

Suspected Physical Abuse (SPA)

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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



- 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?



- 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



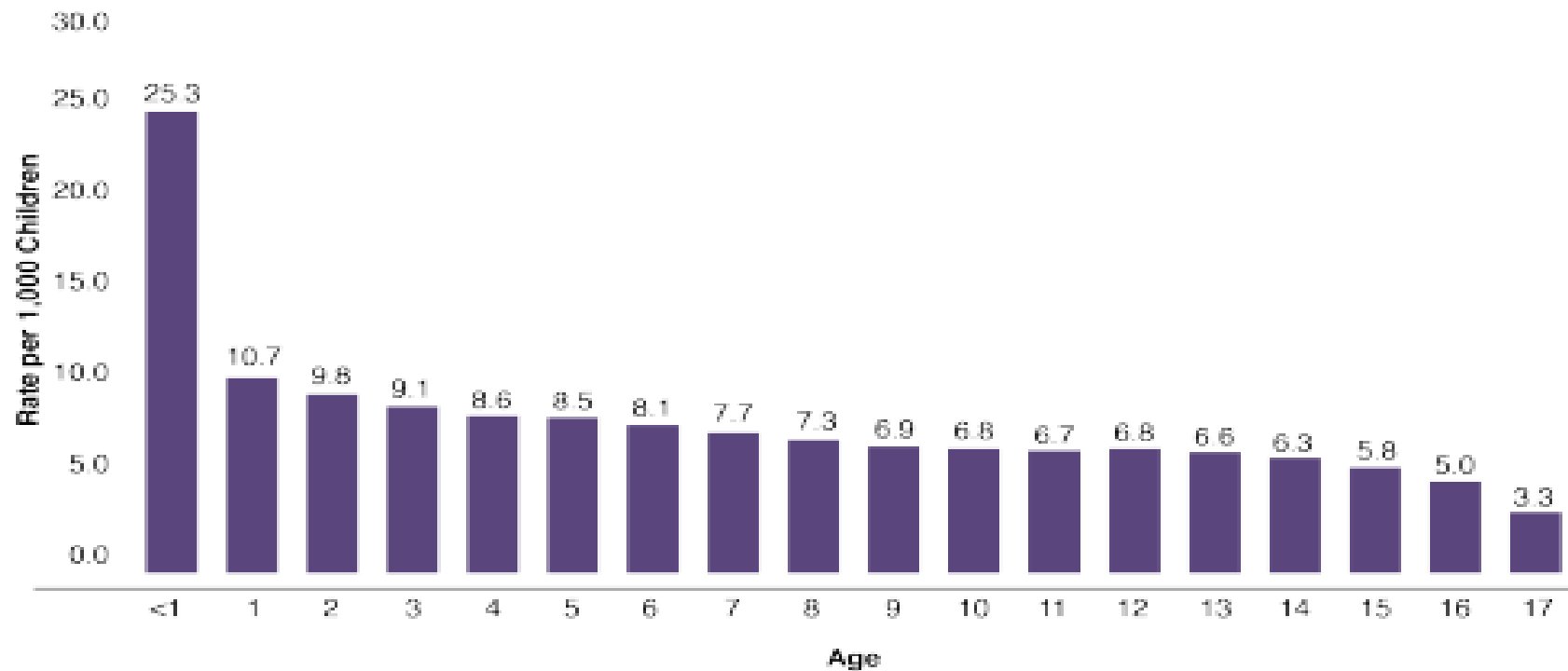
600,000 substantiated cases of child maltreatment in the U.S. in 2021

- 76% - neglect
- 16% - physical abuse
- 10.1% - sexual abuse
- 3.6% - “other” maltreatment

Who are the Victims?

Exhibit 3–D Victims by Age, 2021

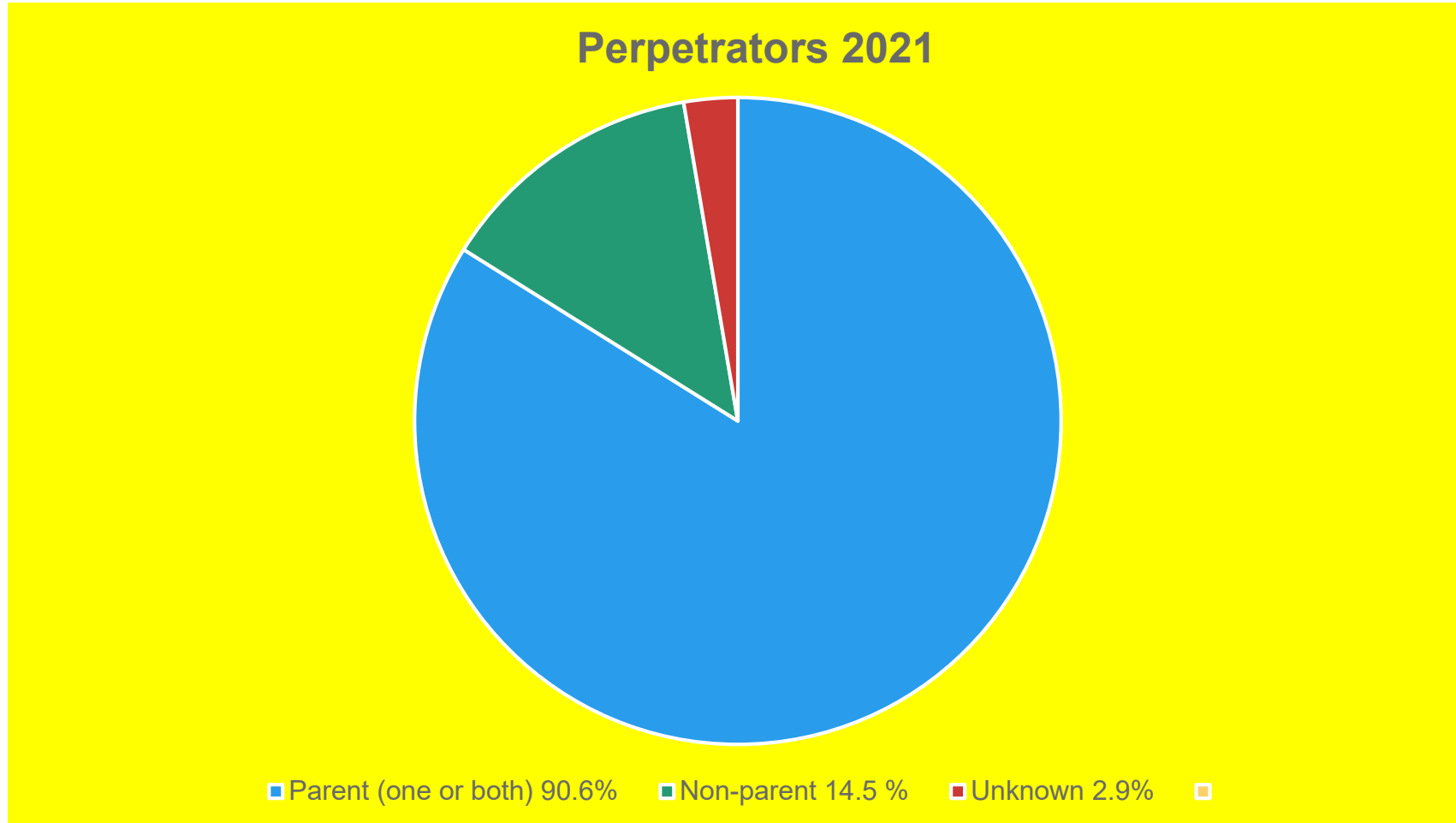
The youngest children are the most vulnerable to maltreatment



Based on data from 51 states. See [table 3–5](#).

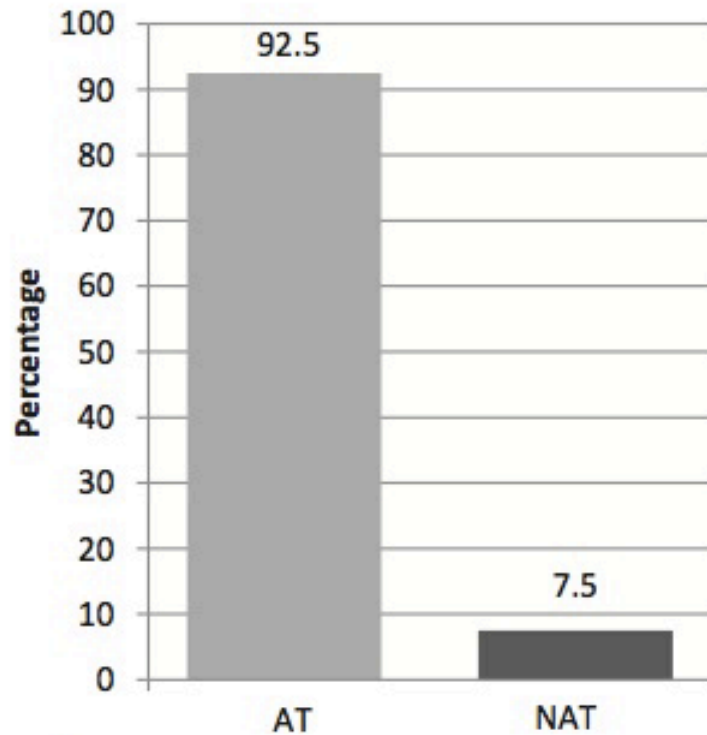
Highest victimization rate < 1 year old

Who are the Perpetrators?

