

Coroner Systems

- Not always a physician, often from law enforcement background or lay person
- May not be his/her primary occupation
- Often elected
- Requirements vary
- Typically countywide jurisdiction

Medical Examiner Systems

- Typically, licensed physician in the state of jurisdiction
- Often, a pathologist or forensic pathologist
- Generally appointed
- Often, statewide jurisdiction

Combined Systems

- Both medical examiners and coroners within the state
- In some cases, state medical examiner with county coroners
- Can also vary by counties within the state
- Accounts for approximately 22-36% of the states.
- s death investigation systems and NAME, ABMDI , IACME representation in states, SWIGMDI infrastructure committee.
 March 33,2663.
- Death Investigation: a guide for the scene investigator, technical update, national institute of justice, June 202

Standardization

- American board of medicolegal death investigators (ABMDI)
- International association of coroner/medical examiner (IACME)
- National association of medica examiners (NAME)
- Multiple working groups for medicolegal death investigation

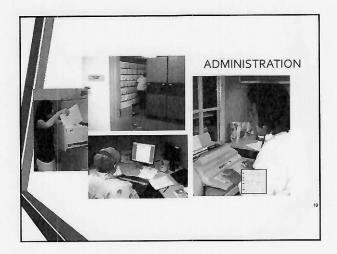
"Remember ...

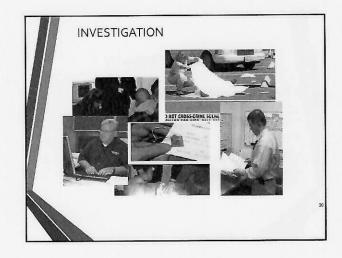
This Room becomes sacred when a family entrusts us with one of their most precious possessions

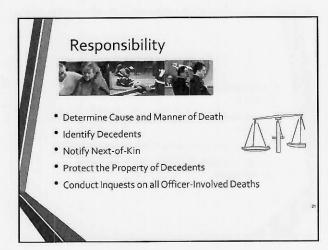
Keep faith with them by conducting yourself as though the family were present. The body is dear to them ...

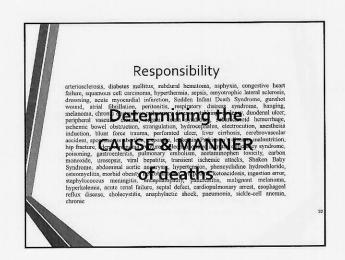
... treat it reverently."

When is a Death a Coroner/ME Case Any Death: Unnatural Under the age of 18 years Unexpected Unknown means Possible Criminal means









Deaths are categorized as being one of the designated Manners:

Natural

Natural disease process of the body

Accident

Any unforeseen or unexpected event

Suicide

The taking of ones own life or death at ones own hand

Homicide

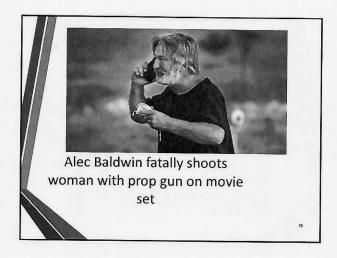
The taking of one life by another or an interaction in which a death occurs

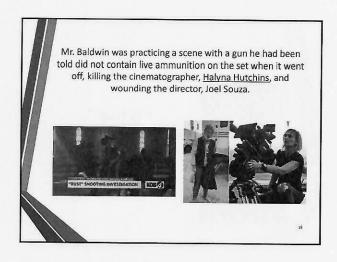
Undetermined

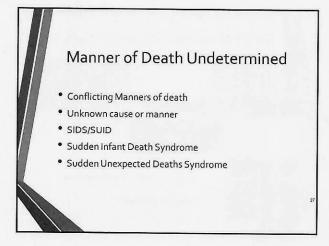
Conflicting manners of death

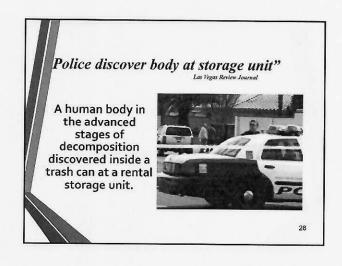
Mechanism of death

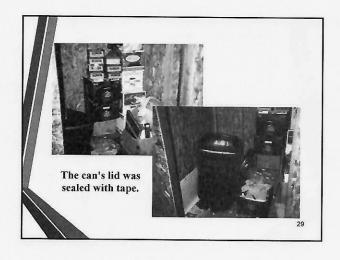
• The process that <u>causes</u> one or more vital organs or organ systems to fail when a fatal disease, injury, abn ormality or chemical insult occurs; it is the functional (physiologic) or structural change that makes independent life no longer possible after a lethal event has occurred.

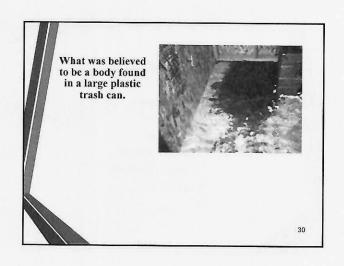


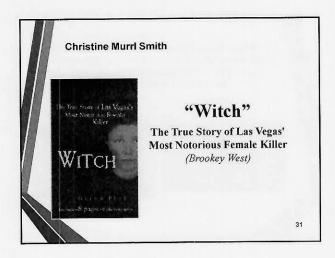












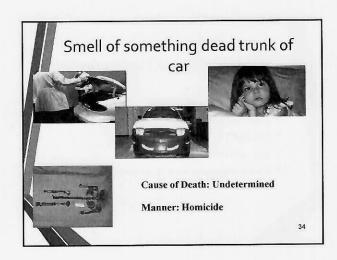
Significant findings at autopsy

- Plastic bag tied behind head, over nose and mouth.
- Per radiology, no characteristics suggestive of projectile or weapon of any type.
- Body in advance decomposition with adipocere formation; all internal viscera were in an advanced state of decomposition with virtually no detail remaining and the brain was liquefied.
- No anatomical findings during postmortem examination.

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Cause of Death:
1. Undetermined

Manner: Undetermined



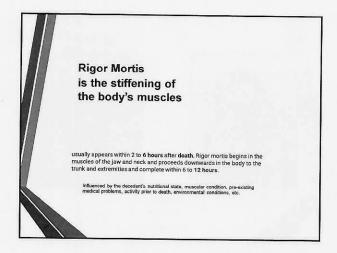
Death Terminology

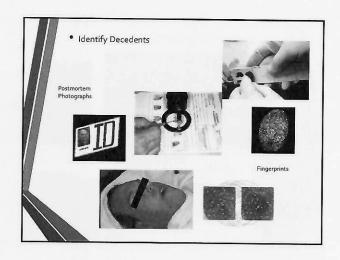
Ante mortem
Peri mortem
Post mortem
TOD/Time of death
Lividity / Livor Mortis
Rigor Mortis

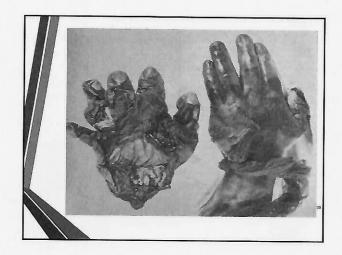
Livor Mortis (Lividity / Hypostasis)

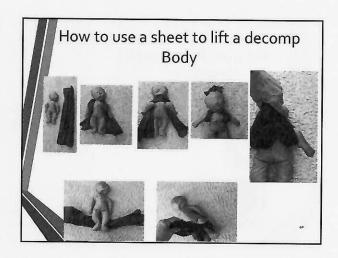
is the gravitational pooling of blood.

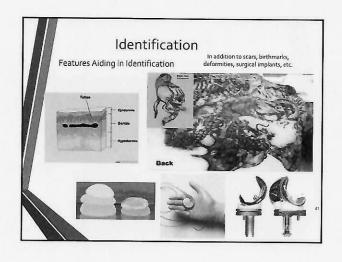
typically begins around thirty minutes to four hours after death, and is most pronounced approximately twelve hours after death. Livor becomes "fixed" when the blood coagulates, preventing the blood from re-pooling if the body is moved into another position.

