# Appendix I: Care of Children in the Emergency Department

# Child Maltreatment

**Purpose**

To describe and outline the procedures for evaluation and treatment of the child or adolescent victim of maltreatment or assault who presents to the ED, thus ensuring consistent and thorough medical care of patients, appropriate reporting practices, and initiation of follow-up services.

**Definitions**

**Child Maltreatment:** An intentional act of omission or commission by a person who is responsible for the child’s welfare, that harms or threatens to harm a child or adolescent in a significant way, through physical or emotional injury, sexual abuse, or negligent treatment.

**Child Neglect:** All instances in which the basic needs of the child are not met, including adequate food, supervision, protection, clothing, health care, education, a safe/stable home, and adequate love/nurturing. Child neglect also includes the child abandoned by a parent or caretaker without a proper plan of care. The identifiable actual or potential harm to the child may be in the form of physical, emotional, or psychological harm.

**Mandated Reporter:** A professional who works with children and possesses a reasonable degree of suspicion that a child has been abused or neglected is a mandated reporter, and as such has a duty to report that suspicion to the designated child protective services agency.

**Chain of Custody:** The forensic exam of the assault victim necessitates maintaining the appropriate “chain of custody,” ie, meeting legal requirements for the collection, storage and transfer of evidence from medical to criminal justice personnel. Meeting these requirements is essential in bringing the assailant to justice and averting potential future crimes.

**Protective Custody:** Protective custody of a child victim is taken against a parent’s will when the child’s safety is felt to be in imminent danger in the home, and consists of admission to the hospital, or placement of a child outside the home by child protective services. This requires documentation of the clinician’s assessment of risk to the child, involvement of appropriate legal and/or social services personnel within the hospital, and prompt report of the case to designated child protective services for urgent investigation and placement of the child in a safe environment.

**Consent:** For all aspects of the ED medical evaluation of the victim of maltreatment, all attempts should be made to obtain informed consent. The person to whom a physician has communicated information regarding their illness/injury, procedure, therapy, options, risks, benefits, prognosis without prescribed procedure and/or therapy, right to refuse, right to receive answers to their questions, and who has the capacity to understand this information, is said to be “informed.” For patients who are minors, most commonly it is the parent providing consent to evaluation and treatment in the ED. However, in child abuse/assault cases where temporary protective custody is taken, a CPS representative may be the individual consenting in the ED. Also, minors may provide consent for their own treatment in some cases (eg, teen seeks treatment for sexual assault, sexually transmitted diseases (STDs), or mental health services). Finally, for the minor who requires emergent medical treatment and awaiting the consent of an adult and withholding treatment would harm the patient, appropriate medical care supercedes signed consent.

**Procedure/Action:** Child Sexual Abuse

* + 1. General Principles

Child sexual abuse may present acutely within 72 hours) or in a delayed fashion, with limited history provided by the child victim and little or no diagnostic physical findings. Despite this challenge, ED staff must maintain vigilance for this under-diagnosed disease process, and an open-minded, calm, compassionate and nonjudgmental approach to the care of child and family members in the ED.

* + 1. Triage

1. Triage evaluation requires a brief history and screening exam, and should afford, at a minimum, an “urgent” or ESI Level III status to the child.
2. The triage nurse activates the clinical forensic process (i.e. SANE nurse, physician in-unit, social worker) of the child’s presence in the ED.
3. A patient room is readied that allows for privacy.
   * 1. Medical Evaluation
4. Deferral of a *comprehensive* medical evaluation (including a complete physical exam and forensic interview) to a specialty site/advocacy center should be considered if the following conditions are met:
5. Careful screening of the home, caretaker(s), and/or medical history completed
6. The abuse occurred >72 hours prior to the ED visit
7. There is no suspicion of anogenital injury or infection (ie, child is asymptomatic)
8. Caretaker compliance with referral plan is assured
9. Safety plan is established; child at no risk for re-abuse
10. Report is made to the local CPS and/or police agencies
11. The child receives a medical screening exam that complies with federal law (excluding the anogenital exam)
12. Contact has been made with the referral physician, child abuse specialist, local advocacy center or children’s hospital for prompt evaluation/definitive exam.

