Child Maltreatment, Abuse and Neglect

Louis Durkin MD, FACEP
Objectives

- By the end of this lecture, the EMT will be able to...
  - Understand the scope of child maltreatment in the US
  - List the risk factors associated with child maltreatment
  - List the key features on History and Physical that suggest child maltreatment
  - Describe the best options for treatment of victims of child maltreatment
  - Describe appropriate documentation techniques in cases of suspected child maltreatment
Description

- **Levels**
  - Appropriate for all levels
- **This lecture will review the data available on child maltreatment and discuss the recognition and treatment in suspected cases encountered by EMS personnel. It will also go over documentation techniques and legal issues.**
Case 1

- You are called to the home of an infant with a chief complaint of having an asthma attack. On arrival you find a 7 month old, lethargic infant lying on the couch. The male and female adults on scene appear agitated and say the infant just got sick 2 hours ago and has asthma. On exam you see old appearing bruises on the thighs and wrists, and note the child is lethargic. There are no signs of respiratory distress, no retractions, and breath sounds are clear bilaterally. Abdomen is distended and the fontanel is bulging.
  ✓ What is the differential diagnosis?
  ✓ What are some red flags?
  ✓ What is some additional information you would like?
You are called to the scene of a woman with difficulty breathing. On arrival to her apartment you find a 30 year old, woman in mild respiratory distress smoking a cigarette. She has wheezes bilaterally and says she has a history of asthma the “f---ing doctors do nothing about.” She smells heavily of ETOH, as does her male significant other. You also notice the apartment is covered in several month old garbage with insects and rodent evidence. There are 4 children in the apartment who appear to be ages 1-6. All are unkempt and appear malnourished. As the patient and the other adult get ready to go with you in the ambulance, you ask who will be watching the children. She replies “none of your damn business, they can watch themselves.”

- What is your legal obligation?
- What are your concerns?
You are called to the home of a 2 year old who suffered a burn. On arrival you find the patient, crying, in no respiratory distress, who is inconsolable. The Mother states she was ironing and the iron rolled off the bed and hit the child. On exam you notice several acute burns on the chest, back and right thigh, all consistent with the iron imprint.

- What are the red flags?
- Is this a plausible story?
- What is the best way to handle this scenario?
Introduction

- Child maltreatment is an extremely common problem. In 1997, Child Protection Services in the United states received 3,195,000 reports of suspected maltreatment, with 1,015,000 confirmed victims.
- It is one of the leading causes of childhood death in the US.
- It can be subtle, and difficult to prove.
- EMS is often the key to unveiling and preventing abuse and death.
Definitions

- **Child maltreatment**: The general term used to describe all forms of abuse and neglect.

- **Abuse**: An act of commission that causes harm or potential harm.
  - Physical abuse: inflicting or allowing to be inflicted injury upon a child under 18 years or a mentally disabled child under 21 years old. May result in, or cause risk of death, disfigurement, or injury.
  - Emotional abuse: Any behavior that interferes with the normal emotional, psychological and social development of a child.
Definitions

- Sexual abuse: Occurs when an older child or adult engages in sexual activity with a younger, dependant child or adolescent for the older person’s sexual gratification. Or when it is done for other person’s gratification such as prostitution or child pornography.
  - Most frequently perpetrated by a known trusted adult, often living in the same home, often ongoing, and often using the power of authority, not violence.
  - Difficult to prove in many cases. Need high index of suspicion
Definitions

- **Child Neglect**: An act of omission that occurs when a child’s basic needs are not met resulting in either physical, emotional or mental endangerment.
  - **Physical neglect**: failure to provide adequate food, clothing, shelter, or supervision
  - **Medical neglect**: failure to meet child’s medical needs, such as failure to seek medical attention or follow up on medical recommendations
  - **Educational neglect**: failure to ensure basic educational needs
  - **Emotional neglect**: Failure to provide the support or affection needed for normal psychosocial development
Abuse and neglect

Abuse is an act of commission and may be directed towards one child, or the whole family. Neglect is an act of omission and usually involves all the children in the house.

- A caregiver’s misuse of drugs and alcohol are considered forms of neglect, as is abandonment.
- Striking a child is usually abuse:
  - Controversy exists over spanking, but usual definitions of abuse include spanking in anger, or for gratification, or spanking so hard as to leave a mark.
Examples

- Physical Abuse
  - While witnessing a fight between her mother and her mother's boyfriend, 8-year-old “Jane” called 911. She told the operator that her mother's boyfriend was hitting her mommy again. In addition, Jane said she was worried about her 5-year-old brother because he tried to help their mom and the boyfriend punched him in the face. Her brother has not moved since. The operator heard yelling in the background and the mother screaming, "Get off the phone!" When the police arrived, the 5 year old was unresponsive, having suffered permanent brain injury.
Example

- Child Neglect
  - Betty has a drug dependency problem and a 9 month old son. Since she cannot pay rent, she has been living with various relatives and friends. While living with her new boyfriend, she left her son alone to go earn money via prostitution for drugs. After hearing the baby cry for over an hour, neighbors called the police.
  - This is neglect in the extreme.
  - **More children die from neglect than abuse**
Example

- Sexual Abuse
  - An 11 year old girl told her teacher that she was asleep in her bedroom and that her father came in and took off all his clothes. She stated that he took off her pajamas and put his private part on her private part. She said he pushed hard and it hurt. It’s happened a number of times before, but no one believes her.
Example

- Psychological Abuse

  ✓ A 7-year-old girl who lives with her mother. Her mother has told her friends that she has behavior problems and just won’t listen. She often calls her stupid and threatens to kill her when she misbehaves. She frequently says having you was the biggest mistake of my life.

  ✓ Now the girl has no friends and does not participate in class
For every 1,000 children in the population in 2000, approximately 12 were victims of maltreatment. The Chart above presents NCANDS data on the reported annual victimization rates over the past 11 years.
Statistics

- **Neglect.** More than half of all reported victims (62.8 percent) suffered neglect (including medical neglect), an estimated rate of 7 per 1,000 children.

- **Physical abuse.** Approximately one-fifth of all known victims (19.3 percent) were physically abused, an estimated rate of 2 per 1,000 children.

