POL	09/11/93	Child Welfare Check	No call back info / Unfounded
MED	11/15/93	Wet Burn to Feet	Mother counseled about bathtub & hot water
POL	02/20/94	Domestic Violence	Boyfriend removed
CPS	07/04/94	Child Neglect	Child left w/10 yr. old/ CR
POL	12/25/94	Domestic Violence	Child taken by Grandmother / Mom PC'd
CPS	08/17/95	Physical Abuse Referral	Minor injury / Parental Counseling
POL	11/29/95	Child Neglect	Child unsupervised outside / Mom sleeping
SCH	02/06/96	Poss. Sexual Abuse	CPS notified / no info. provided re: outcome
CPS	02/06/96	Sexual Abuse Referral	Child denies abuse / Med. Neglect / Unsub.
MED	02/06/96	Sexual Abuse Referral	Negative cultures / Results inconclusive
POL	05/17/97	Domestic Violence	Boyfriend arrested
CPS	08/12/97	Child Neglect	Child taken to PC for 1 night / Mom ref. to MH
SCH	09/15/97	School Report Poss. Phy. Abuse	Referred to CPS / on-going invest.
CPS	09/15/97	Inappropriate Discipline	Reported to MH counselor
CPS	10/18/97	Mental Health Appointments	Mother counseled re: poss. sanctions
SCH	11/01/97	Poss. Sexual Abuse	Police & CPS notified
POL	11/01/97	Sexual Abuse Investigation	Offender arrested and bailed
CPS	11/01/97	Sexual Abuse Investigation	Out of home perp. No further involvement
MED	11/10/97	Amb. Transport for Phy. Abuse	Abdominal Injury / Child dies
POL	11/10/97	Homicide Investigation	Offender arrested / Mother charged for FTP
CPS	11/10/97	Child Death Investigation	Out of home perp. / Police matter / Case closed

CFI-Case Mgmt-Russ-49

Kristie W/F 4'7" / 70lbs DOB 1/5/90

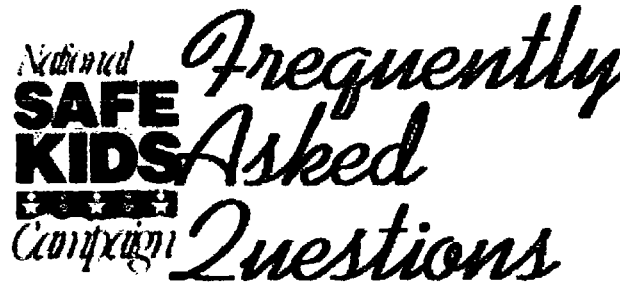
AGENCY	DATE	COMPLAINT	DISPOSITION
MED	03/16/92	Broken Arm	Reported fall from playground / T&R
CPS	06/09/93	Child Neglect	Unsubstantiated
POL	09/11/93	Child Welfare Check	No call back info / Unfounded
MED	11/15/93	Wet Burn to Feet	Mother counseled about bathtub & hot water
POL	02/20/94	Domestic Violence	Boyfriend removed
CPS	07/04/94	Child Neglect	Child left w/10 yr. old/ CR
POL	12/25/94	Domestic Violence	Child taken by Grandmother / Mom PC'd
CPS	08/17/95	Physical Abuse Referral	Minor Injury / Parental Counseling
POL	11/29/95	Child Neglect	Child unsupervised outside / Mom sleeping
SCH	02/06/96	Poss. Sexual Abuse	CPS notified / no info. provided re: outcome
CPS	02/06/96	Sexual Abuse Referral	Child denies abuse / Med. Neglect / Unsub.
MED	02/06/96	Sexual Abuse Referral	Negative cultures / Results inconclusive
POL	05/17/97	Domestic Violence	Boyfriend arrested
CPS	08/12/97	Child Neglect	Child taken to PC for 1 night / Mom ref. to MH
MH	09/10/97	Parental Counseling	Missed appointment
SCH	09/15/97	School Report Poss. Phy. Abuse	Referred to CPS / on-going invest.
CPS	09/15/97	Inappropriate Discipline	Reported to MH counselor
MH	10/10/97	Parental Counseling	Missed appointment
MH	10/17/97	Parental Counseling	Missed appointment / Call to CPS
CPS	10/18/97	Mental Health Appointments	Mother counseled re: poss. sanctions
SCH	11/01/97	Poss. Sexual Abuse	Police & CPS notified
POL	11/01/97	Sexual Abuse Investigation	Offender arrested and bailed
CPS	11/01/97	Sexual Abuse Investigation	Out of home perp. No further involvement
MED	11/10/97	Amb. Transport for Phy. Abuse	Abdominal Injury / Child dies
POL	11/10/97	Homicide Investigation	Offender arrested / Mother charged for FTP
CPS	11/10/97	Child Death Investigation	Out of home perp. / Police matter / Case closed

CFI-Case Mgmt-Russ-50

Kristie W/F 4'7" / 70lbs DOB 1/5/90

AGENCY	DATE	COMPLAINT	DISPOSITION
MED	03/16/92	Broken Arm	Reported fall from playground / T&R
CPS	06/09/93	Child Neglect	Unsubstantiated
POL	09/11/93	Child Welfare Check	No call back info / Unfounded
MED	11/15/93	Wet Burn to Feet	Mother counseled about bathtub & hot water
POL	02/20/94	Domestic Violence	Boyfriend removed
CPS	07/04/94	Child Neglect	Child left w/10 yr. old/ CR
CCC	10/12/94	Suspicious Injury	Poss. Accidental / Unfounded
POL	12/25/94	Domestic Violence	Child taken by Grandmother / Mom PC'd
CCC	04/11/95	Child Neglect	Mother failed to p/u child / parent meeting
CCC	08/17/95	Suspicious Injury	CPS notified / no info. provided re: outcome
CPS	08/17/95	Physical Abuse Referral	Minor Injury / Parental Counseling
POL	11/29/95	Child Neglect	Child unsupervised outside / Mom sleeping
SCH	02/06/96	Poss. Sexual Abuse	CPS notified / no info. provided re: outcome
CPS	02/06/96	Sexual Abuse Referral	Child denies abuse / Med. Neglect / Unsub.
MED	02/06/96	Sexual Abuse Referral	Negative cultures / Results inconclusive
POL	05/17/97	Domestic Violence	Boyfriend arrested
CPS	08/12/97	Child Neglect	Child taken to PC for 1 night / Mom ref. to MH
MH	09/10/97	Parental Counseling	Missed appointment
SCH	09/15/97	School Report Poss. Phy. Abuse	Referred to CPS / on-going invest.
CPS	09/15/97	Inappropriate Discipline	Reported to MH counselor
MH	10/10/97	Parental Counseling	Missed appointment
MH	10/17/97	Parental Counseling	Missed appointment / Call to CPS
CPS	10/18/97	Mental Health Appointments	Mother counseled re: poss. sanctions
SCH	11/01/97	Poss. Sexual Abuse	Police & CPS notified
POL	11/01/97	Sexual Abuse Investigation	Offender arrested and bailed
CPS	11/01/97	Sexual Abuse Investigation	Out of home perp. No further involvement
MED	11/10/97	Amb. Transport for Phy. Abuse	Abdominal Injury / Child dies
POL	11/10/97	Homicide Investigation	Offender arrested / Mother charged for FTP
CPS	11/10/97	Child Death Investigation	Out of home perp. / Police matter / Case closed

CFI-Case Mgmt-Russ-51



1. What is the best car seat for my child?
2. At what age should I turn my infant's car seat around to face forward?
3. What about air bags and kids?
4. What are some things I should look for in a bike helmet?
5. We want to build a pool in our yard. How can we make sure it's safe?
6. What makes some playgrounds safer than others?
7. How can I keep my child safe from lead poisoning?
8. I own a gun and have children in my home. What safety precautions should I take?
9. At what age can my child cross the street alone?
10. What should I look for when buying a crib?
11. Are baby walkers really dangerous?
12. What temperature should I set my hot water heater at to protect my child from scalding?
13. Where in my home should I put the smoke alarm?
14. How often should I replace my smoke alarm?
15. Where should I put a carbon monoxide (CO) detector in my home and what do I do if it goes off?
16. What is a small parts tester and where can I buy one?
17. Where can I get childproofing devices?
18. Who do I contact if I have safety concerns about a consumer product?
19. What should I have in my first aid kit?
20. What household plants are poisonous?

1. What is the best car seat for my child?

The best car seat is one that meets your child's age and size requirements and is compatible with your car. Children are safer in the back seat of the vehicle. Generally, the middle seating position is the safest place in the car, but ONLY IF the child's car seat and the vehicle seat are compatible and you can get a tight fit.

To find out which seat is best for your child's age and size, visit our [Child Car Seat Locator](#).

Due to the countless variations of car seats, vehicle seats and safety belt systems, the most important thing you can do to make sure your child's car seat is installed properly is to thoroughly read BOTH your car seat manufacturer's instructions and your vehicle owner's manual.

Once you've done that, if you are still unable to secure the seat properly, attend a Car Seat Check Up event (*remember: the Car Seat Check Up event list at this web site is updated weekly, so keep*

checking for an event near you).

For more information about purchasing a car seat, recalled car seats and for a list of certified child passenger safety technicians, and frequently asked questions, visit the National Highway Traffic Safety Administration's web site at www.nhtsa.dot.gov.

2. At what age should I turn my infant's car seat around to face forward?

An infant should stay rear-facing until at least 1 year and at least 20 pounds to reduce the risk of cervical spine injury in the event of a crash. Many infant-only seats and convertible seats are tested up to 20 or 22 pounds rear-facing, which is a problem when an infant reaches 20-22 pounds before his/her first birthday. Fortunately, there are seats for weights higher than 22 pounds in the rear-facing position.

The Safeline Corporation Sit and Stroll (1-800-829-1625) goes up to 25 pounds rear facing. The Evenflo Horizon, Secure Choice and Medallion (1-800-837-9201) all go up to 30 pounds rear facing, as do the Century Smart-Move and Bravo (1-888-5-CAR SEAT). The Britax Roundabout (1-888-4Britax) goes up to 30 pounds rear facing. The Cosco Touriva and Alpha-Omega (1-800-544-1108) go to 35 pounds rear facing.

Important: Check labels for these seats to confirm the weight limits! Read both the car seat instructions and the vehicle owner's manual for correct use and installation of your car seat.

3. What about air bags and kids?

Air bags have been designed to help protect adults in a front-end collision, but not children. So it is very important that all children ages 12 and under be properly restrained in the back seat. NEVER put a rear-facing infant in the front passenger seat of a vehicle with an active passenger-side air bag. If it is absolutely necessary for a child to ride in the front seat of a car with a passenger-side air bag:

- Never put an infant (less than 1 year old) in the front seat of a vehicle with an active passenger-side air bag,
- Secure the child in a restraint system that is correct for the size of the child — a front-facing car seat, a booster seat, or a lap/shoulder belt,
- Move the front seat as far back away from the dashboard as possible, and
- Never allow a child to lean forward toward the dashboard.

If you have more car seat questions, visit SafetyBeltSafe U.S.A. at www.carseat.org

4. What are some things I should look for in a bike helmet?

Make sure the bike helmet meets safety standards. Look for an ASTM, Snell or ANSI sticker or the new federal standard certification sticker inside the helmet and on the box. The bike helmet should sit squarely on your child's head, cover his forehead and not rock side to side or forward to back. Bring

your child to the store to try on helmets before you purchase one. Make sure the helmet fits snugly and comfortably when the helmet straps are buckled.

5. We want to build a pool in our yard. How can we make sure it's safe?

The pool should be surrounded by four-sided isolation fencing, at least five feet high, equipped with self-closing and self-latching gates. Adults should be on hand at all times to supervise and should know CPR. Keep rescue equipment, a telephone and emergency number poolside.

It's also important to remember that pool covers are not designed to prevent children from drowning, so watch children carefully even around a pool that's covered. Keep water from collecting on the pool cover surface. Most importantly, NEVER leave a child unsupervised in or around a swimming pool, even for a second.

6. What makes some playgrounds safer than others?

The safest playgrounds are those that are well maintained (no broken, protruding or loose parts) and have ample soft surfacing. Recommended surface materials include hardwood fiber, mulch chips, pea gravel, fine sand and shredded rubber. Surfacing should be kept at least 12 inches deep and should extend a minimum of 6 feet in all directions around stationary equipment. Avoid playgrounds with asphalt, concrete, grass and soil surfaces under the equipment. Make sure that children are supervised at all times and that they play on age-appropriate equipment.

7. How can I keep my child safe from lead poisoning?

Protect your children from lead poisoning by encouraging them to wash their hands frequently. Contact the U.S. Consumer Product Safety Commission with concerns about any consumer product that may contain lead. If your home was built prior to 1979, you may want to have the paint tested by lead-abatement professionals. If you believe your child may have been exposed to lead, ask your pediatrician to test his or her blood lead levels.

8. I own a gun and have children in my home. What safety precautions should I take?

You should always store firearms unloaded and locked up, with ammunition locked in a separate location that is up and out of reach of children. Use gun locks, load indicators and other safety devices on all firearms. You should also teach your children never to touch a gun and to tell an adult immediately if they ever find a gun.

9. At what age can my child cross the street alone?

In general, children 10 and over are able to cross the street safely by themselves. Children under the age of 10 should only cross the street under the supervision of an adult. Children ages 5 to 9 are at greatest risk for pedestrian death and injury. These children tend to think they are more independent than they are. Developmentally, they do not have the skills to make decisions about traffic patterns and do not clearly perceive danger.

10. What should I look for when buying a crib?

A safe crib will be certified to meet national safety standards and will have no more than 2 3/8 inches of space between slats or spindles and a mattress that fits snugly. The drop-side latches must work properly and be safe from unintentional release or release by a baby inside the crib. Crib cornerpost extensions or protrusions should not exceed 1/16 inch, including decorative knobs. Always keep the side rail locked in its up position when the baby is in the crib. Never use a pillow in the crib and remove all crib toys when your child is asleep. Do not place cribs near radiators, heating vents, windows, venetian blind strings, drapery cords or other hanging strings.

11. Are baby walkers *really* dangerous?

Yes. Each year, more than 16,000 children are treated in hospital emergency rooms for baby walker-related injuries. **DO NOT USE BABY WALKERS WITH WHEELS.** There are several alternatives on the market that are stationary. Look for one that is on a stable, non-moveable base and place it away from stairs, hot appliances and window blind or drapery cords. Remember that children should never be left unattended — whether using a walker alternative or not.

12. What temperature should I set my hot water heater at to protect my child from scalding?

Hot water heaters should be set at 120 degrees Fahrenheit or below in order to avoid scald burns to children.

13. Where in my home should I put the smoke alarm?

Install smoke alarms in every sleeping area and on every level of your home. Central locations such as the living room, the top of the stairwell and outside bedroom doors are good places.

14. How often should I replace my smoke alarm?

Test smoke alarms once a month and replace batteries at least once a year. The alarm itself should be replaced every 10 years.

