Suspected Physical Abuse

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Connecticut Children's

What is a Clinical Pathway?

An evidence-based guideline that decreases unnecessary variation and helps promote safe, effective, and consistent patient care.

Objectives of Pathway

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- Standardize the clinical practice in cases of suspected physical abuse that present to Connecticut Children's
- Standardize initial work-up and history taking
- Provide clear guidelines for when to consult with the Suspected Child Abuse and Neglect (SCAN), Pediatric Surgery, Neurosurgery, Orthopedic, and Ophthalmology teams
- Provide clear, evidence based guidelines for ordering laboratory and radiographic testing when abuse is suspected
- Decrease the ordering of unnecessary imaging studies
- Reduce bias in the evaluation of suspected child physical abuse cases

Why is Pathway Necessary?

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- Cases of suspected physical abuse frequently present to our ED
- Many providers are unsure of how to evaluate these cases and there is variation in approach to these cases. The pathway is an evidence based guideline which will help to standardize care based on current best practice
- Bias can impact evaluation of suspected child physical abuse Standardized care can help reduce such bias

Background

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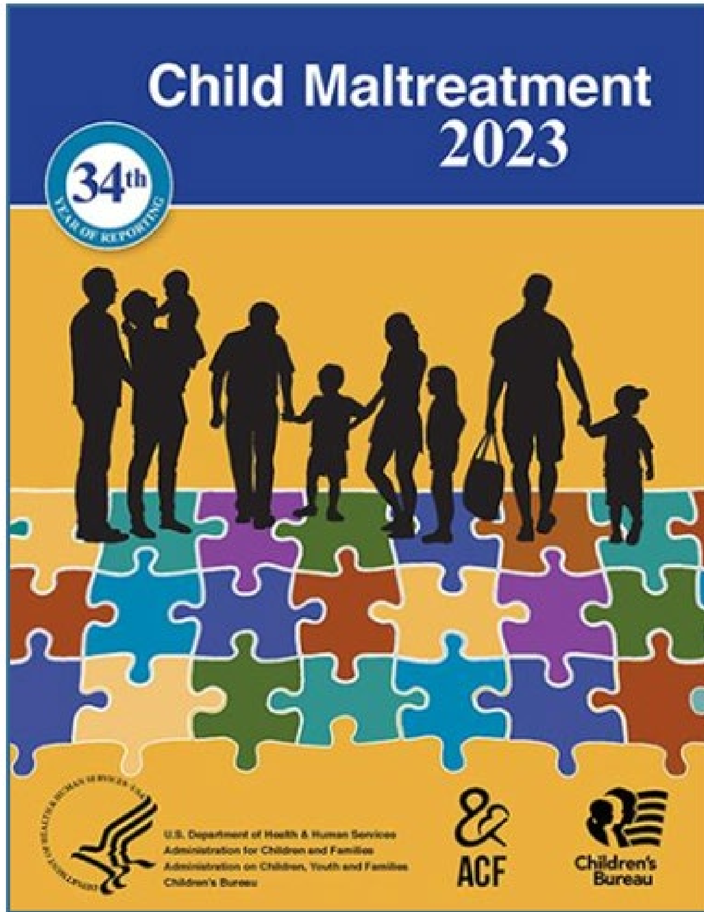
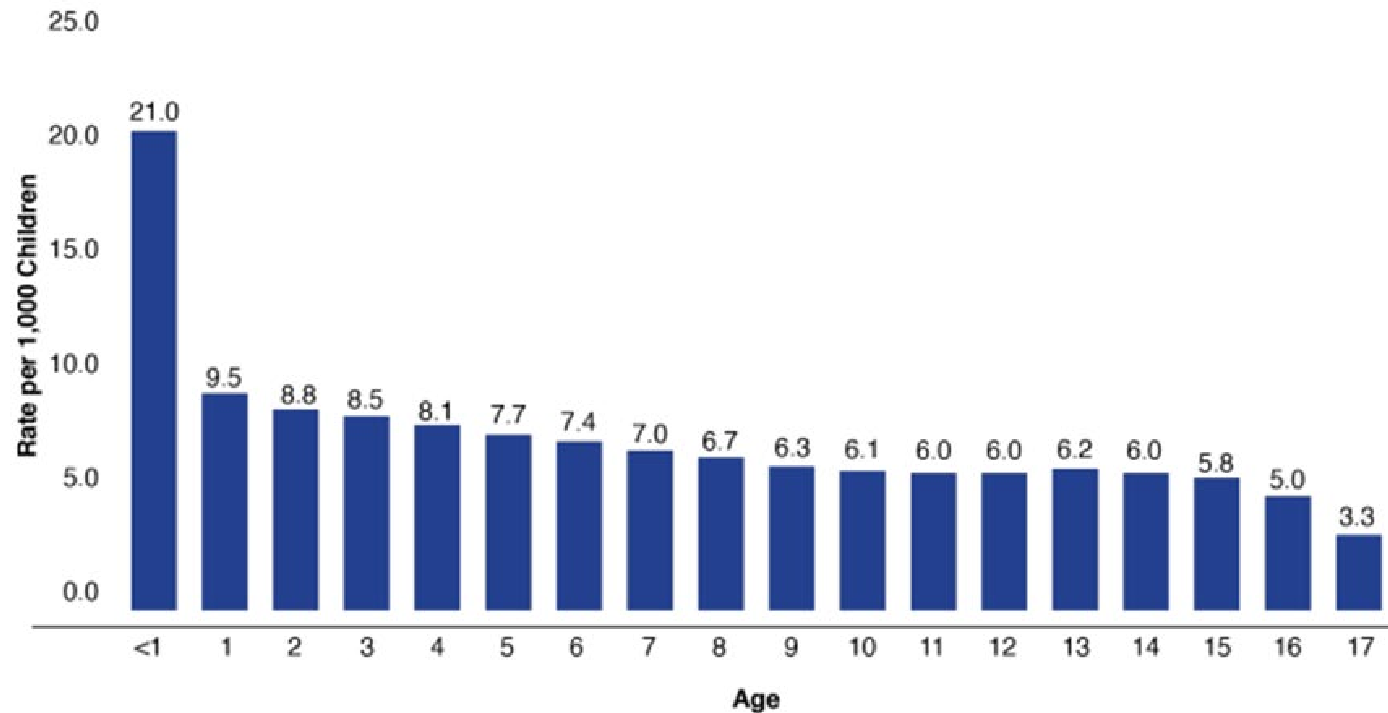


Approximately 546,000 substantiated cases of child maltreatment in the U.S. in 2023

- 64.1% - neglect
- 10.6% - physical abuse
- 10 % - sexual abuse
- 7.5% - psychological

- 11.1%- multiple forms

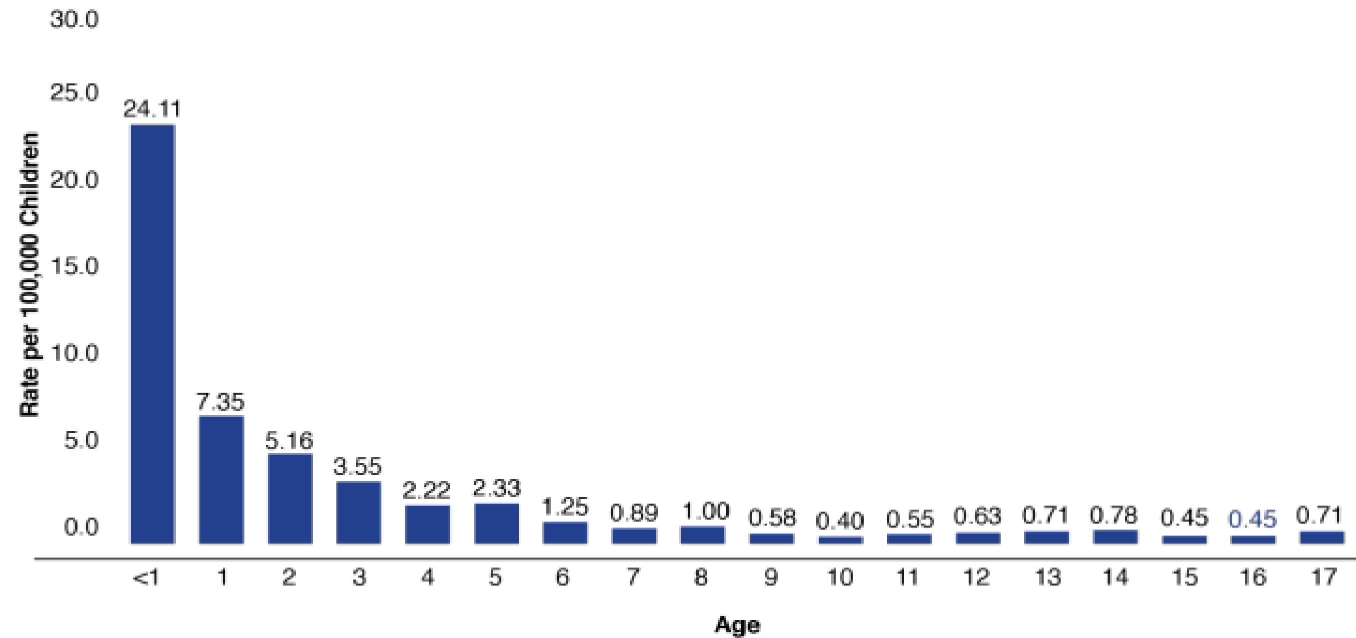
Who are the Victims?