The advantages of deferral of the comprehensive medical evaluation include use of subspecialty medical services, coordination of efforts by medical/social services/law enforcement personnel, and prevention of repeated interviewing and multiple genital exams of the child.

2. General Guidelines

1. Utilize the assistance of a clinical forensic team including a pediatric trained SANE nurse and an on-call social worker if available
2. Conduct an initial history with the caretaker/parent alone
3. Subsequent interview of the child (if not deferred to non-ED setting) should also be conducted alone
4. History should include
5. Events surrounding abuse incident(s)
6. General medical history
7. Behavioral and developmental history
8. Social history
9. Physical Examination
10. Considered minimum triage acuity categorization: emergent/ESI II if
11. Gross anogenital trauma suspected
12. Sexual contact within preceding 72 hours
13. Includes a complete head-to-toe exam with particular attention to
14. Oral or dental trauma
15. Skin bruising, petechiae, bite marks
16. Abdominal tenderness or bruising
17. Anogenital injuries or abnormalities
    1. Anogenital exam of the prepubertal girl
18. Do not use a speculum
19. External inspection only
20. Honor the child’s modesty and request for caretaker presence during the exam
21. Perform the exam in a private, well-lighted room
22. Diagnostic Testing
23. STD testing is not performed on every child referred for sexual abuse but may be considered in a child in the following settings
24. History of genital contact
25. Symptoms of STDs
26. Abnormal anogenital findings, concern for penetration
27. Suspected perpetrator with known STDs (or at high risk for same)
28. Multiple perpetrators

c. Other diagnostic testing includes:

* Pregnancy testing (urine human chorionic gonadotropin (HCG)) for a girl >8 years of age
* Urinalysis for detection of sperm and/or infection
* Imaging and/or labs for suspected physical abuse or injury

1. Treatment
2. Refer to Centers for Disease Control (CDC) guidelines for STD treatment guidelines.
3. Proceed with HIV testing, prophylaxis or treatment, as appropriate, in conjunction with local infectious disease specialists, who will offer assistance in providing HIV therapy recommendations, counseling for families and follow-up care.
4. Refer to institutional guidelines for pregnancy prophylaxis recommendations.
   * 1. Reporting

Contact the local CPS and law enforcement agencies to report the abuse, providing information about the identity of the suspected perpetrator and the victim, and pertinent details of the medical evaluation in the ED. Be sure to communicate any concern about risk of harm to the patient and other children with whom the suspected perpetrator may have access.

* + 1. Documentation

The medical record should include the following:

* + - * 1. All information obtained from the caretaker and the child about the abuse incident(s), the child’s medical history, social history and identity/relationship of perpetrator
        2. Physical exam findings
        3. Results of diagnostic testing
        4. Medical therapies
        5. Photography, diagrams, drawings
        6. Summary of evaluation, ie final assessment
        7. Disposition of the child and safety plan
        8. Medical and psychological care follow-up plan
        9. Names of CPS and police personnel to whom the report was made
    1. Serious Injury

1. For the child or adolescent with continued pain and bleeding, where there is concern about a rectal or vaginal foreign body, or serious internal injury, contact with surgeon, gynecologist, and/or urologist should be made emergently, as such cases may require an exam and repair under general anesthesia.
2. In rare cases, such serious injuries require that the exam, forensic evidence collection and any necessary surgical repair require moderate to deep sedation in the ED, or general anesthesia in the operating room (OR). Contact with specialists and arrangements for appropriate consultation and/or transfer should be made expeditiously.
   * 1. Forensic Evidence Collection per institutional and state forensic requirements.

# Physical Abuse

# General Principles

Proceed with the evaluation and reporting of physical abuse in the following cases:

1. No explanation for the child’s injury(ies)
2. Explanation provided does not account for the injury(ies)
3. A changing history is given
4. Explanation is inconsistent with the child’s developmental level
5. Significant delay in seeking medical care for an injury
6. Repeated injuries in the same child
7. Excessive force used when disciplining, demonstrated by a lasting mark or bruise
8. Clear accusation or disclosure of physical abuse
   1. Triage
9. Complete a brief history and screening exam.
10. The child should be afforded at a minimum, “urgent”/ESI III triage status.
11. For the child with serious or multiple injuries, the triage nurse should notify the ED physician/provider immediately and bring the child to a patient room for evaluation.