15. Where should I put a carbon monoxide (CO) detector in my home and what do I do if it goes off?

Carbon monoxide, or CO, is a poisonous gas that kills many people in the United States each year. In 1997, more than 3,000 children ages 5 and under were poisoned by CO. You can't hear, see, taste or smell the CO, but a CO detector can sense if it's in the air and alert you immediately.

Place CO detectors outside of sleeping areas and at least 15 feet away from fuel-burning appliances such as furnaces, wood stoves and fuel-burning kitchen stoves.

If your CO detector goes off, ventilate the home immediately by opening windows and outside doors. If anyone starts to experience flu-like symptoms, evacuate the house and call the fire department. After ventilating the home, you should turn off all fuel-burning appliances and call a qualified technician to inspect for sources of CO.

16. What is a small parts tester and where can I buy one?

Small Parts Testers, also known as "choke tubes," are designed for testing which objects are small enough to pose a choking hazard to kids age 3 and under. If the item fits in the tester, it is too small for children this age.

Many discount stores, toy stores, hardware stores and safety device catalogs offer Small Parts Testers, which cost around \$1.00- \$2.00.

17. Where can I get childproofing devices?

Childproofing devices, such as electric socket covers, safety gates and window guards, can be purchased at hardware stores, baby supply stores, some discount stores and through baby supply catalogs.

18. Who do I contact if I have safety concerns about a consumer product?

Report any product-related injury or safety concern about consumer products, including toys, to the U.S. Consumer Product Safety Commission. Call their hotline at (800) 638-CPSC or visit their web site at <http://www.cpsc.gov>. For questions about car seats, call the National Highway Traffic Safety Administration's auto safety hotline at (800) 424-9393.

19. What should I have in my first aid kit?

First aid kits can be purchased already assembled or you can make your own. Make sure the kit includes the following basic supplies:

- adhesive or gauze wrappings or pads
- bandages or surgical tape
- soap
- sterile gauze
- absorbent cotton
- adhesive tape
- tweezers
- sharp scissors
- cotton-tipped swabs
- tissues
- thermometer
- first aid manual
- aspirin and acetaminophen
- syrup of Ipecac and activated charcoal
- antiseptic solution (e.g., hydrogen peroxide)
- antiseptic cream (e.g., bacitracin)
- hydrocortisone cream (for bites and stings)
- anti-diarrhea medication
- elastic bandages
- Band-Aids
- dosage spoon for medications
- calamine lotion for skin irritations
- ice pack and heating pad/water bottle
- flashlight with working batteries
- pocket mask or face shield for CPR
- needle for splinter removal
- disposable rubber gloves
- petroleum jelly

20. What household plants are poisonous?

Contrary to popular belief, poinsettias are not poisonous plants (although they can cause some skin irritations). However, there are many plants to be concerned about. Poisonous plants include, but are not limited to:

- Angel's Trumpet (*Datura meteloides*)
- Jerusalem cherry (*Solanum pseudocapsicum*)
- Azalea (*Rhododendron*)
- Jimson Weed

HOME INJURY

Unintentional injury is the leading cause of death among children ages 14 and under. In 1997, more than 6,040 children died from unintentional injuries; more than 40 percent of these deaths occurred in and around the home. Home injury deaths are caused primarily by fire and burns, drowning, suffocation, choking, firearms, poisoning, and falls. Young children are at the greatest risk from unintentional injuries in the home because it is where they spend the majority of their time. As children grow older, they spend less time in the home and the incidence of home injury deaths diminishes. The percentage of non-fatal unintentional injuries that occur in the home also decreases with age.

DEATHS IN THE HOME

In 1998, approximately 1,900 children ages 14 and under died in the home from unintentional injuries. Nearly 70 percent of these deaths occurred among children ages 4 and under. Among the leading causes of death in the home are:

Fire and Burns

- In 1998, approximately 550 children ages 14 and under died from fires and burns in the home. Of these children, 55 percent were ages 4 and under.

Drowning

- In 1998, an estimated 440 children ages 14 and under drowned in or around the home. Of these children, 80 percent were ages 4 and under.

Suffocation

- In 1998, an estimated 370 children ages 14 and under suffocated in the home. Of these children, more than 80 percent were ages 4 and under.

Choking

- In 1998, more than 160 children ages 14 and under choked to death in the home. Of these children, three-quarters were ages 4 and under.

Unintentional Firearm Injury

- In 1998, an estimated 80 children ages 14 and under died from unintentional shootings in the home. Of these children, three-quarters were ages 5 to 14.

Poisoning

- In 1998, an estimated 80 children ages 14 and under died from poisonings in the home. Half of these deaths were due to solids and liquids such as medicines and cleaners; the remaining deaths were due to gases and vapors, principally carbon monoxide.

Falls

- In 1998, an estimated 60 children ages 14 and under died as the result of falls in the home. Half of these deaths were to children ages 4 and under.

INJURIES IN THE HOME

Each year, more than 4.5 million children ages 14 and under are treated in hospital emergency departments (EDs) for injuries incurred in the home. Nearly two-thirds of the injuries requiring ED visits among children under age 3 occur in the home. Conversely, one-third of the injuries requiring ED visits among children ages 12-14 occur in the home.

12/99 This information was compiled by the National SAFE KIDS Campaign.

BICYCLE INJURY

The bicycle injury death rate among children ages 14 and under declined 48 percent between 1987 and 1997. However, bicycles remain associated with more childhood injuries than any other consumer product except the automobile. More than 70 percent of children ages 5 to 14 (27.7 million) ride bicycles. This age group rides about 50 percent more than the average bicyclist and accounts for approximately 24 percent of all bicycle-related deaths and more than 50 percent of all bicycle-related injuries.

Head injury is the leading cause of death in bicycle crashes and is the most important determinant of bicycle-related death and permanent disability. Head injuries account for more than 60 percent of bicycle-related deaths, more than two-thirds of bicycle-related hospital admissions and about one-third of hospital emergency room visits for bicycling injuries. The single most effective safety device available to reduce head injury and death from bicycle crashes is a helmet. Helmet use reduces the risk of bicycle-related death and injury and the severity of head injury when a crash occurs. Unfortunately, national estimates report that bicycle helmet use among child bicyclists ranges from 15 to 25 percent. Helmet usage is lowest (for all ages) among children ages 11 to 14 (11 percent). Bicycle education programs and mandatory bicycle helmet legislation are effective at increasing helmet use and, therefore, reducing bicycle-related death and injury.

DEATHS AND INJURIES

- In 1997, 225 children ages 14 and under died in bicycle-related crashes. Motor vehicles were involved in more than 200 of these deaths.
- In 1998, nearly 362,000 children ages 14 and under were treated in hospital emergency rooms for bicycle-related injuries.
- In 1998, children ages 14 and under accounted for approximately 28 percent of bicyclists injured in motor vehicle crashes. It is estimated that collisions with motor vehicles account for nearly 90 percent of all bicycle-related deaths and 10 percent of all nonfatal bicycle-related injuries. Collision with a motor vehicle increases the risk of death, severity of injury, and the probability of sustaining a head injury.
- More than 40 percent of all head injury-related deaths and approximately three-fourths of head injuries occur among children ages 14 and under. Younger children suffer a higher proportion of head injuries than older children.

WHEN AND WHERE BICYCLE DEATHS AND INJURIES OCCUR

- Children are more likely to die from bicycle crashes at non-intersection locations (66 percent), during the months of May to August (55 percent), and between 3 p.m. and 6 p.m. (39 percent).
- Nearly 60 percent of all childhood bicycle-related deaths occur on minor roads. The typical bicycle/motor vehicle crash occurs within one mile of the bicyclist's home.
- Children ages 4 and under are more likely to be injured in non-street locations around the home (driveway, garage, yard) than are children ages 5 to 14.

- Children ages 14 and under are nearly four times more likely to be injured riding in non-daylight hours (e.g., at dawn, dusk or night) than during the daytime.
- Among children ages 14 and under, more than 80 percent of bicycle-related fatalities are associated with the bicyclist's behavior including, riding into a street without stopping; turning left or swerving into traffic that is coming from behind; running a stop sign; and riding against the flow of traffic.
- Injuries related to the use of bicycle-mounted child seats typically occur when the bicycle crashes or tips over and when the child falls out of the seat. Falls account for 80 percent of these injuries.

WHO IS AT RISK

- Riding without a bicycle helmet significantly increases the risk of sustaining a head injury in the event of a crash. Non-helmeted riders are 14 times more likely to be involved in a fatal crash than helmeted riders.
- Children under age 10 are at greater risk for serious injury and are more likely to suffer head injuries than older riders. Approximately half of all bicycle-related injuries among children under age 10 occur to the head/face, compared to one-fifth among older children.
- Bicyclists admitted to hospitals with head injuries are 20 times more likely to die than those without head injuries.
- Correct fit and proper positioning are essential to the effectiveness of bike helmets. One study found that children whose helmets fit poorly are at twice the risk of head injury in a crash compared to children whose helmet fit is excellent. In addition, children who wear their helmets tipped back on their head have a 52 percent greater risk of head injury than those who wear their helmets centered on their head.
- Children ages 14 and under are five times more likely to be injured in a bicycle-related crash than older riders.
- Males account for more than 80 percent of bicycle-related deaths and 75 percent of nonfatal injuries. Children ages 10 to 14, especially males, have the highest death rate from bicycle-related head injury of all ages.

BICYCLE HELMET EFFECTIVENESS

- Bicycle helmets have been shown to reduce the risk of head injury by as much as 85 percent and the risk of brain injury by as much as 88 percent. Bicycle helmets have also been shown to offer substantial protection to the forehead and mid face.
- It is estimated that 75 percent of bicycle-related fatalities among children could be prevented with a bicycle helmet.
- Universal use of bicycle helmets by children ages 4 to 15 could prevent between 135 and 155 deaths, between 39,000 and 45,000 head injuries, and between 18,000 and 55,000 scalp and face injuries

annually.

- Child helmet ownership and use increases with income and educational level, yet decreases with age. Children are more likely to wear a bicycle helmet if riding with others (peers or adults) who are also wearing one.

BICYCLE HELMET LAWS AND REGULATIONS

- Currently, 16 states and numerous localities have enacted some form of bicycle helmet legislation, most of which cover only young riders.
- Various studies have shown bicycle helmet legislation to be effective at increasing bicycle helmet use and reducing bicycle-related death and injury among children covered under the law. One example shows that five years following the passage of a state mandatory bicycle helmet law for children ages 13 and under, bicycle-related fatalities decreased by 60 percent.
- Helmet use among children is greater in those regions of the United States with the highest proportion of mandatory helmet laws. A recent study reported that the rate of bicycle helmet use by children ages 14 and under was 58 percent greater in a county with a fully comprehensive bike helmet law than in a similar county with a less comprehensive law.
- As of March 10, 1999, all new bicycle helmets manufactured must meet the new U.S. Consumer Product Safety Commission federal safety standard. Helmets meeting American National Standards Institute (ANSI), the Snell Memorial Foundation and/or the American Society for Testing and Materials (ASTM) standards are safe and may be available in stores until March 2002.

HEALTH CARE COSTS AND SAVINGS

- The total annual cost of traffic-related bicyclist death and injury among children ages 14 and under is more than \$3.4 billion.
- Every dollar spent on a bike helmet saves society \$30 in direct medical costs and other costs to society.
- If 85 percent of all child cyclists wore bicycle helmets in one year, the lifetime medical cost savings could total between \$109 million and \$142 million.
- A review of hospital discharge data in Washington state found that treatment for nonfatal bicycle injuries among children ages 14 and under costs more than \$113 million each year, an average of \$218,000 per child.

PREVENTION TIPS

- A bicycle helmet is a **necessity**, not an accessory. Always wear a bicycle helmet every time and everywhere you ride.
- Wear a bicycle helmet correctly. A bicycle helmet should fit comfortably and snugly, but not too tightly. It should sit on top of your head in a level position, and it should not rock forward and back

or from side to side. The helmet straps must always be buckled.

- Buy a bicycle helmet that meets or exceeds the safety standards developed by the U.S. Consumer Product Safety Commission federal safety standard or those developed by ANSI, Snell or ASTM.
- Learn the rules of the road and obey all traffic laws. Ride on the right side of the road, **with** traffic, not against; use appropriate hand signals; respect traffic signals; stop at all stop signs and stop lights; and stop and look left, right and left again before entering a street.
- Cycling should be restricted to sidewalks and paths until a child is age 10 and able to show how well he or she rides and observes the basic rules of the road. Parental and adult supervision is essential until the traffic skills and judgment thresholds are reached by each child.

12/99 This information was compiled by the National SAFE KIDS Campaign.

CHILDHOOD INJURY

The unintentional injury-related death rate among children ages 14 and under declined 33 percent from 1987 to 1997. However, unintentional injury remains the leading cause of death among children ages 14 and under in the United States. In 1997, more than 6,040 children ages 14 and under died from unintentional injuries. In addition, each year nearly 120,000 children are permanently disabled. One out of every four children, or more than 14 million children ages 14 and under, sustains injuries that are serious enough to require medical attention each year. These injuries have enormous financial, emotional and social effects on not only the child and the family, but the community and society as a whole.

In general, children are primarily at risk of unintentional injury-related death from: motor vehicle injuries which include children as occupants, pedestrians and bicyclists; drowning; fire and burns; suffocation; choking; unintentional firearm injuries; falls; and poisonings. Injury rates vary with a child's age, gender, race and socioeconomic status. Younger children, males, minorities and poor children suffer disproportionately. Additionally, the causes and consequences of injuries vary considerably by age and developmental level, reflecting differences in children's cognitive, perceptual and motor/language abilities as well as environment and exposure to hazards.

DEATHS

- In 1997, unintentional injuries resulted in the death of 736 children under age 1, 1,968 children ages 1 to 4, 1,514 children ages 5 to 9, and 1,824 children ages 10 to 14.
- Among children under age 1, suffocation is the leading cause of unintentional injury-related death, followed by motor vehicle occupant injury, choking, drowning and fire and burns.
- Among children ages 1 to 4, drowning is the leading cause of unintentional injury-related death, followed by motor vehicle occupant injury, fire and burns, pedestrian injury and airway obstruction injuries (choking and suffocation).
- Among children ages 5 to 9, motor vehicle occupant injury is the leading cause of unintentional injury-related death, followed by pedestrian injury, drowning, fire and burns and bicycle injury.
- Among children ages 10 to 14, motor vehicle occupant injury is the leading cause of unintentional injury-related death, followed by pedestrian injury, drowning, bicycle injury and fire and burns.

INJURIES

- Every day, more than 39,000 children are injured seriously enough to require medical treatment, totaling more than 14 million children each year.
- Each year, injuries to children ages 14 and under result in 213,000 hospitalizations, nearly 7,900,000 emergency room visits, and more than 11,000,000 visits to physicians' offices.
- Among children ages 14 and under, treatment for injury is the second leading cause of hospitalization and the leading cause of visits to hospital emergency departments.