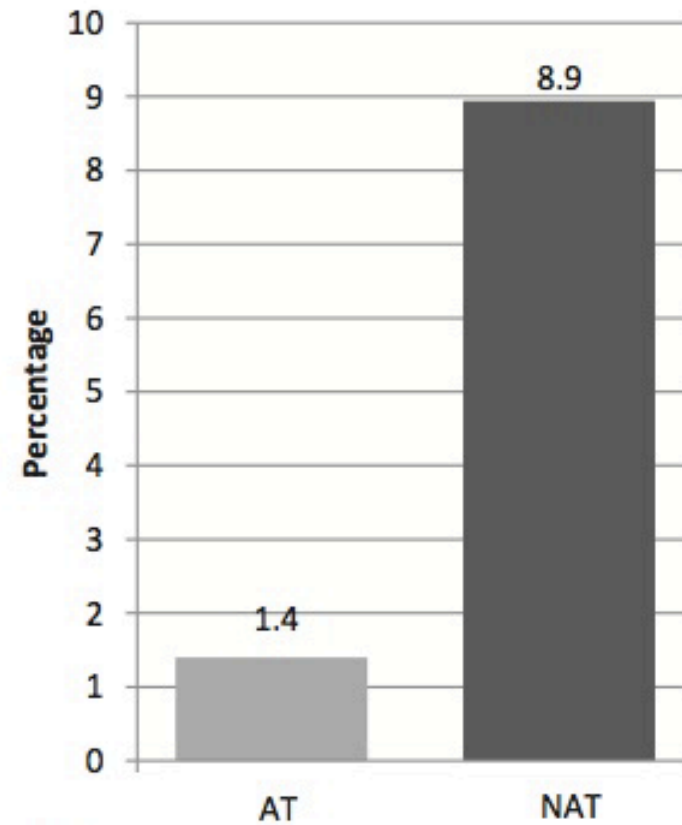


Mortality of Abuse

Admissions



Mortality

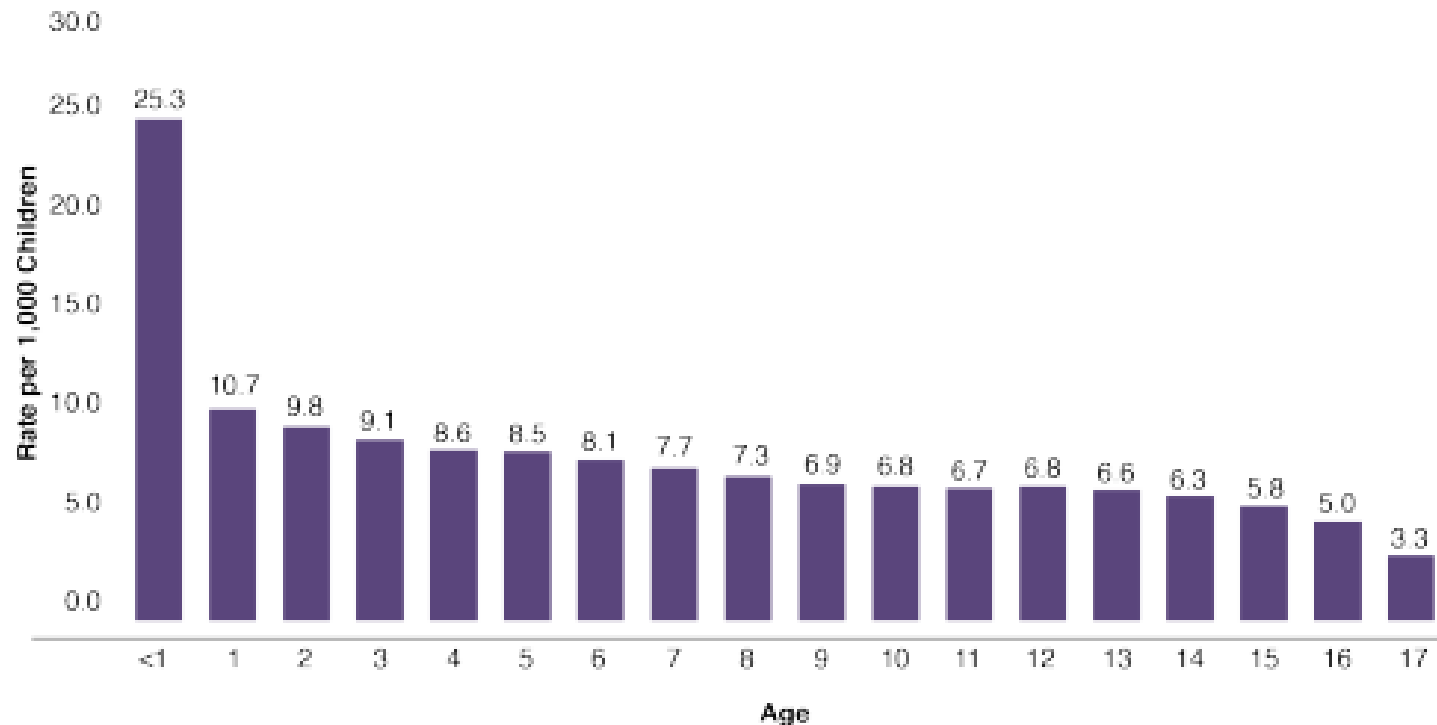


Abuse has a higher mortality than accidents

Child Fatalities

Exhibit 4–B Child Fatalities by Age, 2021

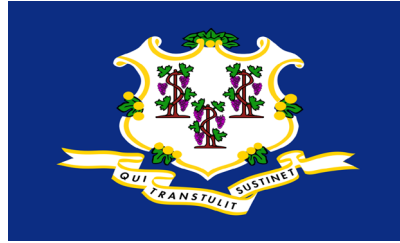
Children <1 year old died from abuse and neglect at more than three times the rate of children who were 1 year old.



Based on data from 44 states. See [table 4-3](#).

- **1,753 child deaths** due to abuse or neglect in 2021
- **Highest victimization rate in children < 1 year old**

Child Abuse in Connecticut



2021

- 5,954 substantiated cases of child abuse or neglect
- 14 fatalities due to abuse or neglect

When to Consider Child 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 Suggestive of Abuse