# Medical Evaluation

The History may be conducted with the assistance of the on-call social worker or member of a child protection team (if available) and should include the following:

1. General medical history

This includes prior or ongoing medical conditions, prior surgeries, prior injuries and hospitalizations, medications, allergies, immunization status, general somatic complaints, and a complete review of systems.

1. Social history

This includes identifying all members of the household(s) in which the child resides or is supervised, domestic violence, drug or alcohol use in the household(s), perinatal drug exposure, prior involvement with CPS and law enforcement agencies, and caretaker’s history of maltreatment as a child.

1. Behavioral history

This includes the description of any change in emotional affect (particularly apathy, fear, anxiety, clinging behavior or excessive quietness in the very young child), regressive behaviors, learning problems, extreme risk-taking behavior, or other behavioral problems at home or at school.

1. Developmental history

This is particularly important if the injury history described by the caretaker requires a certain degree of child mobility, motor development or dexterity.

1. History of injury event(s)

The following information should be obtained from the parent or caretaker(s):

1. Events leading up to injury event
2. Person supervising the child at the time of the event
3. Witnesses to the event(s)
4. Person who first found the child in distress or injured
5. Details of the event, including location of child, position of his/her body, skin swelling, bruising or bleeding, responsiveness of the child, level of consciousness, immediate symptoms post-injury
6. If fall described, details concerning height of fall, nature of landing surface, number of impacts, presence of objects on the impact surface
7. Actions of caretaker or first person responding to the injured child
8. Time elapsed between event/trauma and seeking medical care
9. Details of home treatments/first aid given/remedies
10. Details of medical care prior to ED visit (eg, office visit, urgent care visit)
11. Child’s symptoms that prompted ED visit
12. For the child who spontaneously discloses abuse to ED personnel, obtain further details of the abuse event(s), when possible:
13. Timing of abuse event(s)
14. Nature of abuse
15. Object(s) used
16. Threats, coercion, force or weapons employed
17. Witness(es) to the abuse
18. Other victims
19. Symptoms during and after the abuse
20. Person(s) to whom abuse disclosed prior to the ED visit
21. Name/relationship of perpetrator of abuse

### Physical Examination

1. The physical exam should be performed in a private and well-lighted room.
2. The complete head-to-toe exam should pay particular attention to:
3. Head Trauma
4. Hematomas, bruises
5. Fractures, bony depression, crepitus
6. Retinal hemorrhages
7. Abnormal neurologic findings
   1. Oral trauma
8. Bleeding
9. Frenulum laceration
10. Dental trauma
    1. Bruises
11. Unusual location, ie, cheeks, pinnae, neck, buttocks, thighs, genitalia
12. Patterned, eg, loop, hand print, bite, ligature
13. Multiple locations, colors
14. Any unexplained bruises in very young, nonambulatory child
15. Burns
16. Immersion pattern
17. Bilateral, symmetric
18. Patterned burn, eg, steam iron, heater, curling iron
19. Severe, ie, partial or full thickness, extensive
20. Abdominal Injury, ie, solid organ hematoma/laceration or bowel perforation
21. Distension
22. Tenderness
23. Bruising, discoloration
24. Note: Severe and multiple solid and/or viscous organ injuries can be present due to blunt force trauma to the abdomen in the *complete* *absence* of skin bruising or any external skin markings
25. Extremity Injury/Fractures
26. Swelling, deformity, tenderness, neurovascular compromise
27. Multiple extremities/sites injured
28. Any extremity fracture in very young, nonambulatory child
29. Anogenital Injury
30. Bruising, bleeding, lacerations, hematomas, scarring of anogenital structures
31. Foreign bodies
    1. The physical examination should also include:
32. The patient’s general physical appearance and emotional state
33. Vital signs
34. Height and weight
    1. Diagnostic Testing
35. Head Trauma
36. Obtain a non contrast head computed tomography (CT) emergently
37. Consider skeletal survey urgently, particularly in the child
38. Under 2-3 years of age with any concern of abuse
39. Infant with evidence of injury, eg, abnormal head CT, skull fracture
40. If intracranial bleeding, send available blood for testing (blood count, coagulation studies, type and cross)
    1. Oral Trauma
41. Consider dental x-rays
42. Consider x-rays of jaw (Panorex, Panelipse)
43. Consider dental consultation
    1. Bruises
44. For extensive bruising, send available blood and urine for testing
45. Blood count, coagulation studies, type and cross, urinalysis, electrolytes, renal function, creatinine phosphokinase (CPK)
46. Consider more comprehensive coagulopathy work-up as patient and family history dictates
47. For bruising over abdomen, flank, or inguinal area, consider emergent abdominal imaging (ie, abdominal CT)
    1. Burns