Highest victimization rate **< 1 year old**

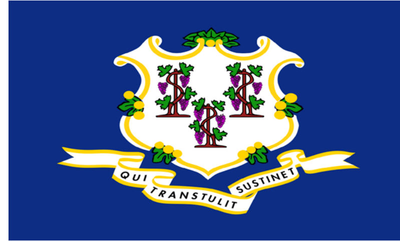
Child Maltreatment 2023 | The Administration for Children and Families

Child Fatalities



- **1,968 child deaths** due to abuse or neglect in 2023
- Highest victimization rate in children **< 1 year old**

Child Abuse in Connecticut



2023

- 5,227 substantiated cases of child abuse or neglect
- 11 fatalities due to abuse or neglect

Child Maltreatment 2023 | The Administration for Children and Families

When to Consider Child Physical Abuse

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- A disclosure of abuse is made by a child or caregiver
- There is either no explanation or a vague explanation given for a significant injury
- There is an explicit denial of trauma in a child with obvious injury
- An important detail of the explanation changes in a substantive way
- An explanation is provided that is inconsistent with the child's physical and/or developmental capabilities
- There is an unexplained or unexpected notable delay in seeking medical care
- Different witnesses provided markedly different explanations for the injury or injuries

Christian, Committee on Child Abuse and Neglect. The Evaluation of Suspected Child Physical Abuse. Pediatrics. 2015;135(5):e1337–e1354

Physical Findings Suggestive of Abuse

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- *ANY injury to a young, pre-ambulatory infant*, including bruises, mouth injuries, fractures, and intracranial or abdominal injury
- Injuries to multiple organ systems
- Multiple injuries in different stages of healing
- Patterned injuries
- Injuries to non-bony or other unusual locations such as over the torso, ears, face, neck or upper arms
- Significant injuries that are unexplained
- Additional evidence of child neglect

Christian, Committee on Child Abuse and Neglect. The Evaluation of Suspected Child Physical Abuse. Pediatrics. 2015;135(5):e1337–e1354

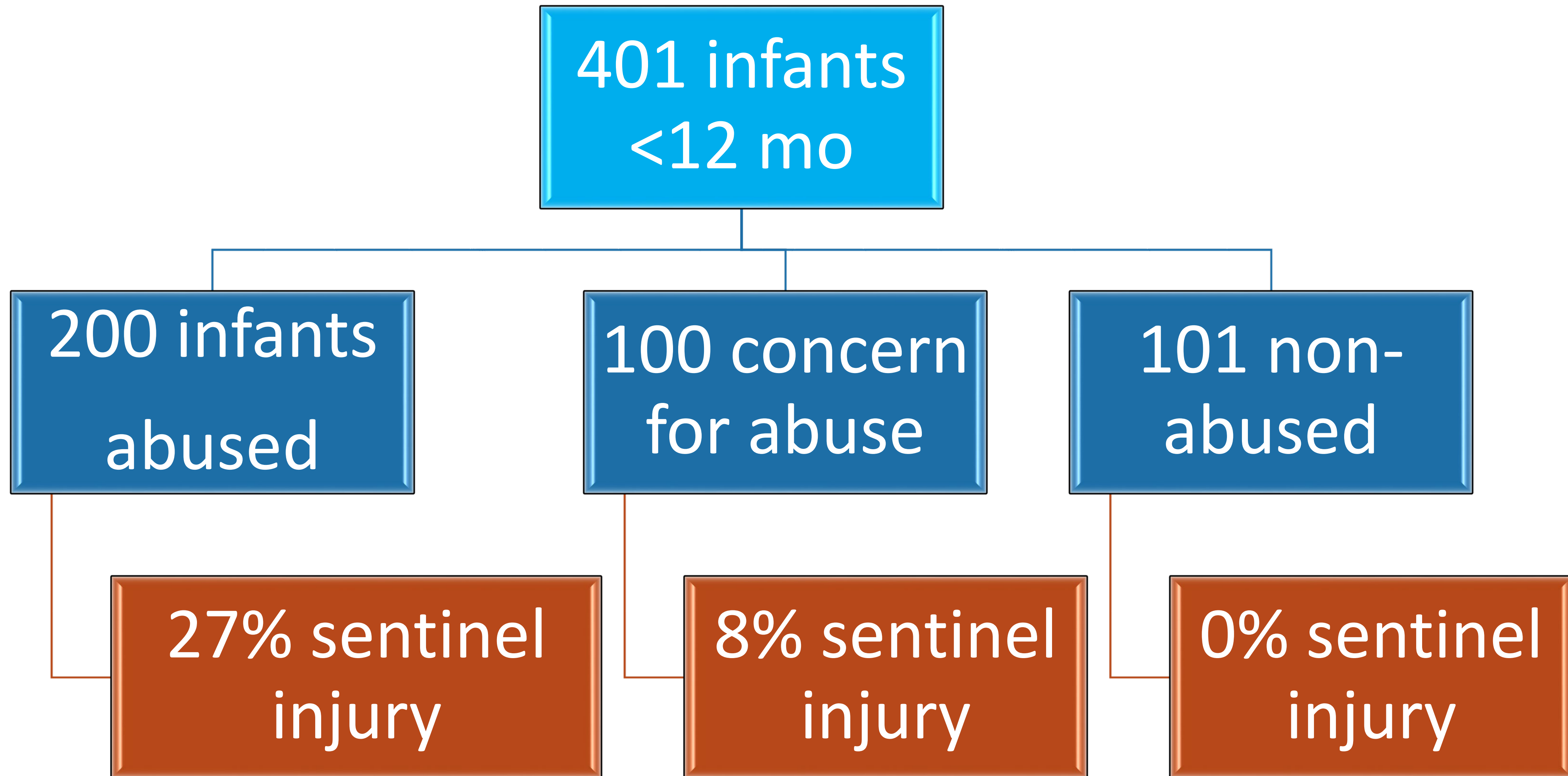
Sentinel Injuries

- Multiple studies have shown that 25-30% percent of infants with serious abusive injuries had prior medical presentation for injuries or symptoms of abuse
- Sheets et al (2013) also showed that a comparison population of infants with non-abusive injury did not have prior injuries

A previous injury was defined as a sentinel injury if it was reported to have been visible to at least 1 parent before the events leading to the current admission and was suspicious for abuse because the child was not able to cruise or there was an implausible explanation offered.

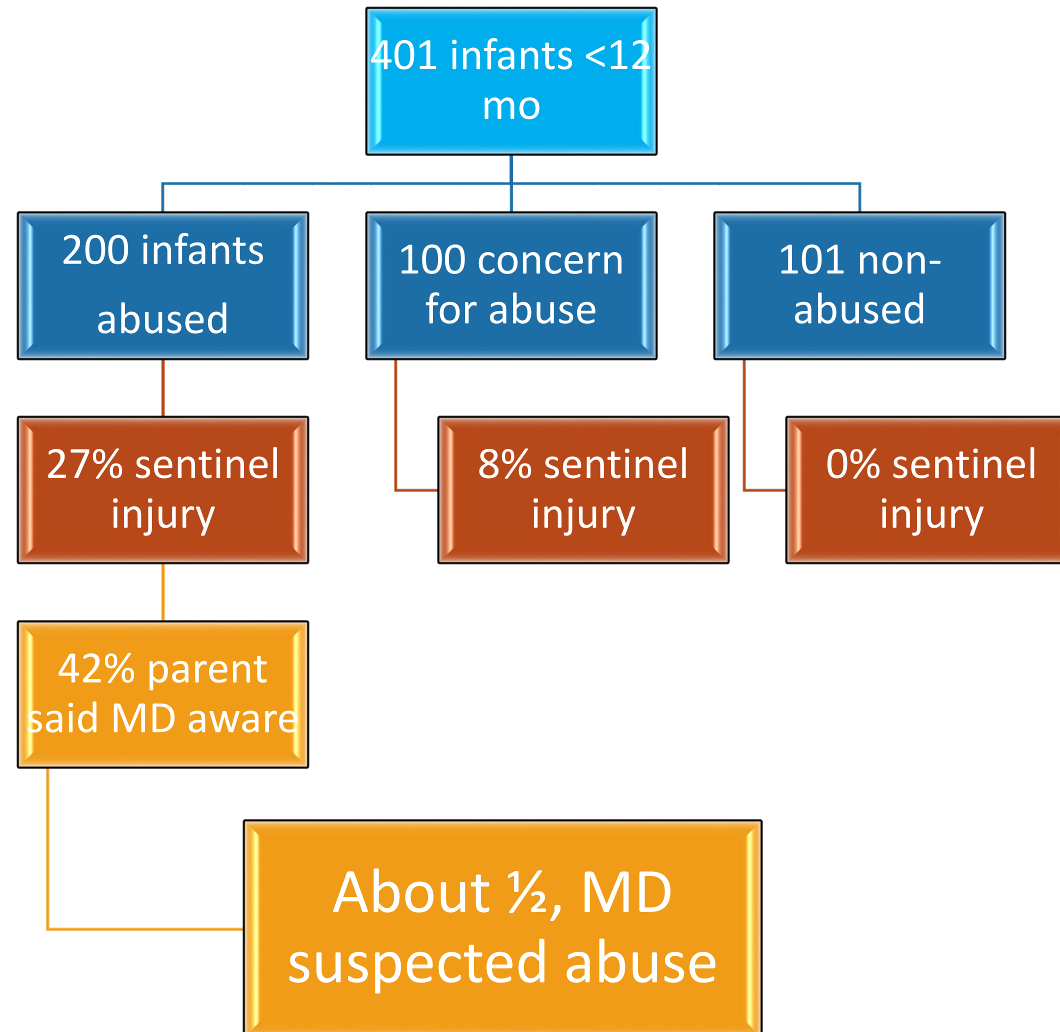
Feldman 2009; Jenny 1999; Pierce 2009; Sheets 2013; Harper 2014; Letson 2016

Sentinel Injuries



Sheets et al, Pediatrics 2013

Sentinel Injuries



Sheets et al, Pediatrics 2013

What Were the Sentinel Injuries?

