**Minnesota Child Abuse Network**

**COMMON EVALUATION FOR PHYSICAL ABUSE**

- **All Injuries in Infants are Concerning:**
  - Oral Injury
  - Bruise(s), Burns, Fracture(s)
  - Head and/or Abdominal Injury

- **Head CT (recommended in all)**
- **Skeletal Survey, Labs Abdominal Injury**
- **Urine Drug Screen**
- **May Expect? Eye Exam**

- **"Red Flag" Injury, Pattern, or Location**
- **Unexplained Injury**
- **Head and/or Abdominal Injury**

- **Labs Abdominal Injury, Urine Drug Screen**
- **May Expect? Neuro-Imaging, Eye Exam, Skeletal Survey**

**5 years and older**

- Labs Abdominal Injury, Urine Drug Screen
- May Expect? Neuro-Imaging
- Mental Health Assessment

- **Any Injuries in Non-Ambulatory Infants**
- "Red Flag" Injury, Pattern, or Location
- Unexplained Injury
- Head and/or Abdominal Injury

- **Skeletal Survey, Labs Abdominal Injury**
- **Urine Drug Screen**
- **May Expect? Neuro-Imaging, Eye Exam**

**0 - 6 months**

- **"Red Flag" Injury, Pattern, or Location**
- **Unexplained Injury**
- **Head and/or Abdominal Injury**

**6 - 12 months**

- **Skeletal Survey, Labs Abdominal Injury**
- **Urine Drug Screen**
- **May Expect? Neuro-Imaging, Eye Exam**

**2 - 5 years**

- **Head CT (recommended in all)**
- **Skeletal Survey, Labs Abdominal Injury**
- **Urine Drug Screen**
- **May Expect? Neuro-Imaging, Eye Exam**

**1 - 2 years**

- **"Red Flag" Injury, Pattern, or Location**
- **Unexplained Injury**
- **Head and/or Abdominal Injury**

**5 years and older**

- **Skeletal Survey** – series of x-rays of the skeleton used to identify fractures. Indicated in children under 2-3 years. Expect a repeat in 2 weeks, called a Follow-up Skeletal Survey, if skeletal survey positive and/or injuries are concerning.
- **Labs Abdominal Injury** – typically liver enzymes & lipase to screen for internal injury
- **Neuro-Imaging (head MRI or CT)** – indicated in Skull Fracture(s), Bruising Face/Head, Altered Mental Status
- **Eye Exam** – expect if Positive Neuro-Imaging and/or Altered Mental Status
- **Contact a Child Abuse Physician for guidance on evaluation and management**

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*Otto Bremer Trust Center for Safe & Healthy Children*

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### Assessment for Physical Abuse: Injury Patterns, “Red Flags” & Child Abuse Programs

#### When the following injuries are present, ADDED MEDICAL EVALUATION IS ALWAYS INDICATED:
- Rib Fractures
- Metaphyseal Fractures
- Longbone Fracture (non-ambulatory)
- Bruising (infants less than 6 months)
- Oral or Pharyngeal Injury (non-ambulatory)
- Abdominal Injury (non-MVC under 5 yrs)
- Head Injury (unwitnessed, unexplained)

#### Unusual Locations of Injury & Patterned Skin Injuries (P)

<table>
<thead>
<tr>
<th>TEN</th>
<th>FACES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torso (trunk)</td>
<td>Frenulum (mouth)</td>
</tr>
<tr>
<td>Ear</td>
<td>Angle of the Jaw</td>
</tr>
<tr>
<td>Neck</td>
<td>Cheek</td>
</tr>
<tr>
<td>Eyelids (bruising)</td>
<td>Subconjunctival Hemorrhage</td>
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</tbody>
</table>

**TEN-4 FACES-p**

4: Bruises in the TEN distribution in a child under 4 years of age, or **ANY** bruise in an infant less than 4.99 months of age

#### MOST CHILD FATALITIES:

i. Occur in children under 4 years of age (80%)
ii. Occur at the instigation of a caregiver (80%)
iv. Involve head (leading cause) and/or abdominal (second cause) Injury

#### What Is An Unexplained Injury:

i. Injury that is not consistent w/ child's age, developmental abilities, or injury type
ii. History that is vague or changes w/ time, repetition, or caregiver
iii. Delay in seeking medical care

#### Signs of Head Injury*:

i. Bulging fontanelle (soft spot) in an infant
ii. Rapidly increasing head circumference
iii. Bruising/Swelling to Face/Head
iv. Vomiting or fussiness
v. Unresponsive, “altered mental status”
vi. Apnea or change in breathing

*Simple household falls rarely result in serious injury.

#### Signs of Abdominal Injury*:

i. Abdominal pain or distention
   ii. Abdominal bruising
   iii. Vomiting
   iv. Lethargic, “altered mental status”
   v. Rectal bleeding
   vi. Presents in shock, low blood pressure

*Simple household falls rarely result in serious injury.

#### Contact a Child Abuse Physician:

- Univ. of Minnesota Masonic Children's Hospital
  Minneapolis MN
  Center for Safe & Healthy Children
  (612) 273-SAFE (7233) or (612) 365-1000
- Hennepin County Medical Center
  Minneapolis MN
  Center for Safe & Healthy Children
  (800) 424-4262 Hennepin Connect
- Children's Hospitals and Clinics of Minnesota
  Minneapolis and St. Paul MN
  Midwest Children's Resource Center (MCRC)
  (651) 220-6750
- Mayo Clinic
  Rochester MN
  Mayo Child and Family Advocacy Program
  (507) 266-0443 daytime or (507) 284-2511
- Essentia Health
  Duluth MN (218) 786-8364
- Gundersen Health System
  La Crosse WI 1-800-362-9567
- Sanford Health
  Sioux Falls SD
  Child's Voice Child Advocacy Center
  (605) 333-2226
- Sanford Health
  Fargo ND
  Child & Adolescent Maltreatment Service (CAMS) (701) 234-2000 or (877) 647-1225

These recommendations are not a substitute for expert medical evaluation. It should also not take the place of medical decision-making. Injuries that are suspicious for abuse require careful assessment by a physician or medical provider with expertise in child abuse.