For extensive or severe burns, send blood and urine for testing (ie, blood count, electrolytes, renal function, coagulation studies, urinalysis, type and cross)

1. Abdominal Injury
2. Emergency imaging with abdominal CT, in consultation with pediatric, trauma or general surgeon
3. Send blood and urine for testing (ie, blood count, liver enzymes, amylase/lipase, electrolytes, renal function, coagulation studies, type and cross, urinalysis)
4. Fractures
5. Obtain at least 2 radiographic views of any site with a suspected fracture
6. For severe or multiple fractures, send blood for testing (ie, blood count, coagulation studies, type and cross)
7. Obtain a skeletal survey in the following cases:
8. Concern for abuse in child under 2-3 years
9. Infant or toddler with unexplained serious injury, ie, bruising, fracture, burns, head trauma, abdominal trauma.
10. For the infant or child in whom a diagnosis of osteogenesis imperfecta is considered, testing should be done in consultation with a child protection team and/or geneticist.
    1. Treatment/Consultation
11. For the physically abused child with injuries, proceed with appropriate treatment for resuscitation and stabilization, and pain control. In these cases, specialty care may be warranted on an urgent or emergent basis.
12. Child protection team
13. Pediatric surgical specialists (ie, general surgery, trauma surgery, neurosurgery, orthopedics, plastic surgery, etc.)
14. Pediatric medical specialists (ie, radiology, dermatology, hematology, genetics, etc.)
    1. Differential Diagnosis

For the child with physical findings that raise the question of physical abuse, it is important to consider medical conditions that may be mistaken for abuse, including:

1. Skin bruises due to accidental trauma
2. “Mongolian” spots
3. Disorders of blood vessels, eg, hemangiomas, erythema multiforme, Henoch-Schönlein purpura, leukoclastic angiitis
4. Disorders of collagen, eg, Ehlers-Danlos syndrome
5. Dermatitis (contact, irritant, or atopic)
6. Staining of skin due to “bleeding” of dyes from clothing
7. Hereditary and acquired coagulation disorders, eg, hemophilia, von Willebrand’s Disease, ITP, leukemia, and vitamin K deficiency
8. Folk medicine remedies
9. Conditions mistaken for **burns** due to abuse:
10. Dermatologic disorders, eg, phytodermatitis, diaper dermatitis, streptococcal and staphylococcal infections, dystrophic epidermolysis bullosa
11. Accidental burns
12. Chemical burns
13. Folk remedies
14. Conditions mistaken for **intracranial bleeding** due to abuse:
15. Bleeding due to birth trauma, especially with breech and vacuum extraction births
16. Perinatal disorders of coagulation
17. Congenital malformations, eg, arteriovenous malformation (AVM)
18. Glutaric aciduria type I
19. Conditions mistaken for **fractures** due to abuse:
20. Fractures due to falls and other accidental mechanisms
21. Birth injury
22. Metabolic conditions, eg, Menkes’ kinky hair syndrome, rickets, scurvy
23. Infectious conditions, eg, congenital syphilis
24. Osteogenesis imperfecta
25. Rare genetic disorders, eg, congenital indifference to pain.
    1. Reporting is required when there is a reasonable concern that the injuries are the result of physical abuse. Contact the local child protective services agency as soon as possible, providing pertinent history, physical examination findings, risk of future harm to the child or other members of the household who are minors, and your final assessment and degree of suspicion of physical abuse.