- *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

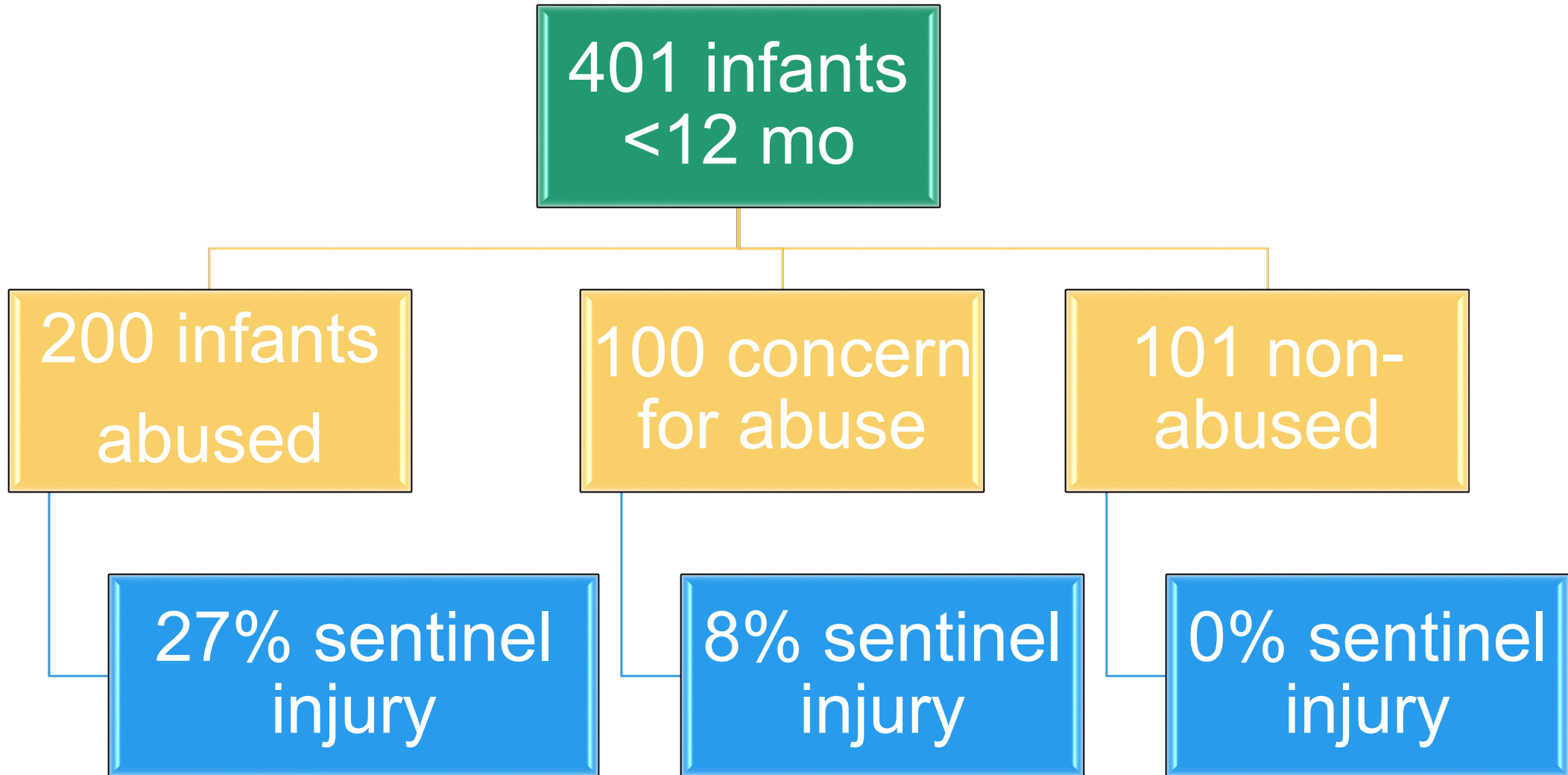
Sentinel Injuries



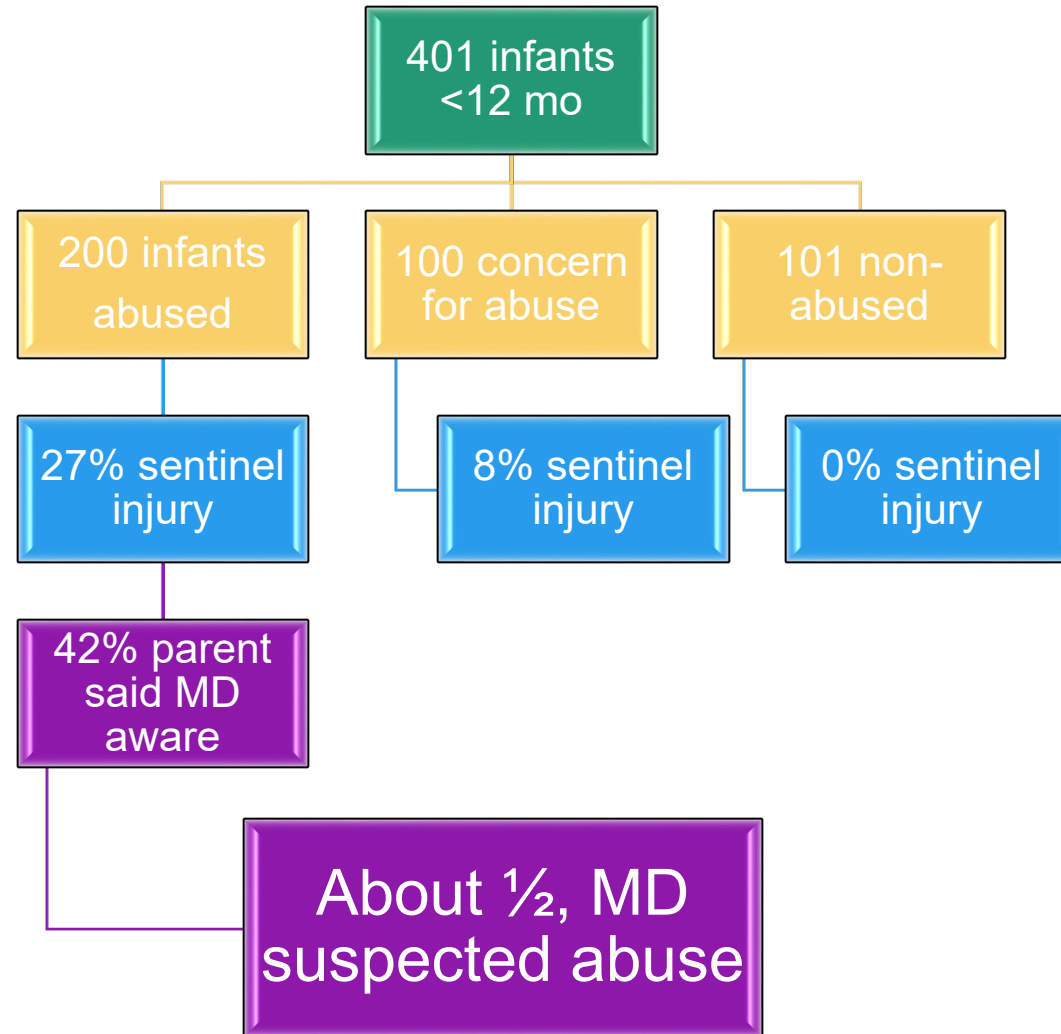
- Multiple studies have shown that 25-30% percent of infants with serious abusive injuries had prior medical presentation for injuries or symptoms of abuse
- Sheets et al (2013) also showed that a comparison population of infants with non-abusive injury did not have prior injuries

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

Sentinel Injuries



Sentinel Injuries



What Were the Sentinel Injuries



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



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

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

- **Review of interval literature and guidelines provides further support for our clinical pathway and there are no substantive changes needed at this time.**
- Pediatric Radiology (2021), Journal of Trauma and Acute care surgery (2021), Journal of Child Abuse & Neglect (2020), Pediatric Neurosurgery (2018), Pediatric Radiology (2018) & Journal of American College of Radiology (2017):

ALL support similar Physical abuse algorithms (including radiology imaging)

In 2019, future directions suggested and work is in progress:

1. Use of MR as first line imaging when possible

- Flom L et al (2016) Compared CTs and MRIs in AHT cases that had both. Identified sequences on MRI with high sensitivity for acute blood. Needs more research before ready for clinical use in place of CT.
- Kralik et al (2017) Compared diagnostic accuracy of ultrafast MR, CT, and standard MR. Standard MR more sensitive than either CT or ultrafast MR for intracranial findings of trauma. Ultrafast MR cannot replace CT for initial imaging in ED.
- Choudhary et al (2018) Notes that MR may be used instead of CT as first line imaging in those with normal neuro exam
- Berger et al (2020) Looking at MRIs in infants with concern for AHT
- Burstein et al (2019) Looked at feasibility of Fast MRI

1. Efficacy of Clinical Pathways, use of EHR alerts

- Riney et al. (2018), Quality report in Pediatrics from Cincinnati Children's. Reported on implementation of a clinical pathway with QI methodology, supported by EMR available pathway and supporting order sets. Showed adherence to guidelines in evaluation increased from 47% to 69% over several months.
- J Am Med Inform Assn (2018), Demonstrated that a series of embedded EHR alerts were sensitive and specific for abuse
- Berger et al. (2018) Linked alerts to clinical guideline/order sets, improved compliance with recommendations for evaluation

2. Screening in the ED

- Rumball-Smith et al. (2018) Modified screening tool developed in Netherlands and implemented at UPMC. Demonstrated feasibility, higher rate of reporting among those screened.

3. Developing literature on IV Contrast Abdominal Ultrasound

- Armstrong et al (2018)
- Henry et al (2021)

2022 Update: Important Reminders



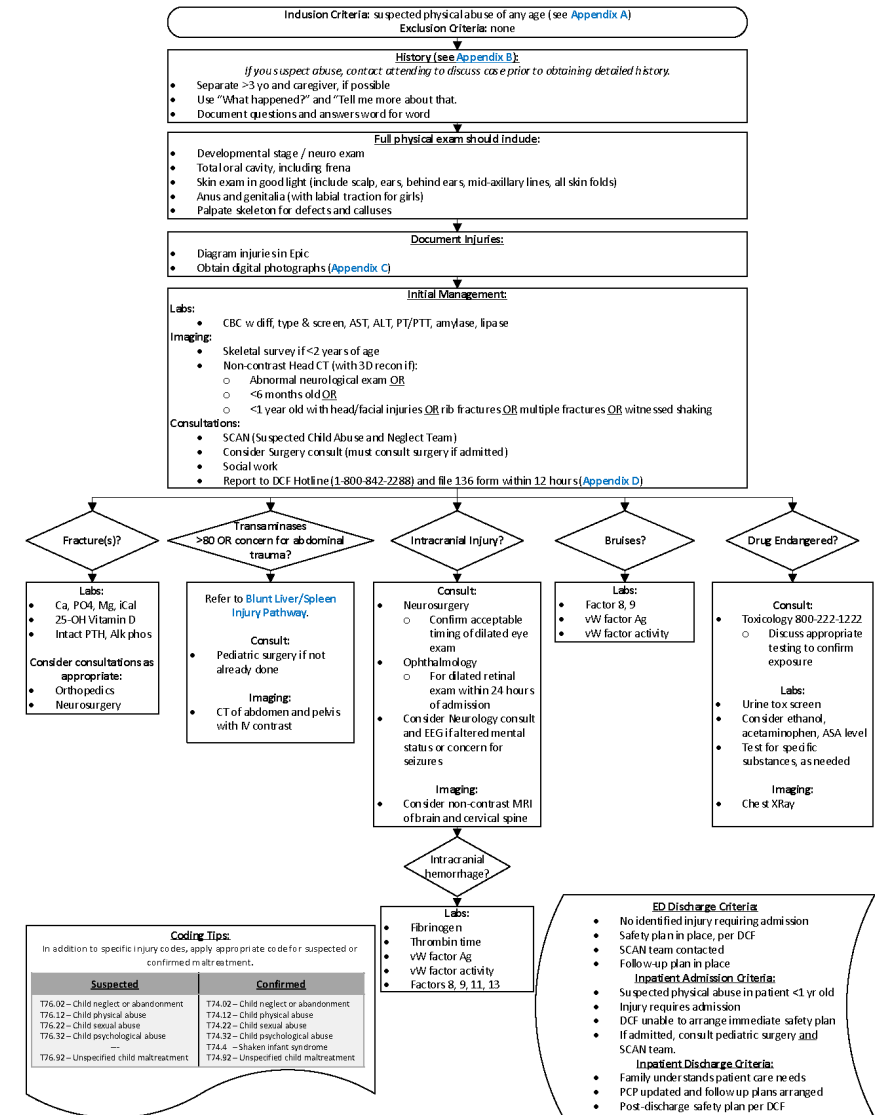
- Encourage continued use the Order set (including ensuring that SCAN team consult is ordered in EPIC)
- 2022-2023 Adjustments to SPA pathway include:
 - Addition of Amylase and Lipase into baseline trauma labs order set
 - Consider Neurology consult with cases of intracranial injury

CLINICAL PATHWAY: Suspected Physical Abuse (SPA)

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

This is the Suspected Physical Abuse Clinical Pathway.

We will be reviewing each component in the following slides.