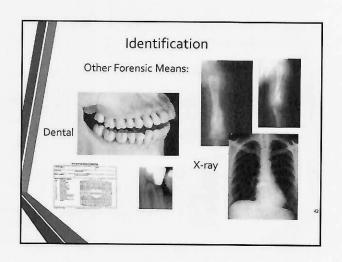


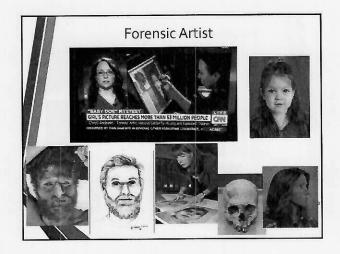




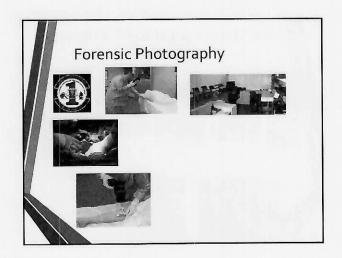


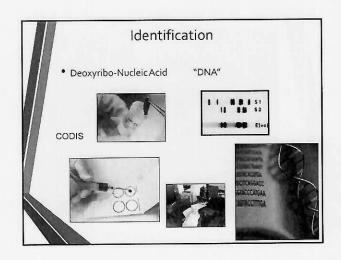


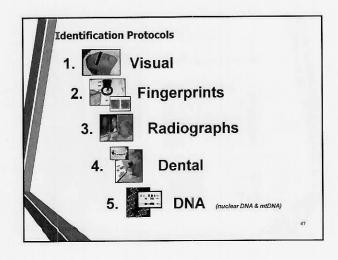


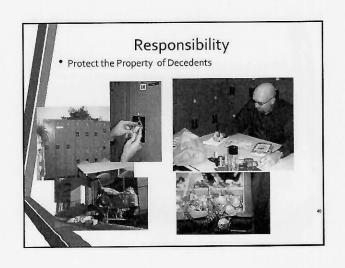


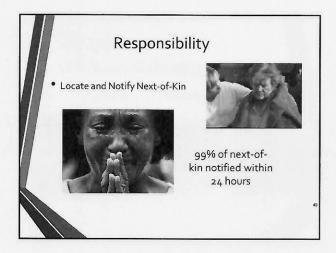


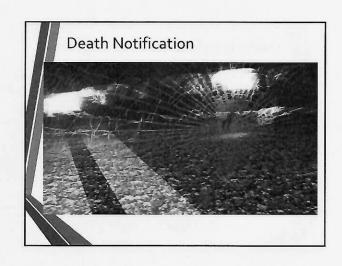


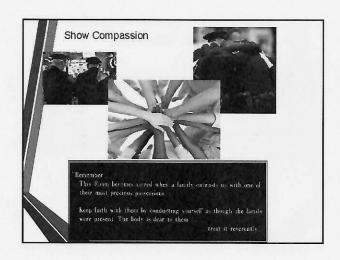


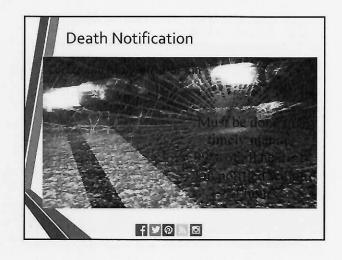


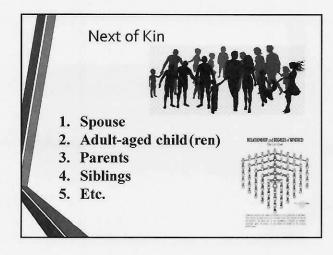


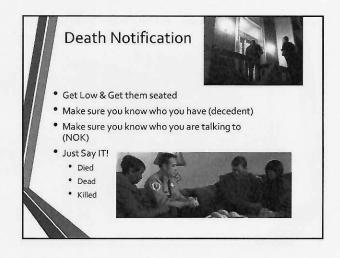


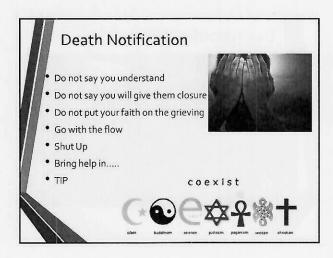


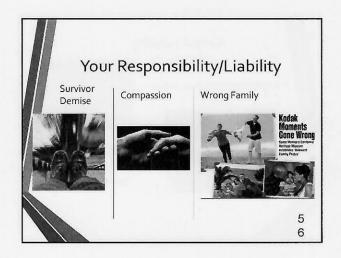


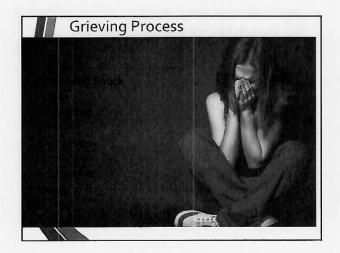




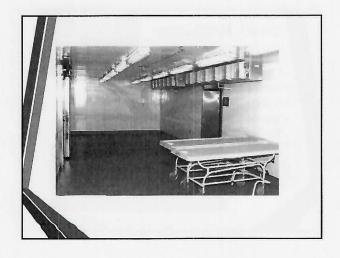




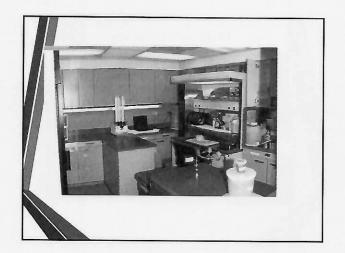


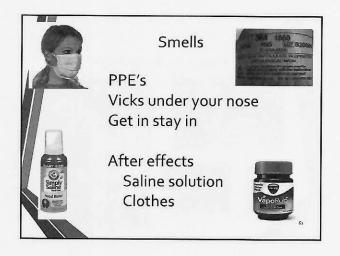


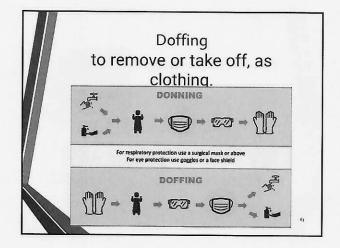


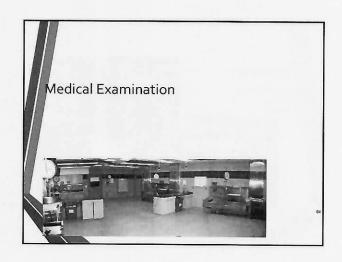


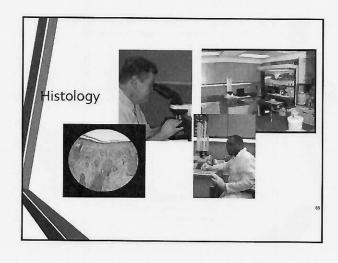


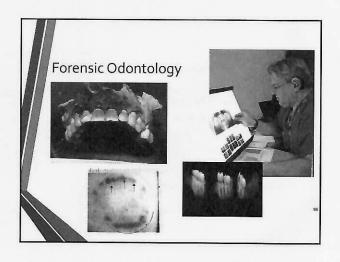


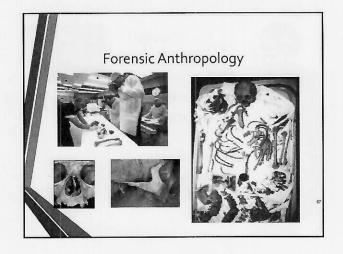


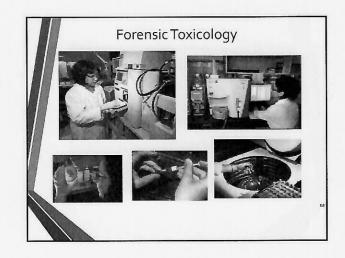


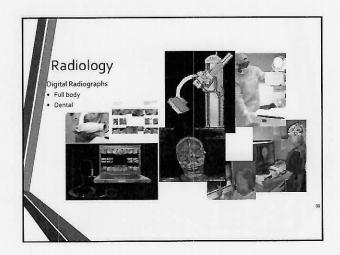


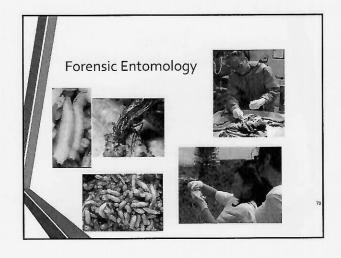


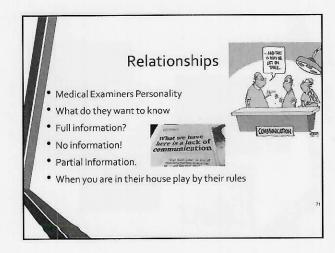


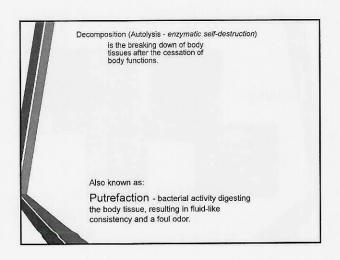




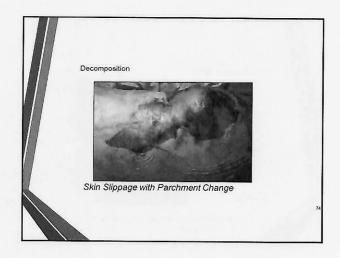


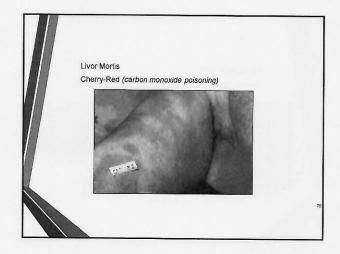


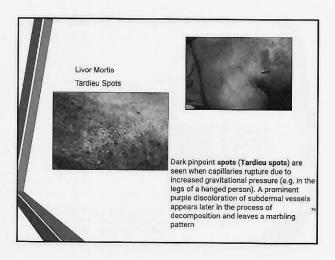


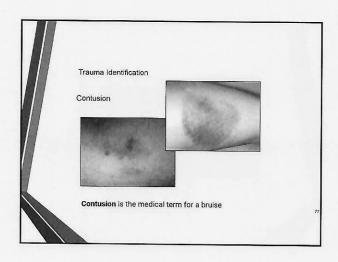


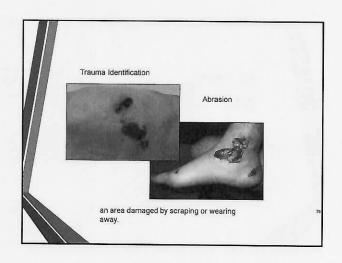


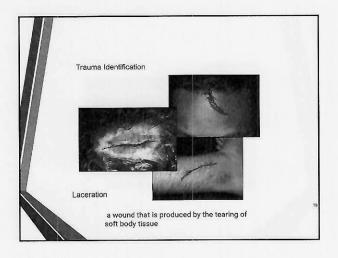


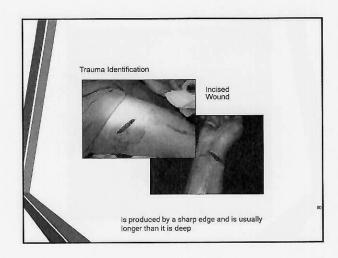


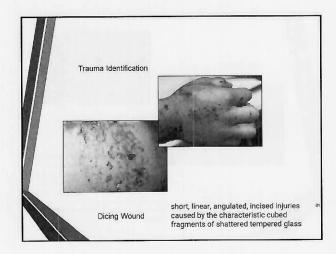


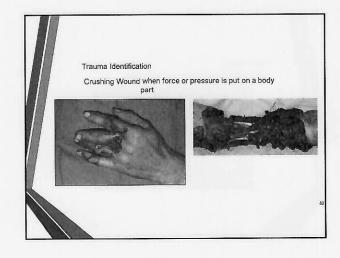


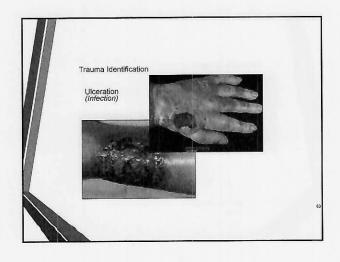


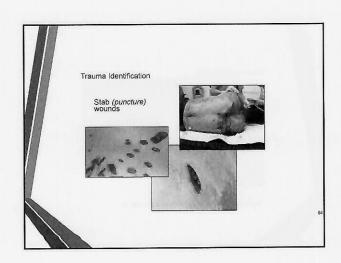




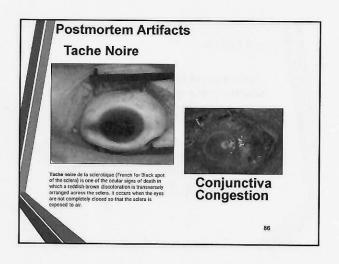


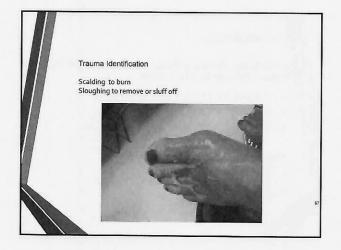


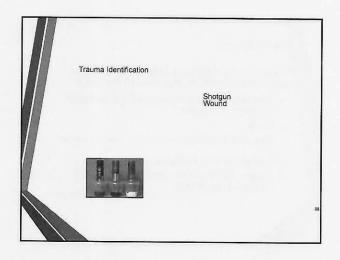












Ballistics is the area of study dealing with the motion of projectiles; i.e., bullets, and is further divided into internal ballistics, the study of projectiles in the weapon; external ballistics, the behavior of the projectile through air; and terminal ballistics, the study of the penetration of a medium denser than air by projectiles.

(Barach et al., 1996, Bellun, 1978, Di Maio, 1985, Ordog et al., 1984)

There is no single characteristic appearance of a gunshot wound that defines the manner of death.

Such a determination requires analysis of multiple pieces of evidence, including the scene investigation, the examination of the body, ballistics evidence, analysis for gunshot residue, and interviews of persons involved with the decedent and the scene of death.

Terminal Effects

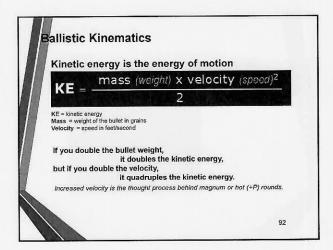
The amount of tissue damage is determined by the amount of kinetic energy lost by the projectile in the body.

(Callender and French, 1935; Coates and Beyer, 1962; Di Maio et al., 1974; Harvey et al., 1945)

The bullet weight and velocity determines the kinetic energy possessed by a projectile with velocity being the most critical component.

(Bartin 1976 DaMuth 1966 Hopkinson and Marshall, 1967; Ordog et al., 1984)

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Cinetic Energy

A variety of factors are responsible for the amount of kinetic energy lost in the body:

- Amount of kinetic energy of the bullet at the time of impact,
- > Mass.
- Yaw and tumbling (deviation of the missile from its flight path),
- > Caliber or size of bullet, and
- Shape, deformation, and density of the tissue being struck.

(Callender, 1943; Fatteh, 1976; Ragsdale, 1984).

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Wound Ballistics

Principally, there are three (3) mechanisms of tissue damage due to bullets:

- 1. Tissue laceration and crushing,
- 2. Cavitation, and