- **Sexual abuse.** Of all reported maltreated children, just over one-tenth (10.1 percent) had been sexually abused, an estimated rate of 1 per 1,000 children.

- **Psychological maltreatment.** Less than one-tenth (7.7 percent) were identified as victims of psychological maltreatment, or less than 1 per 1,000 children.
Who is doing the reporting?

- More than half the reports are generated by professional personnel, with educators and law enforcement at the top. Medical personnel report about 8% of all abuse. However, medical personnel are often involved in the case, even if law enforcement or others are submitting the report.
- Less than half of all reports are generated by family, friends, neighbors and other lay people.
Who is the maltreating?

- About 40% of maltreatment is perpetrated by the mother acting alone
- 18.8% is by the father alone
- In 16.9% of the time, it is carried out by both parents
- The rest of the time it by other providers, either with or without the parents involved

**Victims by Parental Status of Perpetrator, 2003**

<table>
<thead>
<tr>
<th>Perpetrator Status</th>
<th>Percent of Victims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother Only</td>
<td>40.8</td>
</tr>
<tr>
<td>Father Only</td>
<td>18.8</td>
</tr>
<tr>
<td>Mother and Father</td>
<td>16.9</td>
</tr>
<tr>
<td>Mother and Other</td>
<td>6.3</td>
</tr>
<tr>
<td>Father and Other</td>
<td>1.1</td>
</tr>
<tr>
<td>Nonparental Perpetrator(s)</td>
<td>13.4</td>
</tr>
<tr>
<td>Unknown or Missing</td>
<td>2.8</td>
</tr>
</tbody>
</table>
What is the age distribution?

- The younger the child, the more likely to be abused
  - Younger children, higher stress, unable to communicate or defend

**Victimization Rates by Age Group, 2003**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rate Per 1,000 Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 0-3</td>
<td>16.4</td>
</tr>
<tr>
<td>Age 4-7</td>
<td>12.8</td>
</tr>
<tr>
<td>Age 8-11</td>
<td>11.7</td>
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<tr>
<td>Age 12-15</td>
<td>10.7</td>
</tr>
<tr>
<td>Age 16-17</td>
<td>5.9</td>
</tr>
</tbody>
</table>
The younger the child, the higher the incidence of fatality
Statistics

- Overall, in 2000, 52 percent of victims of child maltreatment were girls and 48 percent were boys. While rates of most types of maltreatment were similar for both sexes, more girls than boys were sexually abused.

- The youngest and most vulnerable children—children under the age of 3—had the highest victimization rate, approximately 16 per 1,000. Overall, rates of victimization declined as children's age increased. ( Victimization patterns by age, however, differ by type of maltreatment.)
While children of every race and ethnicity were maltreated, victimization rates varied. Out of all children reported as maltreated in 2000:

- 50.6 percent of victims were White;
- 24.7 percent of victims were African American;
- 14.2 percent of victims were Hispanic;
- 1.6 percent of victims were American Indian-Alaska Native;
- 1.4 percent of victims were Asian-Pacific Islander.

It is important to remember that these figures represent those children who have been referred to CPS, investigated, and found to have credible evidence of maltreatment. Other studies suggest that there are not significant differences in the actual incidence of maltreatment by race, but rather that certain races may receive different attention during the processes of referral, investigation, and service allocation.
What happens in the investigations

- The majority turn out to be unsubstantiated
  - No evidence to prove the abuse
  - Or false reports
- 26% are substantiated
Fatality by maltreatment type

- Neglect alone is first accounting for about a third of deaths
- Multiple maltreatment types is second
  - Children who are both abused and maltreated
- Abuse alone is the third most common cause

![Diagram showing fatality by type of maltreatment with percentages for each category: Neglect Only (35.6%), Multiple Maltreatment Types (28.9%), Physical Abuse Only (28.4%), Psychological Maltreatment Only, Other Only, or Unknown Only (6.7%), Sexual Abuse Only (0.4%).]
Unreported cases

- Not all victims of abuse and neglect are reported to CPS and not all reports are verifiable.
- The statistics presented here likely under represent the true scope of child maltreatment.
- The Third National Incidence Study of Child Abuse and Neglect (NIS-3) surveyed community-level professionals (e.g., educators, medical professionals, and mental health care providers) who came into contact with children in 1993.
  - The study estimated that less than one-third of the children who were identified as having experienced harm from abuse or neglect had been investigated by CPS.
  - General population surveys suggest that maltreatment is higher than the official reports.
  - Based on what parents reported, a 1995 Gallup Poll estimated the number of physical abuse victims to be 16 times the official reported number of victims for that time period.
Factors that contribute to child maltreatment

- Risk factors associated with child maltreatment can be grouped in four domains:
  - Parent or caregiver factors
  - Family factors
  - Child factors
  - Environmental factors
Parent or Caregiver Factors

- Personality characteristics and psychological well-being
  - No consistent set of characteristics or personality traits has been associated with maltreating parents or caregivers. Some characteristics frequently identified in those who are physically abusive or neglectful include
    - Low self-esteem,
    - An external locus of control (i.e., belief that events are determined by chance or outside forces beyond one's personal control),
    - Poor impulse control,
    - Depression,
    - Anxiety
    - Antisocial behavior.
  - Severe mental disorders are NOT common.
Parental Histories and the Cycle of Abuse

- A parent's childhood history plays a large part in how he or she may behave as a parent.
  - Individuals with poor parental role models or those who did not have their own needs met MAY find it very difficult to meet the needs of their children.
- About one-third of all individuals who were maltreated will maltreat their own children.
- Children who experience or witness violence may learn to perpetuate and rationalize violence
Parental Histories and the Cycle of Abuse

- Not all abused children will abuse their own children, however. Approximately TWO THIRDS of all individuals who are maltreated will NOT subject their children to abuse or neglect.
  
  ✓ It is not known why some parents or caregivers who were maltreated as children abuse or neglect their own children and others do not.
  
  ✓ The presence of emotionally supportive relationships may reduce the risk of the cycle of abuse.
Parental substance abuse is reported to be a contributing factor for between one- and two-thirds of maltreated children in the child welfare system.