NEXT PAGE

CONTACTS: LAURA CANEIRA, APRN | NINA LIVINGSTON, MD | MICHAEL SOLTIS, MD

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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



Inclusion Criteria: suspected physical abuse of any age (see Appendix A)
Exclusion Criteria: none

History (see Appendix B):

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

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

Document Injuries:

- Diagram injuries in Epic

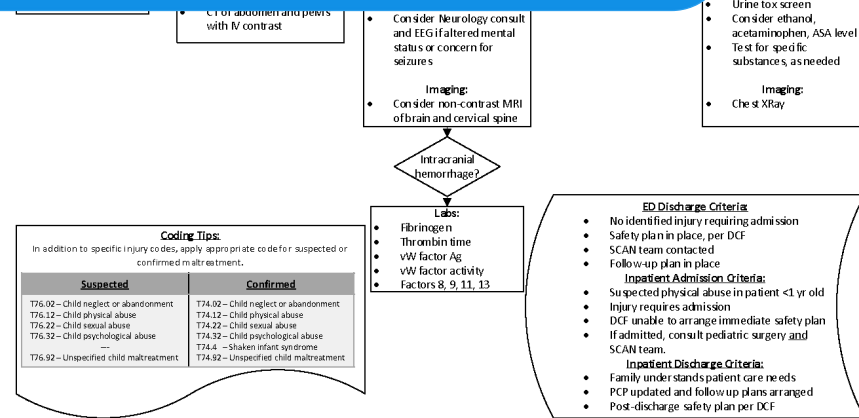
Labs:

- 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):

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?)

Inclusion Criteria: suspected physical abuse of any age (see Appendix A)

Exclusion Criteria: none

History (see Appendix B):

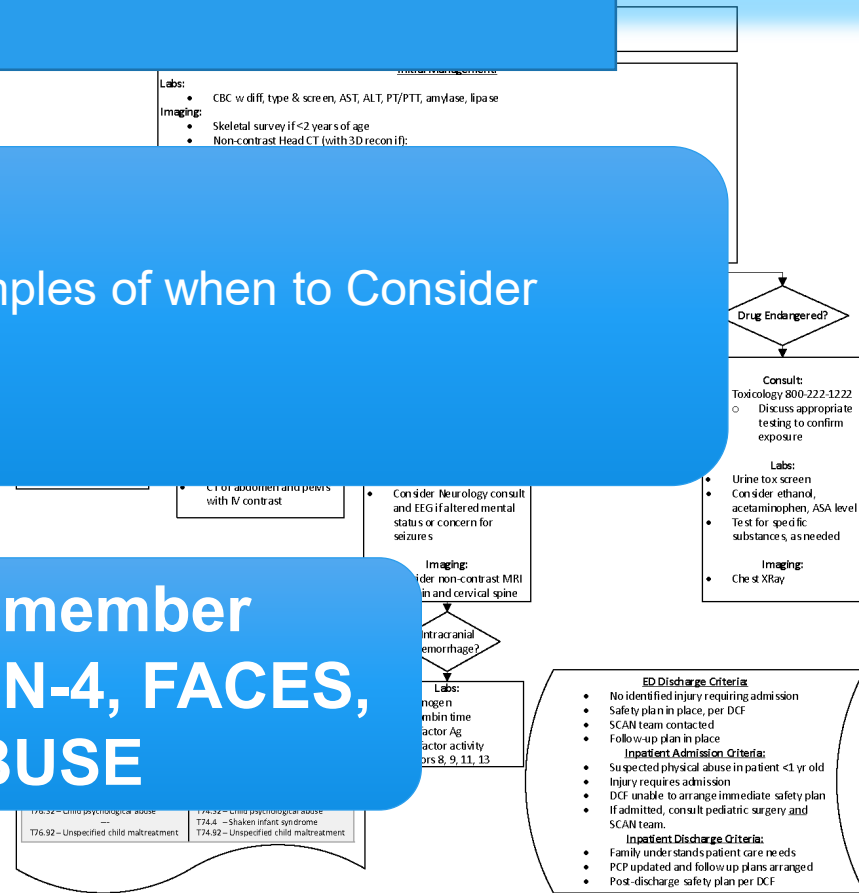
If you suspect abuse, contact attending to discuss case prior to obtaining detailed history.

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Appendix A: Examples of when to Consider Physical Abuse

**Remember
 TEN-4, FACES,
 ABUSE**

- 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):



Inclusion Criteria: suspected physical abuse of any age (see Appendix A)

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

Document Injuries:

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

Initial Management:

Labs:

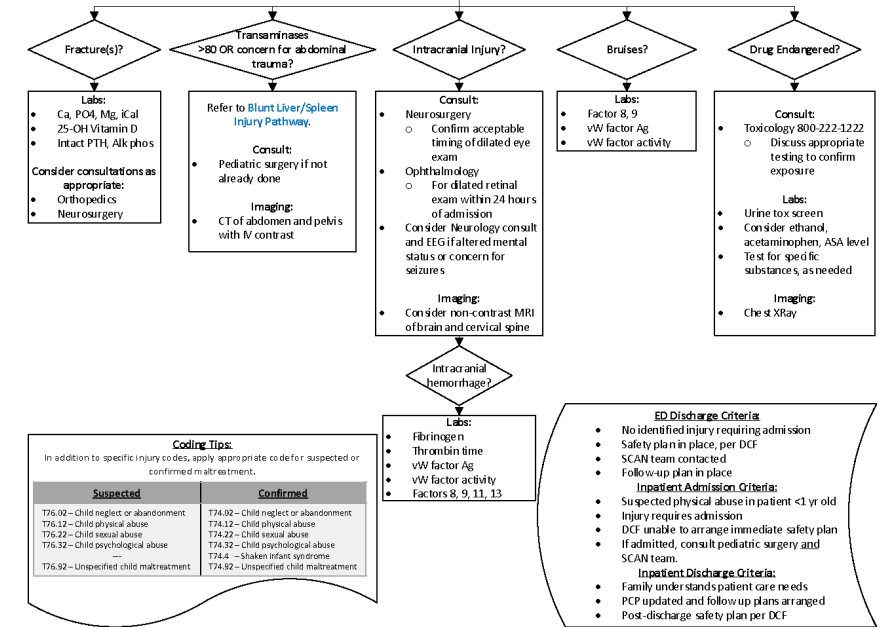
- CBC w diff, type & screen, AST, ALT, PT/PTT, amylase, lipase

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)



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

NEXT PAGE

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.

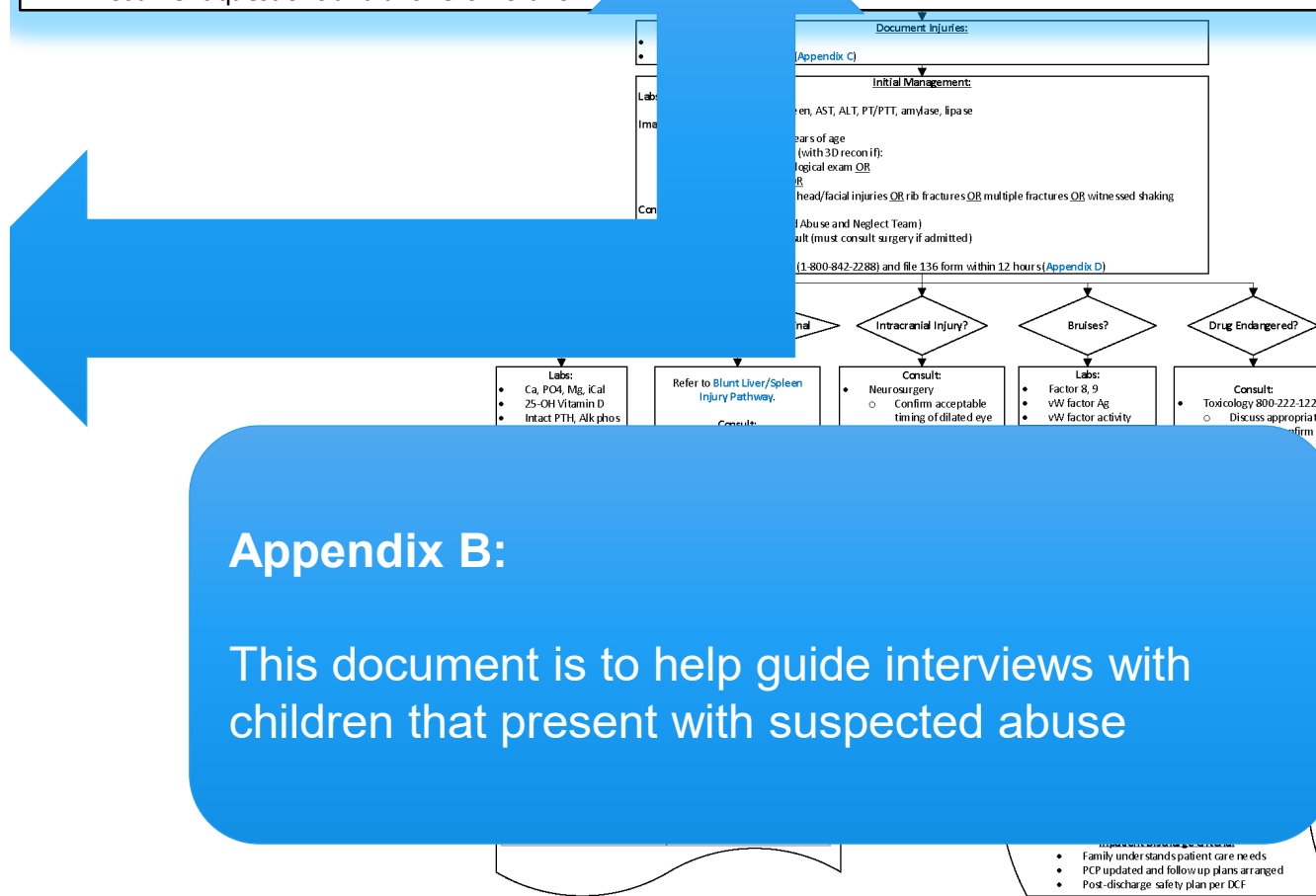
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- Separate >3 yo and caregiver if possible
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- Document questions and answers word for word



Appendix B:

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

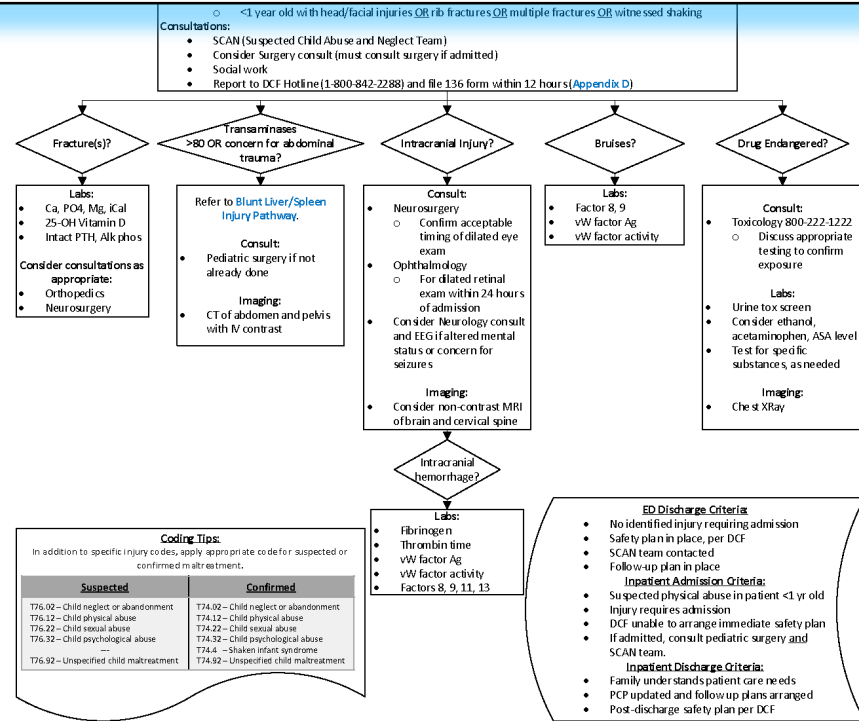
Physical Exam:

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

- Inclusion Criteria: suspected physical abuse of any age (see Appendix A)
Exclusion Criteria: none
- 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

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



NEXT PAGE

CLINICAL PATHWAY:
Suspected Physical Abuse (SPA)

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

Inclusion Criteria: suspected physical abuse of any age (see Appendix A)
 Exclusion Criteria: none

- Full physical exam should include:**
- Developmental stage / neuro exam
 - Total oral cavity, including frenula
 - 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

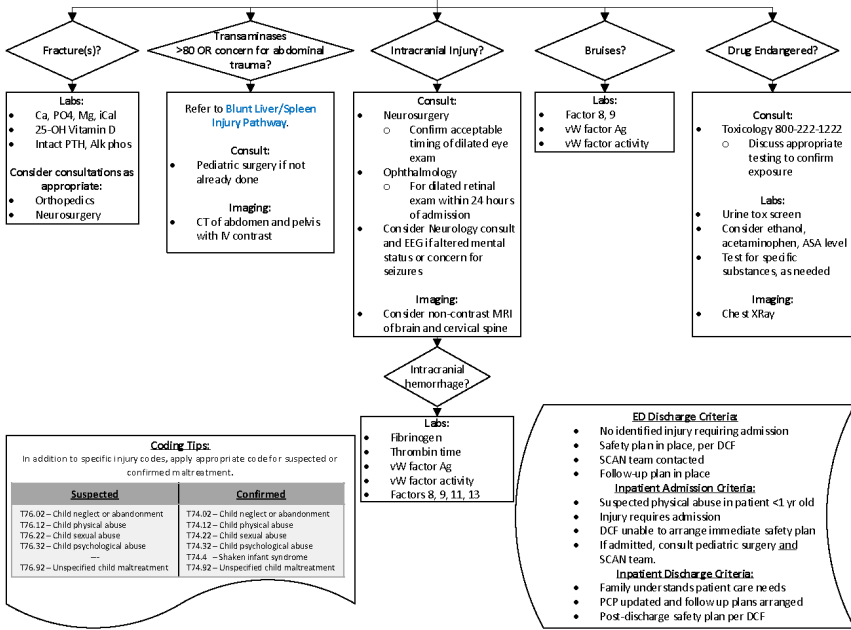
• Obtain digital photographs (Appendix C)

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

• <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)



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

Suspected	Confirmed
T76.02 - Child neglect or abandonment	T74.02 - Child neglect or abandonment
T76.12 - Child physical abuse	T74.12 - Child physical abuse
T76.22 - Child sexual abuse	T74.22 - Child sexual abuse
T76.32 - Child psychological abuse	T74.32 - Child psychological abuse
---	T74.4 - Shaken infant syndrome
T76.92 - Unspecified child maltreatment	T74.92 - Unspecified child maltreatment

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

Documentation is crucial!

- Diagram all injuries in EPIC
- Obtain digital photographs

See Appendix C for additional information on photographs

NEXT PAGE

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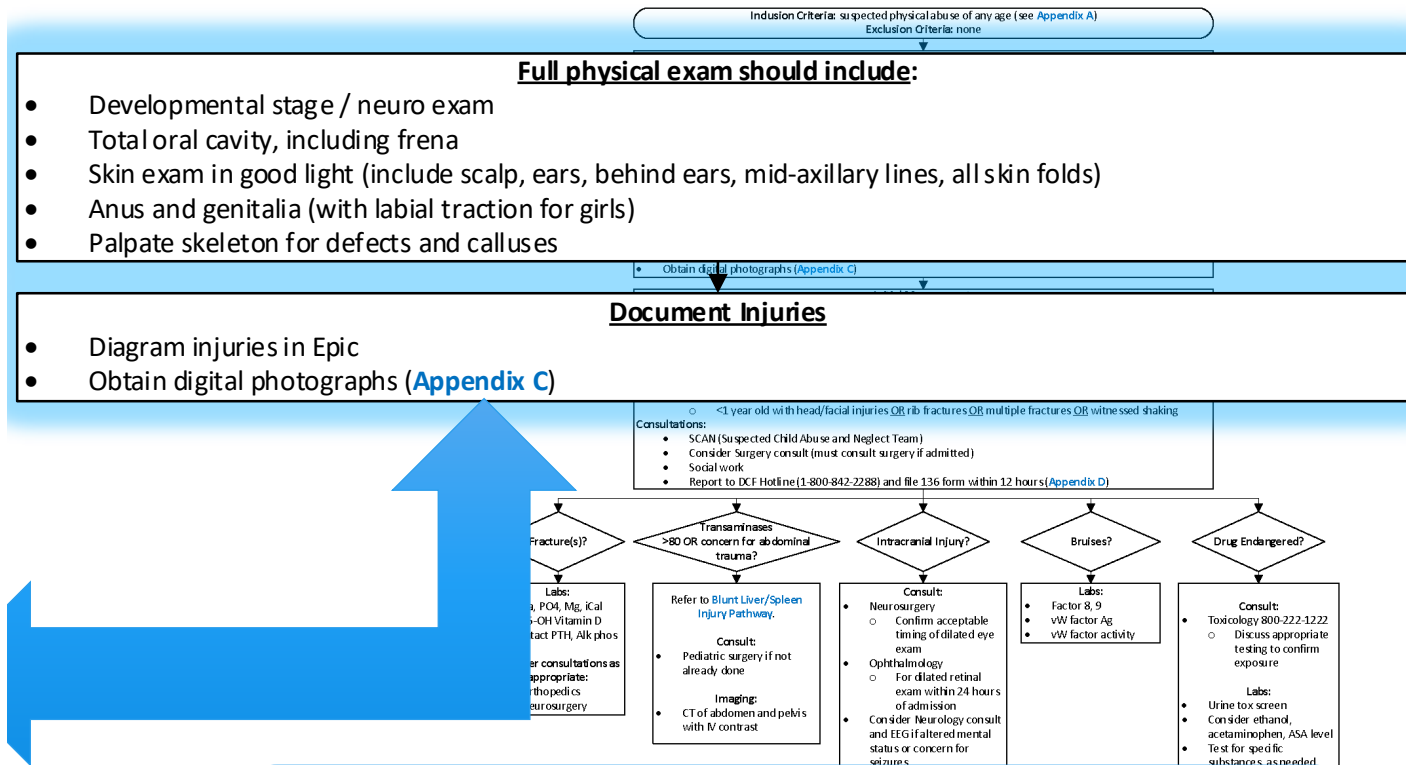
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Forensic digital photographs may be obtained using the general procedure outlined below:

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.



Appendix C: Tips for Obtaining Forensic Photographs

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

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

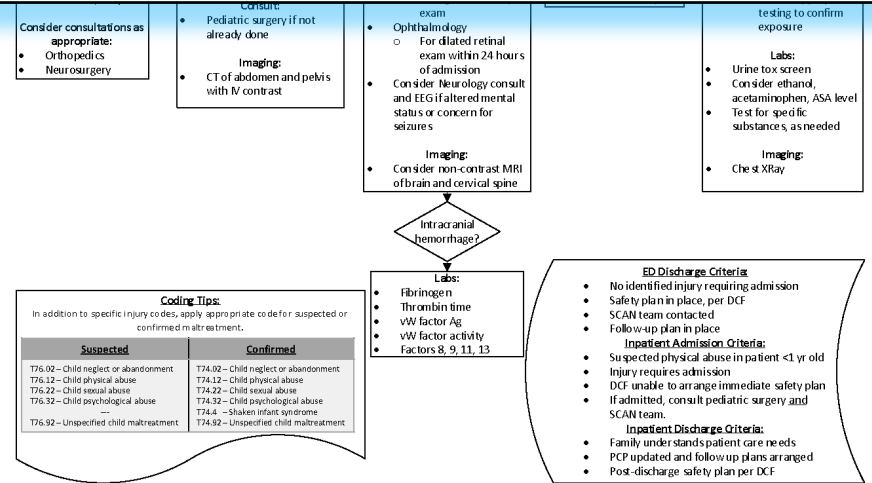
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History (see Appendix B):
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*****If you file a 136 with DCF it is your responsibility to inform the family of this*****

NEXT PAGE

REPORT OF SUSPECTED CHILD ABUSE OR NEGLECT

DCF-136
05/2015 (Rev.)