- 3. Fragmentation (incl. secondary projectiles).

There are 2 other considerations:

- i. Combustion, and
- ii. Shock waves

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Laceration & Crushing

As a bullet first enters the body, it lacerates and crushes tissue in its path resulting in what is known as the "Permanent Cavity" by displacing the tissues in its track. The degree and amount of laceration and crushing are dependent upon missile velocity, shape, angle of impact, yaw, and tumbling.

(Adams, 1982; Ordog et al., 1984). Fackler (1986)

* recognized as the primary wounding mechanism produced by handguns

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Laceration & Crushing

Generally speaking,

- A round with a copper or steel jacket may stay intact as it travels through the body, creating a narrow cavity.
- Hollow-point or soft point rounds create larger permanent cavities by mushrooming.
- High velocity rounds are sometimes designed to tumble (the M-16.223 caliber round), thus enlarging the bullet tract and damaging more tissue.
- A shotgun offers multiple projectiles creating numerous bullet tracts and tremendous tissue damage, especially at close range.

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Tissue Wounding

Once the bullet strikes the body, not only is the amount of kinetic energy displaced into the surrounding tissues important, but also the density of the tissue being penetrated.

Consequently, the wounding capacity of a bullet striking bone will be greater than in soft tissues, as bone acts as a superior retardant force that is more effective at decelerating a projectile and increasing the energy transfer than less compact substances.

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Tissue Wounding

In other words, the higher the specific gravity of tissue, the greater the damage.

- Elasticity reduces damage; i.e., lung tissue of low density and high elasticity is damaged less than muscle with higher density.
- 2. Liver, spleen, and brain have little tensile strength and elasticity, and are easily injured as is adipose tissue. (Adipose tissue is commonly known as body fat.)
- Fluid-filled organs (bladder, heart, great vessels, bowel) can burst because of pressure waves generated.

Cavitation

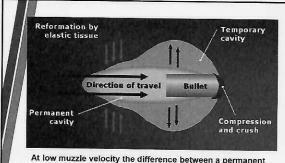
The second injuring mechanism is the cavitation created by the kinetic energy of the bullet.

The transference of this energy from the projectile to the victim causes tissue to be forcibly thrown forward and radially from the bullet's path, causing stretching, tearing and concussive forces to the surrounding tissue thus producing a "Temporary Cavity" or temporary displacement of tissues.

Cavitation

A bullet's ability to produce a temporary cavity is considered an important component in wound production and degree of destruction. This sheering force can damage tissue some distance from the projectile tract itself.

The temporary cavity may be considerably larger than the diameter of the bullet, may measure up to 15-times the projectile diameter with wall pressures 100-times that of the atmosphere, and rarely lasts longer than a few milliseconds before collapsing into the permanent cavity or wound (bullet) track.



At low muzzle velocity the difference between a permanent and temporary cavity is small; however, at high-velocity the temporary cavity is larger.

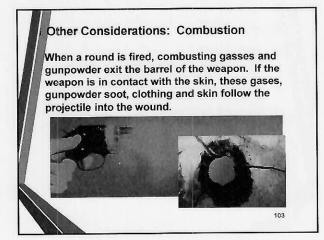
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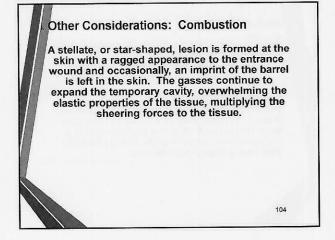
Fragmentation

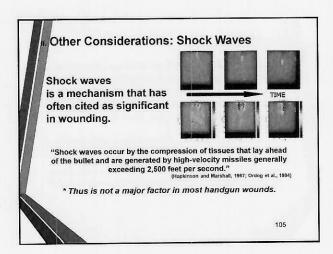
Most bullets are designed to hit the victim without exiting by mushrooming or fragmenting, for this imparts all the bullet's to the body and increases the volume of tissue disruption.