- A retrospective study of maltreatment experience in Chicago found children whose parents abused alcohol and other drugs were almost three times likelier to be abused and more than four times likelier to be neglected than children of parents who were not substance abusers.

- A Department of Health and Human Services study found all types of maltreatment, and particularly neglect, to be more likely in alcohol-abusing families than in nonalcohol-abusing families.
Substance Abuse

- Substance abuse interferes with a parent's mental functioning, judgment, inhibitions, and protective capacity.

- Parents affected by the use of drugs and alcohol may neglect the needs of their children,
  - Spend money on drugs instead of household expenses,
  - Criminal activity associated with drug trade may put child in harm’s way

- Studies suggest that substance abuse can influence parental discipline choices and child-rearing styles.
Substance Abuse

- The number of children born each year exposed to drugs or alcohol is estimated to be between 550,000 and 750,000.
  - The full negative impact of fetal drug exposure is still unknown.
  - Developmental delay, fetal demise, and behavior disorders are common in children exposed to drugs in utero.
- Children who exposed prenatally represent only a small proportion of children negatively affected by parental substance abuse.
Substance Abuse

- The number and complexity of co-occurring family problems often makes it difficult to understand the full impact of substance abuse on child maltreatment.
- Substance abuse and child maltreatment often co-occur with other problems
  - mental illness,
  - health problems,
  - domestic violence,
  - poverty,
- These co-occurring problems produce extremely complex situations that can be difficult to resolve.
Attitudes and Knowledge

- Some studies have found that mothers who physically abuse their children have both more negative and higher than normal expectations of their children, as well as less understanding of appropriate developmental norms.
  - For example, thinking a two year old is a bad child because he does not have the impulse control of a 6 year old is a set up for frustration and maltreatment. Understanding what the developmental norm is may be protective.

- “A parent's lack of knowledge about normal child development may result in unrealistic expectations. Unmet expectations can culminate in inappropriate punishment (e.g., a parent hitting a one-year-old for soiling his pants). Other parents may become frustrated with not knowing how to manage a child's behavior and may lash out at the child. Still others may have attitudes that devalue children or view them as property.”
  - A Coordinated Response to Child Abuse and Neglect: The Foundation for Practice
    Author(s): Office on Child Abuse and Neglect (DHHS)
    Goldman, Salus, Wolcott, Kennedy
    Year Published: 2003
Age of caretaker

- Caretaker age may be a risk factor for some forms of maltreatment, although research findings are inconsistent.
  - Some studies show younger mothers may be more likely to physically abuse their children than older mothers. Results are inconclusive.
  - Low economic status, lack of social support, and high stress levels may contribute to younger childbirth—particularly teenage parenthood—and consequently child abuse.
    - So it may not be the age itself, rather the factors that set up the teen pregnancy that really contribute to the abuse.
Family Factors

- Marital conflict, domestic violence, single parenthood, unemployment, financial stress, and social isolation—may increase the likelihood of maltreatment.

- Again, it is uncertain if they cause the maltreatment or are part of the general environment in which abuse takes place.
**Family Structure**

- Children living with single parents may be at higher risk of experiencing physical and sexual abuse and neglect than children living with two biological parents. Single parent households tend to have...
  - Lower income
  - Increased stress associated with the sole burden of family responsibilities
  - Fewer supports
- In 1998, 23 percent of children lived in households with a single mother, and 4 percent lived in households with a single father.
- A strong, positive relationship between the child and the father may lessen the risk of abuse, weather father resides in the home or not.
- In addition, studies have found that compared to similar non-neglecting families, neglectful families tend to have a more chaotic
  - More children
  - Changing constellations of adult and child figures (e.g., a mother and her children who live on and off with various others, such as the mother's mother, the mother's sister, or a boyfriend).
Child Maltreatment and Father Absence

- The rate of child maltreatment in single parent households is 27.3 children per 1,000.
- The rate of child maltreatment in two parent households is 15.5 children per 1,000, almost half.
- The following statistics come from a nationally representative sample of 42 counties. Compared to children living with both parents, children in single parent homes had:
  - 77 percent greater risk of being physically abused
  - 87 percent greater risk of being harmed by physical neglect
  - 165 percent greater risk of experiencing notable physical neglect
  - 74 percent greater risk of suffering from emotional neglect
  - 80 percent greater risk of suffering serious injury as a result of abuse
  - 120 percent greater risk of experiencing some type of maltreatment overall.
Child Maltreatment and Family Structure

- A national survey of nearly 1,000 parents found that 7.4 percent of children who lived with one parent had been sexually abused
  - Only 4.2 percent of children who lived with both biological parents were sexually abused
- According to data from 1,000 students tracked from seventh or eighth grade in 1988 through high school in 1992, 3.2 percent of the boys and girls who were raised with both biological parents had a history of maltreatment. 18.6 percent of those in other family situations had been maltreated.
- A study of 156 victims of child sexual abuse found that only 31% of the children lived with both biological parents. The other 69% came from other family situations.
  - Stepfamilies make up only about 10 percent of all families, but 27 percent of the abused children in this study lived with either a stepfather or the mother's boyfriend.
Marital Conflict and Domestic Violence

- In 30 to 60 percent of families where spouse abuse takes place, child maltreatment also occurs.
  - Children in violent homes may witness parental violence
  - May be victims of physical abuse
  - May be neglected by parents who are focused on their partners or unresponsive to their children due to their own fears.