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	<input type="checkbox"/> M <input type="checkbox"/> F	Age Or DOB	Race:	<input type="checkbox"/> American Indian or Alaskan Native <input type="checkbox"/> Asian/Pacific Islander <input type="checkbox"/> Black/African American (not of Hispanic Origin)	<input type="checkbox"/> Hispanic <input type="checkbox"/> White (not of Hispanic origin) <input type="checkbox"/> Unknown <input type="checkbox"/> 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 Person(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:	Reporter's Race
Agency Name:	<input type="checkbox"/> American Indian or Alaskan Native <input type="checkbox"/> Asian/Pacific Islander <input type="checkbox"/> Black/African American (not of Hispanic Origin) <input type="checkbox"/> Hispanic (any race) <input type="checkbox"/> White (not of Hispanic origin) <input type="checkbox"/> Prefer Not to Answer <input type="checkbox"/> Other
Phone Number:	Position
Agency Address:	Date
City:	
Reporter's Signature	

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 203-384-6300 TDD: 203-384-6388 Fax: 203-384-6306	Danbury 131 West Street Danbury, CT 06810 203-207-5100 TDD: 203-748-8326 Fax: 203-207-5169	Hartford 260 Hamilton Street Hartford, CT 06106 860-418-8000 TDD: 860-315-4082 Fax: 860-418-8326	Manchester 384 West Middle Turnpike Manchester, CT 06040 860-533-3600 TDD: 860-315-4415 Fax: 860-533-3734	Norwalk 781 Main Avenue, I-Park Complex Norwalk, CT 06851 203-899-1400 TDD: 203-899-1481 Fax: 203-899-1463, 203-899-1464
Hartford One West Main Street Middletown, CT 06461 203-238-8400 TDD: 203-238-8517 Fax: 203-238-8425	Middletown 2081 South Main Street Middletown, CT 06467 860-838-2100 TDD: 860-838-2195 Fax: 860-838-2086	Milford 38 Wallington Road Milford, CT 06461 203-306-8300 TDD: 203-306-9604 Fax: 203-306-9606	New Britain One Grove Street, 4th Floor New Britain, CT 06053 860-832-8200 TDD: 860-832-5370 Fax: 860-832-5481	New Haven One Long Wharf Drive New Haven, CT 06511 203-786-0500 TDD: 203-786-2589 Fax: 203-786-0883
Norwich Two Courthouse Square Norwich, CT 06850 860-885-2691 TDD: 860-885-2438 Fax: 860-887-3883	Torrington 82 Commercial Blvd Torrington, CT 06790 860-496-6700 TDD: 860-496-5796 Fax: 860-496-5834	Waterbury 396 West Main Street Waterbury, CT 06702 203-759-7000 TDD: 203-465-7328 Fax: 860-759-7295	Willimantic 322 Main Street Willimantic, CT 06228 860-450-2000 TDD: 860-456-8603 Fax: 860-450-1051	Special Investigations Unit 506 Hudson Street, 7th Floor Hartford, CT 06106 860-860-6696 FAX: 860-723-7237

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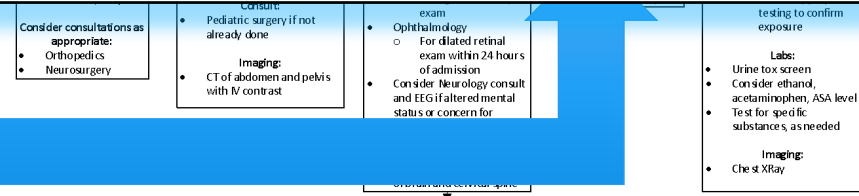
Inclusion Criteria: suspected physical abuse of any age (see Appendix A)
Exclusion Criteria: none

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

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**)



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.

Inclusion Criteria:
Requires admission to hospital per DCF protocol
Exclusion Criteria:
Child abuse in patient <1 yr old
Inpatient admission
Immediate safety plan
Inpatient pediatric surgery and
Charge Criteria:
Inpatient care needs
Follow up plans arranged
Inpatient per DCF



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

Inclusion Criteria: suspected physical abuse of any age (see Appendix A)
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

Initial Management:

Labs:

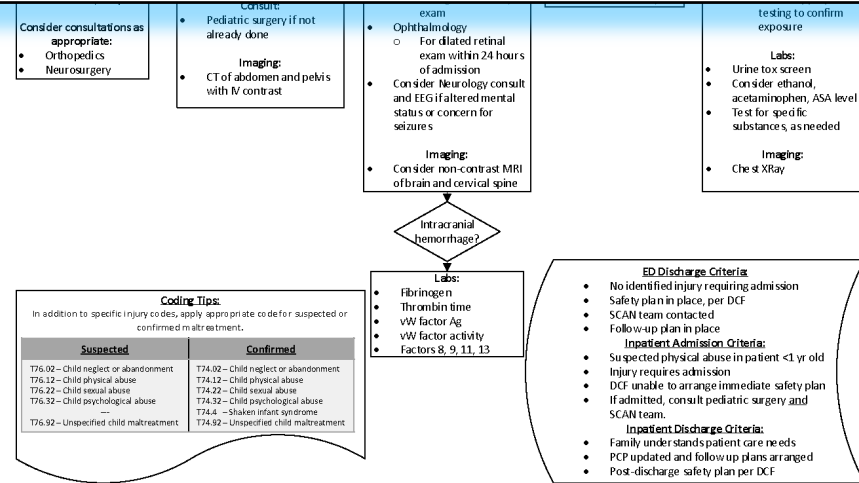
- CBC w diff, type & screen, AST, ALT, PT/PTT, amylase, lipase

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](#))



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

Suspected	Confirmed
T76.02 - Child neglect or abandonment	T74.02 - Child neglect or abandonment
T76.12 - Child physical abuse	T74.12 - Child physical abuse
T76.22 - Child sexual abuse	T74.22 - Child sexual abuse
T76.32 - Child psychological abuse	T74.32 - Child psychological abuse
T76.92 - Unspecified child maltreatment	T74.4 - Shaken infant syndrome
	T74.92 - Unspecified child maltreatment

NEXT PAGE



Fractures:

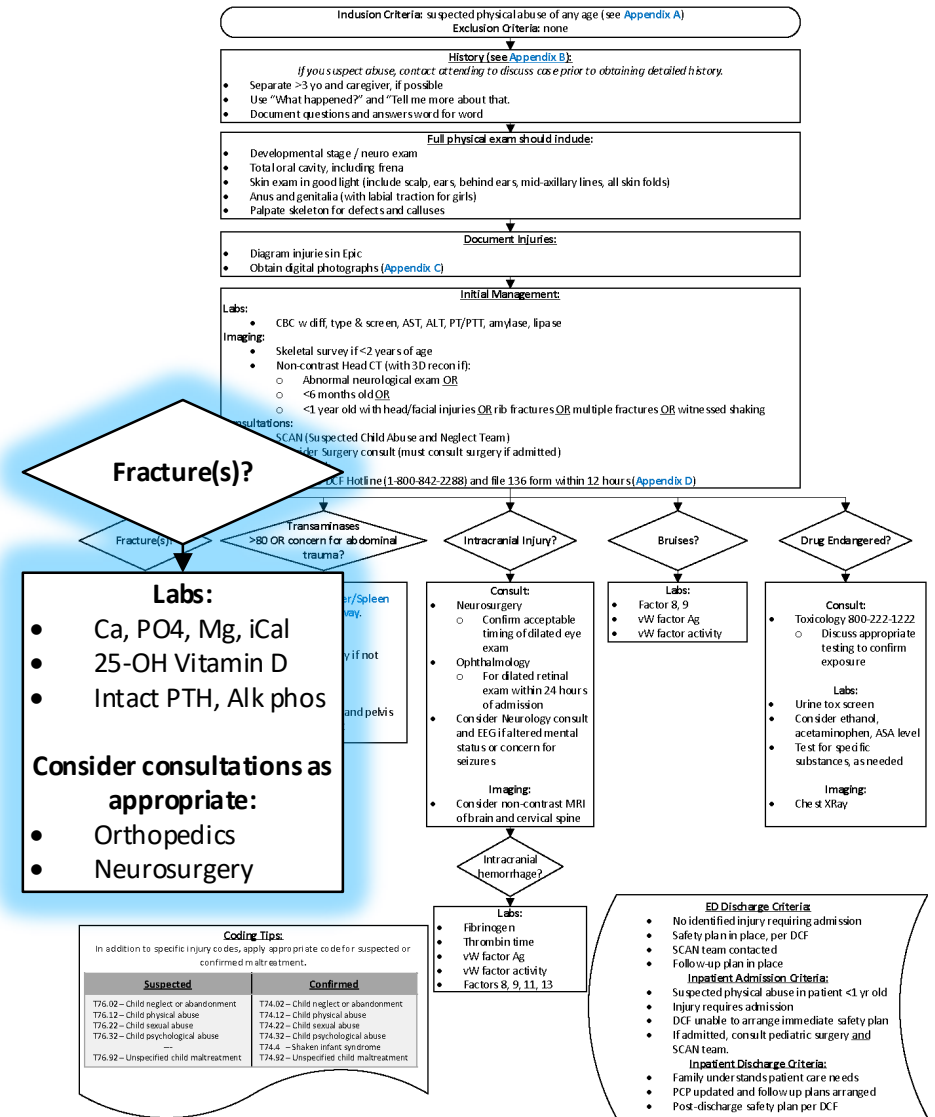
Any fracture in a non-mobile infant is highly suspicious for inflicted trauma

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

CLINICAL PATHWAY: Suspected Physical Abuse (SPA)