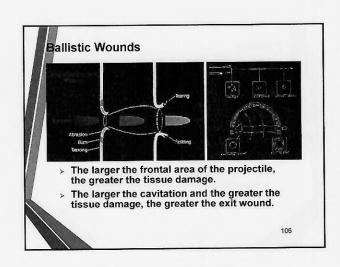
Fragmentation of the bullet at impact may produce secondary projectiles of which increases the permanent cavity size. A bullet striking bone may cause fragmentation of bone(s) and/or bullet with numerous secondary projectiles formed, each producing additional wounding

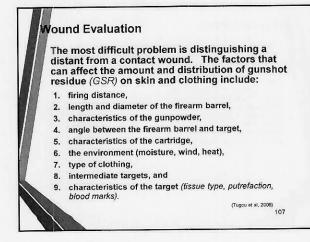


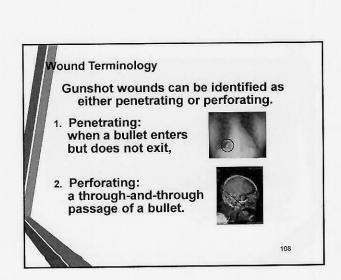


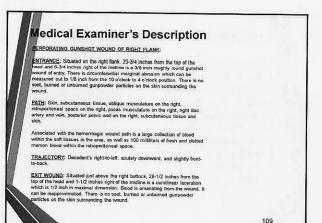


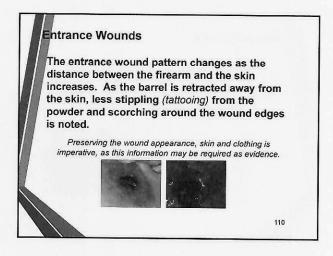


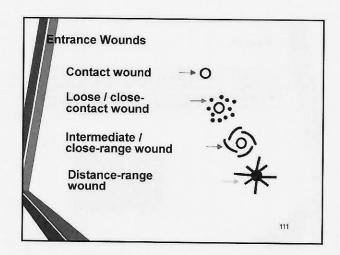


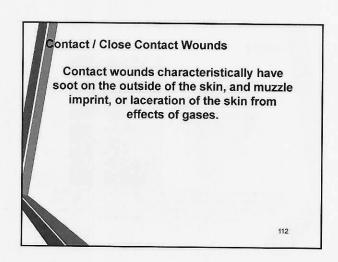


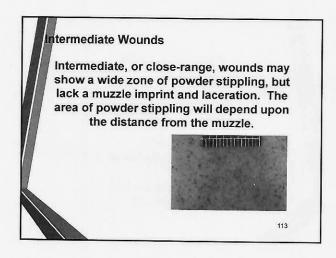


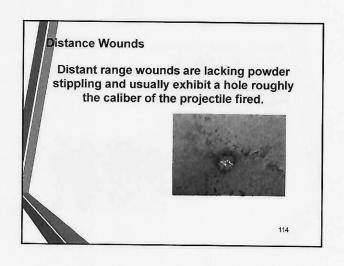


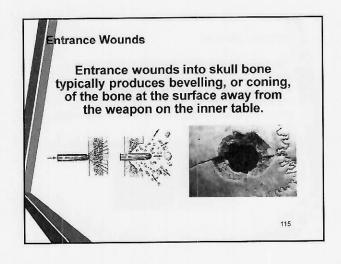


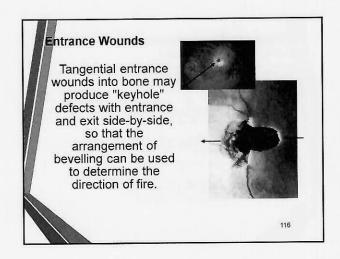


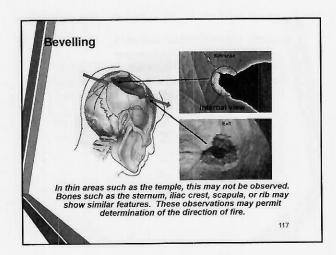


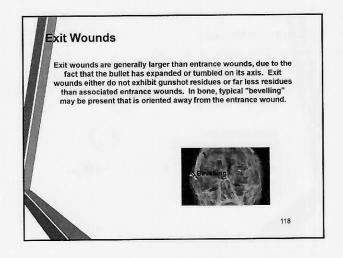


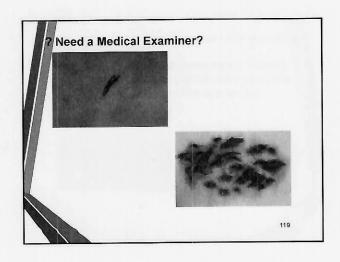


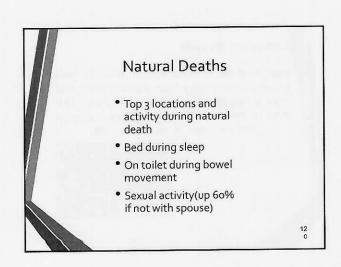


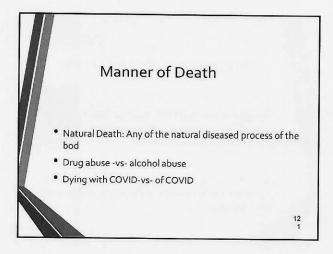


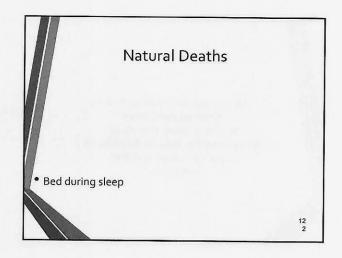


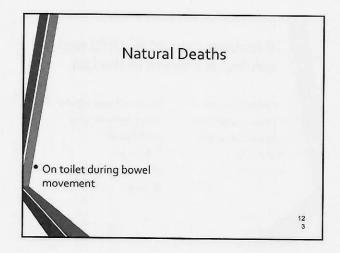


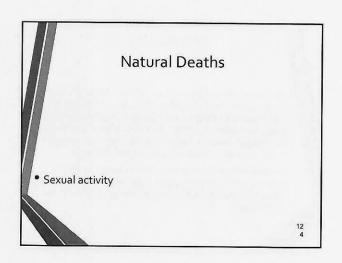


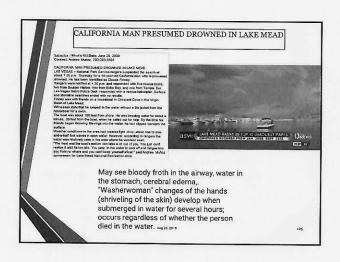


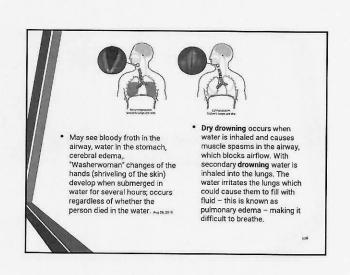












"To nourish children and raise them against odds is in any time, any place, more valuable than to fix bolts in cars or design nuclear weapons."

Investigation of Child Death

Investigating the death of a child can be among the most difficult and frustrating types of cases we will encounter



In some cases the cause of death will be clear and a perpetrator being obvious; unfortunately, this is not always the case.

Introduction

The United States has a higher child mortality rate than 19 other wealthy democracies. A child age 15 to 19 in the U.S. is 82 times more likely to die from gun violence than such a child in the other countries. America's higher death rate for kids has persisted despite the nation spending more on health care for children than other rich countries.

Unintentional injuries—such as those caused by burns, drowning, falls, poisoning and road traffic—are the leading cause of morbidity and mortality among children in the United States.

10 leading causes of child and adolescent death in the U.S.

Motor vehicle crash Firearm related injury

Malignant neoplasm Suffocation Fire or burns

Drowning

Drug overdose/poisoning Congenital anomalies

Heart disease

Chronic lower respiratory

disease

National Overview of the Problem of Abuse and Neglect

2019 Overview

Of the 3,534,000 million children who were the subject of an investigation or alternative response in fiscal year 2018:

- 678,000 (rounded) children were determined to be victims of maltreatment, up from 674,000 (rounded) victims in 2017.
- In total, 6o.8 percent of victims were neglected
- 10.7 percent were physically abused
- 7.0 percent were sexually abused
- More than 15 percent were victims of two or more maltreatment

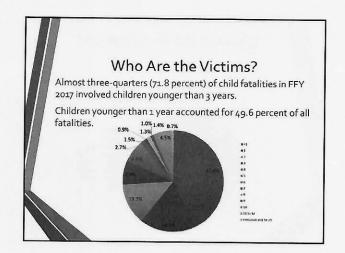
Continued....

Most children enter the foster care system, not from physical abuse, but from neglect.

1,770 children died from <u>abuse and neglect</u> in fiscal year 2018 compared to an estimated 1,710 children who died in fiscal year 2017.

This accounts for approximately 11% of the murders in the U.S. in 2018





Who Are the Victims? Demographics

- Eighty-seven percent (87.3%) of child fatalities are one of three races:
 - White (40.1%)
 - African-American (32.8%)
 - Hispanic (14.4%)
- The rate of African-American child fatalities (5.48 per 100,000 African-American children) is 2.8 times greater than the rate of White children (1.94 per 100,000 White children)

Who Are the Victims? Demographics

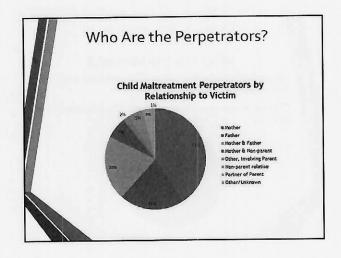
- 3.4 times greater than the rate of Hispanic children (1.63 per 100,000 Hispanic children).
- Children of two or more races had the second highest rate at 3.50 and
- Children of American Indian or Alaska Native descent had a rate of 3.12 per 100,000 children of their respective races.