WHEN AND WHERE DEATHS AND INJURIES OCCUR

- The majority of childhood injuries occur between May and August.
- The vast majority of unintentional injury-related deaths among children occur in the evening hours when children are most likely to be out of school and unsupervised.
- Among children ages 14 and under, it is estimated that 40 percent of deaths and 50 percent of nonfatal unintentional injuries occur in and around the home.

WHO IS AT RISK

- Unintentional injuries disproportionately affect poor children and result in more fatalities in these children than children with greater economic resources.
- Children ages 4 and under are at greater risk of unintentional injury-related death and disability. This age group accounts for 46 percent of all unintentional injury-related deaths among children ages 14 and under.
- Through virtually all ages, for all causes of injury, males are at greater risk of unintentional death and injury than females. This is primarily due to greater exposure to activities that result in injury and patterns of risk taking and rough play.
- Children living in rural areas are at greater risk from unintentional injury-related death than children living in urban areas. Injuries in rural settings occur in remote, sparsely populated areas that tend to lack organized systems of trauma care, resulting in prolonged response and transport times. A short supply of medical facilities, equipment and personnel to treat injuries in rural areas also contribute to this increased risk.
- Black, Hispanic and Native American children have disproportionate death and injury rates primarily due to higher levels of poverty and lower levels of education, employment and income.

HEALTH CARE COSTS AND SAVINGS

- Injury is the leading cause of medical spending for children ages 5 to 14.
- Among children ages 14 and under, falls account for the largest share of unintentional injury-related costs — nearly 21 percent — followed by motor vehicle occupant injuries, pedestrian injuries, drownings, poisonings and fire and burn injuries.
- The annual lifetime cost of unintentional injury among children ages 14 and under is nearly \$175 billion, which includes \$10.1 billion in direct medical costs, \$16.9 billion in future earnings and \$148 billion in quality of life.
- For every child injured, total costs are more than \$12,700, including \$650 in medical costs, more than \$1,000 in future earnings lost and nearly \$11,000 in quality of life.

- Every dollar spent on a child safety seat saves this country \$32 in direct medical costs and other costs to society.
- Every dollar spent on a bicycle helmet saves this country \$30 in direct medical costs and other costs to society.
- Every dollar spent on a smoke alarm saves this country \$21 in direct medical costs and other costs to society.
- Every dollar spent on poison control centers saves this country \$7 in medical costs.

PREVENTION EFFECTIVENESS

- It is estimated that as many as 90 percent of unintentional injuries can be prevented.
- A combination of education, environmental improvements, engineering modifications, enactment and enforcement of legislation and regulations, economic incentives, community empowerment and program evaluation are effective at reducing the incidence and severity of unintentional injury-related death and disability.

12/99 This information was compiled by the National SAFE KIDS Campaign.

UNINTENTIONAL FIREARM INJURY

The death rate from unintentional firearm injury among children ages 14 and under declined 49 percent from 1987 to 1997. However, unintentional shootings account for more than 20 percent of all firearm-related fatalities among children ages 14 and under, compared with 3 percent for the entire U.S. population. Americans possess nearly 200 million firearms, including 65 million handguns. An estimated 40 percent of all homes in the United States have some type of firearm, and one in four homes has a handgun. Gun owners keep firearms in the home for hunting and recreation (60 percent) or for protection and crime prevention

(40 percent). Guns in the home for protection are more likely to be handguns, found in a home with children, and stored loaded and unlocked.

Exposure to guns and access to a loaded firearm increase the risk of unintentional firearm-related death and injury to children. Unrealistic perceptions of children's capabilities and behavioral tendencies with regard to guns are common. These include misunderstanding a child's ability to gain access to and fire a gun, distinguish between real and toy guns, make good judgments about handling a gun, and consistently follow rules about gun safety. Promoting the safe storage of firearms in the home and reducing their availability and accessibility are important steps in preventing unintentional firearm-related death and injury among children.

DEATHS AND INJURIES

- In 1997, 142 children ages 14 and under died from unintentional firearm-related injuries. Children ages 10 to 14 accounted for more than 85 percent of these deaths.
- Each year, an estimated 1,500 children ages 14 and under are treated in hospital emergency rooms for unintentional firearm-related injuries. Approximately 38 percent of these injuries are severe enough to require hospitalization.
- The unintentional firearm injury death rate among children ages 14 and under in the United States is nine times higher than in 25 other industrialized countries combined.
- In 1998, nearly 10,700 children ages 14 and under were treated in hospital emergency rooms for non-powder gun-related injuries (e.g., BB guns, pellet guns).

WHEN AND WHERE FIREARM DEATHS AND INJURIES OCCUR

- Nearly all childhood unintentional shooting deaths occur in or around the home. Fifty percent occur in the home of the victim and nearly 40 percent occur in the home of a friend or relative.
- Firearm ownership in the home (especially a firearm kept loaded and unlocked) is associated with an increased risk of unintentional firearm fatalities among children. Owners of firearms in the home tend to be male, white, married, age 30 to 65, have higher incomes and educational levels, live in the South and the Midwest, in rural areas and have one to two children under the age of 18.
- Most childhood unintentional shooting deaths involve guns that have been kept loaded and accessible to children and occur when children play with loaded guns.

- One-third to one-half of all firearm owners keep firearms loaded and ready for use at least some of the time.
- In one recent study of parents of children ages 4 to 12, more than half of gun-owning parents reported storing a firearm loaded or unlocked in their home.
- An estimated 3.3 million children in the United States live in households with firearms that are always or sometimes kept loaded and unlocked.
- Unintentional shootings among children most often occur when children are unsupervised and out of school. These shootings tend to occur in the late afternoon, peaking between 4 p.m. and 5 p.m., during the weekend, and during the summer months (June to August) and the holiday season (November to December).
- More than 70 percent of unintentional firearm shootings involve handguns.
- Rural areas have higher rates of firearm ownership and unintentional firearm-related injuries than urban and suburban areas. Shootings in rural areas are more likely to occur outdoors and with a shotgun or rifle, as opposed to indoors and with a handgun, as in urban areas.

WHO IS AT RISK

- Male children are far more likely to be injured and die from unintentional firearm-related injuries than female children. Of those children ages 14 and under who are killed from unintentional shootings, more than 85 percent are male.
- Black children ages 14 and under have an unintentional shooting death rate that is more than twice that of white children.
- Children living in the South are three times more likely to die from unintentional firearm-related injuries than those living in the Northeast.
- Children living in rural areas have higher death rates from unintentional firearm-related injuries.
- Nearly two-thirds of parents with school-age children who keep a gun in the home believe that the firearm is safe from their children. However, one study found that when a gun was in the home, 75 to 80 percent of first and second graders knew where the gun was kept.
- Generally, before age 8, few children can reliably distinguish between real and toy guns or fully understand the consequences of their actions.
- Children as young as age 3 are strong enough to pull the trigger of many of the handguns available in the U.S.

FIREARM PREVENTION EFFECTIVENESS

- Two safety devices — gun locks and load indicators — could prevent more than 30 percent of all unintentional firearm deaths.
- Product design modifications can prevent unintentional firearm death and injury. Every unintentional shooting in which a child age 5 and under shot and killed himself or another could have been prevented by a safety device.

FIREARM LAWS AND REGULATIONS

- Firearms are not federally regulated consumer products. However, in October 1997, Massachusetts became the first state to issue consumer product safety regulations for guns by establishing safety standards for all handguns made or sold in the state. Most gun laws in the United States target gun users, as opposed to firearm manufacturers.
- Currently, 17 states have enacted Child Access Prevention (CAP) laws, which may hold adults criminally liable for failure to either store loaded firearms in a place inaccessible to children or use safety devices to lock guns.
- State safe storage laws intended to prevent child access to guns have reduced unintentional firearm-related deaths among children ages 14 and under an average of 23 percent.
- Four states – Connecticut, Massachusetts, California and New Jersey – and several local jurisdictions have passed laws or ordinances requiring the provision of a gun lock with the purchase of every handgun.
- A national gun policy survey found that 68 percent of Americans endorse government regulation of the safety design of guns and 88 percent support laws requiring all new handguns be childproofed.

HEALTH CARE COSTS AND SAVINGS

- The total annual cost of unintentional firearm-related death and injury among children ages 14 and under is more than \$3.7 billion. Children ages 5 to 14 account for more than \$3.5 billion, or nearly 95 percent, of these costs.
- Among children ages 14 and under, unintentional firearm-related injuries account for half of the total cost of all firearm injuries, which include homicide, suicide and unintentional firearm injuries.
- Hospital treatment for a firearm-related injury averages between \$7,000 and more than \$15,000 per case.

PREVENTION TIPS

- Children should not have access to firearms. A gun in the home is a danger to children. Parents should seriously weigh the risks of keeping a gun in the home.
- Gun owners should always store firearms unloaded and locked up, out of reach of children. Ammunition should be stored locked in a separate location, also out of reach of children.

- Safety devices such as gun locks, lock boxes or gun safes should be used for every gun kept in the home.
- Parents should talk to children about the dangers of guns, teach children to never touch or play with guns, and to tell an adult if they find a gun.
- Parents should check with neighbors, friends or relatives – or adults in any other homes where children may visit – to ensure they follow safe storage practices if firearms are in their homes.

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Home Injury

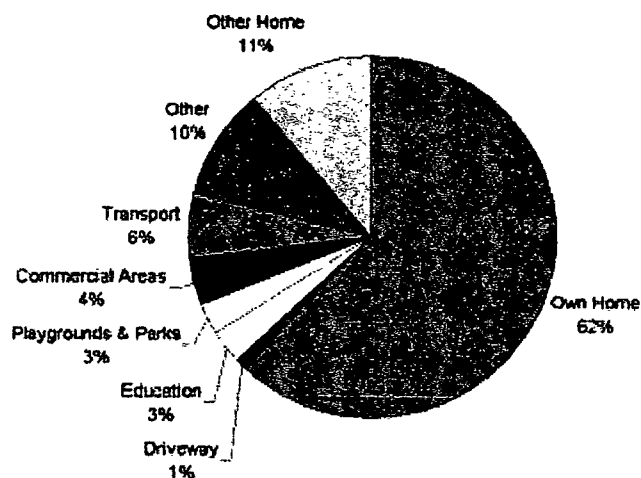
In Australia, on average 5, 000 children each day require medical treatment as a result on unintentional injury, 200 are admitted to hospital and 1 or 2 die.

PRIVATE HOMES ARE THE MOST LIKELY PLACE FOR THESE INJURIES TO OCCUR

WHERE ARE THE CHILDREN INJURED?

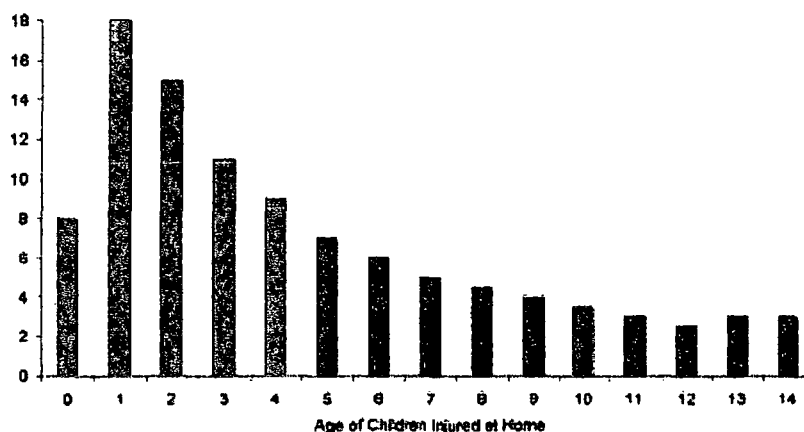
For children under 5 home injuries account for:

- Half of unintentional deaths;
- Three out of four non-fatal injuries.



WHO IS INJURED AT HOME?

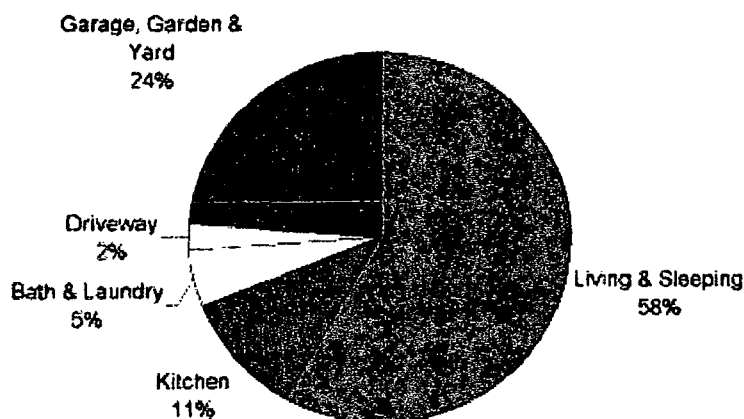
- Younger children are more likely to be injured at home.
- 60% of those injured at home are under 5.
- The group most at risk are 1 and 2 year olds.



WHERE DO HOME INJURIES HAPPEN?

For children under 5:

- More than half the home injuries occur in living or sleeping areas.
- A quarter occur in the garage or yard.
- 11% occur in the kitchen.
- 5% occur in the bathroom or laundry.



WHAT ARE THE MOST COMMON CAUSES OF HOME INJURY AND DEATH?

- Pool drowning and house fires account for half of the home deaths. Most of these children are under five.
- Other common causes of home deaths are: other drowning, particularly in the bath; asphyxiation, smothering and strangulation; crushing; falls; electrocutions; poisoning and being run over in the

driveway.

- The most common event leading to injury is to trip or fall of some kind. These account for nearly half of the injury cases. Other common incidents causing injury at home are: ingestions and inhalations (12%), burns and scalds (7%) and bites (3%).
- Three out of four of these injuries occur during general play.

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KIDSAFE WA

Western Australia

Healthway



Safety Rules OK! is a joint project of Kidsafe WA, Health Department of WA and Education Department of WA, funded by Healthway and HDWA

Last Updated: Friday, 11 September 1998 14:12

<http://www.safetyrules.health.wa.gov.au/kids/factsheets/homeinjury.htm>

<http://www.safetyrules.health.wa.gov.au/kids/factsheets/factsheets.htm>

TRENDS IN UNINTENTIONAL CHILDHOOD INJURY PREVENTION SINCE THE LAUNCH OF THE NATIONAL SAFE KIDS CAMPAIGN

The National SAFE KIDS Campaign is the first and only national organization dedicated solely to the prevention of unintentional childhood injury, the leading killer of children ages 14 and under.

Since the launch of the Campaign in 1988, America has witnessed a dramatic reduction in unintentional injury-related mortality. Although the Campaign cannot take sole credit for this decline, it has played a major role in generating activity at the national level and through its network of more than 280 State and Local SAFE KIDS Coalitions in all 50 states, the District of Columbia and Puerto Rico.