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



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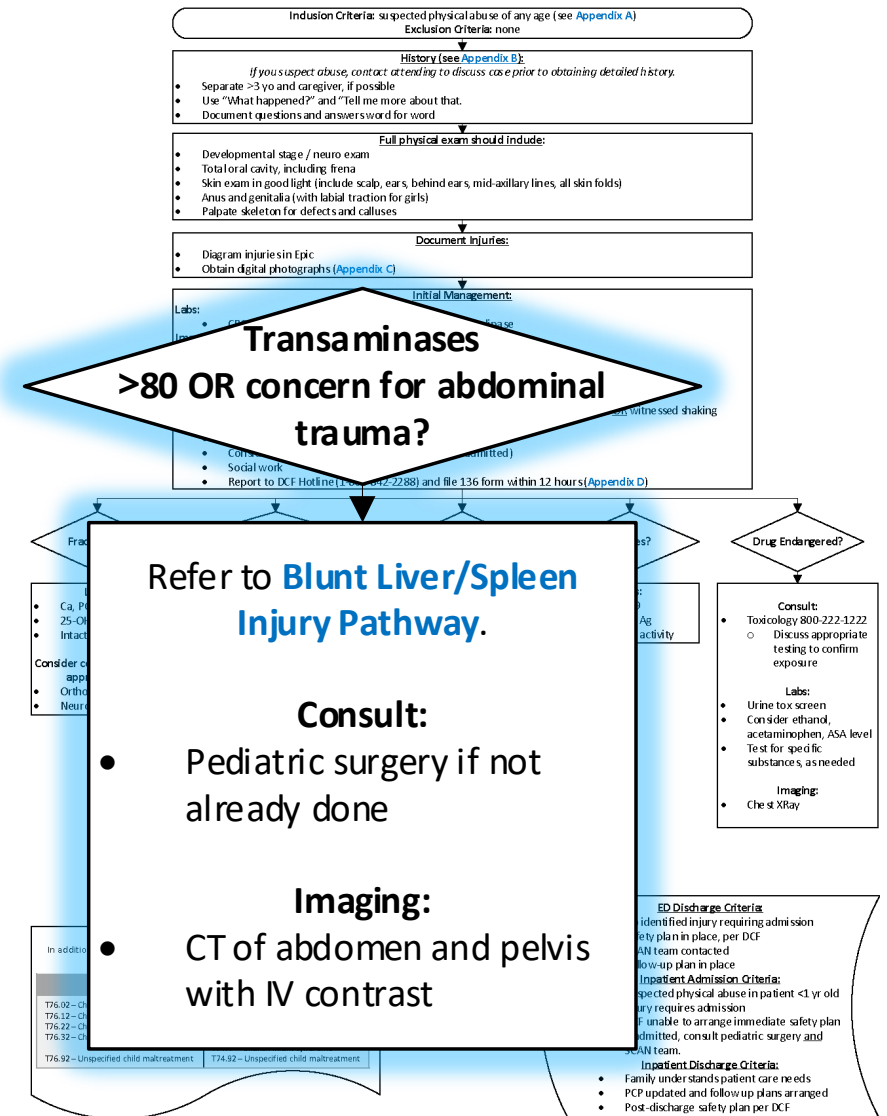
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Transaminases greater than 80 or concern for intra-abdominal trauma:

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

CLINICAL PATHWAY: Suspected Physical Abuse (SPA)

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Intracranial Injury:

If there is intracranial injury identified on CT or MRI

- Consult Neurosurgery and Ophthalmology
- Consult neurology if there is altered mental status or a concern for seizure activity

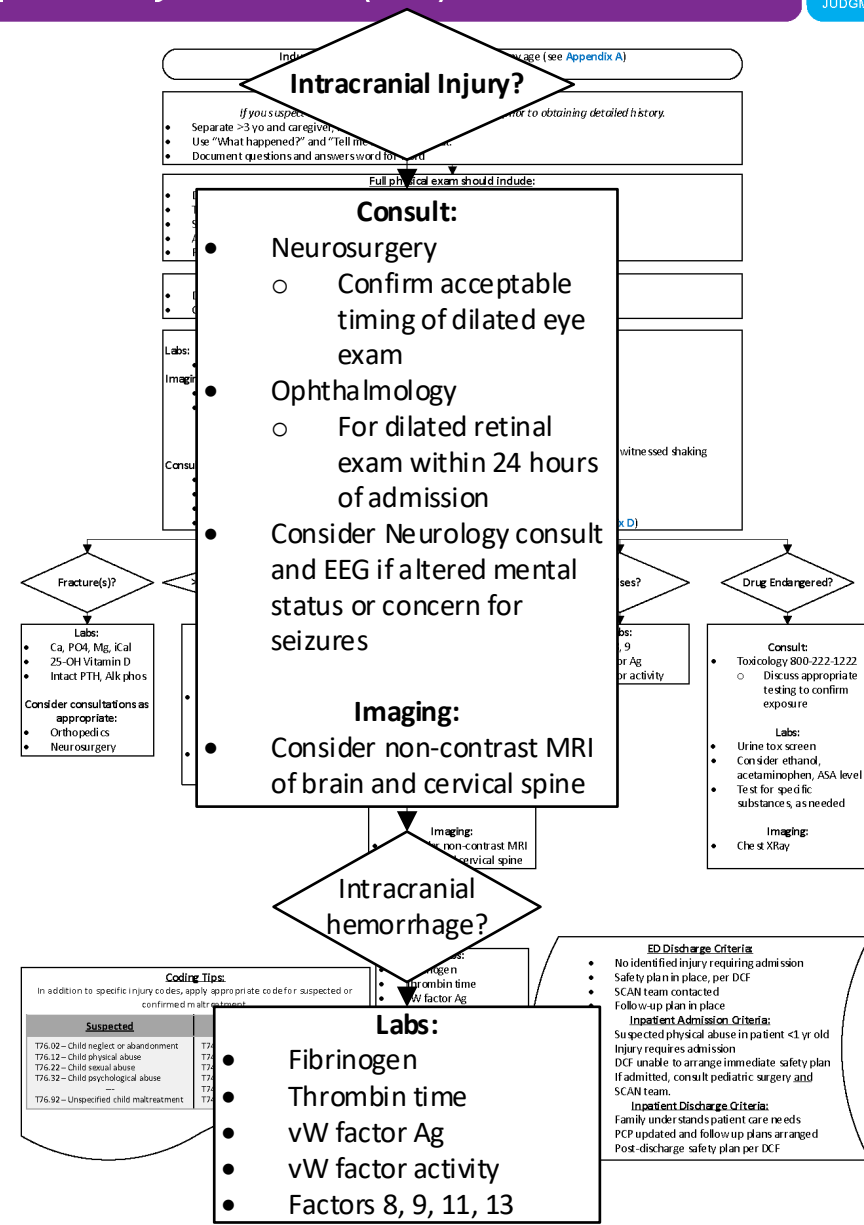
If there is intracranial hemorrhage labs should be sent to rule out underlying bleeding disorder

Labs:

- Fibrinogen, thrombin time
- von Willebrand factor antigen (vWF Ag), von Willebrand factor activity (vWF activity)
- Factors 8, 9, 11, and 13

CLINICAL PATHWAY: Suspected Physical Abuse (SPA)

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



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Bruises:

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

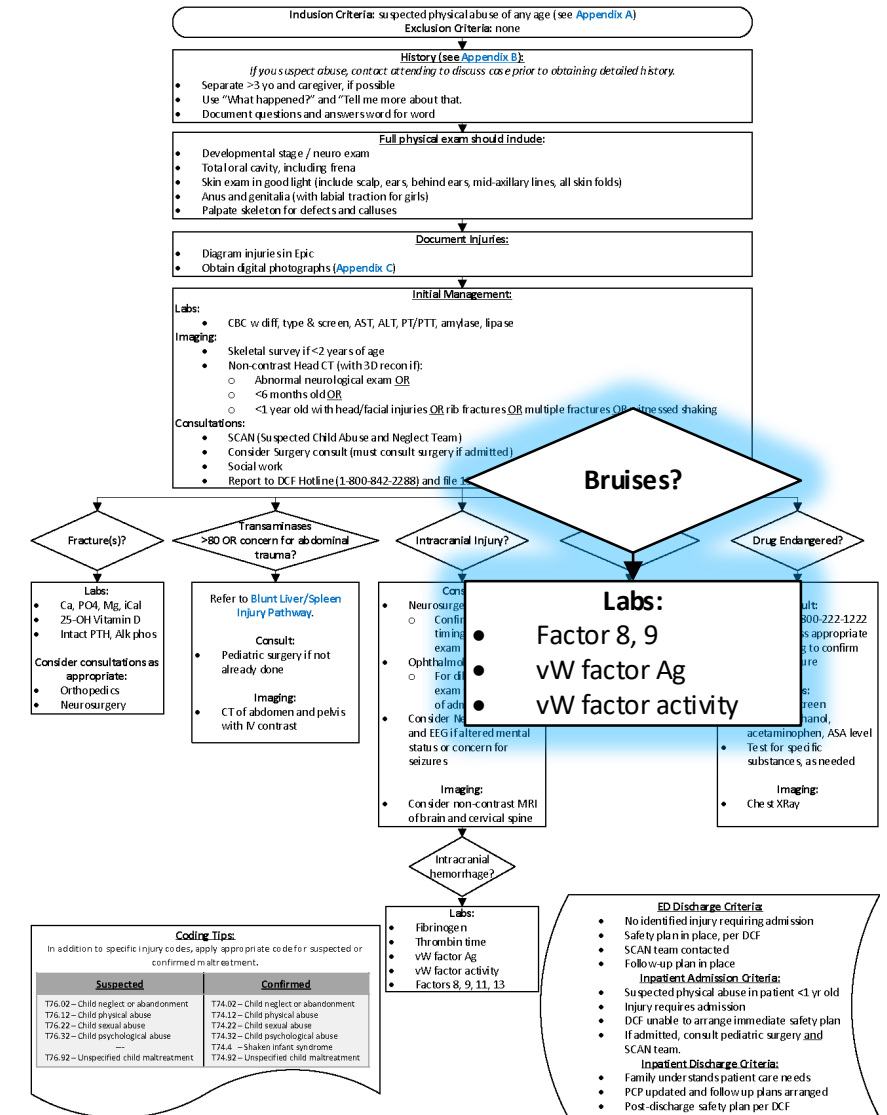
Bleeding disorders are a rare cause for bruising, however, are considered with unexplained bruising