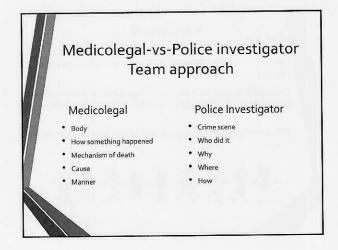


Who Are the Perpetrators?

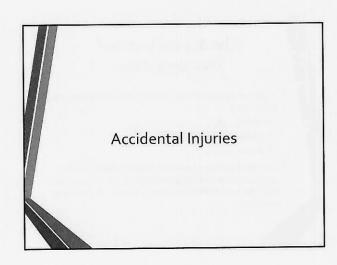
The Perpetrators

- In 2017, parents—acting alone or with another parent or individual—were responsible for 80.1 percent of child abuse or neglect fatalities.
 - More than one-quarter (30.5 percent) of fatalities were perpetrated by the mother acting alone
 - 15.5 percent were perpetrated by the father acting alone
 - 20.2 percent were perpetrated by the mother and father acting together.
- Nonparents (including kin and childcare providers, among others) were responsible for 15.2 percent of child fatalities
- child fatalities with unknown perpetrator relationship data accounted for 4.7 percent of the total.

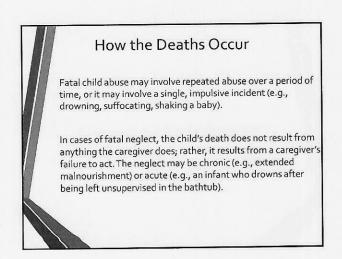


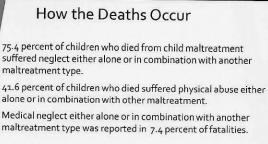






Determining Accidental Injuries • What is the location of the injury • Falls • Suffocation • Burns • Bone injury – broken/fractures • What is the frequency of injuries • What type of injury • What is the explanation of the injury







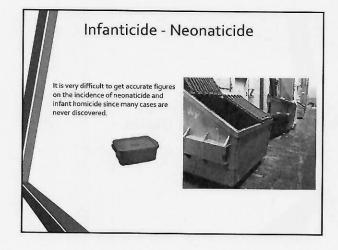
Refers to any murder of a child up to the age of 18 years committed by his or her parent(s) or parental figure(s), including guardians and stepparents.

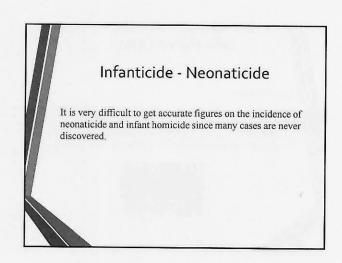
Filicide — Infanticide and Neonaticide Infanticide commonly applies to the murder of a child under the age of one year by his or her parent(s). Neonaticide, a term coined by Phillip Resnick in 1970, refers to the

unique circumstance in which a newborn is killed by his or her parent(s) within the first 24 hours of life. Baby dump cases...

Filicide can be committed by both men and women, though far less often paternal filicide than maternal filicide.

Neonaticide, the deliberate murder of a baby by its parent during first 24 hours following birth, is mostly committed by women following a pregnancy that has been concealed or denied from the wider world. Infant Mortality Much of the research identifies the stereotypical neonaticidal woman as young, single and poor. They often lack the economic, social and emotional resources to deal with the pregnancy.



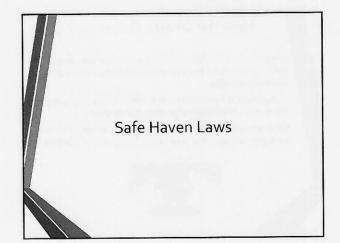


Infanticide

The most common methods of infanticide are battering, smothering, strangling, and drowning.

Homicide of infants and young children is typically committed with personal weapons (i.e. hands, feet) and rarely involves firearms, knives, and other dangerous weapons.

Conversely, older children are killed with knives, firearms, and other lethal weapons.



Safe Haven Laws

To help stop mothers from abandoning their babies in unsafe locations, states have enacted safe haven laws that allow mothers to leave their unwanted babies in designated locations such as hospitals or churches without fear of being charged with a crime.

Safe haven laws, also known as "Baby Moses laws", serve a dual purpose:

to protect unwanted babies from potential harm and safety

to provide parents an alternative to child abandonment charges.

Safe Haven Laws

Most states limit the age of who may be placed in a designated 'safe haven' to infants 72 hours old or younger, while other states may accept infants up to 1 month of age.

Locations may include health care clinics, police stations, fire stations, emergency medical technicians (EMT), churches, and other "safe" places a state deems acceptable.

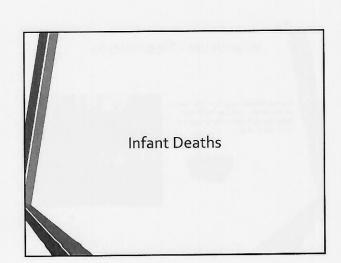


Safe Haven Laws

Father's Rights

In most states, a child-placing agency must make "reasonable efforts" to identify and locate the non-relinquishing parent (typically the father) by posting notice in a publication such as a newspaper in the county where the child was surrendered.





Infant Deaths

SIDS - SUIDI

Sudden infant death syndrome (SIDS) is the unexplained death, usually during sleep, of a seemingly healthy baby less than a year old. SIDS is sometimes known as crib death because the infants often die in their cribs.

Although the cause is unknown, it appears that SIDS might be associated with defects in the portion of an infant's brain that controls breathing and arousal from sleep.

DEATH SCENE INVESTIGATION

In order to fully understand how the death occurred, we must understand the events that led to death and must conduct a thorough investigation of the death scene.

Remember, the prosecution of child maltreatment fatality cases could be compromised because of inadequately conducting a thorough death scene investigation.

DEATH SCENE INVESTIGATION

Minimum Needed tools for the investigation:

- Camera
- Still and Video
- Measurement devices (tape measure)
- Digital Thermometer

Arnazon Basics Self-Locking Tap Amazon Basics Self-Locking Taps
Measure, 53-Fed (10-Meters),
Inch/Metric Scale, MID Accuracy,
Black, Yellow
for for fig. 5, 847
dx is beught in part month.

Doll

http://www.suididolls.com/



Infrared Thermometer Laser Temperature Gun -58 F to 1112 F with Adjustable Emissivity & Max and Min Measure Laser Digital I...

Protocols

DETAILED SCENE DESCRIPTION

i.e. to include bedding, toys, furniture, clothes, etc.

The death scene should be visited immediately as the types and the location of toys, furniture, and other objects could have played a role in the injury or accident. Also, there may be possible sources of evidence present to assist in the investigation - such as blood stains, vomit, or signs of struggle.

The Death/Crime Scene

Proper response.....

Every scene every time

Collaborative investigations

Police, Coroner/ME, DA, Child welfare

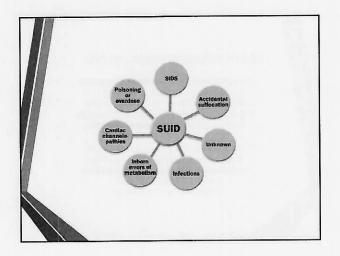
48/72 hour group review

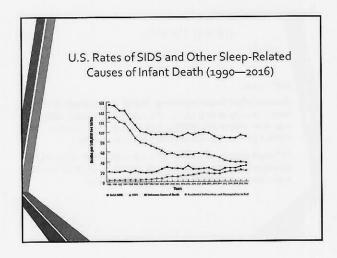
Participation in Child death review

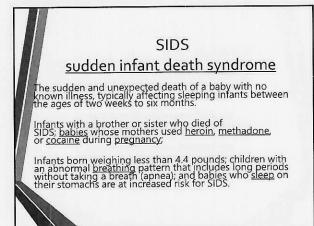
SUIDI

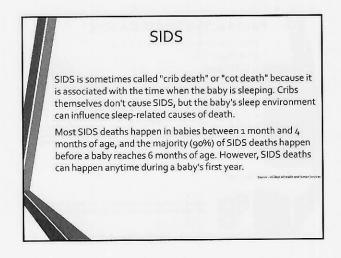
Sudden Unexpected Infant Deaths are defined as deaths in infants less than 1 year of age that occur suddenly and unexpectedly, and whose cause of death are not immediately obvious prior to investigation.

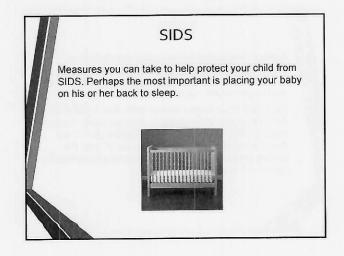
Each year in the United States, more than 4.500 infants die suddenly of no immediately, obvious cause. Half of these Sudden Unexpected Infant Deaths (SUID) are due to Sudden Infant Death Syndrome (SIDS), the leading cause of SUID and of all deaths among infants aged 1-12 months.

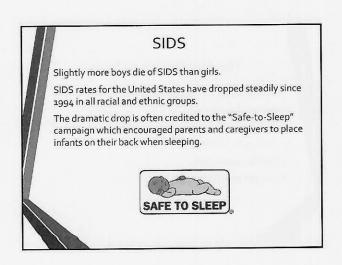












SIDS

Symptoms

There are usually no symptoms to alert parents that anything is wrong in SIDS as the child less than one year of age die suddenly. But, those as a result of illness can present as:

Being sick (vomiting), especially green (bile) vomit Taking at feeding time

Physical Factors Associated With SIDS

Brain defects. Some infants are born with problems that make them more likely to die of SIDS. In many of these babies, the portion of the brain that controls breathing and arousal from sleep hasn't matured enough to work properly.