UNINTENTIONAL INJURY-RELATED DEATH RATES

- The unintentional injury death rate among children ages 14 and under declined more than 33 percent from 1987 to 1997.
- The motor vehicle occupant death rate among children ages 14 and under declined by 9 percent from 1987 to 1997.
- The bicycle injury death rate among children ages 14 and under declined by 48 percent from 1987 to 1997.
- The pedestrian injury death rate among children ages 14 and under declined by 42 percent from 1987 to 1997.
- The drowning death rate among children ages 14 and under declined by 37 percent from 1987 to 1997.
- The residential fire injury death rate among children ages 14 and under declined by 50 percent from 1987 to 1997.
- The airway obstruction injury death rate among children ages 14 and under declined by 15 percent from 1987 to 1997.
- The unintentional firearm injury death rate among children ages 14 and under declined by 49 percent from 1987 to 1997.
- The fall injury death rate among children ages 14 and under declined by 33 percent from 1987 to 1997.
- The poisoning death rate among children ages 14 and under declined by 27 percent from 1987 to 1997.

INJURY PREVENTION EFFORTS

Child Safety Seats

- More than 375,000 child safety seats have been distributed by State and Local SAFE KIDS Coalitions to families in need since the launch of the Campaign.

Bicycle Helmets

- Sixteen states and numerous localities have enacted and/or strengthened some form of mandatory bicycle helmet legislation since the launch of the Campaign.
- More than 1 million bicycle helmets have been distributed by SAFE KIDS Coalitions since the launch of the Campaign.
- Bicycle helmet use among children in the United States ranges from 15 to 25 percent, as compared to one percent helmet usage when the Campaign launched its bicycle safety program in 1989.

Fire And Burns

- More than 100,000 smoke alarms and batteries have been distributed by SAFE KIDS Coalitions since the launch of the Campaign's fire safety program in 1991.
 - All national and regional code-making bodies have amended their plumbing code language to require anti-scald technology and a maximum water heater temperature of 120 degrees F in all newly constructed residential units.
- * The first full year of funding for the Campaign began in 1988. Therefore, 1987 is used as benchmark data from which to establish trends.

12/99 This information was compiled by the National SAFE KIDS Campaign.

CHILDREN AT RISK

Children are at significant risk from unintentional injury-related death and disability. Injury rates vary with a child's age, gender, race and socioeconomic status. Younger children, males, minorities and poor children suffer disproportionately. Poverty is the primary predictor of injury. Racial disparities in unintentional injury rates appear to have more to do with living in impoverished environments than with ethnicity. Strategies that reduce financial barriers to safety devices, increase education efforts, and improve the safety of the environment are effective at reducing death and injury among these populations at risk.

LOW-INCOME CHILDREN

- Unintentional injuries disproportionately affect poor children and result in more fatalities compared with those children with greater economic resources. Children from low-income families are twice as likely to die in a motor vehicle crash, four times more likely to drown and five times more likely to die in a fire.
- Children ages 5 and under are more likely to live in poverty than any other age group. Nearly one out of every four (5.8 million) children ages 5 and under in the United States lives in poverty.
- Several factors common to low-income families may increase a child's risk of injury, including single-parent households, lack of education, young maternal age and multiple siblings.
- Children from low-income families live in more hazardous environments which may increase their risk of injury, including substandard and overcrowded housing, lack of safe recreational facilities, proximity of housing to busy streets, inadequate day care and/or supervision, increased exposure to physical hazards and limited access to health care.
- Low-income families are less likely to use safety devices due to a lack of money, lack of transportation to obtain safety devices and/or a lack of control over housing conditions.

MINORITY CHILDREN

- Minority children have higher poverty rates than white children.
- Black, Hispanic and Native American children have disproportionate death and injury rates due to higher levels of poverty and lower levels of education, employment and income.
- Minority children are more likely to lack health insurance; have more difficulty obtaining appropriate and necessary medical care; have lower incomes creating significant financial barriers to care; are more likely to receive care in hospital emergency rooms; are less likely to receive lifesaving preventive services; and practice fewer safety behaviors.

Native American Children

- Among children ages 14 and under, Native American children have the highest unintentional injury death rate in the United States and are two times more likely to die from unintentional injury than white children.
- More than 40 percent of Native American children are poor — more than three times the poverty rate of white children. Factors that contribute to higher death and injury among Native American children are more strongly associated with economic conditions than culturally-based differences in parenting.

Black Children

- Among children ages 14 and under, black children have the second highest unintentional injury death rate in the United States and are 1.7 times more likely to die from unintentional injury than white children.
- More than 45 percent of black children are poor; approximately four times the poverty rate of white children. In addition, only 39 percent of black children live with both parents.

Hispanic Children

- Among children ages 1 to 14, Hispanic children have an unintentional injury death rate approximately equal to non-Hispanic children.
- More than 40 percent of Hispanic children are poor; having a poverty rate more than three times that of white children.

RURAL AND URBAN CHILDREN

- Children living in rural areas are at significantly greater risk from unintentional injury-related death than children living in urban areas. These children are especially at risk from drowning, motor vehicle crashes, unintentional firearm injury, residential fires and agricultural work.
- Injuries in rural settings occur in remote, sparsely populated areas which tend to lack organized systems of trauma care, resulting in prolonged response and transport times. A short supply of medical facilities, equipment and personnel to treat injuries in rural areas also contribute to this increased risk.
- Minority children living in rural areas are especially at risk from unintentional injury-related death. These children represent a smaller percentage of the rural population and their specific needs are unlikely to be met.
- Higher death rates from unintentional injury in southern and mountain states reflect the high number of people living in rural communities.
- Higher injury fatality rates in rural communities are due in part to the high number of farm-related injuries. Children account for 20 percent of all injury-related farm fatalities and comprise an even larger portion of nonfatal injuries.
- Inner-city children are at greater risk from sustaining severe nonfatal injuries than suburban and rural children. Mortality rates, however, are lower, possibly due to better access to care because hospitals and trauma centers are in closer proximity.

MALE CHILDREN

- At virtually all ages, for all causes of injury, males have significantly higher risk of death and injury than females.
- Males are at higher risk than females, mostly due to greater exposure to activities that result in injury and patterns of risk taking and rougher play.

YOUNG CHILDREN

- Children ages 4 and under are at greater risk from unintentional injury-related death and disability and account for 46 percent of these deaths among children ages 14 and under.
- Leading causes of unintentional injury-related death vary throughout childhood and are dependent upon a child's developmental abilities and exposure to potential hazards. The parent's perceptions of the child's abilities and injury risk also are factors. Injuries tend to occur when the demands of a task exceed the abilities of the child to safely complete the task.
- Infants have higher rates of unintentional injury-related death and are more likely to die or sustain nonfatal injuries, especially from suffocation and motor vehicle occupant injury, than older children.
- Preschoolers are developing motor skills but have poor impulse control and judgment. Their natural curiosity and lack of fear lead them into potentially dangerous situations. These children are more likely to die from drowning, fire and burn injury, motor vehicle occupant injury, pedestrian injury, choking and poisoning.

OTHER CHILDREN AT RISK

- Children with emotional or behavioral problems or who are inattentive or easily distracted tend to sustain more unintentional injuries than other children.
- Children with developmental disabilities, both physical and psychological, have higher rates of injury.

12/99 This information was compiled by the National SAFE KIDS Campaign.

HOME INJURY

Unintentional injury is the leading cause of death among children ages 14 and under. In 1997, more than 6,040 children died from unintentional injuries; more than 40 percent of these deaths occurred in and around the home. Home injury deaths are caused primarily by fire and burns, drowning, suffocation, choking, firearms, poisoning, and falls. Young children are at the greatest risk from unintentional injuries in the home because it is where they spend the majority of their time. As children grow older, they spend less time in the home and the incidence of home injury deaths diminishes. The percentage of non-fatal unintentional injuries that occur in the home also decreases with age.

DEATHS IN THE HOME

In 1998, approximately 1,900 children ages 14 and under died in the home from unintentional injuries. Nearly 70 percent of these deaths occurred among children ages 4 and under. Among the leading causes of death in the home are:

Fire and Burns

- In 1998, approximately 550 children ages 14 and under died from fires and burns in the home. Of these children, 55 percent were ages 4 and under.

Drowning

- In 1998, an estimated 440 children ages 14 and under drowned in or around the home. Of these children, 80 percent were ages 4 and under.

Suffocation

- In 1998, an estimated 370 children ages 14 and under suffocated in the home. Of these children, more than 80 percent were ages 4 and under.

Choking

- In 1998, more than 160 children ages 14 and under choked to death in the home. Of these children, three-quarters were ages 4 and under.

Unintentional Firearm Injury

- In 1998, an estimated 80 children ages 14 and under died from unintentional shootings in the home. Of these children, three-quarters were ages 5 to 14.

Poisoning

- In 1998, an estimated 80 children ages 14 and under died from poisonings in the home. Half of these deaths were due to solids and liquids such as medicines and cleaners; the remaining deaths were due to gases and vapors, principally carbon monoxide.

Falls

- In 1998, an estimated 60 children ages 14 and under died as the result of falls in the home. Half of these deaths were to children ages 4 and under.

INJURIES IN THE HOME

Each year, more than 4.5 million children ages 14 and under are treated in hospital emergency departments (EDs) for injuries incurred in the home. Nearly two-thirds of the injuries requiring ED visits among children under age 3 occur in the home. Conversely, one-third of the injuries requiring ED visits among children ages 12-14 occur in the home.

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DROWNING

The death rate from drowning among children ages 14 and under declined 37 percent from 1987 to 1997. However, drowning remains the second leading cause of unintentional injury-related death in this age group and the leading cause of unintentional injury-related death among children ages 1 to 4. The majority of drownings and near-drownings occur in residential swimming pools. However, children can drown in as little as one inch of water and are therefore at risk of drowning in wading pools, bathtubs, buckets, diaper pails, toilets, spas and hot tubs. Additionally, older children are more likely to drown in open water sites, such as lakes, rivers and oceans.

Drowning usually occurs quickly and silently. Childhood drownings and near-drownings can happen in a matter of seconds and typically occur when a child is left unattended or during a brief lapse in supervision. Two minutes following submersion, a child will lose consciousness. Irreversible brain damage occurs after four to six minutes and determines the immediate and long-term survival of a child. The majority of children who survive are discovered within two minutes following submersion (92 percent), and most children who die are found after 10 minutes (86 percent). Nearly all who require cardiopulmonary resuscitation (CPR) die or are left with severe brain injury.

DEATHS AND INJURIES

- In 1997, nearly 1,000 children ages 14 and under drowned. Children ages 4 and under accounted for more than half of these deaths.
- Near-drownings have high case fatality rates. Fifteen percent of children admitted for near-drowning die in the hospital. As many as 20 percent of near-drowning survivors suffer severe, permanent neurological disability.
- For every child who drowns, an additional four are hospitalized for near-drowning and for every hospital admission, approximately four children are treated in hospital emergency rooms.

WHEN AND WHERE DROWNINGS AND NEAR-DROWNINGS OCCUR

- More than half of drownings among infants (under age 1) occur in bathtubs. Drownings in this age group also occur in toilets and buckets.
- More than 85 percent of drownings among children ages 1 to 4 are pool-related.
- Children ages 5 to 14 most often drown in swimming pools and open water sites.
- More than 327 children, 89 percent between the ages of 7 and 15 months, have drowned in buckets containing water or other liquids used for mopping floors and other household chores since 1984.
- Approximately 10 percent of childhood drownings occur in bathtubs; and the majority of these occur in the absence of adult supervision.
- Among children ages 4 and under, there are approximately 375 residential swimming pool drownings and 2,900 near-drownings requiring hospital emergency room treatment each year. More than half of these drownings occur in the child's home pool and one-third at the homes of friends, neighbors or relatives.

- The majority of children who drown in swimming pools were last seen in the home, had been missing from sight for less than five minutes, and were in the care of one or both parents at the time of the drowning.
- In-ground swimming pools without complete four-sided isolation fencing are 60 percent more likely to be involved in drownings than those with four-sided isolation fencing.
- Since 1980, approximately 230 children ages 4 and under have drowned in spas and hot tubs.
- In 1998, 17 children ages 14 and under drowned in boating-related incidents.
- In 1998, more than 210 children ages 14 and under suffered personal watercraft-related injuries while on the water.
- Drownings and near-drownings tend to occur on Saturdays and Sundays (40 percent) and between the months of May and August (66 percent).
- Drowning fatality rates are higher in southern and western states than in other regions of the United States. Rural areas have higher death rates than urban or suburban areas, in part due to decreased access to emergency medical care.

WHO IS AT RISK

- Children ages 4 and under have the highest drowning death rate, a rate two to three times greater than other age groups, and account for 80 percent of home drownings. These drownings typically occur in swimming pools and bathtubs.
- Male children have a drowning rate two to four times that of female children. However, females have a bathtub drowning rate twice the rate of males.
- Black children ages 14 and under have a drowning death rate that is two times greater than white children, in general and six times greater for drownings in buckets. However, white children ages 1 to 4 have a drowning death rate that is twice that of black children, primarily from residential swimming pool drownings.
- Low-income children are at greater risk from non-swimming pool drownings.
- Among children hospitalized for near-drownings, prolonged submersion and time until resuscitative efforts are initiated, as well as hypothermia, are strongly associated with poor outcomes.

DROWNING PREVENTION EFFECTIVENESS

- Installation of four-sided isolation fencing, at least five feet high, equipped with self-closing and self-latching gates, could prevent 50 to 90 percent of childhood residential swimming pool drownings and near-drownings. Door alarms, pool alarms and automatic pool covers, when used correctly, can add an extra level of protection.
- It is estimated that 85 percent of boating-related drownings could have been prevented if the victim had been wearing a personal flotation device (PFD). In 1998, less than one-fourth of the children ages 14 and under who drowned in boating-related incidents were wearing PFDs.
- Educational efforts focused on PFDs and safe boating practices are effective in increasing PFD usage.

WATER SAFETY LAWS AND REGULATIONS

- The U.S. Consumer Product Safety Commission has developed voluntary guidelines, which include both education and labeling, to address the hazard of children drowning in five-gallon buckets.
- Three states (Arizona, California and Oregon) and many communities have enacted safety laws requiring fencing around residential swimming pools.
- At least 32 states have enacted boating safety laws requiring children to wear PFDs at all times when on boats or near open bodies of water. These laws vary in age requirements, exemptions and enforcement procedures.
- Recreational boats must carry one U.S. Coast Guard-approved PFD in good condition and the correct size for each person aboard. A properly sized PFD must be available, serviceable and accessible.

HEALTH CARE COSTS AND SAVINGS

- Typical medical costs for a near-drowning victim can range from \$75,000 for initial emergency room treatment to \$180,000 a year for long-term care. The cost of a near-drowning that results in brain damage can be more than \$4.5 million.
- The total annual cost of drownings and near-drownings among children ages 14 and under is approximately \$6.2 billion. Children ages 4 and under account for \$3.8 billion, or 61 percent, of these costs.