- A child who witnesses parental violence, even if not maltreated, may experience harmful emotional consequences secondary to witnessing the parental violence.
Stress

- Although stress is also thought to play a significant role in family functioning, its exact relationship with maltreatment is not fully understood.
  - Physical abuse has been associated with stressful life events, parenting stress, and emotional distress
  - Neglectful families report more day-to-day stress than non-neglectful families.
    - It is unclear whether maltreating parents actually experience more life stress or, rather, perceive more events and life experiences as being stressful.
- Specific stressful situations (e.g., losing a job, physical illness, marital problems, or the death of a family member) probably increase the risk of maltreatment secondary to the increased negative emotions such as depression, hostility and anger.
Parent-Child Interaction

- Maltreating parents tend to overly respond to a child’s negative behavior, with little or no reward for positive behavior. Studies have shown them to be...
  - Less supportive
  - Less Affectionate
  - Less Playful
  - More likely to use harsh discipline
    - Hitting
    - Prolonged isolation
  - Less likely to use positive strategies
    - Time outs
    - Reasoning
    - Encouraging success
Child Factors

- Children are not responsible for being victims of maltreatment!
- Certain factors, however, can make some children more vulnerable to maltreating behavior.
  - Age and development impact on the likelihood of maltreatment
  - Anything that increases difficulty of parenting, increases the likelihood of maltreatment
Age

- The relationship between a child's age and maltreatment is not clear cut and differs by type of maltreatment.
  - In the year 2000, the rate of documented maltreatment was highest for children between birth and 3 years of age (15.7 victims per 1,000 children of this age in the population) and declined as age increased.
  - This is particularly true in neglect, but not as consistent for other types of maltreatment (physical, emotional, or sexual abuse).
- Very young children are more likely to experience certain forms of maltreatment, such as shaken baby syndrome and nonorganic failure to thrive.
- Teenagers are at greater risk for sexual abuse.
Disabilities

- Children with physical, cognitive, and emotional disabilities experience higher rates of maltreatment than do other children.
  - Children with disabilities are 1.7 times more likely to be maltreated than children without disabilities.
  - It is unclear to what degree the disability precedes the abuse or is caused by the abuse.
  - In general, children who are perceived by their parents as "different" or who have special needs are at a greater risk for maltreatment
    - disabilities
    - chronic illnesses
    - difficult temperaments
Disabilities

- The demands of caring for disabled children may overwhelm parents.
- Bonding may be difficult, especially in children who are not responsive to affection or are separated from their parents by prolonged hospitalizations.
- Children with disabilities may not understand that the abusive behaviors are inappropriate, and may be unable to escape or defend themselves.
- Some child advocates have suggested that society may tolerate abuse in the disabled child more than in the normally abled child.
Other Child Characteristics

- Some studies suggest that infants born prematurely or with low birth-weight may be at increased risk for maltreatment, but others do not.
  - The higher risk may be secondary to the increased demands of dealing with a low-birth weight baby, or lack of parental education about the low birth weight baby
  - Conversely, the low birth weight may be attributable to lack of prenatal care, drug abuse, or other
Behavior

- Parental perception of child factors such as aggression, attention deficits, difficult temperaments, and behavior problems are associated with increased risk for all types of child maltreatment.

- Again, it is unclear how much of the child’s behavior is secondary to the maltreatment versus how much the maltreatment is elicited by the parents inability to deal with the behavior.
  - Is the child being hit because of the behavior, or is the behavior because the child is being hit?
Environmental Factors

- Poverty
- Unemployment
- Social isolation
- Community characteristics
  - May increase likelihood of maltreatment
  - Most parents or caregivers who live in these types of environments are NOT abusive!
Poverty and Unemployment

- Poverty and unemployment show strong associations with child maltreatment, especially neglect.
- The NIS-3 study showed that children from families with annual incomes below $15,000 in 1993 were more than 22 times more likely to be harmed by child abuse and neglect as compared to children from families with annual incomes above $30,000.
- It is important to underscore that most poor people do not maltreat their children.
  - However, poverty—particularly when interacting with other risk factors such as depression, substance abuse, and social isolation—can increase the likelihood of maltreatment.
Poverty and unemployment

- Theories. There are a number of theories about the cause and effect relationship between poverty and maltreatment. They probably all contribute to a certain degree in different cases.
  - Low income creates greater family stress, which, in turn, leads to higher chances of maltreatment. OR
  - Parents with low incomes may be unable to provide adequate care while raising children in high-risk neighborhoods with unsafe or crowded housing and inadequate daycare. OR
  - Certain characteristics may make parents more likely to be both poor and abusive.
    - A substance abuse problem will decrease the parent's ability to obtain and maintain a job, which also increases the likelihood of abusive behavior. OR
  - Poor families may experience maltreatment at rates similar to other families, but that maltreatment in poor families is reported to CPS more frequently
  - The reporting bias may be due to increased interaction with agencies that are mandatory reporters, or because of greater scrutiny by these agencies
Social Isolation and Social Support

- Some studies indicate that compared to other parents, parents who maltreat their children report experiencing greater isolation, more loneliness, and less social support.
  - Less material and emotional support
  - Lack of positive parenting role models
  - Less pressure to conform to conventional standards of parenting behaviors

- It is not clear, however, whether social isolation in some cases precedes maltreatment or whether it is caused by the same behaviors that contribute to maltreatment
  - In other words, people may avoid the abusive parent because of the personality that makes them abusers
Violent Communities

- Children living in dangerous neighborhoods are at higher risk for severe neglect and physical abuse, as well as child sexual victimization, than children from safer neighborhoods.
  - This may be secondary to the poverty in dangerous neighborhoods OR
  - Violence may seem an acceptable response or behavior to individuals who witness it more frequently
    - “Violence begets violence”

- It is controversial, but some studies show a relationship between violence on TV and violent behavior, especially in individuals who watch a substantial amount of televised violence
Protective Factors

- Just as there are factors that place families at risk for maltreating their children, there are other factors that may protect them from abuse and promote resilience.
- Research has shown that supportive, emotionally satisfying relationships with a network of relatives and friends can help reduce the risk of maltreatment, especially during periods of increased stress.
  - Parents who were abused as children are less likely to abuse their own children if
    - They have resolved internal conflicts and pain related to their history of abuse
    - They have an intact, stable, supportive, and non-abusive relationship with their partner.
  - Additionally, programs on marriage and parenting education may mitigate the stresses associated with family life.
What Are the Consequences of Child Abuse and Neglect?

- The consequences of child maltreatment can be profound and may endure long after the abuse or neglect occurs.
- The effects can appear in childhood, adolescence, or adulthood, and may affect various aspects of an individual's development (e.g., physical, cognitive, psychological, and behavioral).
- These effects range in consequence from minor physical injuries, low self-esteem, attention disorders, and poor peer relations to severe brain damage, extremely violent behavior, and death.
What Are the Consequences of Child Abuse and Neglect?