Certain injuries, serious in nature due to associated morbidity and/or mortality, should prompt expeditious reporting to police as well. Such injuries include head injuries, inflicted burns, injuries from weapons, intra-abdominal injuries and certain long bone fractures. Alternatively, a decision may be made for those injured children safely removed from the alleged perpetrator, to proceed with case management by completing the medical work-up and social services investigation of the home BEFORE proceeding with the criminal investigation by police. Laws mandating reporting child abuse to police vary from state to state, and all such decisions to report should be done in compliance with local law.

## Documentation

Careful, thorough documentation of caretaker statements, quoting household members directly when possible, with a highly detailed description of physical findings is essential.

Each abnormal finding should be described in detail, sketched on a body diagram, and photographed. For example, a bruise on the child’s back is described as “linear bruise, 0.5 cm wide and 6 cm long, extending across the back at the level of the lower edge of the scapulae, red and purple in color, photographed.”

Strong consideration should be given to contacting the local crime lab or law enforcement agency for an investigator/forensics specialist to photograph injuries, with such photography accomplished in accordance with law enforcement investigative protocols. If unavailable, proceed with photography using the camera available in the ED. Be sure that each picture has two important items in the frame: an identifying label with the date and patient’s name, and a ruler. If available, photography of bruises with a color bar or wheel in the frame assists in the later identification of colors.

Standardized medical charts for child physical abuse may assist greatly in providing such detailed documentation

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# Disposition

1. Admission

For the victim of child maltreatment with serious, multiple or life-threatening injuries, or for whom no safe environment is available emergently, hospital admission should be promptly arranged.

1. Temporary Protective Custody

Law enforcement, CPS, and physicians treating the child may take protective custody without the consent of the caretaker or parent if leaving the child in the care of the parent presents an imminent danger to the child’s life or health. This is done on a temporary basis until time allows a court order to be issued. Know your institutions written policy.

1. Transfer

For the patient requiring specialized emergency, operative or inpatient care, transfer should be arranged once the patient is stabilized, communication between referral and accepting physicians is complete, and patient and caretaker are notified of the need for transfer.

### Discharge/Follow-up Care/Safety Plan

### Once the medical evaluation is complete, discharge instructions should be provided to the patient and caretaker, with a documented plan that provides for prompt and comprehensive follow-up care with the patient’s primary care provider and/or appropriate subspecialists and ensures the safety of the patient. This is especially critical in cases where a relative or household member is the perpetrator, or with the very young victim. Also, attention must be paid to the protection of all minors in the household to whom the perpetrator has access. Close communication with social services and law enforcement are therefore essential prior to patient discharge.

#### Child Neglect

1. General Principles

Child neglect is the most prevalent form of child maltreatment, with a recent incidence estimate of 14.6 cases per 1,000 children in the United States. This is likely underestimating the true incidence, as many cases of neglect go unobserved and unreported. Manifestations of neglect include:

1. Noncompliance with medical advice
2. Delay in seeking health care for medical conditions or injuries
3. Refusal of medical treatment
4. Hunger, failure to thrive, unmanaged morbid obesity
5. Drug-exposed newborns and children
6. Inadequate protection from environmental hazards, including prescription medications, alcohol, drugs, guns, domestic violence
7. Inadequate hygiene, clothing, housing, education
8. Abandonment
9. Triage
10. The abandoned child may be brought to the ED by social services, law enforcement or alternative caretaker.
11. The neglected child may be brought to the ED by a caretaker for the evaluation of an acute complaint or symptoms.
12. Triage screening may reveal no evidence of neglect, but in the process of the physician evaluation, with a more detailed history, neglect issues may come to light.
    1. History

The history may be conducted with the assistance of the on-call social worker or member of a child protection team (if available) and should include the following:

1. General medical history

This includes prior or ongoing medical conditions, prior surgeries, injuries and hospitalizations, medications, allergies, immunization status, general somatic complaints, and a complete review of systems.