PREVENTION TIPS

- Never leave a child unsupervised in or around water in the home. Empty all containers immediately after use and store out of reach.
- Never leave a child unsupervised in or around a swimming pool or spa, even for a moment. Never rely on a PFD or swimming lessons to protect a child. Learn CPR and keep rescue equipment, a telephone and emergency numbers poolside.
- Install four-sided isolation fencing, at least five feet high, equipped with self-closing and self-latching gates, that completely surrounds swimming pools or spas and prevents direct access from a house and yard.
- Always wear a U.S. Coast Guard-approved PFD when on a boat, near open bodies of water or when participating in water sports. Air-filled swimming aids, such as "water wings," are not considered safety devices and are not substitutes for PFDs.
- Never dive in water less than nine feet deep.

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MOTOR VEHICLE OCCUPANT INJURY

Motor vehicle crashes remain the leading cause of unintentional injury-related death among children ages 14 and under, despite a nine percent decline in the motor vehicle occupant death rate from 1987 to 1997. During the same time period, the motor vehicle occupant nonfatal injury rate among children has increased by four percent.

Child safety seats and safety belts, when correctly installed and used, can prevent injury and save lives. It is estimated that 71 percent of children ages 4 and under are restrained while riding. Unrestrained children are more likely to be injured, to suffer more severe injuries, and to die in motor vehicle crashes than children who are restrained.

DEATHS AND INJURIES

- In 1997, 1,775 child occupants ages 14 and under died in motor vehicle crashes. Children ages 4 and under accounted for 34 percent of these childhood motor vehicle occupant deaths.
- In 1998, more than 274,000 children ages 14 and under were injured as occupants in motor vehicle-related crashes. Children ages 4 and under accounted for nearly 30 percent of these childhood motor vehicle occupant injuries.
- Motor vehicle injuries can have long-lasting psychological effects. One study showed that 25 percent of children who suffered from traffic injuries and 15 percent of their parents were later diagnosed with posttraumatic stress disorder.
- As of November 1, 1999, 86 children have been killed by passenger air bags. More than 20 percent of these deaths were among infants in rear-facing child safety seats in front of a passenger airbag. More than 89 percent of all children killed by passenger airbags were either unrestrained or improperly restrained at the time of the crash.

WHEN AND WHERE DEATHS AND INJURIES OCCUR

- Seventy-five percent of motor vehicle crashes occur within 25 miles of home. In addition, 60 percent of crashes occur on roads with posted speed limits of 40 mph or less.
- More than one-fifth of all traffic deaths among children ages 14 and under involve alcohol. Almost half of the children killed in alcohol-related crashes are passengers in vehicles with drunken drivers.
- Rural areas have higher motor vehicle crash incidence rates and death rates than urban areas. In addition, crashes in rural areas are more severe.

WHO IS AT RISK

- Riding unrestrained is the greatest risk factor for death and injury among child occupants of motor vehicles. Approximately 29 percent of children ages 4 and under ride unrestrained, placing them at twice the risk of death and injury as those riding restrained.
- Among children ages 14 and under killed as occupants in motor vehicle crashes in 1998, 61 percent were not using safety restraints at the time of the collision.
- Misuse of child safety seats is widespread. It is estimated that approximately 85 percent of children who are placed in child safety seats and booster seats are improperly restrained.

- Driver safety belt use is positively associated with child restraint use. In a study of car crashes, a restrained driver was found to be three times more likely to restrain a child.
- The back seat is the safest place for children to ride. It is estimated that children ages 12 and under are 36 percent less likely to die in a crash if seated in the rear seat of a passenger vehicle.
- It is estimated that one in four children ages 13 and under ride in the front passenger seat, many in front of passenger air bags. Children traveling with unbelted drivers, as the only passenger, and those ages six and over are more likely to be seated in front.
- Recent surveys indicate that children ages 3 to 6 years are increasingly riding unrestrained and improperly restrained in the front passenger seat. Nearly 60 percent of children killed by deploying air bags are in this age group.
- Male children ages 1 to 14 have a motor vehicle fatality rate nearly one and a half times that of female children.
- American Indian and Alaska Native children ages 14 and under have a motor vehicle occupant death rate three times that of white and black children.
- Restraint use is lower in rural areas and low-income communities. Lack of access to affordable child safety seats contributes to a lower usage rate among low-income families. However, 95 percent of low-income families who own a child safety seat use it.

RESTRAINT SYSTEMS

- Child safety seats are extremely effective when correctly installed and used in passenger cars, reducing the risk of death by 71 percent for infants and by 54 percent for children ages 1 to 4, and reducing the need for hospitalization by 69 percent for children ages 4 and under.
- It is estimated that nearly 300 children ages 4 and under were saved as a result of child restraint use in 1998. If all child passengers ages 4 and under were restrained, it is estimated that an additional 173 lives could be saved and 20,000 injuries could be prevented annually.
- Adult safety belts do not adequately protect children ages 4 to 8 (about 40 to 80 pounds) from injury in a crash. Although car booster seats are the best way to protect them, only five percent of booster-age children are properly restrained in car booster seats.
- Safety restraints afford the greatest protection against ejection from a vehicle during a crash. Nearly three-quarters of occupants who are totally ejected from passenger vehicles during fatal crashes are killed.
- Air bags, combined with lap/shoulder safety belts, offer the most effective protection available today for adult passenger vehicle occupants. It is estimated that air bags have saved more than 3,700 lives since they were first introduced in the late 1980s.

CHILD OCCUPANT PROTECTION AND SAFETY BELT USE LAWS

- All 50 states, the District of Columbia and all U.S. territories have child occupant protection laws which vary widely in their age requirements, exemptions, enforcement procedures and penalties. These laws typically cover only children ages 3 and under.
- A total of 49 states (New Hampshire is the exception), the District of Columbia and all U.S. territories have safety belt use laws in effect. Most of these laws cover front-seat occupants only

and mandate "secondary" enforcement, which means an officer may cite a driver for not wearing a safety belt only if the violator is initially stopped for another violation.

- Only 16 states and the District of Columbia currently have primary (standard) enforcement laws. States with primary laws average 15 percentage points higher in restraint usage rates than those with secondary laws as well as lower fatality and injury rates.
- Child occupant protection and safety belt use laws are proven effective at increasing restraint use. Ninety percent of Americans favor stronger enforcement of laws that require all children to be buckled up.
- In 1999, a new federal standard went into effect resulting in the manufacture of most new child safety seats with a standard top tether that will snap into vehicle anchors on most new passenger cars. The tether system will allow the child seat to be fastened more securely to the vehicle seat.

HEALTH CARE COSTS AND SAVINGS

- The total annual cost of motor vehicle occupant-related death and injury exceeds \$25.5 billion for all children ages 14 and under, and is nearly \$7.8 billion among children ages 4 and under.
- Every dollar spent on a child safety seat saves this country \$32.

PREVENTION TIPS

- Always use child safety seats and/or safety belts correctly every time you ride. Restrain children ages 12 and under in a back seat.
- Infants, until at least 1 year old and at least 20 pounds, should be in rear-facing child safety seats. Never put a rear-facing infant or convertible safety seat in the front passenger seat of a vehicle with an active passenger air bag.
- Children over 1 year old and between 20 and 40 pounds should be in forward-facing child safety seats. In addition, children ages 4 to 8 (about 40 to 80 pounds) should be in a car booster seat and restrained with lap/shoulder belt every time they ride.
- Read your child safety seat instruction manual and your motor vehicle owner's manual for directions on proper installation.
- Call the National Highway Traffic Safety Administration's Auto Safety Hotline, (888) 327-4236, to inquire about any recalls or safety notices on your child safety seat.

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AIRWAY OBSTRUCTION INJURY

The airway obstruction injury death rate among children ages 14 and under declined 15 percent between 1987 and 1997. However, the airway obstruction injury death rate among children under age 1 has shown no decline in the past decade. Airway obstruction injury (suffocation, choking, and strangulation) is the leading cause of unintentional injury-related death among children in this age group. These injuries occur when children are unable to breathe normally because food or objects block their internal airways (choking); materials block or cover their external airways (suffocation); or items become wrapped around their necks and interfere with breathing (strangulation). Children, especially those under age 3, are particularly vulnerable to airway obstruction death and injury due to the small size of their upper airways, their relative inexperience with chewing, and their natural tendency to put objects in their mouths. Additionally, infants' inability to lift their heads or extricate themselves from tight places puts them at greater risk.

AIRWAY OBSTRUCTION DEATHS AND INJURIES

- In 1997, 659 children ages 14 and under died from airway obstruction injuries. Of these children, nearly 80 percent were ages 4 and under.
- In 1997, more than 470 children ages 14 and under died from suffocation, strangulation, and entrapment in household appliances and toy chests. Of these children, nearly two-thirds were under age 1 and more than 80 percent were ages 4 and under.
- In 1997, 185 children ages 14 and under died from choking (food and nonfood). Of these children, nearly 80 percent were ages 4 and under.
- In 1998, eight children ages 8 and under died from choking on a toy or toy part. Balloons were involved in half of these incidents. In addition, one child died from toy-related suffocation. These deaths account for nearly 65 percent of all toy-related fatalities.
- Approximately 5,000 children ages 14 and under are treated in hospital emergency rooms for aspirating and ingesting toys and toy parts each year. More than 75 percent of these children are ages 4 and under.

WHEN AND WHERE AIRWAY OBSTRUCTION DEATHS AND INJURIES OCCUR

- The majority of childhood suffocations, strangulations and chokings occur in the home.
- Children are more likely to suffocate during the summer months and choke during the winter months.

Suffocation

- Sixty percent of infant suffocation occurs in the sleeping environment. Infants can suffocate when their faces become wedged against or buried in a mattress, pillow, infant cushion or other soft bedding, or when someone in the same bed rolls over onto them. Infants can also suffocate when their mouths and noses are covered by or pressed against a plastic bag.
- Children can suffocate when they become trapped in household appliances, such as refrigerators or dryers, and toy chests.
- Each year, cribs are involved in more than 70 percent of all nursery product-related deaths among infants. Cribs are responsible for about 40 strangulation and suffocation deaths each year (primarily older, used cribs).
- It is estimated that as many as 900 infants whose deaths are attributed to Sudden Infant Death Syndrome (SIDS) each year are found in potentially suffocating environments, frequently on their stomachs, with their noses and mouths covered by soft bedding.

Choking

- The majority of childhood choking injuries and deaths are associated with food items.
- Children are at risk from choking on small, round foods such as hot dogs, candies, nuts, grapes, carrots and popcorn. Nonfood items tend to be round or conforming objects, including coins, small balls and balloons.
- Balloons are the most common cause of toy-related choking death among children. Unlike other causes of choking death, balloon-related deaths are as common among children ages 3 and older as among younger children.

Strangulation

- Strangulation occurs among children when consumer products become wrapped around their necks. Common items include clothing drawstrings, ribbons or other decorations, necklaces, pacifier strings, and window blind and drapery cords.
- Since 1981, more than 350 children have strangled on window covering cords. The majority of deaths occurred when the cord was hanging near the floor or crib, or when furniture was placed near the cord. Nearly 95 percent of these children were ages 3 and under.
- Since 1985, 22 children have died and at least 48 were injured from entangled children's clothing drawstrings, most often the hood/neck drawstrings. In addition, more than half of drawstring entanglement incidents involved playground slides.
- Children strangle in openings that permit the passage of their bodies, yet are too small for, and entrap, their heads. These include spaces in bunk beds, cribs, playground equipment, baby strollers, carriages and high chairs. Since 1990, at least 57 children, nearly all ages 3 and under, have died due to entrapment in bunk beds alone.

WHO IS AT RISK

- Children ages 4 and under, especially under age 1, are at greatest risk for all forms of airway obstruction injury.
- Male, low-income and non-white children are at increased risk from suffocation, choking and strangulation.
- Black infants are more likely than white infants to be placed to sleep on their stomachs and on softer bedding.
- Children placed in adult beds are at increased risk for airway obstruction injury. Since 1990, at least 121 children ages 2 and under have died in adult beds from smothering as a result of being overlain by another person. Additionally, 296 children in this age group died in adult beds as a result of entrapment in the bed structure.

AIRWAY OBSTRUCTION PREVENTION LAWS AND REGULATIONS

- The Child Safety Protection Act requires choking hazard warning labels on packaging for small balls, balloons, marbles, and certain toys and games having small parts that are intended for use by children ages 3 to 6. This Act also bans any toy intended for use by children under age 3 that may pose a choking, aspiration or ingestion hazard.
- The U.S. Consumer Product Safety Commission (CPSC) has issued voluntary guidelines for drawstrings on children's clothing to prevent children from strangling in the neck and waist drawstrings of upper outerwear garments, such as jackets and sweatshirts.
- The CPSC has combined voluntary standards development with mandatory regulations to prevent an estimated 200 crib-related deaths among young children each year.
- In 1999, the CPSC voted to issue a mandatory standard for bunk beds to address entrapment hazards. The new standard will restrict opening sizes and require company identification and age-specific warning labeling on all new bunk beds.

HEALTH CARE COSTS AND SAVINGS

- The total annual cost of airway obstruction injury among children ages 14 and under exceeds \$1.5 billion. Children ages 4 and under account for more than 60 percent of these costs.

PREVENTION TIPS

- Place infants on their backs on a firm, flat crib mattress in a crib that meets national safety standards — look for a Juvenile Products Manufacturers Association certification label. Remove pillows, comforters, toys and other soft products from the crib.
- Always supervise young children while they are eating and playing. Do not allow children under age 6 to eat round or hard foods like peanuts and other nuts, raw carrots, popcorn, seeds, or hard candy. Children under age 6 should not eat hot dogs or grapes unless the skin is removed and the food is chopped into small, non-round pieces. Keep small items such as coins, safety pins, jewelry and buttons out of children's reach. Learn First Aid and CPR.
- Consider purchasing a small parts tester to determine whether or not small toys and objects in your home may present a choking hazard to young children. Ensure that children play with age-appropriate toys according to safety labels. Inspect old and new toys regularly for damage. Make any necessary repairs or discard damaged toys.

- Remove hood and neck drawstrings from all children's outerwear. To prevent strangulation, never allow children to wear necklaces, purses, scarves or clothing with drawstrings while on playgrounds.
- Tie up all window blind and drapery cords or cut the ends and retrofit with safety tassels. Never hang anything on or above a crib with string or ribbon longer than seven inches.
- Do not allow children under age 6 to sleep on the top bunk of a bunk bed. Ensure that all spaces between the guardrail and bed frame and all spaces in the head and foot boards are less than 3.5 inches.

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SCHOOL INJURIES

More than 53 million children in the United States spend almost one-fourth of their total waking hours in school or on school property. An estimated 10 to 25 percent of the more than 14 million unintentional injuries sustained by children ages 14 and under each year occur in and around schools.

Annually, one in 14 students suffers a medically attended or temporarily disabling injury at school. Public attention often focuses on school violence.