- Although we know there are profound negative effects of child maltreatment, it should be noted that it may be impossible to study the full effect. Other factors, such as poverty, drug use, and criminal activity cloud the issue, making it difficult to determine how much is secondary to maltreatment, or causing the maltreatment.

- Many studies rely on self reporting, or following certain subsets of the population, such as mental health patients or prison populations.

- It is difficult to compare the maltreated population to a non-maltreated control.
What Are the Consequences of Child Abuse and Neglect?

- Despite the above challenges, it is still possible to identify effects that are associated with abuse and neglect. These effects can be categorized in the following areas:
  - Health and physical effects
  - Intellectual and cognitive development
  - Emotional, psychological, and behavioral effects

- Although maltreated children have a higher risk of certain problems, not all children who have been maltreated will suffer severe consequences. Factors that influence the effects of maltreatment include
  - The child's age and developmental status at the time of the maltreatment
  - Type, frequency, duration, and severity of the maltreatment
  - Other protective factors and individual resilience
Health and Physical Effects

- **Immediate effects**
  - Bruises, burns, lacerations, and broken bones
- **Longer-term effects of**
  - Brain damage and permanent disabilities.
- **Negative effects on physical development can result from physical trauma**
  - Blunt trauma to the head and body
  - Violent shaking
  - Scalding with hot water
  - Asphyxiation
- **Neglect**
  - Inadequate nutrition
  - Lack of adequate motor stimulation
  - Withholding medical treatments
Physical Effects on Infants

- Infants and young children are particularly vulnerable to the physical effects of maltreatment.
- Shaking an infant may result in severe brain injury.
- Shaken baby syndrome can range from vomiting or irritability to more severe effects:
  - Concussion, seizures, death
  - Neurologic disabilities
    - Loss of vision or blindness
    - Learning disabilities
    - Mental retardation
    - Cerebral palsy
    - Paralysis
Physical Effects on Infants

- A nurturing environment is critical for infant growth and development.
- Neglect and malnourishment may cause a condition known as "non-organic failure to thrive."
  - With this condition, the child's weight, height, and motor development fall significantly below age-appropriate ranges.
  - No medical or organic cause.
- The death of the child is the end result in extreme cases.
- Non-organic failure to thrive can result in continued growth retardation as well as cognitive and psychological problems.
- Long-term consequences can include growth problems, diminished cognitive abilities, and socio-emotional deficits such as poor impulse control.
Effects on Brain Development

- As the human brain is exposed to surrounding stimuli, certain areas are stimulated to grow and develop as needed. If certain areas are over stimulated or under stimulated, normal development does not occur.

- For example, a young child exposed to chronic physical or sexual abuse is likely to have pathways that cause the fear response to be strengthened. This in turn causes the brain to see the world a hostile place, increasing the likelihood of anxiety and aggressive behavior.

- Certain areas of the brain may also be inhibited. A neglected infant or young child, for example, may not be exposed to stimuli that would activate important regions of the brain. Consequently, the connections among neurons in these inactivated regions will atrophy. If the regions responsible for emotional regulation are not activated, the child may have trouble controlling his or her emotions and behaving or interacting appropriately (e.g., impulsive behavior, difficulties in social interactions, or a lack of empathy).

- The intellectual ability of the neglected child may also atrophy causing mental retardation and cognitive delay.
Other Health-related Problems

- **Sexual abuse**
  - Direct
    - STD’s
    - Pregnancy
  - Indirect
    - Chronic pelvic pain and other gynecologic problems
    - Gastrointestinal problems
    - Headaches
    - Obesity.

- **Adults who were maltreated as children show higher levels of many health problems not usually associated with abuse and neglect**
  - heart disease, cancer, chronic lung disease, and liver disease.
  - The link may be depression, which can lower the immune system and lead to high risk behaviors such as smoking, alcohol and drug use, and overeating.
Cognitive Development and Academic Achievement

- Studies show conflicting results on the consequences of maltreatment on cognitive development, verbal abilities, and problem-solving skills. Some studies find evidence of lowered intellectual and cognitive functioning in abused children and other studies show no differences.

- Although it is unclear how much cognitive ability is affected, it is clear that academic achievement suffers. Most of the literature reviewed show lower grades and test scores in abused and neglected children, but it is uncertain weather this is because of lowered cognitive ability or lack of support needed to do well in school.
Emotional, Psychosocial, and Behavioral Development

- All maltreatment, whether abuse or neglect, can affect a child's emotional and psychological well-being. This can lead to behavioral problems which may appear immediately or years later.
Emotional and Psychological Consequences

- There is no single set of behaviors that is characteristic of all children who have been abused and neglected.
- Emotional and psychological problems among maltreated children is common.
- Behaviors range from passive and withdrawn to active and aggressive.
- Physically and sexually abused children often exhibit both internalizing and externalizing problems.
Common Consequences

- Low self-esteem
- Depression and anxiety
- Post-traumatic stress disorder (PTSD)
- Attachment difficulties
- Eating disorders
- Poor peer relations
- Self-injurious behavior (e.g., suicide attempts)
Consequences

- Maltreated children may become more mistrustful of others and less able to learn from adults
- May also lack empathy and be unable to understanding the emotions of others
- May have difficulty regulating their own emotions
- May have difficulty forming and maintaining relationships with peers
Violence, Substance Abuse, and Other Problem Behaviors

- A study sponsored by the National Institute of Justice showed that being abused or neglected as a child increased the likelihood of arrest as a juvenile by 53 percent and as a young adult by 38 percent. Physically abused children were the most likely to be arrested later for violent crime.

- Maltreated children are at increased risk (at least 25 percent more likely) for adolescent problem behaviors, including delinquency, teen pregnancy, drug use, low academic achievement, and mental health problems.

- There is also a link between child maltreatment, especially sexual abuse, and later substance abuse.

- Remember, the risk may be higher in these children, but most abused and neglected children will NOT become delinquent, experience adolescent problem behaviors, or become involved in violent crime.
Resilience

Not every child who is maltreated will experience the negative consequences discussed above. "Protective factors" that appear to mediate or serve as a "buffer" against the effects of the negative experiences may include:

✓ Personal characteristics
  • Optimism
  • High self-esteem
  • High intelligence
  • Sense of hopefulness.