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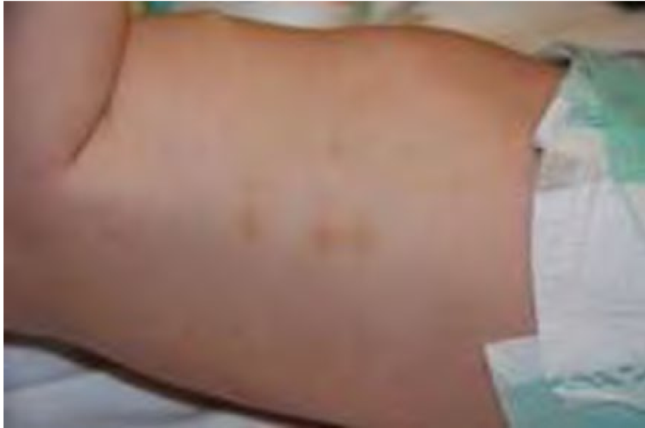
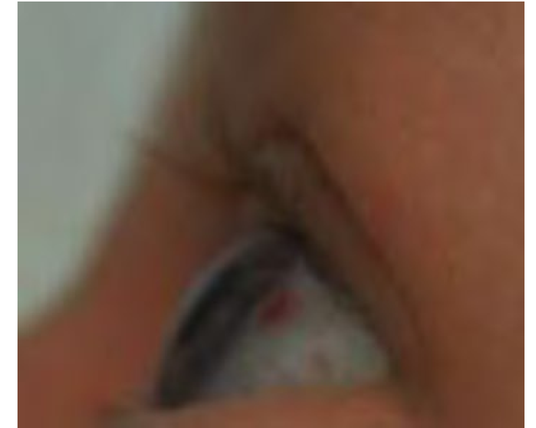
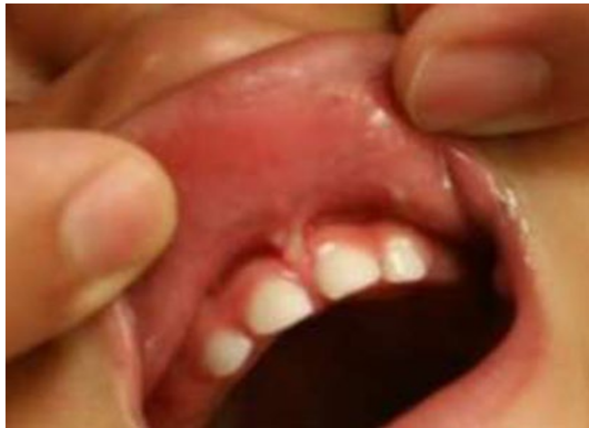
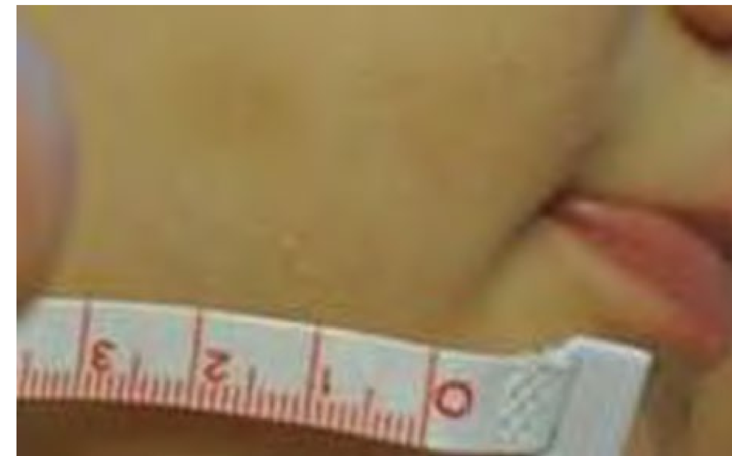


- 80% Bruises
- 11% intraoral injuries
- 7% other injuries
- 66% under age 3 months
- 95% under age 7 months







Sheets et al, Pediatrics 2013

What Happened When a Sentinel Injury was seen by the Medical Provider?

- Some injuries were noted in the medical record and not commented upon
- Some injuries were thought to be self-inflicted
- Some injuries initially prompted concern for abuse but, when no other injury was diagnosed, no further effort to protect the child was made
- Some were reported to child protective services but child was not protected

Sheets et al, Pediatrics 2013

Study Conclusions

- Sentinel injuries preceded more severe abuse in 27.5% of abuse cases
- "Prevention window" between sentinel injury and more severe abuse ranged from 1 day-7.3 months

Improved recognition of sentinel injuries combined with appropriate interventions could prevent more severe injuries.

Sheets et al, Pediatrics 2013

2026 Literature Review

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- **Review of literature and guidelines provides support for an evidence based clinical pathway that standardizes care regarding assessment of abuse and neglect.**

- JAMA (2025), AAP (2021) Pediatric Radiology (2024), Journal of Trauma and Acute care surgery (2021), Journal of Child Abuse & Neglect (2024), Pediatric Neurosurgery (2018), Pediatric Radiology (2018) & Journal of American College of Radiology (2017).

ALL (of the above) support similar Physical abuse algorithms

- **The following changes were recommended in order to better align with current recommendations regarding laboratory testing:**

- Modification of Laboratory studies requested when concerns of Intracranial bleeding
  - **(Anderst et al 2022; Boos et al. 2025; Christian 2021)**

2026 Recommendations

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2026 Adjustments to SPA pathway include:

- Addition of **"Contact SCAN provider on-call about ANY injury in an infant"** above inclusion criteria
- Addition of (See also Appendix A eg. TEN-4-FACESp bruises in child ≤ 4 years old)
- Addition of "Consider urinalysis" under Abdominal trauma branch
- Modification of Intracranial labs to include:
  - Removal of VWB Activity
  - Removal of VWB Antigen
  - Removal of Factor 11,13
  - Addition of Fibrinogen
  - Addition of D- Dimer
- Modification of Child Maltreatment codes, specific to Physical abuse only

2026 Works in Progress

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- Continued development of MRI protocol
- Education of Community Pediatricians (within CIN)
- Quality improvement project regarding cutaneous injury detection within the ED

2026 and Beyond: Future Directions

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1. **Further Development of MRI protocol**
   - Christian et al. (2025) MRI is a useful tool for specific populations
   - Derinkuyu et al. (2024), Feldman et al. (2023) MRI may be useful in recognizing AHT and/or abusive spine injuries.
2. **Skull fracture algorithm**
   - Issac et al. (2023) Evaluating skeletal survey yields in low versus high risk pediatric patients with skull fractures.
   - O'Hara et al. (2023) Multicenter retrospective review characterizing skull fractures.
3. **Family Centered Care Referrals**
   - Tiyyagura et al. (2024). IPV exposed children are not routinely evaluated for abused despite co-occurrence.

This is the Suspected Physical Abuse Clinical Pathway.

We will be reviewing each component in the following slides.

CLINICAL PATHWAY:

Suspected Physical Abuse (SPA)

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL JUDGMENT.

Contact SCAN provider on-call about ANY injury in an infant ≤12 months old.
Inclusion Criteria: suspected physical abuse of any age (see Appendix A - i.e., TEN4-FACES-P bruising in a child ≤4 years of age)
Exclusion Criteria: none

History (see Appendix B):
If you suspect abuse, contact attending to discuss case prior to obtaining detailed history.
- Separate >3 yo and caregiver, if possible
- Use "What happened?" and "Tell me more about that."
- Document questions and answers word for word

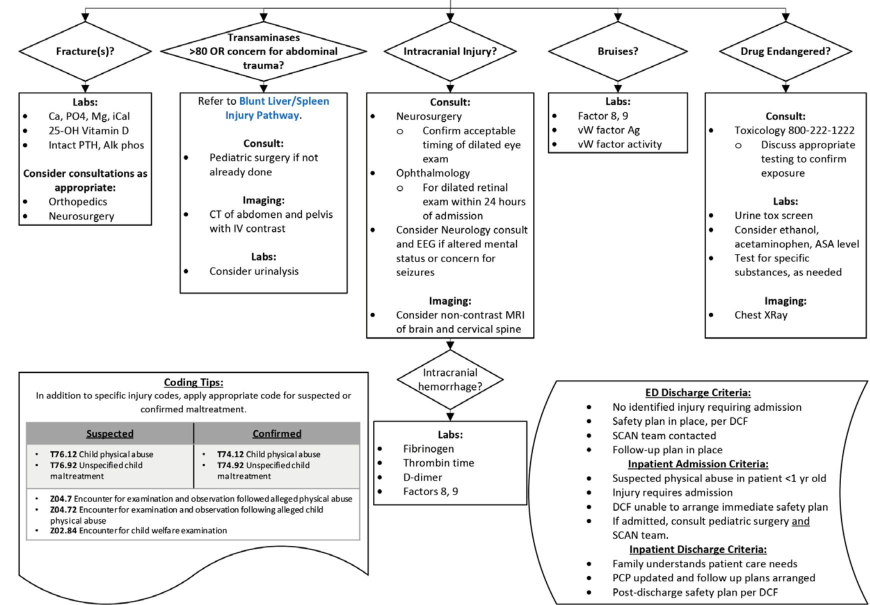
Full physical exam should include:
- Developmental stage / neuro exam
- Total oral cavity, including frena
- Skin exam in good light (include scalp, ears, behind ears, mid-axillary lines, all skin folds)
- Anus and genitalia (with labial traction for girls)
- Palpate skeleton for defects and calluses

Document Injuries:
- Diagram injuries in Epic
- Obtain digital photographs (Appendix C)

Initial Management:
Labs:
- CBC w diff, type & screen, AST, ALT, PT/PTT, amylase, lipase

Imaging:
- Skeletal survey if <2 years of age
- Non-contrast Head CT (with 3D recon if):
  - Abnormal neurological exam OR
  - <6 months old OR
  - <1 year old with head/facial injuries OR rib fractures OR multiple fractures OR witnessed shaking

Consultations:
- SCAN (Suspected Child Abuse and Neglect Team)
- Consider Surgery consult (must consult surgery if admitted)
- Social work
- Report to DCF Hotline (1-800-842-2288) and file 136 form within 12 hours (Appendix D)



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THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL JUDGMENT.

Contact SCAN provider on-call about ANY injury in an infant ≤12 months old.
Inclusion Criteria: suspected physical abuse of any age (see **Appendix A** - i.e., TEN4-FACES-P bruising in a child ≤4 years of age)
Exclusion Criteria: none

If any infant ≤12 months old present with ANY injury, contact the SCAN team on-call to review the case.

For the pathway, inclusion criteria includes any child with *suspected* physical abuse.

Appendix A has examples of when to suspect physical abuse.

CLINICAL PATHWAY:
Suspected Physical Abuse (SPA)
Appendix A: Examples of When to Consider Physical Abuse

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL JUDGMENT

Below are examples of when to consider physical abuse at any age.

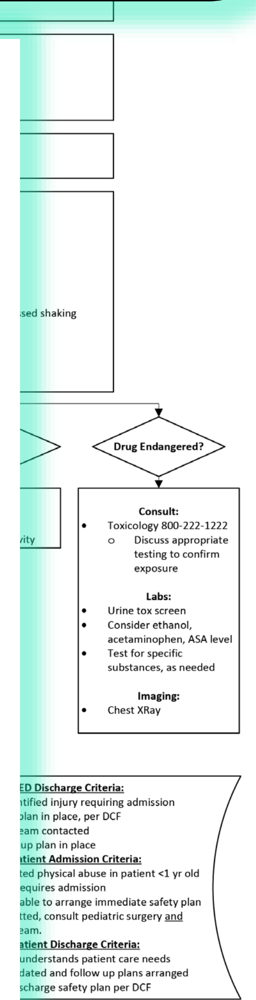
This list is not all-inclusive.