However, studies indicate that school-age children are nine times more likely to sustain an unintentional injury than to be the victim of an intentional injury while at school. Playgrounds are associated with the majority of injuries among elementary school students. Athletics, including both physical education classes and organized sports, account for the majority of injuries among secondary school students.

DEATHS AND INJURIES

- An estimated 2.2 million children ages 14 and under sustain school-related injuries each year.
- Eighty percent of elementary school students will see a school nurse for an injury-related complaint over a two-year period.
- Approximately 715,000 sports- or recreation-related injuries occur in and around schools each year.
- Approximately 13,000 playground equipment-related injuries occur on school playgrounds during school hours.
- In 1998, 21 children ages 14 and under were killed and an estimated 6,000 were injured in school bus-related incidents. Sixty-two percent of the deaths were child pedestrians.

WHEN AND WHERE SCHOOL DEATHS AND INJURIES OCCUR

Playground-Related Injuries

- Playground injuries are the leading cause of injury among children ages 5 to 14 in the school environment. Nearly 40 percent of playground-related injuries occur during the months of May, June and September.
- More than 70 percent of playground equipment-related injuries involve falls to the surface and 9 percent involve falls onto equipment.
- Lack of supervision is associated with 40 percent of playground injuries. A recent study found that children play without adult supervision more often on school playgrounds (32 percent of the time) than on playgrounds in parks (22 percent) or child care centers (5 percent).

Sports-Related Injuries

- The rate of injury per 1,000 students for students participating in organized school sports is more than five times that of students participating in physical education classes. However, physical education classes account for a greater number of injuries than organized school sports.
- Among organized school sports, football has the highest injury rate, followed by basketball, baseball, wrestling and gymnastics. Most organized sports-related injuries (60 percent) occur during practice rather than during games.

- The majority of organized sports injuries are from falls, collisions, being struck by an object or overexertion. Almost 75 percent of all school-related spinal cord injuries occur during sports activities.

School Bus-Related Injuries

- Ninety percent of students who are nonfatally injured in school bus-related incidents are injured occupants.
- Pedestrians account for almost three times as many school bus-related fatalities as bus occupants. Many injuries occur when children are boarding or exiting the school bus due to the driver's "bl spot," which extends approximately 10 feet around the bus.
- Most school-age pedestrian deaths occur in the afternoon. Forty-one percent of the fatalities occur between 3 p.m. and 4 p.m.

WHO IS AT RISK

- Children ages 10 to 14 account for 46 percent of school-related injuries.
- Boys are three times more likely to sustain a school-related injury than girls.
- Half of all school-age pedestrians killed in school bus-related crashes are between the ages of 5 and 7.

HEALTH CARE COSTS AND SAVINGS

- School-related injuries to children ages 14 and under result in an estimated \$2 billion in medical spending each year. School bus-related injuries alone account for \$21 million of these medical costs.
- The total annual cost of school-related injuries to children aged 14 and under exceeds \$74 billion, which includes medical spending, quality of life lost and future earnings.

PREVENTION TIPS

- Implement an annual school safety checklist and regularly maintain all equipment and facilities.
- Train school staff in emergency first aid and CPR.

Playground Safety

- Avoid asphalt, concrete, grass and soil surfaces under playground equipment. Acceptable loose-fill materials include hardwood fiber mulch or chips, pea gravel, fine sand and shredded rubber. Surfacing should be maintained at a depth of 12 inches and should extend a minimum of 6 feet in all directions around stationary equipment. Rubber mats, synthetic turf and other artificial materials also are safe surfaces and require less maintenance.
- Always supervise children when using playground equipment. Prevent unsafe behaviors like pushing, shoving, crowding and inappropriate use of equipment. Ensure that children play on age-appropriate equipment.

Sports Safety

- Make sure the following are included in any sports program: proper physical and psychological conditioning, use of appropriate safety equipment, a safe playing environment,

adequate adult supervision, and enforcement of safety rules.

- Match and group children according to developmentally appropriate skill level, weight and physical maturity, especially for contact sports.

School Bus Safety

- Teach children to arrive at the bus stop early, wait for the bus to come to a complete stop before approaching the street, watch for cars, and avoid the driver's blind spot.
- Ensure that children stay seated at all times and keep their heads and arms inside the bus while riding.
- When exiting the bus, children should be taught to wait until the bus comes to a complete stop, then exit from the front using the handrail to avoid falls, and cross the street at least 10 feet in front of the bus.

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PLAYGROUND INJURY

Play is an essential component of healthy development in children, and playgrounds provide an opportunity for children to develop motor, cognitive, perceptual and social skills. All too often, however, playgrounds are the site of unintentional injuries. The leading cause of playground equipment-related fatalities is strangulation and the majority of these deaths occur on home playgrounds. This is contrasted with nonfatal playground equipment-related injuries which are most often due to falls. The majority of these nonfatal injuries take place on public playgrounds, including school, day care and park playgrounds. In a 1998 survey, U.S. playgrounds received an overall grade of C- when rated on physical hazards and behavioral elements, including supervision and age-appropriate design.

It is the responsibility of adults to create play environments that are challenging for children, but that are also reasonably safe. Utilizing age-appropriate equipment, following a regular maintenance schedule, limiting equipment height and maintaining adequate surfacing, combined with adult supervision, can greatly reduce the incidence and severity of such injuries.

PLAYGROUND DEATHS AND INJURIES

- Each year, nearly 20 children ages 14 and under die from playground equipment-related injuries.
- In 1998, more than 230,000 children ages 14 and under were treated in hospital emergency room for playground equipment-related injuries. Children ages 5 to 14 accounted for more than 70 per cent of these injuries.

WHEN AND WHERE PLAYGROUND DEATHS AND INJURIES OCCUR

- It is estimated that one-third of playground equipment-related deaths and 70 percent of playground equipment-related injuries occur on public playgrounds.
- Playground injuries are the leading cause of injury to children in the day care setting and to children ages 5 to 14 in the school environment.
- Lack of supervision is associated with 40 percent of playground injuries. A recent study found that children play without adult supervision more often on school playgrounds (32 percent of the time) than on playgrounds in parks (22 percent) or child care centers (5 percent).
- Strangulation resulting from entanglement and entrapment is the primary cause of playground equipment-related fatalities, accounting for nearly half of the deaths. Falls to the surface are responsible for an additional 24 percent of the deaths.
- More than 70 percent of playground equipment-related injuries involve falls to the surface and 9 percent involve falls onto equipment.
- Falls account for 90 percent of the most severe playground equipment-related injuries (mostly head injuries and fractures). Head injuries are involved in 75 percent of all fall-related deaths associated with playground equipment.
- Nearly 40 percent of playground injuries occur during the months of May, June and September.
- Swings, climbing equipment and slides combined account for more than 85 percent of

playground-related injuries.

WHO IS AT RISK

- Male children account for 62 percent of playground-related deaths and are at a slightly higher risk of nonfatal playground equipment-related injury compared with females.
- Children ages 4 and under are more likely to suffer injuries to the face and head while children ages 5 to 14 are more likely to suffer injuries to the arm and hand.
- A young child is at increased risk of injury when playing on equipment designed for older children. Only 42 percent of U.S. playgrounds have separate play areas for children ages 2 to 5 and children ages 5 to 12, and only 9 percent have signs indicating the age appropriateness of equipment.
- The risk of injury is four times greater if a child falls from playground equipment that is more than 1.5 meters (approximately 5 feet) high than from equipment that is less than 1.5 meters high.
- The risk of being injured in a fall onto a non-impact absorbing surface such as asphalt or concrete is more than twice that of falling onto an impact-absorbing surface. Only 62 percent of U.S. playgrounds have six feet zones of appropriate impact-absorbing surfacing around stationary equipment.

PLAYGROUND INJURY PREVENTION EFFECTIVENESS

- Protective surfacing under and around playground equipment can reduce the severity of and even prevent playground fall-related injuries.

PLAYGROUND LAWS AND REGULATIONS

- Playground equipment guidelines and standards have been developed by the U.S. Consumer Product Safety Commission (CPSC), the American Society for Testing and Materials (ASTM), and the Consumer Federation of America. However, these are voluntary recommendations and are not federally mandated or regulated. At least four states — California, Michigan, North Carolina and Texas — have enacted playground safety legislation mandating many of these guidelines.
- The CPSC has issued voluntary guidelines for drawstrings on children's clothing to prevent children from strangling or getting entangled in the neck and waist drawstrings of outerwear garments, such as jackets and sweatshirts. Children are at risk for strangulation when drawstrings on clothing become entangled in playground equipment.

HEALTH CARE COSTS AND SAVINGS

- The total annual cost of playground equipment-related injuries among children ages 14 and under was estimated to be \$1.2 billion in 1996.

PREVENTION TIPS

- Avoid asphalt, concrete, grass and soil surfaces under playground equipment. Acceptable loose-fill materials include hardwood fiber mulch or chips, pea gravel, fine sand and shredded rubber. Surfacing should be maintained at a depth of 12 inches and should extend a minimum of 6 feet in all directions around stationary equipment. Rubber mats, synthetic turf and other

artificial materials also are safe surfaces and require less maintenance.

- Ensure that a comprehensive inspection of all playgrounds is conducted by qualified personnel. Abide by daily, monthly and annual playground maintenance schedules.
- Ensure that schools and child care centers have age-appropriate, well-maintained playground equipment, and that trained supervisors are present at all times when children are on the playground.
- Report any playground safety hazards to the organization responsible for the site (e.g., school, park authority, city council).
- Always supervise children when using playground equipment. Maintain visual and auditory contact. Prevent unsafe behaviors like pushing, shoving, crowding and inappropriate use of equipment.
- Ensure that children use age-appropriate playground equipment. Maintain separate play areas for children under age 5.
- Remove hood and neck drawstrings from all children's outerwear. Never allow children to wear necklaces, purses, scarves or clothing with drawstrings while on playgrounds.

12/99 This information was compiled by the National SAFE KIDS Campaign.

Immediate Release

Contact:
Kate Milner, National SAFE KIDS
202-662-0600

Childhood Unintentional Injury-Related Death Rate Drops by Nearly Half in Past Two Decades

New Report Shows Safety Devices Have Played a Key Role in Reducing Preventable Injuries to Kids

(Washington, D.C.)According to a report by the National SAFE KIDS Campaign, safety devices such as smoke alarms, car seats and bike helmets have contributed to a 46 percent decline in the unintentional injury-related death rate among children ages 14 and under. As a result of better engineering, widespread education and improving safety devices over the past 20 years, children are better protected from preventable injury.

The report chronicles important milestones in the evolution of safety devices such as their introduction into the market, the passage of landmark safety legislation, increased affordability and usage, and important innovations in materials such as plastics.

"Of all the dangers children face today, parents need to focus on the one that is not only the largest killer of kids, but the one they can do something about -unintentional injury," said Heather Paul, Ph.D., executive director of the National SAFE KIDS Campaign. "The most effective proven intervention to protecting kids is the use of these safety devices. Safety device distribution and education have always been a core part of our mission, and it's gratifying to see injury death rates have declined as a result."

Among the report findings:

- Over the past two decades, the residential fire-related death rate has declined 55 percent among children. Studies have shown that a working smoke alarm cuts the chances of dying in a residential fire in half. Smoke alarms in the early 1960s were metal devices that were prohibitively expensive at \$120 each and not readily available to the public. Today, smoke alarms cost as little as \$10 and are purchased at retail outlets in every community.
- While vehicle usage and miles traveled have soared over the past 18 years, the motor vehicle occupant-related death rate has declined by 10 percent among children. Car seats manufactured in the early 1970s provided comfort for kids riding in cars, but, ironically, offered little or no protection. Today, crash test standards exist that all car seats must meet. Correctly used, car seats can reduce the risk of death by as much as 71 percent for infants.
- Bike helmets are 88 percent effective in reducing the risk of brain injury and have contributed to a 60 percent decline in the death rate from bike-traffic injuries among children in the past two decades. Bike helmets were once merely a hairnet used only by professional racers. Now, bike helmets are made from protective polystyrene and fiberglass to absorb forces on impact and are used by both adults and children. In addition, 16 states now have bike helmet laws.

While many factors have contributed to a decline in unintentional injury death rates, safety device usage, which has been greatly impacted by advances in technology has clearly made a difference. Materials such as fiberglass, nylon and polystyrene have helped to make safety devices more

accessible to the public by making them lighter, more affordable and more convenient to use.

"When you see the SAFE KIDS statistics, you realize that injuries happen a lot more than you think - and they are preventable," said Ron Yocum, president and CEO, American Plastics Council,. "As a Grandfather, I marvel at the devices we never had when we were raising our kids. Just in the past 25 years we've seen tremendous advancements in the plastics technology that benefit children. We're confident that the role plastics play to improve safety devices will continue into the new millennium."

Despite modern advances, unintentional injury remains the number one killer of children. However, new technologies, together with education and legislation, will continue to evolve as the public increasingly regards family safety as a high priority.

The National SAFE KIDS Campaign is the first and only national organization dedicated solely to the prevention of unintentional childhood injury - the number one killer of children ages 14 and under. More than 275 state and local SAFE KIDS Coalitions in all 50 states, the District of Columbia and Puerto Rico comprise the Campaign. Former U.S. Surgeon General C. Everett Koop, M.D., Sc.D., is chairman of the Campaign and Vice President Al Gore and Tipper Gore are honorary chairs.

THE NATIONAL SAFE KIDS CAMPAIGN

The National SAFE KIDS Campaign, the first national organization dedicated solely to the prevention of unintentional childhood injury, was launched in 1988 to address what was then a little recognized problem: More children under age 14 were being killed by what people call "accidents" (motor vehicle crashes, fires and other injuries) than by any other cause.

The Campaign's founders believe there is no such thing as an accident and that unintentional injuries can be prevented. They enlisted the support of corporations, government agencies and the health and safety community to reduce the incidence of childhood injury. Former U.S. Surgeon General C. Everett Koop, M.D., Sc.D, came on board as chairman of the Campaign and Vice President Al Gore and Tipper Gore are honorary chairs.

The Campaign's aim is to stimulate changes in attitudes, behavior, and the environment. From its inception, the Campaign has relied on developing injury prevention strategies that work in the real world — conducting public outreach and awareness campaigns, stimulating hands-on grassroots activity and working to make injury prevention a public policy priority. This ongoing actionable strategy accounts for the tremendous progress the National SAFE KIDS Campaign has made. In the past decade the unintentional injury death rate among children 14 and under has declined by 33 percent.

Injury Prevention Strategies

The proven science of injury prevention and control underpins all Campaign initiatives. Decisions to focus on particular risk areas are data-driven — based on death and injury rates and the availability of effective preventive interventions. A team of public health specialists endeavors to translate injury prevention research into multifaceted community-based strategies (e.g., SAFE KIDS CYCLE SMART, Project Get Alarmed, SAFE KIDS BUCKLE UP). These experts provide technical assistance to State and Local SAFE KIDS Coalitions to tailor, implement and evaluate these programs with one goal — to prevent injuries and save lives. The Campaign has received awards from the Center for Disease Control and the American Public Health Association for outstanding services in the area of injury prevention practice and advocacy.