✓ Social support and relationships with supportive adults.
Monetary Costs

- In addition to the tragic consequences endured by the children themselves who have been maltreated, society pays a high monetary cost for child maltreatment.
- The costs for child maltreatment include both direct costs (i.e., those associated with the immediate needs of abused and neglected children) and indirect costs (i.e., those associated with the longer term and secondary effects of child maltreatment).
- It is impossible to determine the exact cost of child abuse and neglect. As estimated by Prevent Child Abuse America, the total annual cost of child abuse and neglect in the United States may be as high as $94 billion.
- The table on the next slide outlines some of the estimated costs.
<table>
<thead>
<tr>
<th>Source of Costs</th>
<th>Estimated Annual Cost</th>
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</thead>
<tbody>
<tr>
<td>Hospitalization</td>
<td>$6,205,395,000</td>
</tr>
<tr>
<td>Chronic health problems</td>
<td>$2,987,957,400</td>
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<tr>
<td>Mental health care system (Direct)</td>
<td>$425,110,400</td>
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<tr>
<td>Child welfare system</td>
<td>$14,400,000,000</td>
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<td>Law enforcement</td>
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<td>Judicial system</td>
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<td>Special education</td>
<td>$223,607,803</td>
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<tr>
<td>Mental health and health care (Indirect)</td>
<td>$4,627,636,025</td>
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<tr>
<td>Juvenile delinquency</td>
<td>$8,805,291,372</td>
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<tr>
<td>Lost productivity to society (due to unemployment)</td>
<td>$656,000,000</td>
</tr>
<tr>
<td>Adult criminality</td>
<td>$55,380,000,000</td>
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<tr>
<td><strong>Total Cost</strong></td>
<td><strong>$94,076,882,529</strong></td>
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</table>
- That’s OVER 94 Billion dollars!
- EVERY YEAR!
OK It’s a problem. Now What?

- Child Protection Services (CPS)

  ✓ The CPS agency is a community legal organization responsible for the protection, rehabilitation and prevention of child maltreatment. They have the authority to remove a child at risk from the home. The agency is responsible for the initial investigation of suspected maltreatment.

  ✓ It is the job of CPS to investigate suspected maltreatment and decide if the incident is founded, unfounded, or unable to be determined due to lack of information.
Duties of pre hospital personnel

- It is important to realize that prevention of future maltreatment often relies upon recognition of past or ongoing maltreatment.
- Although most EMS interaction with the patient and family is brief, the pre-hospital care provider is often in the unique position of being allowed into the patient’s home.
- This may be the only hint that maltreatment exists, and recognizing it, documenting it well, and communicating findings may help prevent future episodes, or even save the child from permanent harm or death.
Duties of pre-hospital personnel

- Recognize suspicious circumstances
- Initial physical assessment
- Behavior assessment of child and caregiver
- Detailed physical assessment
- Communicate with child, caregiver, and family
- Careful documentation and reporting
Scene size-up

- As always, ensure scene safety!
  - For you, your partners, and the child
  - Have high index of suspicion for abuse in all injury cases and any medical complaints with suspicious or unusual circumstances
    - May be the environment, the behavior of the child or caregiver, or the H&P
  - Carefully observe the scene for evidence of abuse and document all findings
    - Especially note unsanitary or unsafe conditions such as weapons, drug paraphernalia, or other obvious safety hazards
Scene safety

- Remember, the adult responsible for the maltreatment may be feeling guilty or paranoid
- They should always be considered potentially violent
  - Prior violence is a risk for future violence (see violent patient lecture)
  - If they hurt their child, it puts the healthcare provider at increased risk
- Don’t confront on scene
- Don’t let them between you and the door
- Never get caught alone. Always keep you partner with you
- If necessary, involve law enforcement early
Initial assessment

- **As always, ABC’s**
  - In children it is helpful to remember the Pediatric Assessment Triangle (PAT) as taught by the American Academy of Pediatrics
    - Appearance
    - Work of breathing
    - Circulation to skin
  - Based upon initial findings, determine if critical intervention needs to be performed.
    - Manage airway, call for ALS
  - If the child is critically ill, consider rapid transport after initial life saving interventions
Initial assessment

- Look for clues that don’t make sense
  - If the child supposedly climbed a table and fell off but is only 6 months old, it doesn’t make sense
  - If the child is supposed to be having a bad asthma attack and is unresponsive with no respiratory difficulty, it doesn’t make sense
  - If the child supposedly pulled a hot cup of tea on their head and is covered with burns or has circumferential burns to both arms and legs, it doesn’t make sense
Initial assessment

- Look for clues in the environment
  - If the home is unsafe, or does not look suitable for the child or children who live there, note the details and document
  - Examples
    - Firearms in the open, signs of illegal drug use, caretaker appears intoxicated,
  - Often times this is the only obvious sign of maltreatment, and once the child is out of the home it may not be evident to other health care providers
Initial assessment

- As you take the history, note details of the scene that are pertinent to the history.
- If the child allegedly fell off the couch and has a fractured femur, note the height of the couch, the stopping surface and history of response to the initial injury.
  - Did the child cry immediately?
  - Are there injuries that couldn’t have happened given the mechanism?
- Since you will be the only health care providers to see the actual scene, your documentation of details may be the only clues to neglect or abuse.
Assessing the Child’s behavior

- The child is the barometer of family. If there is maltreatment present, it will often present itself through inappropriate behavior. While there is no pattern that is specific for the neglected child, the following behaviors should serve as a red flag:
  - Avoids caregiver, or does not look to them for comfort
  - Avoids or is wary of physical contact
  - Story is different than caregivers
  - Constantly seeking food, favors or trying to manipulate the healthcare provider into providing needs not met in the home
Child’s Behavior