Low birth weight. Premature birth or being part of a multiple birth increases the likelihood that a baby's brain hasn't matured completely, so he or she has less control over such automatic processes as breathing and heart rate.

Respiratory infection. Many infants who died of SIDS had recently had a cold, which might contribute to breathing problems.

SIDS and the Sleep Environment

The items in a baby's crib and his or her sleeping position can combine with a baby's physical problems to increase the risk of SIDS. Examples include:

Sleeping on the stomach or side. Babies placed in these positions to sleep might have more difficulty breathing than those placed on their backs.

Sleeping on a soft surface. Lying face down on a fluffy comforter, a soft mattress or a waterbed can block an infant's airway.

SIDS and the Sleep Environment

Sharing a bed. While the risk of SIDS is lowered if an infant sleeps in the same room as his or her parents, the risk increases if the baby sleeps in the same bed with parents, siblings or pets.

Overheating. Being too warm while sleeping can increase a baby's risk of SIDS.

Risk Factors

- Sex. Boys are slightly more likely to die of SIDS.
- Age. Infants are most vulnerable between the second and fourth months of life.
- Race. For reasons that aren't well-understood, nonwhite infants are more likely to develop SIDS.
- Family history. Babies who've had siblings or cousins die of SIDS are at higher risk of SIDS.
- Secondhand smoke. Babies who live with smokers have a higher risk of SIDS.
- Being premature. Both being born early and having a low birth weight increase your baby's chances of SIDS.

Maternal Risk Factors

During pregnancy, the mother also affects her baby's risk of SIDS, especially if she:

Is younger than 20

Smokes cigarettes

Uses drugs or alcohol

Has inadequate prenatal care

SUIDI Sudden unexpected infant death

a term used to describe the sudden and unexpected death of a baby less than 1 year old in which the cause was not obvious before investigation. These deaths often happen during sleep or in the baby's sleep area.

SIDS-vs-SUDI and the Sleep Environment

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Infants cannot self rescue!

What does a safe sleep environment look like? But you does you also your and the case that the case the case the case the case that the case t

SUIDI Sudden unexpected infant death

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Major Risk Factors

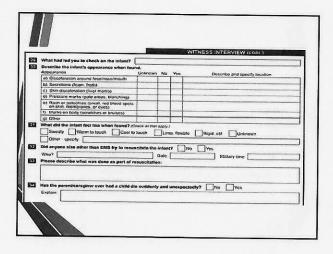
- Infants sleeping on their stomachs
- Soft infant sleep surfaces and loose bedding, toys or other objects in sleep environment
- Maternal smoking during pregnancy
- Second-hand smoke exposure
- Overheating
- · Prematurity and/or low birth weight
- Sharing a bed with others.
- Sleeping place other than crib (e.g., adult bed, couch, chair)
- Faulty design of cribs or beds.
- Obesity, fatigue, or drug or alcohol use by persons supervising or sleeping with child.
- Quality of supervision at time of death.
- Family's ability to provide safe sleep or play environment for child.

(1) com	ETMENT OF HEALTH AND INJAME SERVICES. IN THE ESSANCE CARD IN AND PRIVATE COM- COMMING IN PROPERTY HAVE RETENTED ENGINEERS (HEALT). AND IN GEORGE SPECIAL	CDC S	ÜÜÜÜ
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Address	Parent Physician Healt	M State	Zo
Nork Address	City Work Priorie	State [20

	WITNESS INTERVIEW
Ø	Are you the usual caregiver?
B	Tell me what happened:
-	
D	Diff you more o enything unusual or different about the infant in the first 24 tes?
_	No Yes Specify
	Old the infant experience any falls or injury within the last 72 lms7
	No. Specify
a	When was the Intent LAST PLACED?
_	Gate Mossy, Time Location (spens)
	When was the infant LAST KNOWN ALVEILKA)?
22	Oute Mintary Tame Location (record)
24	When was the Intent FOUND? Cate Milliony Tone Lacation fooms
F3	Cafe Milliony Tone Location (norm) Explain Now you know the inlast was still able.
-	
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	Crastie Gab Floor In a person's arms
	Matters tox spring Matters on Oct Proyees Portable cos
	Selection Strategie Swing Waterbod
	Other describe

				WITNESS INTERVI	W (cont.)			
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	Was the the infents usual position?							
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	Was this the referre's usual peninger?		Yes	No What was the use		Innexement 1		
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22	Which of the following devices were operating in the infant's room?
20 24	None Agnes monito Humiditer Vaporizer Air purifier Other In was the temperature in the Infant's room? Hot Cold Normal Other - Which of the following items were neer the Infant's lace, nose, or mouth? Bumper pack Infant piloss Positional supports Stuffed annals Toys Other -
4	Which of the following items were within the infant's reach?
	Strainteris Toys Pristows Pacifier Nothing Other -
7	Was there evidence of wedging? No. Yes - Describe
2	When the infant was found, was sithe: Breathing Not Breathing



Source of medical information: Mother/primary categiver	Other [× 🗀 o	ther hea	thcare p	Tovide	Medical reco	and Family		
In the 72 hours prior to death, of Condition	did the Infan	f have:	No Ye	s Condi	lion		Unknown	No	Yes
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h) Diarrhea						o in aggettee		-	
b) Excessive sweating				II CV	410015	(turned blue/gray)			-
() Stock changes				1) Vo	gniting				_
c) Lethargy or sleeping more the	an water			mySe	zures	or convulsions			
 Difficulty breathing 		T		g) Ch	oking				
d) Fussiness or excessive crying	,			n; Op	ter se	ecty			
In the 72 hours prior to death, v No Yes describe to the 72 hours prior to the infa Priess include any home remodes. Name of vaccination or medicate.	nte death, w herbel medical	as the int	ant give space me	n any va- ficines, ev ste given	ecinal	lions or medication	m2 [].		Yes
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2									
3		***************************************						********	

		parameter S		1	INFANT MEDICAL HISTORY (cont.)
At any time in the in Memori fistory	fant's life, did s/ho	have a his Unknown	tory e	42 Yes	Describe
a) Attengiers (1000 ma					
b) Abnormal growth					
c) Apnea (stopped as					
d) Cyanous (turned alumbra);		-	-		
e) Seizures or convi			-	-	
f) Cardias (heart) al		1	l	1	
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a) Oxie b) Reason for visit c) Action taken d) Physician's name e) Hospitalcone	est recent times the	at the Infer	at was	scen by a	evapperational in the appropriate of many

	Birth bespital name: Discharge sale: Street address
	City State Zo
y.	What was the infant's length of birsh?enches orcentimeters
	What was the infant's weight at birth?poundspunces orgrams
10	Compared to the delivery date, was the infant born on time, carly, or late? On time Early bow many weeks? Late - how many weeks?
Œ	Was the infant a singleton, hein, triplet, or higher gestation? Singleton Tran Trans Conductopolet or higher gestation
	Were there any complications during delivery or at birth? (emergency c-section, child needed acygon)YesNep Describe
	Are there any alerts to the pathologist? (previous infect deaths in family, newborn screen results) Yes 40 Specify

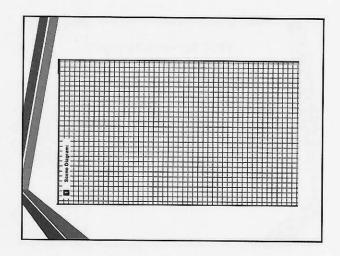
		DECIMAL V	_	PAN	T DIETARY HIS	TORY	
	On what day and at what approximate time was the info	ent last fest	7				
	Date Matery Yerte						
3	What is the name of the person who last fed the infent?						
	What is higher relationship to the Infant?		****				
	What foods and liquids was the infant led in the last 24 bears (exclude last hell?						
-	Food	unanowa	No	Yes	Cluzettly tourious)	Especify. Oype and brand	
	(a) Steepes made concerbate states, temper of terms	1	1				
	b) Frempia (teanet water source or Sandac tap water)						
	() Cown cen						
	op Water (trans), oottled top wells						
	e) Other squids (feas (u/ces)		-				
	b Seeds		-				
	gs Citrier	1	I				
G)	Was a new fund introduced in the 2rl hours prior to his if you, these rities see, economic amount, change or terminal intenses	ther death;	, L	No			
	Was the infant last placed to steep with a bottle?	Ves []N	ia de	50. xé	up to question \$ tel	cnw .	
0350	Was the bettle propped? () or object wave to hole bettle y	antho en lane	Ariendon I	. [leso []wes		
			- Charles	1000	1.0		
	If you what object was used to peop the Initia?		-	-			
	What was the quantity of liquid (in ownces) in the bottle	9					
	Did the death occur during? [] (heart feeding [] ()	ottle ferrier	. [le or	ng send foods	Ned drowing tempting	
	Are there any factors, circumstances, or environments been identified? In exposed to classes affects of the sale					between that have not well	
M3							
M2	Class Class						
Œ	No. Nos						