Historical Findings Concerning for Physical Abuse:

- A disclosure of abuse is made by a child or caregiver
- There is either no explanation, or a vague explanation, given for a significant injury
- There is an explicit denial of trauma in a child with obvious injury
- An important detail of the explanation changes in a substantive way
- An explanation is provided that is inconsistent with the child's physical and/or developmental capabilities
- There is an unexplained or unexpected notable delay in seeking medical care
- Different witnesses provided markedly different explanations for the injury or injuries

Physical Findings Concerning for Physical Abuse:

- ANY injury to an infant (<12 months old) or pre-ambulatory child, including but not limited to bruises, burns, abrasions, oral injuries, fracture, intracranial injury, abdominal injury
- Injuries in any age child to locations not common for accidental injury, such as over the abdomen/torso, ears, mouth/genitals, neck or non-bony prominences (TEN-4 FACES-P; see below)
- Multiple injuries in different stages of healing
- Patterned injuries
- Additional evidence of child neglect



RETURN TO THE BEGINNING

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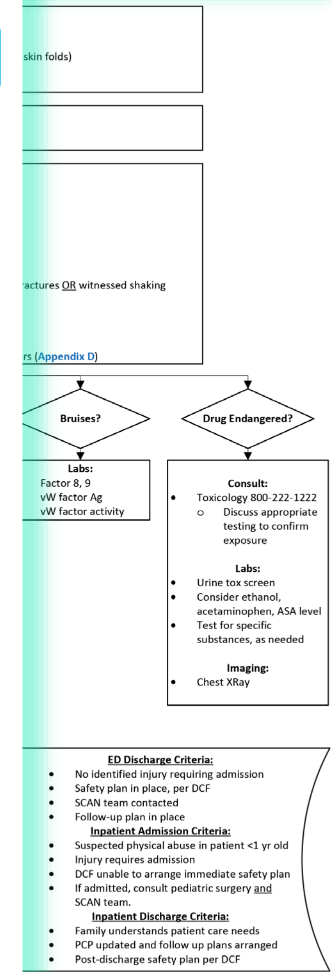
Contact SCAN provider on-call about ANY injury in an infant ≤12 months old.
Inclusion Criteria: suspected physical abuse of any age (see **Appendix A** - i.e., TEN4-FACES-P bruising in a child ≤4 years of age)
Exclusion Criteria: none

Appendix A:
Remember "TEN-4", "FACES", and "ABUSE" when considering physical abuse

Appendix A: Examples of When to Consider Physical Abuse



Pneumonics that may be helpful:

- **Bruising to the:**
  - **T:** Torso
  - **E:** Ears
  - **N:** Neck on children
  - **4**: Under 4 years old and bruising *anywhere* on children under 4 months
  - **F**: Frenulum
  - **A**: Angle of Jaw
  - **C**: Cheek
  - **E**: Eyelid
  - **S**: Sclera
  - **P:** Patterned injury
- **When considering a child with injury, consider:**
  - **A:** Appearance (Is this a patterned injury?)
  - **B:** Baby (<12 months old, bruise on children who don't cruise)
  - **U:** Unusual location (ears, mouth, genitals, etc.)
  - **S:** Story (Is there changing or inadequate history?)
  - **E:** Expected care (Is there a delay in seeking care?)

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CLINICAL PATHWAY:
Suspected Physical Abuse (SPA)

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL JUDGMENT.

Contact SCAN provider on-call about ANY injury in an infant ≤12 months old.

History (see Appendix B):

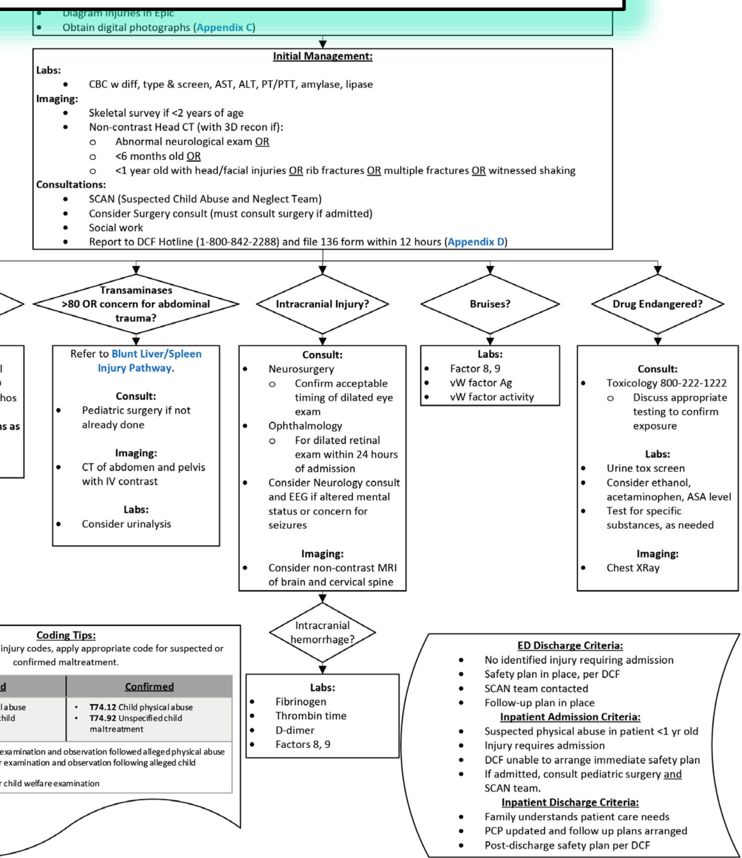
If you suspect abuse, contact attending to discuss case prior to obtaining detailed history.

- Separate >3 yo and caregiver, if possible
- Use "What happened?" and "Tell me more about that."
- Document questions and answers word for word

History Taking:

- When possible separate children over 3 years and older and caregiver.
  - This allows the opportunity for the child to be honest without fear of how the caregiver may react.
- Use open ended phrases such as "what happened?" and "tell me more about that?"
- Document questions and answers word for word

See Appendix B for more details



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If child 3+, leave the child in the company of staff and **talk with caregiver separately first.**

Children 3+ may be interviewed separately from caregiver with guardian permission. **DO NOT** interview children in front of caregivers.

1. Have guardian/caregiver consent to full exam (including looking at private areas) in front of child, and then have caregivers wait elsewhere (out of earshot).
2. Bring in another staff member to observe your exam/record conversation.
3. Establish rapport with child (ask about pets, school, activities, talents/strengths).
4. Perform PE --- upon encountering injury ask the child "What happened here?"
   - Record your questions and any statements by child word for word.
   - If child discloses abuse, follow up with "tell me more about that."
   - You may ask who, what, where, when, number of times, circumstance, who else was there, if anyone else hurts child, if someone else gets hurt.
   - Use these general guidelines for what children of different ages are able to report:

Age of Child | Who | What | Where | When | # of times | Circumstance

3

4-6

7-8

9-10

11-12

This is only a general guideline. Each child's capacity will vary depending on his or her unique circumstances and developmental level.

(Cornerhouse interview training materials 2004)

   - **DO NOT:** Coerce or bribe children to talk, ask questions that contain the answer, ask yes/no or multiple choice questions, or show shock or disapproval. Maintain an interested neutral demeanor.

5. Document both your questions and child's answers in the record. Anything you recorded word for word from the child should be documented in quotes.

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CLINICAL PATHWAY:
Suspected Physical Abuse (SPA)

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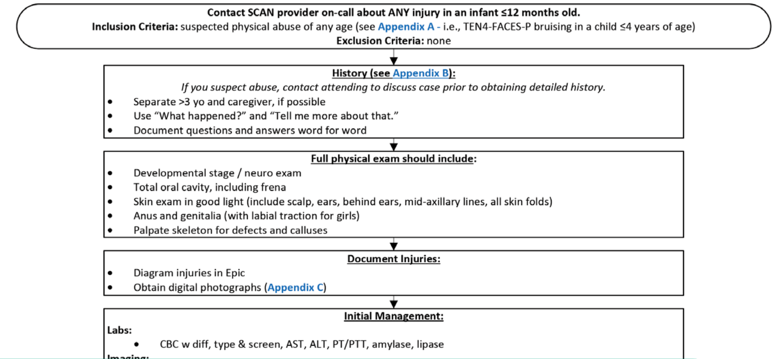
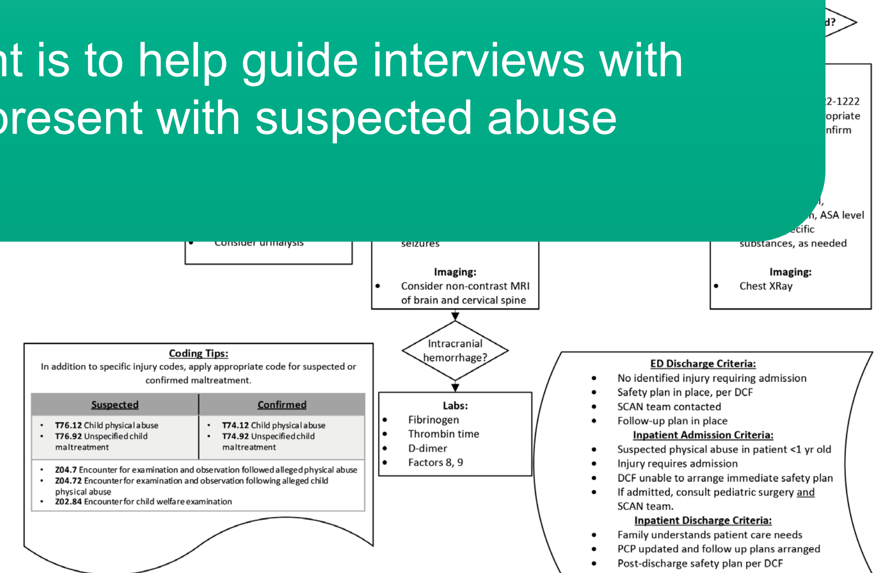


Appendix B:

This document is to help guide interviews with children that present with suspected abuse



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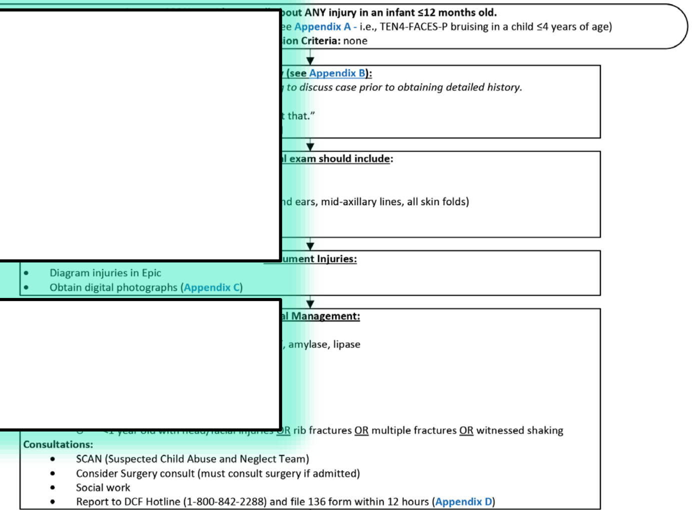
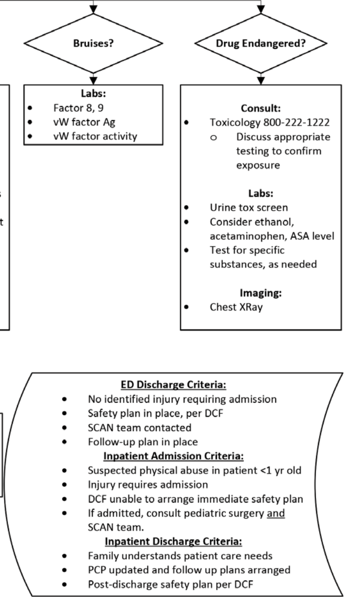
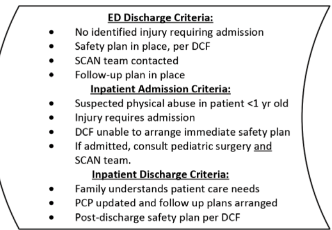
Full physical exam should include:

- Developmental stage / neuro exam
- Total oral cavity, including frena
- Skin exam in good light (include scalp, ears, behind ears, mid-axillary lines, all skin folds)
- Anus and genitalia (with labial traction for girls)
- Palpate skeleton for defects and calluses

Document Injuries:

- Diagram injuries in Epic
- Obtain digital photographs (Appendix C)

CLINICAL PATHWAY:
Suspected Physical Abuse (SPA)

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Physical Exam:

The physical exam should be thorough and include:

- Developmental Stage
  - Can the child roll, cruise, walk, etc.
- Total oral cavity with attention to frena
- Skin exam in good light
  - Including the scalp, ears, behind the ears, mid-axillary lines, and all skin folds
- Anus and genitalia
  - With labial traction for girls
- Palpate skeleton for defects/calluses
- Obtain consent for digital photos

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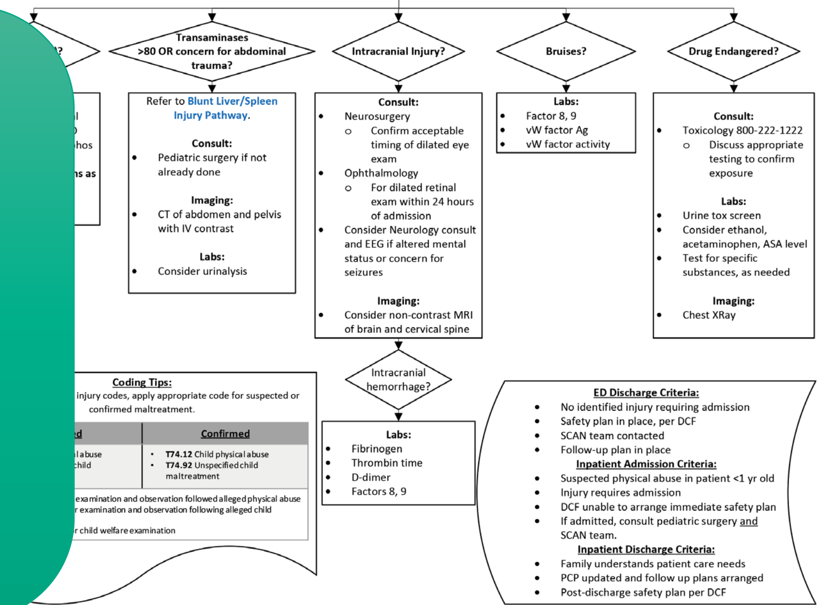

Full physical exam should include:

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- Skin exam in good light (include scalp, ears, behind ears, mid-axillary lines, all skin folds)
- Anus and genitalia (with labial traction for girls)
- Palpate skeleton for defects and calluses

Document Injuries:

- Diagram injuries in Epic
- Obtain digital photographs (Appendix C)

Documentation is crucial!

- Diagram all injuries in EPIC
- Obtain digital photographs

See Appendix C for additional information on photographs

CLINICAL PATHWAY:
Suspected Physical Abuse (SPA)
Appendix C: Tips for Obtaining Forensic Photographs

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL JUDGMENT.

Forensic digital photographs may be obtained using the general procedure outlined below:

1. The digital camera (or other image capture device) should be left on the "auto focus" setting.
2. The first image (Photo #1) should be of the patient's registration sticker to document this information and designate the start of the image series.
3. The second image (Photo # 2) should be of the patient's face.
4. The remaining photos should consist of a three-shot sequence of images which include:
   - Overall- demonstrating the general area of interest/injury
   - Mid-range- closer view focusing in on area of interest/injury
   - Close-up- close up images while keeping in focus (with and without scale)
5. Close up images should be taken using an ABFO No.2 ("L" shaped) forensic scale placed in the same plane and adjacent to the area of interest/injury.
6. Images should be obtained shooting at 90 degrees to the area of interest/injury (and the scale for close-up images).
7. Additional lighting may be used to demonstrate features of the area.
8. Documentation should be made in the medical record that forensic images have been obtained.
9. Forensic photographs should be accompanied by a diagram in the electronic medical record indicating location and a written description of injuries.

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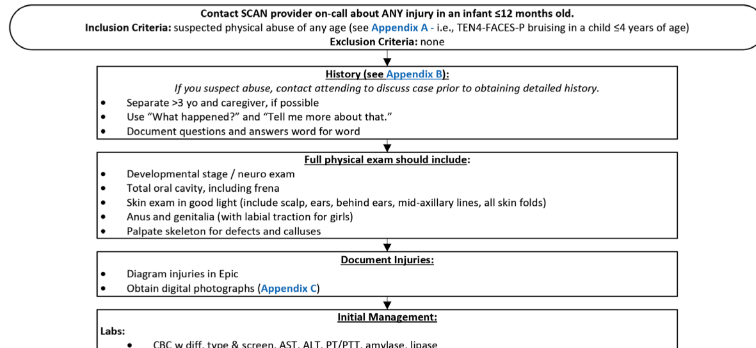
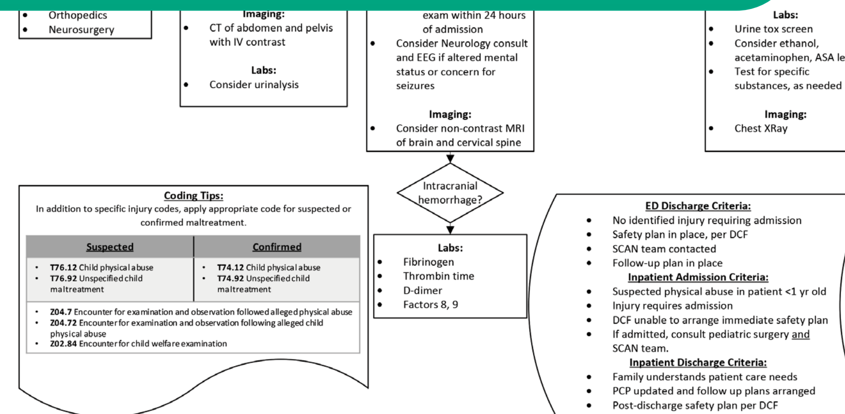


Appendix C: Tips for Obtaining Forensic Photographs

This is a guide for providers to who may need to take photographs of suspected injuries



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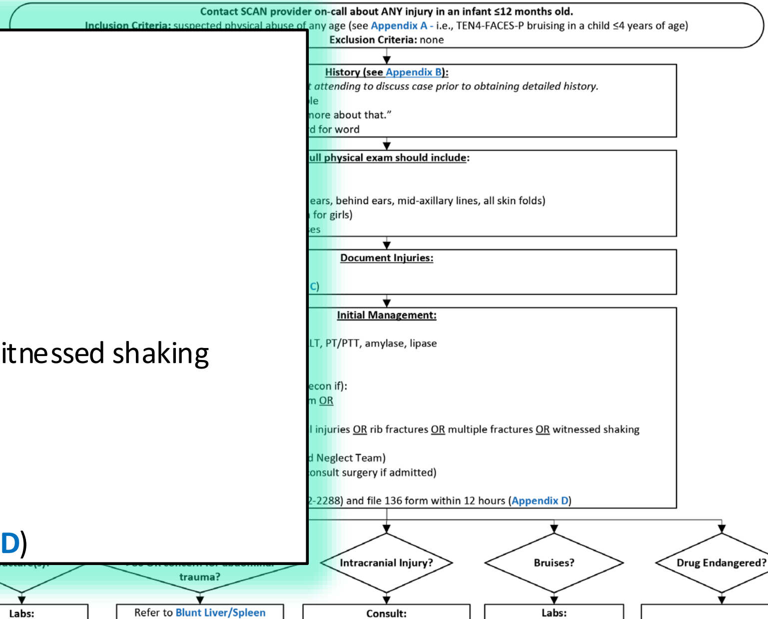

Initial Management:

Labs:

- CBC w diff, type & screen, AST, ALT, PT/PTT, amylase, lipase

Imaging:

- Skeletal survey if <2 years of age
- Non-contrast Head CT (with 3D recon if):
  - Abnormal neurological exam OR
  - <6 months old OR
  - <1 year old with head/facial injuries OR rib fractures OR multiple fractures OR witnessed shaking

Consultations:

- SCAN (Suspected Child Abuse and Neglect Team)
- Consider Surgery consult (must consult surgery if admitted)
- Social work
- Report to DCF Hotline (1-800-842-2288) and file 136 form within 12 hours (Appendix D)

If you file a 136 with DCF it is your responsibility to inform the family of this

Initial Management:

All cases should be discussed with an attending physician immediately

- Consult ED Social Worker
- Consider consulting pediatric surgery and/or SCAN
- Call to DCF hotline to file 136
  - See next slide

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REPORT OF SUSPECTED CHILD ABUSE OR NEGLECT

DCF-136
05/2015 (Rev.)

Careline
1-800-842-2288

Within forty-eight hours of making an oral report, a mandated reporter shall submit this form (DCF-136) to the relevant Area Office listed below
See the reverse side of this form for a summary of Connecticut law concerning the protection of children.

Please Print or Type

Child's Name	☐ M ☐ F	Age Or DOB	Race: ☐ American Indian or Alaskan Native ☐ Asian/Pacific Islander ☐ Black/African American (not of Hispanic Origin) ☐ Hispanic ☐ White (not of Hispanic origin) ☐ Unknown ☐ Other ________

Child's Address

Name Of Parents Or Other Person Responsible For Child's Care	Address	Phone Number
Name Of Careline Worker To Whom Oral Report Was Made	**Date Of Oral Report**	**Date And Time Of Suspected Abuse/Neglect**
Name Of Suspected Perpetrator, If Known	**Address And Phone Number, If Known**	**Relationship To Child**

Nature And Extent Of Injury(ies), Maltreatment Or Neglect

Describe The Circumstances Under Which The Injury(ies), Maltreatment Or Neglect Came To Be Known

Describe the Reasons Such Persons(s) Are Suspected of Causing Such Injuries, Maltreatment of Neglect

Information Concerning Any Previous Injury(ies), Maltreatment Or Neglect Of The Child Or His/Her Siblings

Information Concerning Any Prior Cases(s) In Which The Person(s) Have Been Suspected Of Causing An Injury(ies), Maltreatment Or Neglect Of A Child

List Names And Ages Of Siblings, If Known

What Action, If Any, Has Been Taken To Treat, Provide Shelter Or Otherwise Assist The Child?