**Challenges**

- Some children will exhibit the behaviors mentioned even if not in an abusive or neglectful environment
- Children will often try to hide or cover up the abuse
  - Still have strong bonds with the caregiver and may be afraid the family unit will be broken up
    - Afraid the caregiver will be taken away or they will be removed from the home
    - Fear of the unknown is often worse than fear of the known
  - May be afraid of retaliation if the abuse is uncovered
    - “If you ever tell anyone I will kill you”
  - The child may feel the abuse is their own fault and will try to hide it to avoid shame or humiliation
    - “This wouldn’t happen if you would just learn to behave”
Assessing the Caregiver’s behavior

- Although caregivers may behave normally for the pre-hospital provider, there are some behaviors that should be considered “red flags”. A caregiver who maltreats their children may also not be able to handle other social situations normally.
  - Aggressive or defensive when asked about their child
    - Even routine health questions may be viewed as threatening and the response may be an overreaction
  - Apathy
    - Not appearing to care when the child is in obvious distress or pain
Red Flag Behaviors

- **Bizarre or strange conduct**
  - If you are feeling something just isn’t right, you are probably correct

- **Overreaction to child misbehavior**
  - Slapping the child for minor incident

- **Vague about the event or injury**
  - Most parents will be able to give you details. What the parent was doing at the time of the event, what the child was doing, how it happened, what the response was, if it has happened before, etc...
  - If they are covering, it is hard to make up details as they go

- **A changing or inconsistent story**
  - It is difficult to keep all the details of a lie straight
  - Make sure to document ALL inconsistencies!
Challenges of Caregiver Behavior

- **Behavior is difficult to judge**
  - Just because a caregiver is strange doesn’t mean they are maltreating the child
  - Sometimes a stress reaction to a difficult event can mimic the response of a maltreating caregiver
  - See the lecture “Trials and Tribulations” for details, but an apparent lack of concern or apathy may be a denial response of an overwhelmed caregiver. It does not necessarily mean they caused the injury or illness

- **For this reason, it is important to document all findings as objectively as possible, and DO NOT confront the caregiver on scene**
  - This may cause a conflict that interferes with appropriate care
Physical Exam

- The detailed exam will often yield clues that suggest maltreatment.
- By far the most important clue is when the injury or illness does not match the physical findings.
- Although many injury patterns can be either inflicted or accidental, some are HIGHLY suspicious for abuse.
- It is important to take into account the patient’s developmental state, the location, the severity, and the timing of the injury.
Physical Exam

- Kids get hurt all by themselves
- The key is to recognize which injuries are inflicted and which are accidental
- Some accidental injuries are common, some are not
  - Infant- Any injury in an infant should be considered suspicious, unless accompanied by a reasonable history. Infants are not mobile, so usually do not hurt themselves. Most minor falls, such as rolling off a bed or couch onto a carpeted floor do NOT result in major injury.
    - A roll off the couch in a 5 month old should not routinely fracture a femur or cause an intracranial hemorrhage
Physical Exam

- **Toddler and preschooler**
  ✓ Developmentally normal bruises from falls and injuries resulting from learning to walk, run and climb tend to occur in certain distributions
    - Elbows
    - Knees
    - Shins
    - Forehead
  ✓ Common accidental lacerations
    - Chin
    - Forehead
    - Hands
Physical Exam

- Red Flag Areas
  - Face
    - Especially in a slap distribution
  - Ears
    - From pulling or hitting
  - Neck
  - Back
  - Thighs
  - Genitalia
  - Buttocks
    - Although spanking is controversial, any spanking that causes bruises is considered abuse
Physical Exam

- **Red Flag injuries**
  - Stocking/Glove burns
    - This usually happens when the extremity is forcefully held in hot water and is almost always inflicted
  - Donut burn
    - Happens when a child is forcefully held under hot water in a tub. The water burns the exposed area, and the portion in contact with the porcelain is spared. It creates a donut shaped burn.
  - Human bites
  - Electrical Cord or belt or belt buckle shaped bruises
Physical Exam

- Misleading findings
  - Some conditions lead to easy bruising
    - Low platelet counts, hemophilia, leukemia
  - Some conditions lead to easy bone fractures
    - Osteogenesis imperfecti
  - Mongolian spots or other birth marks
    - The key is timing. The child has had it since birth. Should be confirmable
Cultural Practices

- **Coining.** An Asian practice of rubbing coins on the skin (usually the back) to alleviate symptoms of disease.

The caregiver can tell you the purpose of the procedure. It does not scar and is NOT considered abuse.
Cultural Practices

- Cupping. An Asian practice of placing warm cups on the skin to draw out disease. Also does not scar, and is not considered abuse.
Cultural practices

- Scarring
  - A practice of inflicting cutaneous scars either for medicinal purposes or for religious/cultural rites of passage
  - Usually NOT considered abuse, but depends on circumstances and degree of scarring. Female circumcision is one example where permanent damage and disfigurement, or even death from infectious sequellae may result.
Syndromes

- **Shaken Baby Syndrome**
  - Occurs when an infant is violently shaken back and forth.
  - The rapid acceleration/deceleration of the infant’s head results in brain injury.
  - The injuries can range from concussion to long term developmental delay to death.
  - The shaken baby may have no external signs of injury.
  - It is difficult to make the diagnosis clinically in the field
    - It is often found during the hospital workup when CT shows evidence of Sub-Dural hematoma
CT of infant with subdural hematoma

Mortality of shaken baby syndrome is 20%!
Management

- As always, treat the medical or traumatic conditions according to protocol
- The real challenge lies in the communication and documentation
  - Always remain Professional and non-judgmental. This can be difficult as it is often the first instinct to find out what really happened, or to confront the caregiver on inconsistencies. Then the EMS provider encounters maltreatment, it is normal to feel anger towards the caregiver and let it show.
  - It is important NOT to do this. For both short term and long term reasons, it is important to avoid confrontation on the scene. Once the caregiver feels threatened, it can interfere with the care of the child. The caregiver may attempt to leave, or refuse care for the child. This leaves you in the position of getting law-enforcement to intervene, which wastes valuable time in caring for the patient.
  - Further, once the caregiver becomes uncooperative, history becomes limited. One of the most important tools in proving maltreatment is the changing and inconsistent history. The longer the caregiver talks, and the more information you document, the higher the likelihood of proving maltreatment.
Management

- **Communication**
  - Talk to the child at a developmentally appropriate level. (See Trials and Tribulations lecture for details)
  - Communicate with the caregiver in an objective manner.
  - Ask as many details as possible
    - When did the child fall?
    - What did they fall off?
    - Did you see it happen?
    - What part of their body did they land on?
    - Did they cry immediately?
    - Have they been acting normally ever since?
    - What part of their body did they hurt?
    - Do they have any other injuries?
  - **THE MORE DETAILS, THE MORE INCONSISTANCIES**
Communication

- Avoid posing questions in a way that can be interpreted as judgmental
  - Don’t say “Was anyone watching the child?”
  - Do say “Did anyone see the fall?”