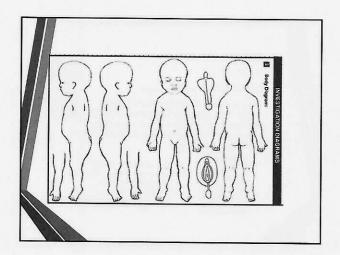
				77 P	PREGNANCY	HISTORY	(cor	it.)	1000	
71	At how many weeks or months o	fld the birth	mether t	begin pren	stat care? No	Yes				
-	At how reprey weeks or months did the birth mether begin prenatel care? No Yes (ox nigh blace pressure, bleeding, geassonal disbrites)									
	Specify						,	_		
5	Was the birth mother injured dur	ing her pre	iumch e	vith the infi	ant? (ex. auto accided	e, demo)P6	0	Yes		
	Specify									
0	During her pregnancy, did she u	so any of th Unknown	e followi No Yes	ng? Daily		Unknown	No	Yes	Date	
	a) Over the counter medications				d) Cigarettes					
	b) Prescription medications				e) Alcohol					
	c) Herbal remedies				f) Other					
	Currently, does any caregiver us	o any of the Unknown	followin	ng? Daily		Unkngwn	No	Yes	Dat	
	a) Over the counter medications		T		d) Cigarettes					
	b) Prescription medications				e) Alcehol					
					fi Other					

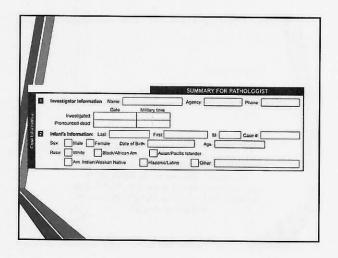
			INCIDENT SCENE INVE	SHIGATION
1	Where did the incident or deal	th occur?		
3	Was this the primary residence	e? No Yes		
3	is the site of the incident or de	eath scene a daycare or other c	hildcare setting? Yes	No - If no, skip to question
	How many children (under ag	e 18) were under the care of the	provider at the time of the inc	ident or death?
3	How many adults (age 18 and	over) were supervising the chil	d(ren)?	
6		od licensing agency for the day		
_	License number	Agency:		
	How long has the daycare be-	on open for business?		
9		ite of the incident or death sce	10?	
	Number of adults (18 years or o		of children (under 18 years old	-
9		g or cooling sources were being	wood burning freelace	Open window(s)
	Central air	Gas furnace or boiler Flector furnace or boiler	Coal burning furnace	Wood burning stove
	A/C window unit Ceiling fan	Electric space heater	Kerosene space heater	Floor/table fam
		Electric (radiant) ceiling heat	Window fan	Unknown
		Tereore frameric serving new	L	
	Ciber - specify	Electric (radiant) desing heat	Munoow res	[] distributi

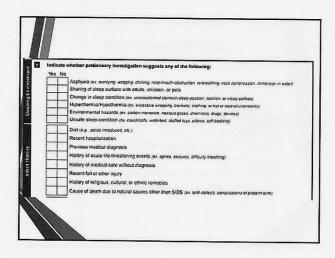
10	Indicate the temperature of	the room where the infant was	s found unresponsive:	
	Thermostat setting	Thermostat reading	Actual room temp.	Outside temp.
	What was the source of dri Public/municipal water	inking water at the site of the in Bottled water Well	cident or death scene? (Creck a	pecify:
12	The site of the incident or	death scene has: (check all that a	oply)	
	Insects	Mold growth	Smoky smell (like agarettes)	
1	Pets	Dampness	Presence of alcohol container	s
	Peeling paint	Visible standing water	Presence of drug paraphenal	a
	Rodents or vermin	Odors or fumes - Describe		
	Other - specify:			
1		arance of incident scene: (ex. c)	leasiness hazaras overcrowding, etc	
	Specify			

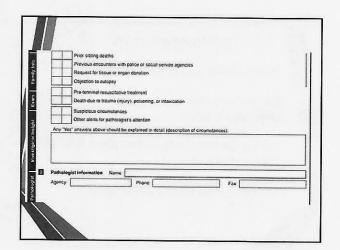
0	Are there any factors, circumstances, or environmental concerns about the incident acene investigation that may impacted the infant that have not yet been identified?	hav
Ð	Arrival times Law enforcement at scene US at scene Infant at hospital	W.W.
	restigator's Notes	
0	Indicate the task(s) performed Additional scene(s)? Garma sittaned) Doff reemacinent/scene re-creation Materials released evolence tagged Reterral for counseling EMS run sheetireport Totaly near of kin or very nonfactation Of 1 tage	ed
2	If more than one person was interviewed, does the information differ?	











Doll Re-enactments

https://www.cdc.gov/sids/pdf/suidmanual/Chapter7_tag508.pdf

- Explain Importance of Visualization by forensic Pathologist
- Show the reenactment doll to the family member /caregiver
- Describe the reenactment procedure to the family member/caregiver

Doll Reenactment

 The investigator must remember that the goal of the infant death scene reenactment is to be able to accurately depict the sleep environment in which the infant was last placed/found.

Protocols

DETAILED SCENE DESCRIPTION

i.e. to include bedding, toys, furniture, clothes, etc.

The death scene should be visited immediately as the types and the location of toys, furniture, and other objects could have played a role in the injury or accident. Also there may be possible sources of evidence present to assist in the investigation - such as blood stains, vomit, or signs of struggle.

Protocols

Reenactment (documentation):

Using a doll to assist the Placer / Finder in describing not only the face and body positioning of the infant when last known alive and found, but also the actions of the individuals involved.



Reenactments can be critical in understanding the course of events and trauma identification; but also sort out conflicting testimony.

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Doll Reenactment

Introduce the doll to the participant

Ask the participant to demonstrate how the infant was placed

Ask the participant to demonstrate how the infant was found

Document-document!

Doll Reenactment

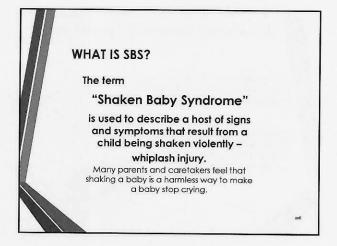
Upon Completion

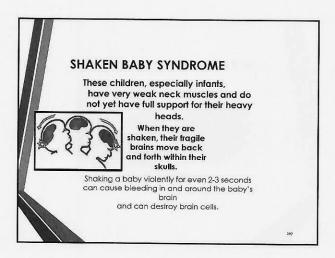
Highlight importance of reenactment Reinforce understanding of difficulty in doing the reenactment

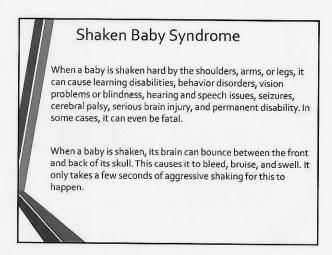
Provide information about next steps in the investigation

Provide time line for reports to be complete Encourage family and caregivers to ask questions









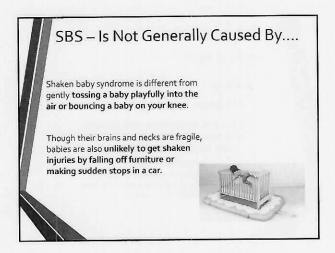
SBS is now the fastest growing occurrence of Traumatic Brain Injury (TBI) in children under the age of one.

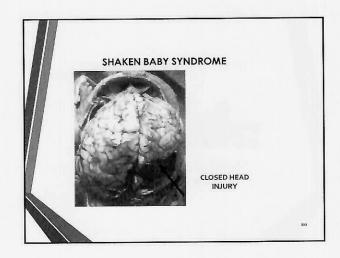
• Each year there are an estimated 50,000 cases of SBS in the United States.

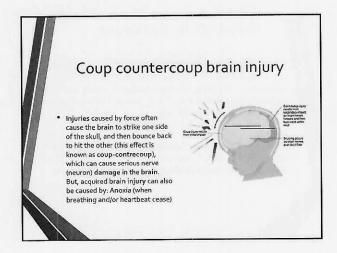
• Studies suggests that 25% of all infants with SBS die.

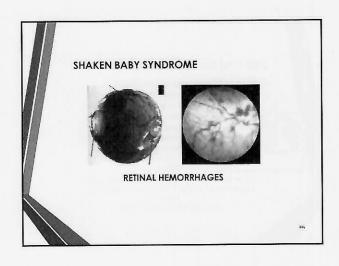
• SBS most often occurs in infants less than six months old; however, it can occur up to the age of three.

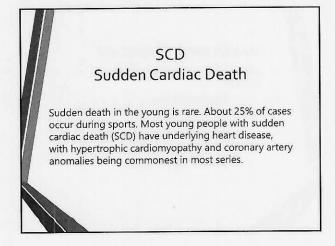
SHAKEN BABY SYNDROME Some of the pathological markers include: Cerebral Edema, Skull Fractures, Subdural and/or Subarachnoid Hemorrhage(s), and Retinal Hemorrhage(s).

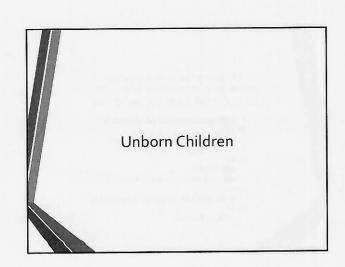












Killing of unborn quick child; penalty.

A person who willfully kills an unborn quick child, by any injury committed upon the mother of the child, commits manslaughter and shall be punished for a category B felony by imprisonment in the state prison for a minimum term of not less than 1 year and a maximum term of not more than 10 years, and may be further punished by a fine of not more than \$10,000.