REPORTER SECTION

Reporter's Name: Agency Name: Phone Number: Agency Address: City:	**Reporter's Race** ☐ American Indian or Alaskan Native ☐ Asian/Pacific Islander ☐ Black/African American (not of Hispanic Origin) ☐ Hispanic (any race) ☐ White (not of Hispanic origin) ☐ Prefer Not to Answer ☐ Other ________	
Reporter's Signature	Position	Date

WHITE COPY: TO DCF AREA OFFICE (see below) ***IF YOU NEED ADDITIONAL SPACE, YOU MAY ATTACH MORE DOCUMENTATION***

Bridgeport 100 Fairfield Avenue Bridgeport, CT 06604 203-384-5300 TDD: 203-384-5399 Fax: 203-384-5306	**Danbury** 131 West Street Danbury, CT 06810 203-207-5100 TDD: 203-748-8325 Fax: 203-207-5169	**Hartford** 250 Hamilton Street Hartford, CT 06106 860-418-8000 TDD: 800-315-4082 Fax: 860-418-8325	**Manchester** 364 West Middle Turnpike Manchester, CT 06040 860-533-3600 TDD: 800-315-4415 Fax: 860-533-3734	**Norwalk** 761 Main Avenue, I-Park Complex Norwalk, CT 06851 203-899-1400 TDD: 203-899-1491 Fax: 203-899-1463, 203-899-1464
Meriden One West Main Street Meriden CT 06451 203-238-8400 TDD: 203-238-8517 Fax: 203-238-6425	**Middletown** 2081 South Main Street Middletown, CT 06457 860-638-2100 TDD: 860-638-2195 Fax: 860-346-0098	**Milford** 38 Wellington Road Milford, CT 06461 203-306-5300 TDD: 203-306-5604 Fax: 203-306-5606	**New Britain** One Grove Street, 4th Floor New Britain, CT 06053 860-832-5200 TDD: 860-832-5370 Fax: 860-832-5491	**New Haven** One Long Wharf Drive New Haven, CT 06511 203-786-0500 TDD: 203-786-2599 Fax: 203-786-0660
Norwich Two Courthouse Square Norwich, CT 06360 860-886-2641 TDD: 860-885-2438 Fax: 860-887- 3683	**Torrington** 62 Commercial Blvd Torrington, CT 06790 860-496-5700 TDD: 860-496-5796 Fax: 860-496-5834	**Waterbury** 395 West Main Street Waterbury, CT 06702 203-759-7000 TDD: 203-465-7329 Fax: 203-759-7295	**Willimantic** 322 Main Street Willimantic, CT 06226 860-450-2000 TDD: 860-456-6603 Fax: 860-450-1051	**Special Investigations Unit** 505 Hudson Street, 7th Floor Hartford, CT 06106 860-550-6696 FAX: 860-723-7237

CLINICAL PATHWAY:
Suspected Physical Abuse (SPA)

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL JUDGMENT.

Contact SCAN provider on-call about ANY injury in an infant ≤12 months old.
Inclusion Criteria: suspected physical abuse of any age (see Appendix A - i.e., TEN4-FACES-P bruising in a child ≤4 years of age)
Exclusion Criteria: none

History (see Appendix B):
If you suspect abuse, contact attending to discuss case prior to obtaining detailed history.
- Separate >3 yo and caregiver, if possible
- Use "What happened?" and "Tell me more about that."
- Document questions and answers word for word

Full physical exam should include:
- Developmental stage / neuro exam
- Total oral cavity, including frena
- Skin exam in good light (include scalp, ears, behind ears, mid-axillary lines, all skin folds)
- Anus and genitalia (with labial traction for girls)
- Palpate skeleton for defects and calluses

Document Injuries:
- Diagram injuries in Epic

Appendix D:

DCF 136: When making a report to DCF you must call the DCF hotline then fax the completed 136 form within 12 hours.

Drug Endangered?

Consult:
- Toxicology 800-222-1222
  - Discuss appropriate testing to confirm exposure

Labs:
- Urine tox screen
- Consider ethanol, acetaminophen, ASA level
- Test for specific substances, as needed

Imaging:
- Chest XRay

- Intact PTH, Alk phos

Consider consultations as

Consult:
- Pediatric surgery if not already done

timing of dilated eye exam

- Ophthalmology

- vW factor activity

If you file a 136 with DCF it is your responsibility to inform the family of this

ED Discharge Criteria:
- No identified injury requiring admission
- Safety plan in place, per DCF
- SCAN team contacted
- Follow-up plan in place

Inpatient Admission Criteria:
- Suspected physical abuse in patient <1 yr old
- Injury requires admission
- DCF unable to arrange immediate safety plan
- If admitted, consult pediatric surgery and SCAN team.

Inpatient Discharge Criteria:
- Family understands patient care needs
- PCP updated and follow up plans arranged
- Post-discharge safety plan per DCF

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Initial Management:

Labs:
- Obtain basic trauma labs

Imaging:
- Obtain skeletal survey for:
  - Less than 2 years of age
- Obtain Head CT (w/ 3D reconstruction) for:
  - Younger than 6 months of age
  - Evidence of head trauma
  - Abnormal neuro exam

  Or
  - Less than 1 year with:
    - rib fracture
    - multiple fractures
    - facial injury
    - witnessed shaking event

CLINICAL PATHWAY:

Suspected Physical Abuse (SPA)

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL JUDGMENT.

Contact SCAN provider on-call about ANY injury in an infant ≤12 months old.
Inclusion Criteria: suspected physical abuse of any age (see Appendix A - i.e., TEN4-FACES-P bruising in a child ≤4 years of age)
Exclusion Criteria: none

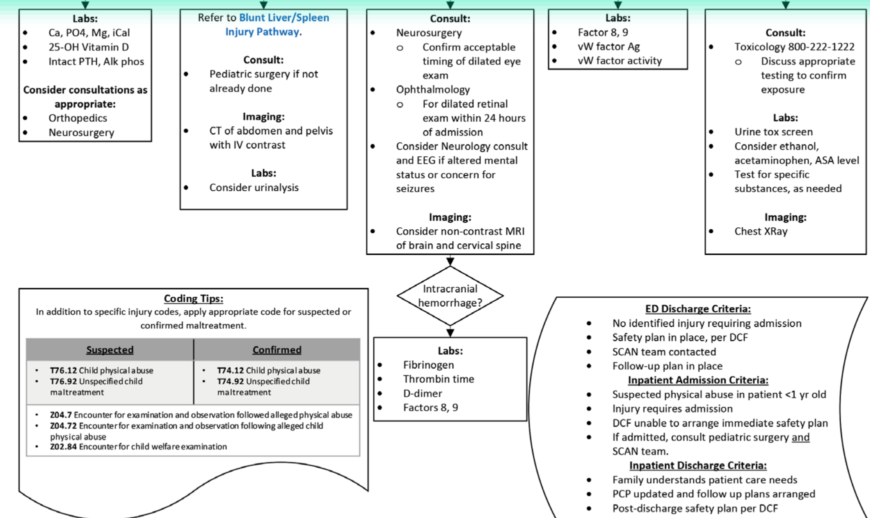
History (see Appendix B):

Initial Management:

Labs:
- CBC w diff, type & screen, AST, ALT, PT/PTT, amylase, lipase

Imaging:
- Skeletal survey if <2 years of age
- Non-contrast Head CT (with 3D recon if):
  - Abnormal neurological exam OR
  - <6 months old OR
  - <1 year old with head/facial injuries OR rib fractures OR multiple fractures OR witnessed shaking

Consultations:
- SCAN (Suspected Child Abuse and Neglect Team)
- Consider Surgery consult (must consult surgery if admitted)
- Social work
- Report to DCF Hotline (1-800-842-2288) and file 136 form within 12 hours (Appendix D)



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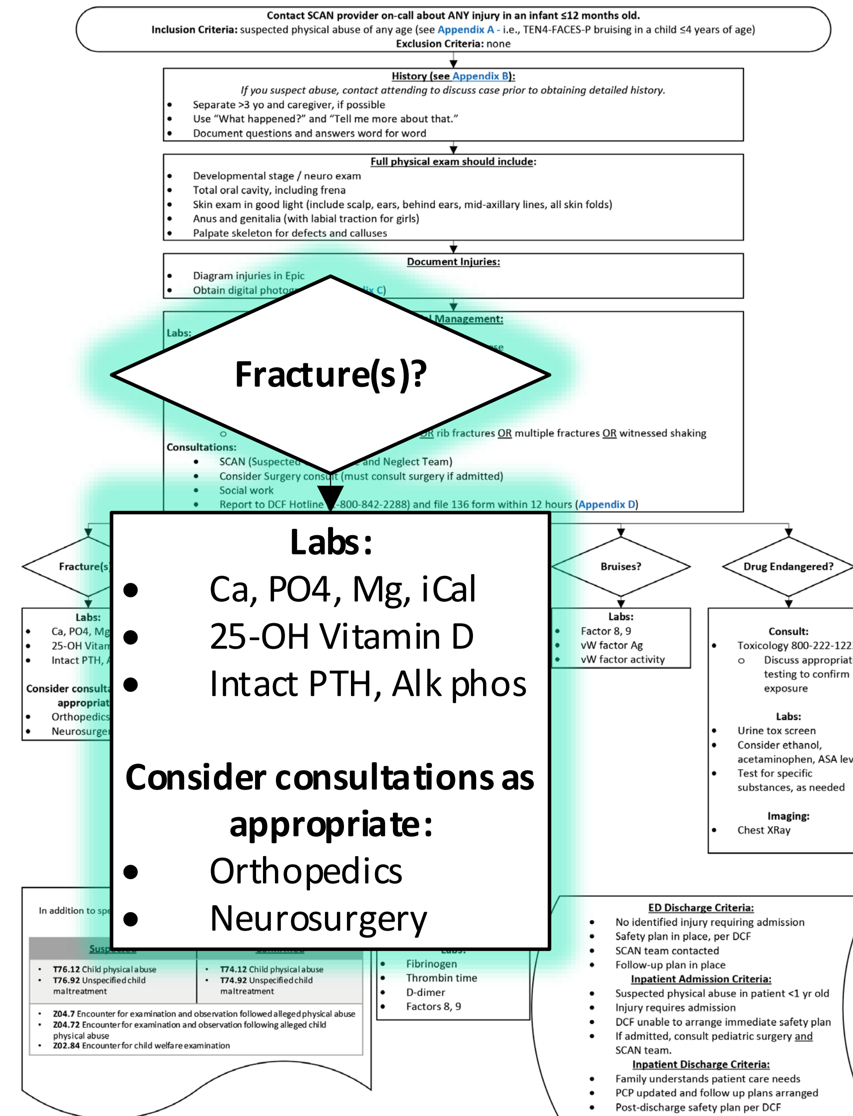
Fractures:

Any fracture in a non-mobile infant is highly suspicious for inflicted trauma

Laboratory studies should be ordered to assess for bone health of child and screen for bone mineralization defects

- Labs:
  - Calcium (Ca), Phosphate (PO4), Magnesium (Mg), Ionized Calcium (iCal)
  - 25-OH Vitamin D
  - Intact Parathyroid Hormone (iPTH), Alkaline Phosphatase
- Consider orthopedics consultation
- For cranial fractures consider neurosurgery consultation

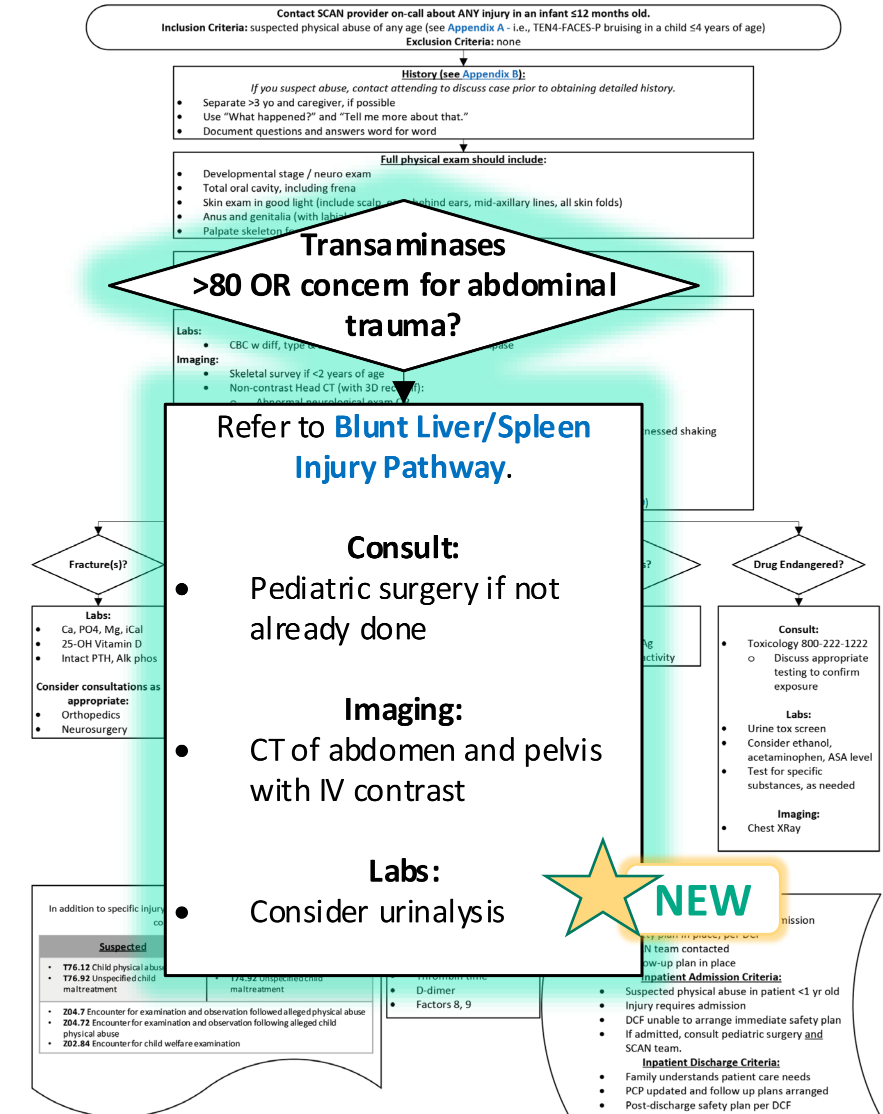


Transaminases greater than 80 or concern for intra-abdominal trauma:

- Obtain a CT of abdomen and Pelvis w/ IV contrast
- Consult Pediatric Surgery

Lab Add-on:

- Consider urinalysis



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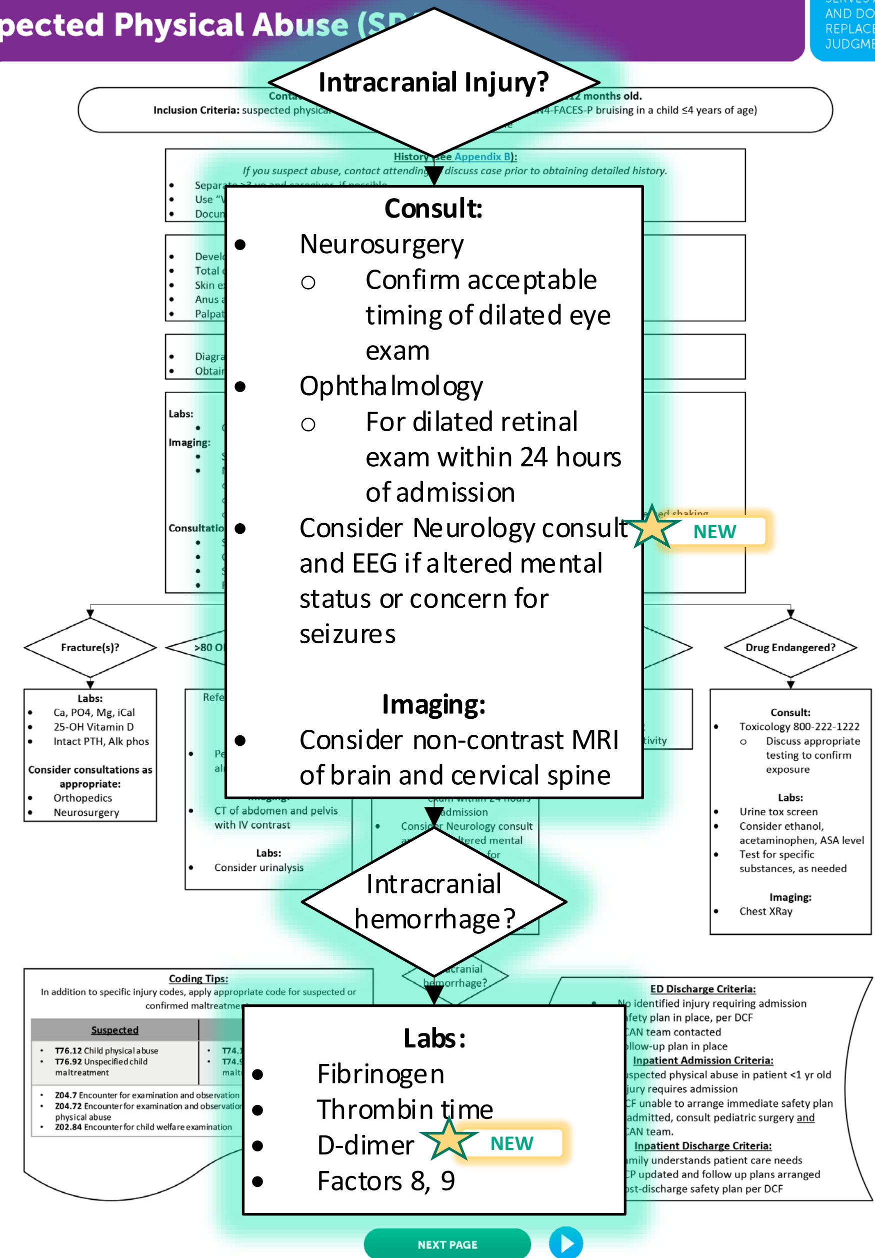
Intracranial Injury:

- If there is intracranial injury identified on CT or MRI: Consult Neurosurgery and Ophthalmology
- Consider Neurology consult and EEG if altered mental status or ?seizures (new)

If there is intracranial hemorrhage labs should be sent to rule out underlying bleeding disorder

Labs:

- Fibrinogen, thrombin time
- D-Dimer (new)
- Factors 8,9
- [Note: we no longer recommend sending von Willebrand factor antigen and activity, or Factors 11 and 13.]

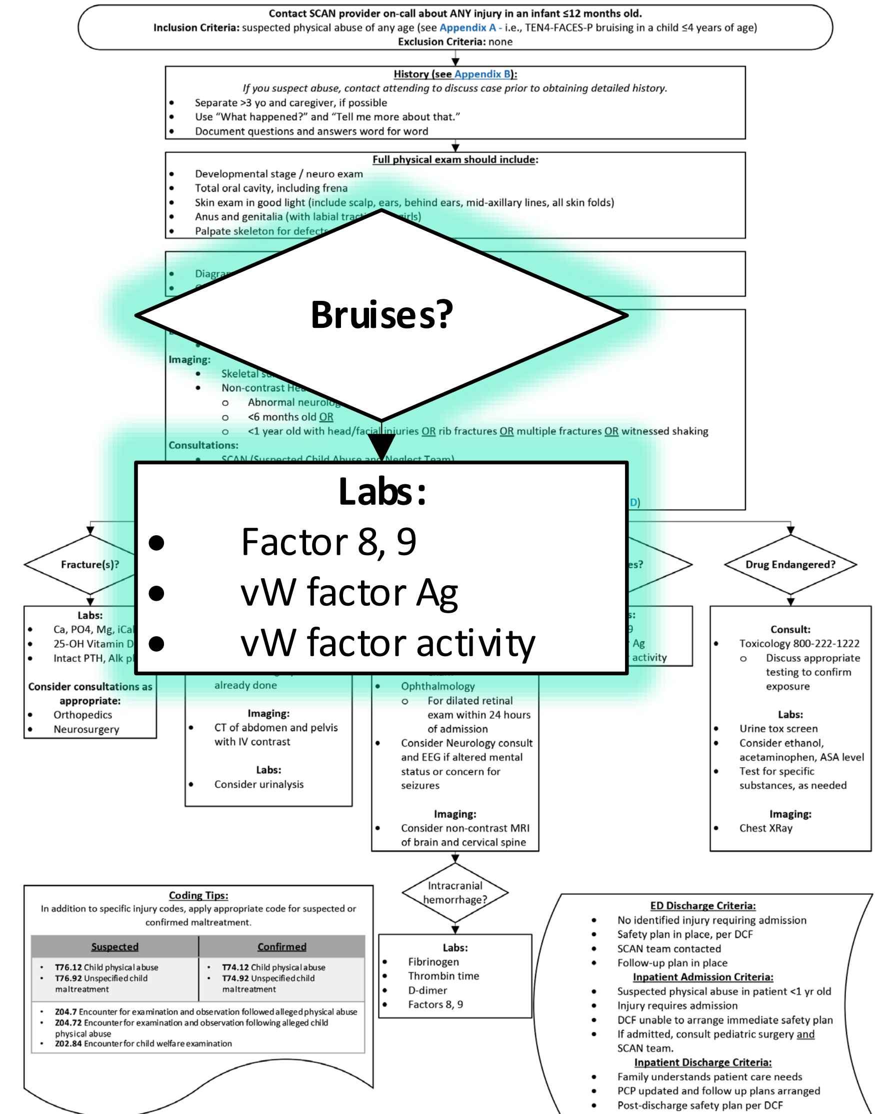


Bruises:

Any bruising in a non-mobile infant is highly suspicious for inflicted trauma

Bleeding disorders are a rare cause for bruising, however, are considered with unexplained bruising

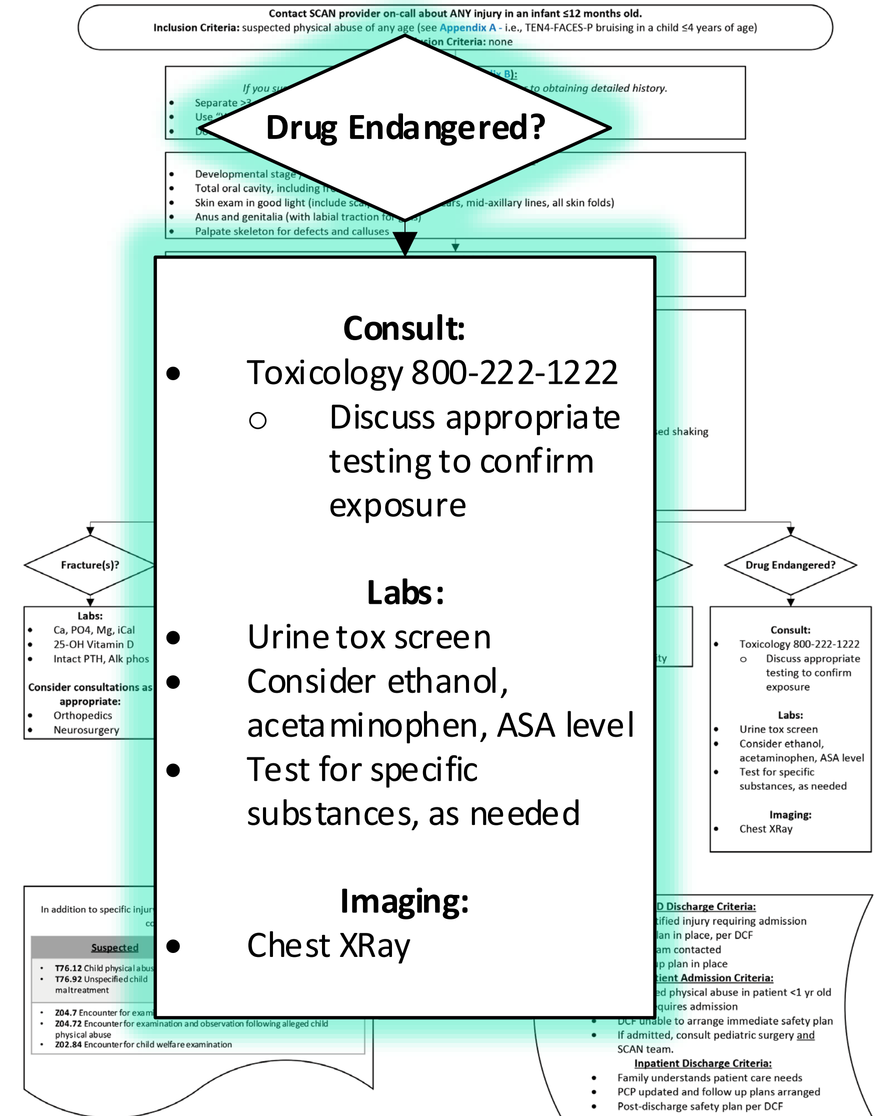
- Labs:
  - Factors 8,9
  - vWF Ag, vWF activity
- Photographs should be obtained
  - Ensure consent for photography is signed



Drug endangered:

If there is any concern for administration or ingestion of alcohol, prescription drugs, illicit drugs, or any other potentially dangerous substance

- Consult Toxicology
- Labs:
  - Urine toxicology screen
  - Tests for specific substances as needed
- Imaging:
  - Obtain a CXR



Disposition:

When to admit:
- Any patient under 1 year of age
- Injury requires admission
- DCF is unable to arrange immediate safety plan

When is it safe to discharge from the ED?:
- No injury that requires admission
- DCF safety plan in place
- Follow-up arranged
- SCAN referral in place as needed

Discharging from inpatient unit:
- DCF disposition determined
- Family/ caregiver capable of caring for child at home
- Follow up in place

CLINICAL PATHWAY:
Suspected Physical Abuse (SPA)

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- Separate >3 yo and caregiver, if possible
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- Document questions and answers word for word

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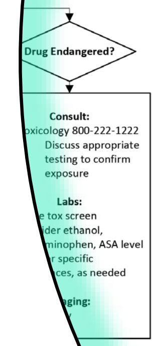
Inpatient Discharge Criteria:
- Family understands patient care needs
- PCP updated and follow up plans arranged
- Post-discharge safety plan per DCF



confirmed maltreatment.

Suspected	Confirmed
T76.12 Child physical abuse **T76.92** Unspecified child maltreatment	**T74.12** Child physical abuse **T74.92** Unspecified child maltreatment

- **Z04.7** Encounter for examination and observation followed alleged physical abuse
- **Z04.72** Encounter for examination and observation following alleged child physical abuse
- **Z02.84** Encounter for child welfare examination

Labs:
- Fibrinogen
- Thrombin time
- D-dimer
- Factors 8, 9

- No identified injury requiring admission
- Safety plan in place, per DCF
- SCAN team contacted
- Follow-up plan in place

Inpatient Admission Criteria:
- Suspected physical abuse in patient <1 yr old
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Coding:

Many providers are unsure of how to bill for Suspected Maltreatment.

The pathway contains some of the common ICD-10 codes that providers should consider with known or suspected maltreatment.

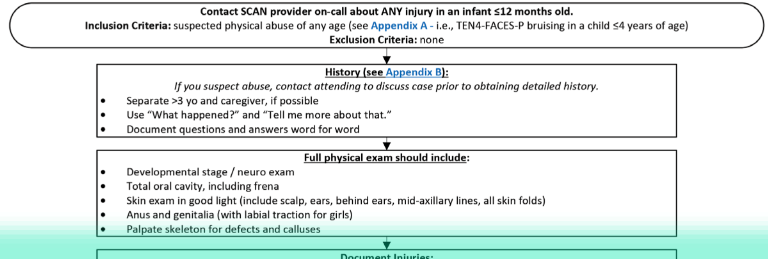
[These codes have been updated!]

*** These codes should be used in addition to other medically appropriate codes.

CLINICAL PATHWAY:

Suspected Physical Abuse (SPA)

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL JUDGMENT.

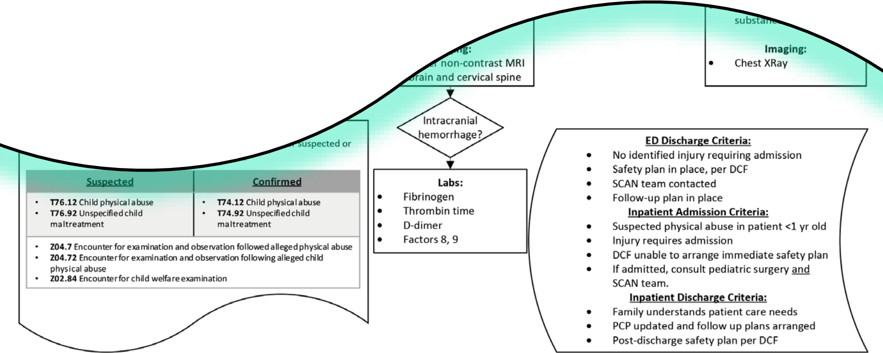


Coding Tips:

In addition to specific injury codes, apply appropriate code for suspected or confirmed maltreatment.

Suspected	Confirmed
• **T76.12** Child physical abuse • **T76.92** Unspecified child maltreatment	• **T74.12** Child physical abuse • **T74.92** Unspecified child maltreatment

- **Z04.7** Encounter for examination and observation followed alleged physical abuse
- **Z04.72** Encounter for examination and observation following alleged child physical abuse
- **Z02.84** Encounter for child welfare examination



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Review of Key Points

- Interview and a thorough physical exam should be conducted as developmentally appropriate
  - Separate child and caregivers when possible
- Thorough word for word documentation of interviews
- Blood work, imaging, and consults should be tailored to presenting/suspected injury
- DCF 136 should be filed within 12 hours
- Children should not be discharged home without DCF plans in place
- ICD-10 codes for child maltreatment should be used when appropriate

Quality Metrics

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- Percentage of admitted patients who have SCAN consult order
- Percentage of patients < 2 years old with suspected physical abuse who have skeletal survey ordered
- Percentage of patients with suspected physical abuse who have utilization of the pathway order set
- Average length of stay (days) for admitted patients
- Percentage of admitted patients who had pediatric surgery consult
- Percentage of patients with maltreatment ICD-10 code applied

- Pathway Bundle: Percentage patients <2yo with Skeletal survey ordered, % admitted patients who had general surgery involvement

Pathway Contacts

- Ada Booth, MD
  - SCAN Team
- Laura Caneira, APRN
  - SCAN Team
- Meghan Wilson Frost, MD
  - Emergency Medicine
- Mike Soltis, MD
  - Emergency Medicine

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Thank You!

About Connecticut Children's Pathways Program

Clinical pathways guide the management of patients to optimize consistent use of evidence-based practice. Clinical pathways have been shown to improve guideline adherence and quality outcomes, while decreasing length of stay and cost. Here at Connecticut Children's, our Clinical Pathways Program aims to deliver evidence-based, high value care to the greatest number of children in a diversity of patient settings. These pathways serve as a guide for providers and do not replace clinical judgment.