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

CLINICAL PATHWAY:

Suspected Physical Abuse (SPA)

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



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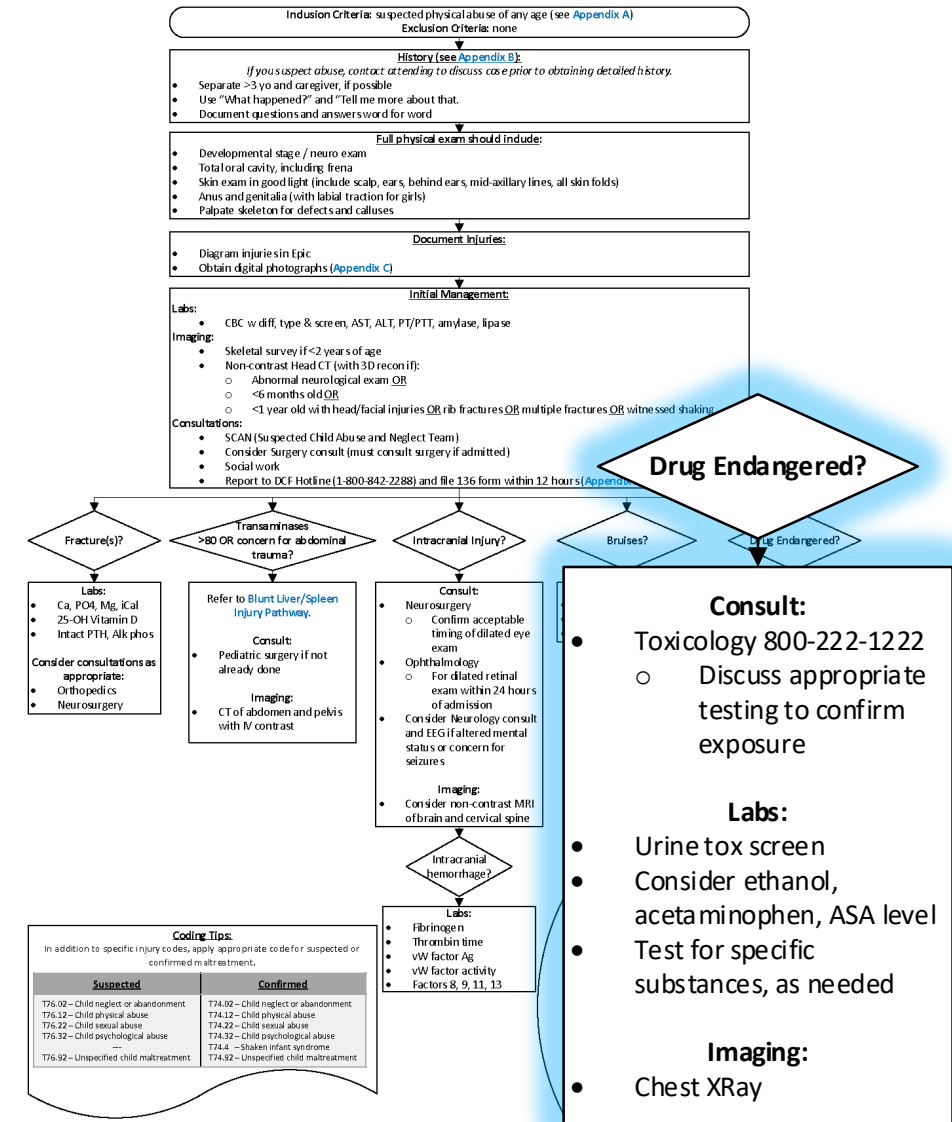
Drug endangered:

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
- Imagine:
 - Obtain a CXR

CLINICAL PATHWAY: Suspected Physical Abuse (SPA)

THIS PATHWAY
SERVES AS A GUIDE
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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

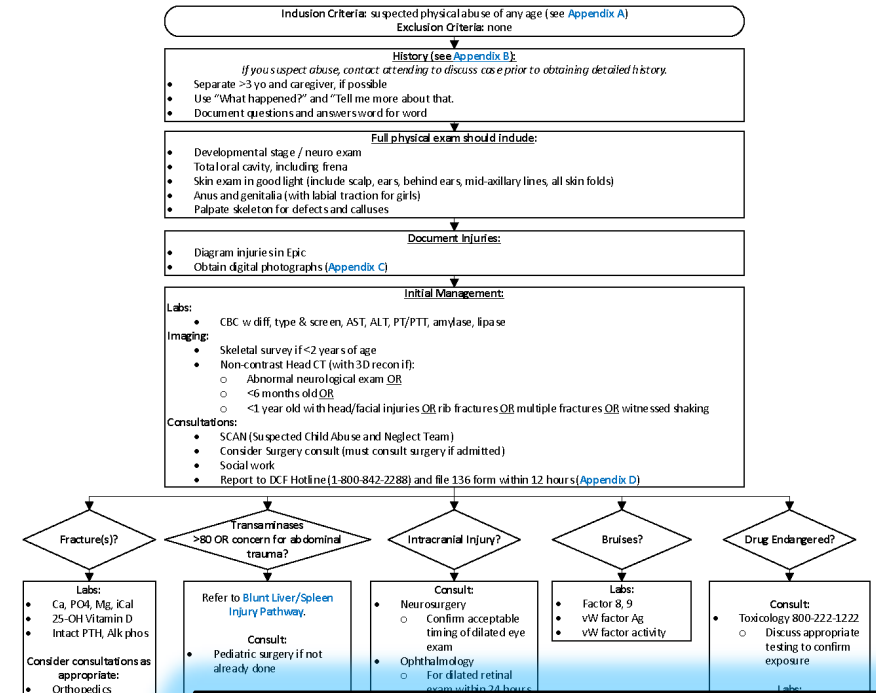
Discharging from inpatient unit:

- DCF disposition determined
- Family/ caregiver capable of caring for child at home
- Follow up in place

CLINICAL PATHWAY:

Suspected Physical Abuse (SPA)

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



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

In addition to specific ICD-9-CM codes, use the following codes:

Suspected
T76.02 - Child neglect or
T76.12 - Child physical ab
T76.22 - Child sexual ab
T76.32 - Child psycholog
T76.92 - Unspecified child

CONTACTS: LAURA CANEIRA, AP

LAST UPDATED: 01/05/24

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 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.

Inclusion Criteria: suspected physical abuse of any age (see Appendix A)
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 frenum
- 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

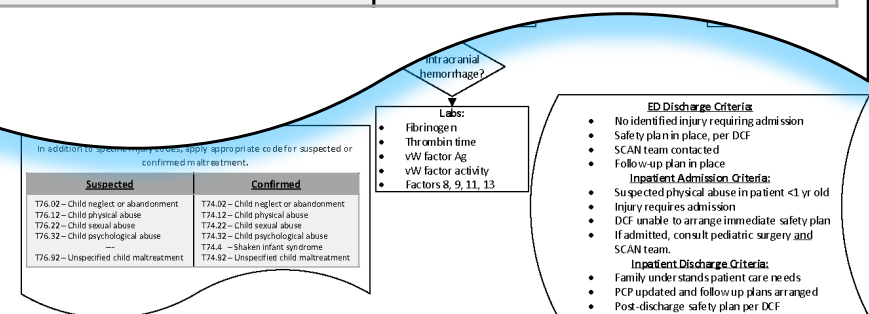
Imaging:

- Skeletal survey if <2 years of age
- Non-contrast Head CT (with 3D recon if):
 - Abnormal neurological exam OR
 - <6 months old OR
 - >6 months old with focal findings OR
 - History of trauma OR
 - History of seizures OR
 - History of vomiting OR
 - History of altered mental status OR
 - History of decreased level of consciousness OR
 - History of decreased pupillary reactivity OR
 - History of decreased reflexes OR
 - History of decreased bowel sounds OR
 - History of decreased bowel activity OR
 - History of decreased bowel output OR
 - History of decreased bowel tone OR
 - History of decreased bowel color OR
 - History of decreased bowel odor OR
 - History of decreased bowel temperature OR
 - History of decreased bowel moisture OR
 - History of decreased bowel elasticity OR
 - History of decreased bowel compliance OR
 - History of decreased bowel distensibility OR
 - History of decreased bowel contractility OR
 - History of decreased bowel motility OR
 - History of decreased bowel tone OR
 - History of decreased bowel strength OR
 - History of decreased bowel power OR
 - History of decreased bowel force OR
 - History of decreased bowel energy OR
 - History of decreased bowel vigor OR
 - History of decreased bowel spirit OR
 - History of decreased bowel animation OR
 - History of decreased bowel interest OR
 - History of decreased bowel concern OR
 - History of decreased bowel determination OR
 - History of decreased bowel resolution OR
 - History of decreased bowel fortitude OR
 - History of decreased bowel endurance OR
 - History of decreased bowel perseverance OR
 - History of decreased bowel tenacity OR
 - History of decreased bowel tenacity OR
 - History of decreased bowel tenacity OR

Coding Tips:

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

Suspected	Confirmed
T76.02 – Child neglect or abandonment	T74.02 – Child neglect or abandonment
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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



- 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



- **Nina Livingston, MD**
 - SCAN Team
- **Laura Caneira, APRN**
 - SCAN Team
- **Michael 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.