22 Weeks Gestation, "Quick Child"

At 22 weeks, baby is the size of a coconut. Average baby size at 22 weeks is 10.9 inches long (from the crown of the head to the heel of the foot) and 15.2 ounces. 22 Weeks Pregnant, "Is How Many Months?" ... You're now entering your sixth month of pregnancy!

Key to many Statues

A person who willfully kills an unborn quick child, by any injury committed upon the mother of the child, commits manslaughter and shall be punished for a category B felony by imprisonment in the state prison for a minimum term of not less than 1 year and a maximum term of not more than 10 years, and may be further punished by a fine of not more than \$10,000.

Taking drugs to terminate pregnancy; penalty.

A woman who takes or uses, or submits to the use of, any drug, medicine or substance, or any instrument or other means, with the intent to terminate her pregnancy after the 24th week of pregnancy, unless the same is performed upon herself upon the advice of a physician acting... and thereby causes the death of the child of the pregnancy, commits manslaughter and shall be punished for a category B felony by imprisonment in the state prison for a minimum term of not less than 1 year and a maximum term of not more than 10 years, and may be further punished by a fine of not more than \$10,000.

Medication Administration

Healthcare professionals should be reminded of the five "Rs" of medication administration:

"The Right dosage of the Right medication must be given to the Right patient by the Right route of administration for the Right reason."

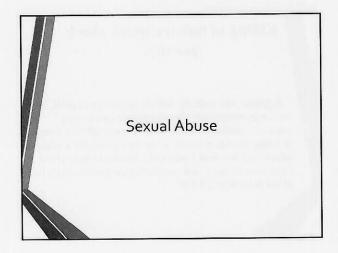
Prescribing Pitfalls: Ordering errors > Wrong dose - 63% > Drug interaction - 22% > Wrong choice - 9% In America, medication errors hurt over 1.3 million patients each Am. Journal PH 2003-93:2233-6

vear.

22

22

According to HHS ACF forty-five states reported that 27,709 infants with prenatal substance exposure were referred to child welfare agencies for Fiscal Year 2018



Sexual Abuse

Sexual Abuse

includes the fondling a child's genitals, intercourse, incest, rape, sodomy, exhibitionism, and commercial exploitation through prostitution or the production of pornographic material.

Many experts hold that sexual abuse is the most under-reported form of child maltreatment due to the secrecy or the conspiracy of silence that is often characterized in this type of cases.

25

Signs more typical of younger children

*An older child behaving like a younger child
(such as bed-wetting or thumb sucking)

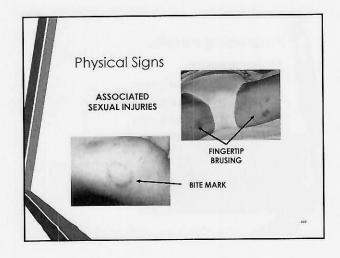
*Has new words for private body parts

*Resists removing clothes when appropriate
times (bath, bed, toileting, diapering)

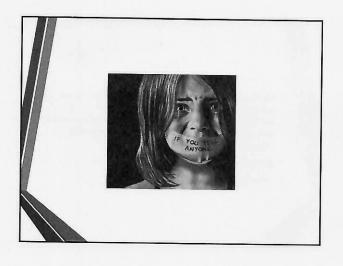
*Asks other children to behave sexually or
play sexual games

*Mimics adult-like sexual behaviors with toys
or stuffed animal

*Wetting and soiling accidents unrelated to
toilet training



Physical warning signs Pain, discoloration, bleeding or discharges in genitals, anus or mouth Persistent or recurring pain during urination and bowel movements Wetting and soiling accidents unrelated to toilet training



Warning Signs of Possible Sexual Abuse In A Child's Behaviors

Any one sign doesn't mean that a child was sexually abused, but the presence of several suggests that you begin asking questions and consider seeking help. Keep in mind that some of these signs can emerge at other times of stress such as:

- During a divorce
- •Death of a family member or pet
- •Problems at school or with friends
- Other anxiety-inducing or traumatic

events

https://www.stopitnow.org/ohc-content/tip-sheet-7

Behavior you may see in a child or adolescent

- •Has nightmares or other sleep problems without an explanation
- •Seems distracted or distant at odd times
- •Has a sudden change in eating habits
 - · Refuses to eat
 - · Loses or drastically increases appetite
 - · Has trouble swallowing.
- •Sudden mood swings: rage, fear, insecurity or withdrawal
- Leaves "clues" that seem likely to provoke a discussion about sexual issues

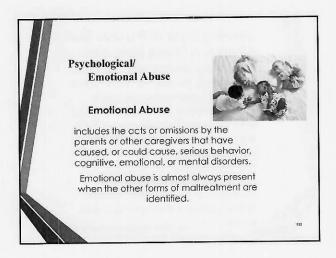
Behavior you may see in a child or adolescent

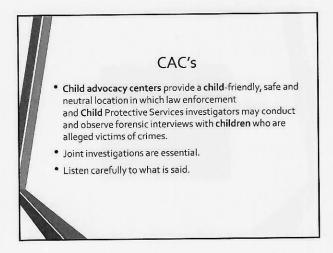
- •Has nightmares or other sleep problems without an explanation
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- •Has a sudden change in eating habits
 - · Refuses to eat
 - Loses or drastically increases appetite
 - Has trouble swallowing.
- •Sudden mood swings: rage, fear, insecurity or withdrawal
- •Leaves "clues" that seem likely to provoke a discussion about sexual issues
- •Writes, draws, plays or dreams of sexual or frightening images
- •Develops new or unusual fear of certain people or places
- •Refuses to talk about a secret shared with an adult or older child
- •Talks about a new older friend
- •Suddenly has money, toys or other gifts without reason
 - Thinks of self or body as repulsive, dirty or bad
- whibits adult-like sexual behaviors, language and knowledge

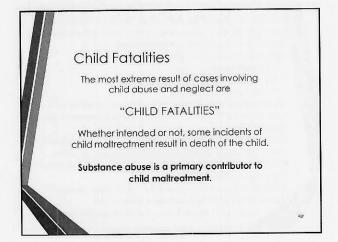
Signs more typical in adolescents

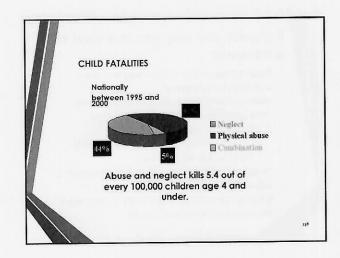
- •Self-injury (cutting, burning)
- •Inadequate personal hygiene
- •Drug and alcohol abuse
- Sexual promiscuity
- •Running away from home
- Depression, anxiety
- •Suicide attempts
- •Fear of intimacy or closeness
- •Compulsive eating or dieting

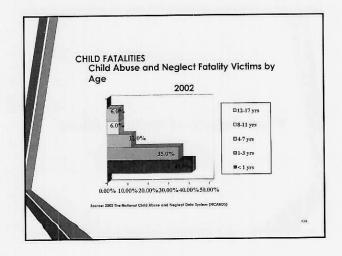
Psychological – Emotional Abuse

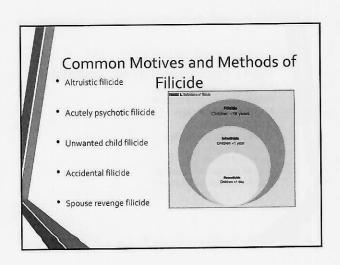












"Altruistic" Filicide

Altruistic filicide—The parent kills the child because it is perceived to be in the best interest of the child. Most common.

- Acts associated with parental suicidal ideation—The parent may believe that the world is too cruel to leave the child behind after his or her death.
- Acts meant to relieve the suffering of the child—The child has a disability, either real or imagined, that the parent finds intolerable.

Acutely Psychotic Filicide

The parent, responding to psychosis, kills the child with no other rational motive. This category may also include incidents that occur secondary to automatisms related to seizures or activities taking place in a post-ictal state.



Unwanted Child Filicide

The parent kills the child, who is regarded as a hindrance.

This category also includes parents who benefit from the death
of the child in some way (e.g., preserving a relationship or
marrying a partner who does not want step-children).



Spousal Revenge Filicide

The parent kills the child as a means of exacting revenge upon the spouse, perhaps secondary to infidelity or abandonment.

Common motive in family abduction scenarios.

Accidental filicide



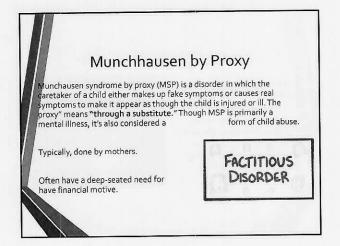
"Can I get my milk from an unopened container? I just saw a documentary on Munchausen by proxy syndrome and, well...you're not exactly the The parent unintentionally kills the child as a result of abuse. This category includes the rarely occurring Munchausen syndrome by proxy.

Spousal Revenge Filicide

The parent kills the child as a means of exacting revenge upon the spouse, perhaps secondary to infidelity or abandonment.

Common motive in family abduction scenarios.







Munchasen by Proxy Signs of Munchausen syndrome by proxy include the following: The child has a history of multiple hospitalizations, clinic visits, and doctor visits, etc. A strange set of symptoms that cannot be identified or understood by healthcare professionals. Parent reports that the child's symptoms are getting worse, but hospital caregivers don't observe or detect.