Grassroots Outreach/SAFE KIDS Coalitions

The Campaign relies on the support of more than 270 State and Local SAFE KIDS Coalitions in all 50 states, the District of Columbia and Puerto Rico to reach out to local communities with prevention messages. These dedicated professionals and volunteers have distributed nearly 1 million bicycle helmets, 500,000 car seats and 100,000 smoke alarms to families in need. The Coalitions work closely with law enforcement officers, firefighters and paramedics, medical and health professionals, educators, parents, grandparents, businesses, public policy makers and, most importantly, kids.

Public Awareness and Education

A large part of prevention is educating parents, caregivers and children about the simple behavior modifications that can prevent needless tragedies. The National SAFE KIDS Campaign has been instrumental in getting vital safety messages to the public through low-cost or free educational materials including brochures, videos and posters. Thousands of national and local news stories air as a result of the Campaign and its Coalitions' media efforts to raise widespread awareness of injury prevention and keep it foremost in the public mind. The Campaign's national media coverage includes broadcast stories on the nation's highest audience programs, including the Today Show, ABC World News Tonight, CNN news and NPR's "All Things Considered." Print articles appear regularly in *USA Today*, *Ladies' Home Journal* and *Parents* magazines. The

Campaign has received the prestigious PRSA Silver Anvil award for its public education initiatives on three occasions.

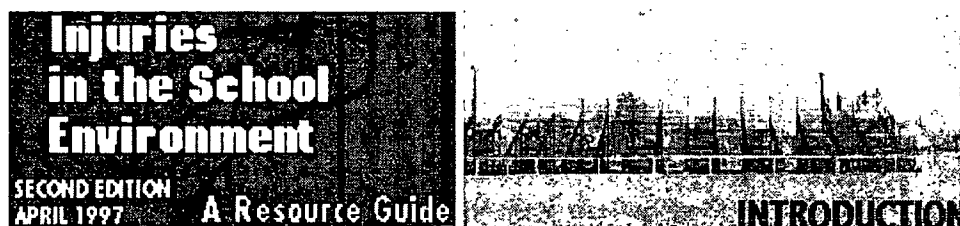
Public Policy

The Campaign and its Coalitions rely on the help of policy-makers to institute child safety practices through effective laws. As a result of their efforts, federal, state and local lawmakers have aided children by passing and enforcing key safety legislation. Ten years ago, when the Campaign was founded, only one state had a bicycle helmet law. Today, 15 states and many communities require youngsters to strap on a helmet while biking -- and America now boasts a 40 percent reduction in the bicycle injury death rate. Additionally, the Campaign has helped pass, strengthen and enforce child occupant protection laws, smoke alarm laws and mandatory playground safety guidelines in communities across the country. The Consumer Product Safety Commission and the National Highway Traffic Safety Administration have honored SAFE KIDS for its injury prevention work.

A Call To Action

Despite recent advances, unintentional injury is still the number one killer of America's children, taking more lives than disease, violence and suicide. In 1996 alone, nearly 6,300 children died from unintentional injuries and each year more than 14 million children -- a staggering one out of four -- are injured seriously enough to require medical attention. Every one of these alarming statistics is somebody's child, which is why the National SAFE KIDS Campaign remains committed to reducing unintentional injury by driving prevention strategies and reinforcing public awareness of the problem.

6/99



71 pupils were killed and 201 severely wounded in schools by handguns during the years 1986-1989, according to the Center to Prevent Handgun Violence.

175 pupils were killed in incidents involving school buses during that same period. An additional 29,600 children suffered school bus-related injuries. More than half of the children killed were struck by the bus or another motor vehicle as they boarded or left the bus.

While media reports sensationalize violence occurring in U.S. schools, the problem of unintentional injuries in the school setting has gone virtually unpublicized.

Almost 22 million children in the United States are injured each year. An estimated 10 to 25 percent of these injuries occur in and around schools. Injuries are one of the most frequent conditions cared for by school health personnel. Over a two-year period, an estimated 80 percent of elementary school children will see a school nurse for injury-related complaints.

Yet the problem of injuries in the school environment is often unrecognized, and consequently, preventive measures are neglected. Recent government initiatives to improve the health of children and adolescents have not addressed the safety of the school environment. For example, neither the problem statement nor the background papers for the National Health Promotion and Disease Prevention Objectives, *Healthy People 2000*, specifically mention injuries in the school setting. And although the National Education Goals call for schools to be free of violence by the year 2000, they do not recognize the importance of preventing unintentional injuries in order to create a safe environment for learning.

Most relevant research in the medical and public health literature focuses on the underreporting of school injuries and the poor quality of data collected, rather than possible prevention measures. The education literature contains numerous references to safety but focuses primarily on liability in the school setting.

Patterns and causes of school injuries are poorly understood, and resources to help public health and education professionals address injuries are scarce. Schools usually respond to injuries on an ad hoc basis--after the damage is done. Injury events are not consistently tracked, and it is often difficult to identify who has responsibility for preventing a recurrence.

Currently, no comprehensive guidelines are available for school administrators and other health and education professionals interested in addressing the problem of injuries in the school environment. Thus, schools need to begin by assessing the causes of injuries within individual schools in order to target the leading causes of injury and to prevent them. A multifaceted intervention--including modifications to school equipment and facilities, development of supervision and safety policies, and education of students, teachers, parents, and administrators about injury prevention at school--provides the most comprehensive approach. State maternal and child health practitioners and other injury control experts can provide information and technical assistance to schools interested in developing and evaluating the impact of school-based injury prevention activities.

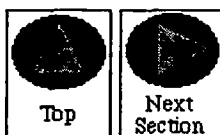
Schools have an important role to play in addressing the problem of child and adolescent injuries. The Children's Safety Network has designed this packet to inform school personnel, injury prevention

professionals, parents, and others about the extent of the problem of injuries in the school environment and to stimulate dialogue about possible solutions. Included are the following materials:

- **UNDERSTANDING THE PROBLEM**--*a fact sheet on school injuries, derived from National Pediatric Trauma Registry data and accompanied by suggested prevention strategies*
- **EXAMINING THE CIRCUMSTANCES**--*a series of vignettes that illustrate the circumstances surrounding injuries occurring in the school environment, along with questions for further discussion*
- **WHAT IS BEING DONE: SELECTED EXAMPLES**--*a description of steps that agencies in nine states are taking to address this problem*
- **SAMPLE DATA COLLECTION FORMS**--*data entry forms from three states that are collecting school injury data*
- **FURTHER READING**--*an annotated bibliography of selected resources, journal articles, studies, and state and federal reports. Topics include: playgrounds and sports, students with special needs, legal and liability issues, transportation, and violence.*

The photographs in this publication illustrate settings and circumstances where students may be injured. You may want to examine these and other settings in your school to identify additional hazards.

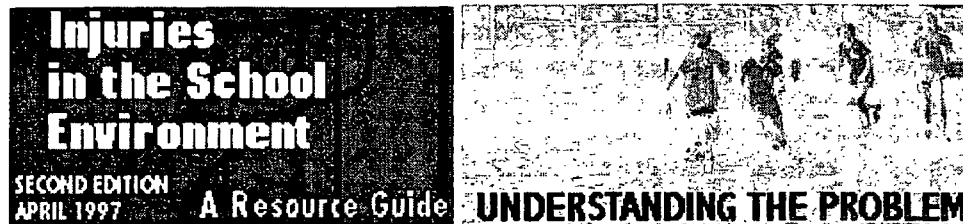
We encourage you to distribute this packet or any of its parts to school nurses, school health personnel, other relevant professionals, and community organizations. Please cite the Children's Safety Network at Education Development Center, Inc. (EDC) as the source. We would appreciate hearing how you use this information, suggestions of additional resources of which we should be aware, and work you may be initiating in this area.



[CSN Home Page](http://www.edc.org/HHD/csn/schoolinj/intro.html)

<http://www.edc.org/HHD/csn/schoolinj/intro.html>
Revised: October 20, 1998

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The research literature indicates that an estimated 10 to 20 percent of all injuries to children and adolescents occur in and around schools. Yet serious injuries that happen on school grounds and result in hospitalization have not been well studied in the United States. The following facts were compiled from a descriptive analysis of the causes and outcomes of 1,558 cases reported to the National Pediatric Trauma Registry (NPTTR).^{*} Although this is not a population-based source of information, the data are useful in drawing attention to the problem of severe injuries in the school environment.

School Injuries Overall

- The ratio of injury to males vs. females was 3:1.
- 46% of these incidents occurred among 10 to 14 year olds.
- 17% of those injured in school had a preexisting medical condition (e.g., physical or mental disability or chronic illness).
- 49% of the injuries happened in recreational areas, as opposed to the school building or other premises.
- The ratio of unintentional injuries to violence-related injuries was 9:1.
- Falls were the most frequent cause of injury (43%), followed by sports activities (34%) and assaults (10%).
- Other major causes of injury included being cut, striking against objects, and being struck by objects.

Falls (N = 665)

- 53 falls were from a height greater than 8 feet, including 12 from windows, roofs, skylights, or balconies; other falls involved bleachers, stairs, and playground equipment.
- Falls accounted for 3 out of 8 deaths, 3 out of 11 cases requiring extensive rehabilitation, and 36% of cases with a high injury severity score.

Sports (N = 524)

- A common scenario involved falling during a sports activity or being struck by a ball or another piece of sports equipment; injuries were related to asphalt surfaces, ruts in the playing field, bleachers, concrete gymnasium walls, and lack of protective equipment.

- Injuries occurred both in gymnasiums and on playing fields.
- Many kinds of sports were implicated, the most common being football, basketball, wrestling, soccer, track and field, and gymnastics.
- 75% of spinal cord injuries occurred during sports.

Assaults (N = 160)

Following falls and sports, assaults were the third most frequent cause of injury.

- Assaults included beatings (57%), gunshot wounds (10%), and stabbings (14%).
- The majority of the assaults (78%) occurred to students in grades 7-12.

Severity

Many school-related injuries result in hospitalization or surgery.

- 11% of children injured were in the intensive care unit for one day or longer.
- 35 children sustained a spinal cord injury.
- 39% had a head injury.
- 41% had one or more injuries to the extremities.
- One or more surgical interventions were required in 38% of school-related injuries.
- 8 children died, 6 from head injuries; 4 were unintentional injuries and 4 were assault-related.
- 44% of children were discharged with functional limitations expected to last less than 7 months, mainly due to fractures of the extremities; 2% were discharged with functional limitations expected to last 2 years or longer, caused by head or spinal cord injury.
- The average length of hospital stay was 3.5 days.

Cost

Assuming a conservative average cost of \$1,000 per day, the cost of hospitalization was more than \$5 million for a total of 5,391 hospital days.

School Triage

Many school-related injuries were not treated immediately or appropriately.

- 248 children (16% of cases) were sent home after being injured and were subsequently admitted to a trauma center.

- 34% of those 248 children ended up in the operating room; 6% were admitted to the intensive care unit.

Prevention

A number of strategies can prevent unintentional injuries and violence in the school environment.

Environmental Changes to Improve Physical Surroundings

- Removal of physical hazards (e.g., breakable glass in doors, concrete or asphalt under playground equipment, bleachers on playing field lines, holes or ruts in playing fields).
- Maintenance of equipment and facilities (e.g., protective guards on shop equipment, lockers anchored securely, playground equipment in good repair, working smoke detectors).
- Addition of safety features and equipment (e.g., padded mats on concrete gymnasium walls, use of mouthguards and other protective equipment, locks on roof doors, improved lighting).
- Institutionalization of an annual safety checklist for school premises.

Policies and Regulations that Are Enforced

- Collection of injury data to identify causes and patterns of injury.
- Development and enforcement of schoolwide safety policies.
- Development of a response protocol for school staff in the event of an injury; emergency or disaster training for school staff.
- Enforcement of regulations, especially during sports and recreational activities.

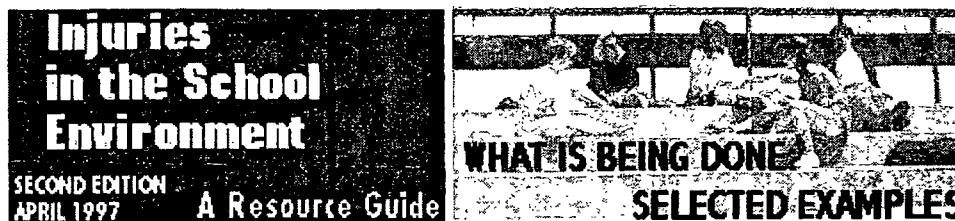
Modification of Behavior

- Education of students and staff regarding potential hazards and preventive measures, and what to do in the event of an emergency or disaster.

Student Instruction in How to Play Safely

- Training of coaches, gym teachers, and other school staff in emergency first-aid procedures.
- Increased supervision of students.

*National Pediatric Trauma Registry, October 1988-October 1995. Reports from 74 participating hospitals across the United States regarding children ages 0-19. *N*=1,555 cases of injuries occurring in the school environment out of 49,540 total cases in the database. NPTR does not include cases of injuries on school grounds to children younger than 5 or older than 18, those that occurred during transportation to or from school, and those reported by a Canadian hospital.



New Hampshire Safe Playground Project

Elaine Frank
The Injury Prevention Center
Dartmouth Hitchcock Medical Center
7455 Butler Building, Room 8
Hanover, NH 03755-3851
603.650.1780 ☎ 603.650.1614 FAX

The New Hampshire Safe Playground Project is designed to identify risks and strategies for reducing the number and severity of playground-related injuries in New Hampshire schools for grades K - 8. The project is funded by the New Hampshire Department of Education, Division of Educational Improvement, and managed by the Injury Prevention Center at Dartmouth Hitchcock Medical Center, in conjunction with the North Country Educational Foundation, a consortium of superintendents and school boards in the rural northern region of New Hampshire that provides training and technical assistance to teachers and administrators.

The goal of the Safe Playground Project is to assist elementary school nurses and staff, school administrators, and insurers to systematically examine playground- and recreation-related injuries in order to develop effective prevention strategies to reduce risks. Data are collected for incidents that occur during school-sanctioned time, on the playground, or during recess or recreational activities, including physical education classes and school-sponsored sports. The data collection form is a modified version of the form developed in Arizona. Also reported are injuries that result in the loss of one half-day of school or more, students referred for outside medical care, and any other significant playground injury. The project is particularly interested in collecting data on injuries to students with special educational needs, to assess the incidence of playground injuries to this population.

Beginning in October 1996, more than 65 schools began voluntary participation in the data collection effort. Schools provide completed injury reports for all incidents meeting the data collection criteria. Participating schools receive training for school nurses and designees related to the project, individualized reports detailing school-based injuries, access to and use of Playground Inspection Kits, ongoing technical assistance and updates on playground safety, and first-aid kits/fannypacks for use on playgrounds and on field trips. All training is provided by the staff of the Injury Prevention Center at Dartmouth Hitchcock Medical Center.