- Don’t say “that doesn’t make sense.”
- Do say “tell me again how it happened.”
Documentation

- Document everything.
- Keep it simple.
- Always use quotations when documenting what the caregiver said.
- If the caregiver told multiple versions of the event, document them all, especially if there is conflicting information.
Documentation

- Keep the documentation non-judgmental as well.
  - Do write “1 cm round burn marks over legs and back”
  - Do NOT write “multiple cigarette burns”

  - Do write “multiple bruises over thighs and buttocks”
  - Do NOT write “bruises from spanking to thighs and buttocks”

- Always describe the size, shape and location of any marks. Draw a diagram on the chart, if possible
Duty to report

- This varies from state to state
  - In many, the EMT is considered a “Mandated Reporter”. In other words, if you suspect maltreatment of any type, you are mandated to report it, or ensure it has been reported to Child Protective Services. Failure to do so could lead to legal action.
  - To report a case, you need only suspect it based on the evidence. You do not need absolute proof. As a mandated reported, you are protected from liability if the charges were made in good faith.
- Even if you are not a mandated reporter, it is important to report your suspicions to the ED personnel when you transport the patient. In all 50 states, physicians and nurses are mandated reporters.
Case 1

- You are called to the home of an infant with a chief complaint of having an asthma attack. On arrival you find a 7 month old, lethargic infant lying on the couch. The male and female adults on scene appear agitated and say the infant just got sick 2 hours ago and has asthma. On exam you see old appearing bruises on the thighs and wrists, and note the child is lethargic. There are no signs of respiratory distress, no retractions, and breath sounds are clear bilaterally. Abdomen is distended and the fontanel is bulging.

  ✓ What are some red flags?
  ✓ What is the differential diagnosis?
  ✓ What is some additional information you would like?
Case 1

- **Red Flags**
  - There are a number of clues that this may be abuse
    - The chief complaint is asthma, but there are no signs of respiratory problems
    - The child is obtunded and it is not a respiratory cause, it must be either toxic/metabolic or traumatic
    - There is bruising on the thighs and wrists
      - 7 month olds should not have bruises. If they do, it should be explainable as they typically are not mobile enough to sustain bruising like a toddler. The thighs are not typical areas to injure while learning to crawl
    - The bulging fontanel (or soft spot of the skull in infants) is caused by increased intracranial pressure. Differential includes trauma, and meningitis.
Case 1

- **Differential diagnosis**
  - Closed Head injury
  - Sepsis/ Meningitis
  - Severe metabolic derangement
    - Multiorgan failure
    - Electrolyte abnormality
    - GI Bleed
    - Vascular anomaly
    - Congenital Cardiac Disorder

- **Most likely cause, given the entire picture is trauma secondary to abuse**
Case 1

- This turned out to be shaken baby syndrome. CT showed bilateral subdural hematoma
- Abdominal injuries were present as well
  - Ruptured spleen
  - Liver laceration
  - Abdominal injuries were from being kicked
- This patient died after several days in the ICU
- The father later confessed
Case 2

- You are called to the scene of a woman with difficulty breathing. On arrival to her apartment you find a 30 year old, woman in mild respiratory distress smoking a cigarette. She has wheezes bilaterally and says she has a history of asthma the “f---ing doctors do nothing about.” She smells heavily of ETOH, as does her male significant other. You also notice the apartment is covered in several month old garbage with insects and rodent evidence. There are 4 children in the apartment who appear to be ages 1-6. All are unkempt and appear malnourished. As the patient and the other adult get ready to go with you in the ambulance, you ask who will be watching the children. She replies “none of your damn business, they can watch themselves.”
  - What is your legal obligation?
  - What are your concerns?
Case 2

- Children under 6 cannot watch themselves
- It is fairly evident the living situation is not fit for children
- The children cannot be left in the apartment alone
  - You have an obligation to make sure the children are adequately supervised. As the mother does not appear in extremis, you can ask her to call a neighbor or family member to watch the children or bring them with you
  - If necessary, involve law enforcement and CPS before leaving the scene
Case 2

- In this case, local police were already dispatched to the scene. The officer stayed behind, called CPS and the children were removed from the home.
Case 3

- You are called to the home of a 2 year old who suffered a burn. On arrival you find the patient, crying, in no respiratory distress, who is inconsolable. The Mother states she was ironing and the iron rolled off the bed and hit the child. On exam you notice several acute burns on the chest, back and right thigh, all consistent with the iron imprint.

  ✓ What are the red flags?
  ✓ Is this a plausible story?
  ✓ What is the best way to handle this scenario?
Case 3

- Red Flags
  - An iron rolling off the bed does not burn a child in several places, both front and back
  - This history quite clearly does not match the mechanism
Case 3

- **Concerns**
  - The main concern is that there may be other life threatening injuries
  - The burns alone are not acutely life threatening
  - This child needs to go to the ER for further evaluation
  - Should be monitored closely for any change in condition
    - Pay special attention to the vitals and the abdominal exam. The abdomen often will hide injuries that become evident as time goes on
Case 3

- In this case, the mother’s story changed several times
- CPS was involved while the child was in the ER and the 2 other children living in the house were removed that day
- The patient was admitted and placed in foster care
Child Maltreatment Summary

- Maltreatment of children is common
- It is often fatal
- It is underreported and under-suspected
- The Pre-hospital provider needs a high index of suspicion to detect maltreatment
- The brief time EMS is in the home is often the only chance the system has to detect and document maltreatment
- When in doubt, report to CPS
- Detecting and intervening before maltreatment escalates can save the life of a child