1. Social history

This includes identifying all members of the household(s) in which the child resides or is supervised, domestic violence, drug or alcohol use in the household(s), perinatal drug exposure, prior involvement with child protective services and law enforcement agencies, and caretaker’s history of maltreatment as a child.

1. Behavioral history

This includes the description of any change in emotional affect (particularly apathy or excessive quietness in the very young child), learning problems, extreme risk-taking behavior, or other behavioral problems noted at home or school.

1. Developmental history (particularly important with the disabled or very young child.)
   1. Physical Exam

The physician should proceed with a complete head-to-toe physical exam, careful to note and document the child’s general appearance and demeanor, vital signs, any evidence of poor hygiene, untreated medical conditions, cutaneous or other evidence of injury(ies), developmental delay, and interaction of the child with ED staff and child’s caretaker.

1. Diagnostic Testing

Proceed with blood, urine, spinal fluid and/or radiographic testing as appropriate for the toxic-appearing child, developmentally delayed child, or child failing to thrive. Consider serious and/or occult injury due to abusive trauma, or injuries that have received no previous medical attention, in any ill-appearing or unstable child. Two important sites for occult injury are the intracranial and intraabdominal areas, particularly in the young, preverbal child.

1. Reporting

If the medical and psychosocial assessment of the child raises a reasonable concern for child neglect, reporting should proceed, contacting local child protective services for further investigation and evaluation. It is also important to contact the patient’s primary care physician who will be providing the essential follow-up and long-term care. It is recommended that the emergency physician inform the caretaker(s) of the report to CPS, remaining non-accusatory and focused on the child’s health, well being and safety during the discussion.

1. Disposition

In conjunction with the on-call social worker, primary care physician, child protective services and patient family, a decision must be made as to the safety and well-being of the child should they return home. For the severely ill, malnourished, or seriously injured child, protective custody with hospital admission must proceed. This may require transfer to a children’s hospital or tertiary-care center, necessitating appropriate stabilization, communication and documentation of care prior to transfer.

1. Follow-up Care

Whether the child is discharged home with the primary caretaker, or placed in foster care, they must be provided with written discharge instructions that explain the plan for close medical and social services follow-up.

###### Death of an Abused Child

1. General Principles

Perhaps no diagnosis is more disturbing to ED staff than fatal child abuse. This diagnosis may be immediately apparent to the emergency physician or nurse, as in an obviously injured child arriving via ambulance with prehospital personnel and police who provide specific information about the crime scene. A more challenging scenario, perhaps, is the child with no visible signs of trauma, arriving to the ED with a caretaker who fabricates medical complaints or an accidental mechanism of injury. Vigilance, attention to the detail in the history provided, and careful examination of the child are all critical to arriving at the correct diagnosis.