The project has produced six Playground Inspection Kits, located around the state and available for loan at no charge. The kits include materials that can assist schools and community groups to learn more about playground safety in general, as well as assess their own playgrounds. A resource library has been developed; it houses playground safety information that is available for loan to schools.

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CPSC and CNA Offer Free Home Childproofing Brochure

by Steven Simpson, Ph.D.

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The US Consumer Product Safety Commission (CPSC) and CNA, a major insurance organization, are joining together to offer a free brochure highlighting low-cost safety devices for making homes safer for young children. CPSC estimates that more than 2.5 million young children are injured or

killed each year in often-preventable incidents at home. "Childproofing Your Home: 12 Safety Devices to Protect Your Children," is a colorful, easy-to-read brochure that offers helpful suggestions to childproof furniture, rooms and other areas of the home. The brochure puts special emphasis on safeguarding children up to five-years-old. Order "Childproofing Your Home: 12 Safety Devices to Protect Your Children," Item 618F, by contacting the Consumer Information Center. Call the center toll-free at 1 (888) 8-PUEBLO, Monday through Friday from 9am to 8pm EST, or send your name and address to Consumer Information Center, Dept. 618F, Pueblo, Colorado 81009. You also will receive a free copy of the Consumer Information Catalog, which lists more than 200 free and low-cost federal publications about a variety of consumer topics.

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A Year 2000

☑ Home Safety Checklist ☑

By Mark Kakkuri

For More Information
Check out these Web sites
for more home-safety
suggestions.

Jump to the sections in this
article for quick tips on
safety-proofing your home.

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Now that the chaos of the recent millennium celebration has passed, it's a good time to take a fresh look at the safety of your home. Use your common sense and the following checklist to help evaluate home hazards and safeguard you and your family.

Fan the flames of safety

One of the most devastating disasters that can happen in a home is a fire. To start minimizing your risk of having a fire, complete these basic home-safety tasks:

- ☑ Install working smoke alarms. Test them monthly, and replace the batteries twice a year, when you change your clocks.
- ☑ Plan and practice a fire escape route with your family.
- ☑ Fix potential fire hazards, such as frayed wires, wires under carpets, loose plugs and gas smells around pipes or appliances.
- ☑ Move candles away from combustibles, such as draperies or paper.
- ☑ Consider installing a sprinkler system. The National Fire Protection Association states that 90 percent of fires can be contained by the operation of just one sprinkler system. "The installation of sprinkler systems in homes saves lives and property and should be increased at every opportunity," says Julie Reynolds, director of public affairs for the NFPA in Quincy, Mass.

Be careful in the kitchen

According to the NFPA, cooking equipment is the No. 1 cause of home fires. Never leave cooking equipment unattended, and keep your cooking area clean and uncluttered. Greasy or cluttered stove tops can lead to fires. Heed these other kitchen safety suggestions.

- ☑ Hot soup on the stove top can fall and burn someone. Turn pan handles in.
- ☑ Don't let children touch or get near hot items.
- ☑ Always supervise children in your kitchen.
- ☑ Lock up cupboards and cabinets that contain detergents or other potentially harmful substances.

Don't forget the garage

Garages are usually filled with sharp tools, flammable liquids and motorized equipment. However, they're often overlooked when considering home safety. Keep these tips in mind when evaluating your garage.

- ☒ Lock up power tools and chemicals inside a cabinet.
- ☒ Store flammable materials, such as gasoline or oil-soaked rags, in appropriate containers.
- ☒ Keep hazardous substances, like weed killers, fertilizers or grease-removing solvents, locked in cabinets or out of children's reach.
- ☒ Always supervise children in your garage.
- ☒ Inspect your overhead garage door regularly.
- ☒ Keep the garage door down and locked at all times, even if you are inside the house or in the yard.
- ☒ Test the automatic reverse mechanism monthly.
- ☒ Keep the garage door remote controls away from children.
- ☒ Never try to "beat the door" by entering or exiting the garage beneath a moving garage door.

Ensure safety in older homes

Replete with charm and nostalgia, older homes unfortunately come with a host of potential safety problems. The home-improvement editors at 4anything.com, an Internet site that supplies information on various topics, offer this advice for improving safety in older homes.

- ☒ Visually inspect wood for rot or termite damage.
- ☒ Check for cold air drafts.
- ☒ Inspect all exposed plumbing for possible insulation trouble spots.

In addition, owners of older homes can inexpensively improve their safety by doing one or all of the following:

- ☒ Install slip-resistant materials in the shower or tub.
- ☒ Add lighting where necessary.
- ☒ Update electrical outlets and switches.

Reduce slips and trips

Slips and trips aren't always a product of clumsiness. Many can be prevented by keeping these simple rules in mind.

- ☒ Make sure all throw rugs have non-skid padding under them.
- ☒ Install handrails and slip-resistant floor coverings on staircases.
- ☒ Use a bath/shower mat near the bathtub or shower.
- ☒ Check outside for uneven ground. Level problem areas or mark them to prevent a fall.
- ☒ Apply an ice-melt product, salt, or sand to icy driveways, sidewalks and porches.

Remove clutter

Home safety includes getting rid of extra household "stuff" and neatly storing

anything that's left over. Too many improperly stored items can be hazardous. For example, the potential for fire increases with each stack of old newspapers or paper grocery bags.

- ☒ Throw away what you don't need.
- ☒ Store what you do need in filing cabinets, see-through plastic bins and desk and closet organizers.

Prevent a pool tragedy

From a child's perspective, swimming pools are excellent escapes on a warm day. However, from a parent's perspective, pools are potential hazards whenever a child is present. The key to pool safety lies primarily with competent adult supervision.

- ☒ Erect a barrier that, according to the U.S. Consumer Product Safety Commission, "prevents a child from getting over, under or through, and keeps the child from gaining access to the pool except when supervising adults are present."
- ☒ Enforce the use of personal flotation devices.
- ☒ Be sure kids don't run around a pool.
- ☒ Don't allow kids to dive in shallow areas.

Remember firearm safety

Most tragedies, injuries or deaths from firearm-related incidents are preventable. The National Rifle Association suggests that adults should store guns so that they are inaccessible to children and other unauthorized users. Store guns in a safe or a locking gun cabinet, or use a device that renders the weapon unusable, such as a trigger lock.

Offer these tips to kids if they find a gun:

- Stop!
- Don't Touch
- Leave the area.
- Tell an adult.

Electrical safety

At some point, a toddler may begin to get curious about the electrical outlets on the walls and may even wonder, "What else can fit in those three holes?"

- ☒ Use outlet covers that prevent fingers, paper clips, pens and other objects from being "plugged in."
- ☒ Replace or repair frayed wires and cords.
- ☒ Unplug electrical appliances when not in use.

Don't wait to fix something until after an incident occurs. Home safety should be on everyone's "to do" list. With the new year in full force, safeguard what matters:

most: you and your family.

FOR MORE INFORMATION

www.nfpa.org www.sparky.org www.cpsc.gov	www.housemaster.com www.4safety.com
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April 18, 2000

**National Center for Injury Prevention and Control**[News](#) [Facts](#) [Data](#) [Publications](#) [Funding](#) [Search](#) [Contact Us](#)**Childhood Injury Fact Sheet****Fact Sheet**

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NCIPC**
How frequently are children injured?

Each year between 20 - 25% of all children sustain an injury sufficiently severe to require medical attention, missed school, and/or bed rest.

- For every childhood death caused by injury, there are approximately 34 hospitalizations, 1000 emergency department visits, many more visits to private physicians and school nurses, and an even larger number of injuries treated at home.
- Deaths: Unintentional injuries are the leading cause of death in children from 1-21 years of age. However, deaths are still a rare event. Even so, they are relatively easy to count accurately, given the sophisticated vital statistics surveillance system in the United States. These records are maintained by the National Center for Health Statistics, CDC
- Nonfatal: These are much less rare, but are more difficult to count accurately, since injured children are treated at so many types of sites by so many types of health care professionals.¹ Very few national surveillance systems exist for such data. The Department of Transportation (National Highway Traffic Safety Administration) maintains the Fatal Accident Reporting System for fatal traffic-related events, and its companion General Estimates System to estimate the number of nonfatal traffic-related events. The U.S. Consumer Product Safety Commission maintains the National Electronic Injury Surveillance System to monitor hospital emergency department visits for product-related injuries.

[Top of Page](#)**Who is at-risk?**

Each type of injury has a particular demographic pattern, which is determined by:

- Developmental level of the child: physical, mental, emotional
- Prevalence of the threat in that community (e.g., all-terrain vehicles backyard swimming pools, firearms, kerosene heaters, etc.)
- Access to and use of environmental countermeasures (e.g., bike helmets, smoke detectors)
- Importance of supervision in avoiding the threat, relative to the degree provided (e.g., toddler living in a low-income apartment complex with an in-ground swimming pool that lacks protective fencing, with a 5-year supervising the toddler)
- Several demographic features are common to most types of injuries. The injury rates are greatest in those with:
 - Low socioeconomic status, especially urban African-American children and American Indians/Alaska Natives
 - Males

The principal exception to this is young motor vehicle occupants before adolescence, in whom the male:female ration is nearly unity.

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What are the leading causes of fatal injuries

Overall, motor vehicles, fires/burns, drowning, falls, poisoning.

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What determines what body site(s) are injured?

- Injury-specific. For example:
 - Motor vehicle--blunt thoracoabdominal trauma, head injuries
 - Sports--extremity fractures, sprains, and strains
 - House fires--body burns, inhalation injuries
 - Near-drowning--coma, brain damage
 - Falls--head injuries, fractures, blunt trauma
 - Poisoning--coma, kidney failure, etc.
- Was the child a projectile?
 - Head injury quite likely
 - Bicycle-motor vehicle collision, falling forward over the handlebars
 - Unrestrained occupant in a motor vehicle collision, thrown forward through the windshield or ejected from vehicle

roadway
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Where do injuries occur most commonly? Locations and conditions associated with possible danger are:

- In the home:
- Water--kitchen, bathroom, backyard swimming pool
- Intense heat or flames--kitchen, backyard barbecue pit
- Toxic agents--under the kitchen sink, bathroom medicine chest, mother's purse, garage
- High potential energy--stairwells, loaded firearms

At school:

- Related to sports activities (especially in the absence of proper gear)
- Carrying of weapons
- Industrial arts classes
- After school:
 - On the job:
 - Hostile relationships in work environment
 - Use of machinery
 - During transport:
 - Motor vehicle crashes (especially if unrestrained or if driver has been drinking alcohol)
 - Bicycle crashes
 - Pedestrian injuries

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What criteria determine the priority level for each type of childhood injury?

- High mortality rate or hospitalization rate
- High long-term disability rate, especially mechanisms likely to result in head and spinal cord injuries
- Existence of effective countermeasure

In other words, the highest priorities are assigned to those types of injuries which are **common, severe, and readily preventable.**

Often, however, the only difference between a nonfatal and fatal event is only a few feet (e.g., pedestrian injury which results in fracture rather than massive trauma), a few inches (gunshot wound to the arm instead of the head), or a few seconds (as in the survivor of a near-drowning event). Therefore, each nonfatal event that involves a great mismatch of momentum must be taken very seriously. Surveillance of nonfatal injuries would be appropriate to help determine risk factors and possible interventions, as a proxy for fatal events.

**Contact
Information**

**National Center for
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TABLE 4. Number of injury deaths according to intent and mechanism of injury, by age — United States, 1993 — Continued

Intent and mechanism	All ages*	Age of decedent (yrs)												
		<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	≥85
Suicide														
Cut/pierce	537	NA	NA	0	1	7	19	109	116	86	69	79	38	13
Drowning	355	NA	NA	0	1	7	24	55	65	44	38	62	40	17
Fall	605	NA	NA	0	5	28	44	141	123	77	64	38	59	24
Fire/burn	188	NA	NA	0	2	12	13	37	47	34	19	19	4	1
Firearm	18,940	NA	NA	1	186	1,273	1,940	3,611	3,194	2,433	1,997	2,104	1,714	483
Motor-vehicle traffic	108	NA	NA	0	2	16	13	20	28	11	6	5	5	2
Natural/environmental	8	NA	NA	0	0	0	0	1	1	1	3	1	0	0
Poisoning	5,271	NA	NA	1	22	178	331	985	1,536	966	520	394	238	99
Suffocation	4,627	NA	NA	3	92	340	532	1,232	929	466	298	316	278	134
Other specified, classifiable	308	NA	NA	1	4	15	34	92	83	32	29	12	5	1
Other specified, not elsewhere classifiable	117	NA	NA	0	0	7	12	18	39	14	9	7	7	4
Unspecified	38	NA	NA	0	0	1	3	6	9	4	9	3	2	0
Total	31,102	NA	NA	6	315	1,884	2,965	6,307	6,170	4,168	3,061	3,040	2,390	778
Homicide														
Cut/pierce	3,204	3	13	16	41	252	420	1,011	719	292	182	139	81	21
Drowning	52	6	13	2	1	5	6	10	3	3	2	1	0	0
Fall	24	0	3	0	0	1	1	6	2	5	1	2	3	0
Fire/burn	227	10	34	17	6	7	9	39	32	24	18	11	12	8
Firearm	18,253	14	71	99	359	3,082	4,023	5,295	2,990	1,302	527	319	120	26
Poisoning	59	8	9	8	1	2	2	7	12	1	7	1	0	1
Struck by/against	368	4	6	0	4	20	29	77	87	53	32	30	19	7
Suffocation	954	31	34	17	18	58	115	245	178	74	48	53	49	28
Other specified, classifiable	363	163	151	10	4	6	3	7	5	2	4	2	1	3
Other specified, not elsewhere classifiable	1,093	20	38	14	13	51	94	256	235	146	83	64	49	26
Unspecified	1,056	85	92	11	15	56	74	210	187	120	65	64	43	19
Total	25,653	344	464	194	462	3,540	4,776	7,163	4,450	2,022	969	686	377	139
Undetermined														
Cut/pierce	5	0	1	0	0	0	1	1	0	1	1	0	0	0
Drowning	262	4	11	2	3	6	24	75	63	24	16	11	10	3
Fall	56	0	0	0	0	3	6	14	9	7	6	5	3	3
Fire/burn	102	3	6	5	2	1	10	14	15	8	14	8	6	4
Firearm	563	0	1	3	18	82	101	129	77	59	29	29	28	4
Motor-vehicle traffic	14	0	0	0	0	1	2	5	3	1	1	1	0	0
Natural/environmental	7	1	0	0	0	1	0	0	0	2	0	0	3	0
Poisoning	1,903	10	5	4	1	35	96	577	750	245	91	53	20	11
Suffocation	76	12	3	1	16	7	5	12	9	5	2	1	1	2
Other specified, classifiable	25	0	0	0	1	2	4	5	8	4	0	1	0	0