1. History
2. The following information should be obtained from the parent or caretaker when the physician can safely leave the child’s bedside. (Alternatively, a second ED staff member can interview the parent during the resuscitation.)
3. Events leading up to acute event, including any minor or nonspecific symptoms
4. Person who first found the child in distress
5. Details of the event, including location of child, position of body, skin coloration, mental status/unresponsiveness, spontaneous breathing, noise or distress with breathing, extremity movements, eye opening/movements, skin temperature, stiffness or laxity of body
6. If trauma or a fall is described, details concerning height of fall, nature of landing surface, immediate and delayed symptoms of child
7. Actions of caretaker or first responder
8. Response to home resuscitation efforts
9. First call for help (eg, 911 or call to family physician)
10. Past medical history, including hospitalizations and surgeries
11. Birth history (for the patient under 2 years of age and any child with chronic medical conditions)
12. Medications, allergies, immunization status
13. Over-the-counter medications, prescription medications in the home, controlled substances in the home
14. Home remedies, folk medicine practices
15. Complete review of systems
16. History of prior injuries, ED visits and hospitalizations
17. History from prehospital (and law enforcement personnel) who were present in the home (or at the scene) is invaluable and should detail:
18. Child’s condition on arrival
19. Resuscitation efforts and child’s response
20. Individuals present at the scene
21. History provided by family/caretakers at the scene
22. Condition of home environment
23. Demeanor of family/caretaker(s) at the scene
    1. Interviewing assistance should be sought from the on-call social worker, which should spend time interviewing as many “on-scene” family members individually as soon as possible. Alternatively, law enforcement personnel may begin interviewing family members in the ED.
24. When performing the physical exam special attention should be paid to the following:
25. Head, identifying any areas of swelling, discoloration, crepitus, depression, bleeding, evidence of basilar skull injury
26. Nose and oropharynx, identifying any lacerations of the frenulum, dried blood in the nose or mouth, petechiae about the face, or dental trauma
27. Retinal exam, identifying the presence of retinal hemorrhages, easily identified in a child whose pupils are fixed and dilated
28. Neck, identifying any bruising or circumferential marks due to ligatures
29. Abdomen, noting distension, discoloration, bruising
30. Complete skin inspection, including the back, noting petechiae, bruising, patterns, other distinctive or unusual markings
31. Anogenital area, noting any abnormalities concerning for old, chronic or acute injury
    1. Documentation

Careful, thorough documentation of caretaker statements, quoting household members directly when possible, with a highly detailed description of physical findings is essential.

Each abnormal finding should be described in detail, sketched on a body diagram, and photographed. For example, a bruise on the child’s back is described as “linear bruise, 0.5 cm wide and 6 cm long, extending across the back at the level of the lower edge of the scapulae, red and purple in color, photographed.”

Strong consideration should be given to contacting the local crime lab or law enforcement agency for an investigator/forensics specialist to photograph injuries, with such photography accomplished in accordance with law enforcement investigative protocols. If unavailable, proceed with photography using the camera available in the ED, being sure that each picture has two important items in the frame: an identifying label with the date and patient’s name, and a ruler. If available, photography of bruises with a color bar or wheel in the frame assists in the later identification of colors.

Standardized medical charts for child physical abuse may assist greatly in providing such detailed documentation.

## Diagnostic Testing

While the coroner’s examination of the child may yield significant diagnostic information about the child’s cause of death, hospital testing during the resuscitation and immediately post-mortem may provide invaluable data.

For the previously healthy young infant pronounced dead in the ED, refrain from using the term “SIDS,” as this is a diagnosis of exclusion, reached *after* the ED evaluation, autopsy by the medical examiner and police crime scene investigation. Also, “SIDS” should *not* be communicated to the family. When documenting the final diagnosis in the medical record do not use “SIDS;” rather, an “unexplained infant death” diagnosis can be used. For the child with obvious fatal injuries (eg, visible skull deformity with retinal hemorrhages, rib fractures and fractured femur) your diagnoses should enumerate the injuries and communicate suspected fatal child abuse, homicide or a “battered child.”

Consider the following diagnostic tests in the ED:

1. Nasal swabs for respiratory pathogens that cause apnea (eg, respiratory syncytial virus (RSV), pertussis)
2. Urine or blood for toxicologic analysis
3. Blood, or bone marrow aspirate via intraosseous needle, for bacterial pathogens that cause sepsis
4. Blood for screening for rare metabolic disorders not detected by routine newborn screening
5. Portable radiographic images (ie, chest radiograph or larger image “babygram”) that may reveal heart or lung pathology, radiodense foreign bodies, or occult rib or long bone fractures due to abuse

For the infant or child with a physical finding concerning for traumatic injury, proceed with portable radiographs to identify fractures, foreign bodies, or soft tissue injury.

* 1. Communication is essential with the following individuals:

1. Patient family members
2. Primary care physician
3. Medical examiner
4. Law enforcement personnel
5. CPS personnel
6. Hospital child protection team and/or on-call social worker
7. Hospital pastoral care and clergy known to family
8. Fellow ED staff members for support/recovery after the trauma of an unsuccessful resuscitation and child death
   1. Reporting is required by law when there is a reasonable concern that the cause of death of the child was abuse. Contact both local CPS and law enforcement agencies as soon as possible.

**Suggested quality indicators**

1. Completed medical record with thorough documentation of the following: the history of abuse event(s); physical examination findings and injury(ies) identified; management in the ED; patient disposition/safety plan; reporting of maltreatment to individuals within CPS and/or law enforcement agencies; and follow-up plan for ongoing patient care.
2. Appropriate collection, storage, and transfer of forensic evidence that meets legal requirements for maintaining the chain of custody.
3. Consistent use of established procedures for the transfer to a pediatric tertiary-care hospital of those child maltreatment victims who have serious or multisystem injuries, who are unstable, or who require pediatric subspecialty or inpatient care.
4. Consistent and appropriate communication/contact with primary physicians, hospital social work personnel, CPS and/or law enforcement.
5. Periodic case review with the local CPS agency, or the local children’s hospital child protection team members or coordinator.

### Special Considerations

**Children with Special Needs**

Child victims of maltreatment that are most vulnerable include the very young, preverbal child, and those with physical or mental disabilities. Great care must be taken in the evaluation of their injuries or conditions, as well as in formulating a plan for disposition. Top priority must be given to keeping such children safe and well connected to the medical and social services communities.

**Cultural Sensitivity Issues**

When proceeding with the evaluation of an infant, child or adolescent whom you suspect has been the victim of maltreatment or assault, remember that such victims can be identified in all cultural groups and all socioeconomic strata. Establish clear guidelines for child abuse evaluation that relies on age of injured patient, type of injury, and/or mechanism of injury as criteria for further evaluation. One example of such a guideline is, “for any patient <2 years of age with a skull fracture or intracranial injury, the hospital social worker on call must be consulted for a psychosocial screening of the caretaker(s).”

In addition, the health practices, folk treatments and home remedies believed to be beneficial and safe within a particular culture, may be viewed as injurious, painful or strange to another. All efforts should be made to fully understand a family’s beliefs and intent in using folk medicine or home remedies, especially one that may pose a risk to the child.

#### Relevant JCAHO Standards can be found in sections PE.1, PE.1.9, PE.1.10.1, PE.8, and IM.2.

The Joint Commission on the Accreditation of Hospitals and Related Organizations describes standards whereby hospitals maintain the following policies with regard to the child maltreatment victim:

1. Identifying and assessing possible victims of abuse and neglect
2. Training of hospital staff
3. Safeguarding information and evidentiary material that arises from medical evaluation
4. Maintaining thorough and accurate documentation, which reflects:
5. Appropriate consent(s) to evaluation and/or procedures
6. Reporting to social services and law enforcement agencies
7. Evidentiary material is safeguarded
8. Referrals are provided abuse/assault victims and families

##### Reference List

1. Heger AW, Emans SJ, Muram D, et al. eds. *Evaluation of the Sexually Abused Child*. 2nd ed. New York, NY: Oxford University Press; 2000.
2. Illinois Criminal Sexual Assault Act and Related Statutes, revised November 2000, Illinois Coalition Against Sexual Assault, Springfield, IL.
3. *J Am Acad Child Adolesc Psychiatry.* 1997 Oct;36(10 Suppl).
4. Kleinman PK, ed*. Diagnostic Imaging of Child Abuse*. 2nd ed. St. Louis, MO. Mosby-Yearbook; 1998.
5. Reece RM, Ludwig S, eds. *Child Abuse: Medical Diagnosis and Management.* 2nd ed. Philadelphia, PA: Lippincott, Williams & Wilkins Publishers; 2001.
6. Yuille JC, Hunter R, Joffe R, Zaparniuk J. In: Goodman GS, Bottoms BL, eds.Interviewing children in sexual abuse cases. *Child Victims, Child Witnesses*. New York, NY: Guilford; 1992.
7. Joint Commission on Accreditation of Healthcare Organizations. *2001 Comprehensive Accreditation Manual for Hospitals: The Official Handbook*. Oakbrook Terrace, IL: Publication Joint Commission Resources; 2001.

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