

Northeast (2) Regional Trauma Advisory Board
Regional Trauma Advisory Board
REGULAR MEETING

Tuesday, May 11, 2021 – 1:00 p.m.

Location of Meeting: Microsoft Teams

https://teams.microsoft.com/l/meetup-join/19%3ameeting_N2EzMzMzMzNzNkMyO0MGNhLTlhOTEtNGE0ZjE0ZGM1NWMw%40thread.v2/0?context=%7b%22Tid%22%3a%229a307864-3e98-4f08-b90a-728b62cf32c5%22%2c%22Oid%22%3a%22463c8334-e408-4d1d-b4eb-52f4b934efe4%22%7d

Join by Phone: +1 405-898-0717 United States, Oklahoma City (Toll)
Conference ID: 823 494 258# (*6 to Mute/Unmute)

There is no physical meeting location. All Advisory Board Members are participating remotely via the Microsoft Teams platform shown above. Advisory Council Members are:

Chair – Dan Dalton, Vice-Chair - Kelly McCauley, Secretary/Treasurer - Heidi Gilbert, Air-Evac Lifeteam – Claremore, Cushing, Stillwater, Springdale / Judy Dyke, Alliance Health Ponca City / Yolanda Ramanos, Arch – Midflight Joplin and Nevada / Rod Pace, Bartlesville Ambulance / Dan Dalton, Blackwell Fire Department/EMS / Cory Hanebrink, Cleveland Area Hospital / Lindsey Hester, Cushing Fire Department/EMS / Terri Koch, Fairfax Community Hospital / Christine M Hoag-Apel, Grove EMS / Jeff Dozier, Hillcrest Hospital Claremore – Melisa Daugherty, Hillcrest Hospital Cushing – Jennifer Moore, Hillcrest Hospital Pryor / Melanie Minor, Hominy EMS / April Thompson, Integris Grove Hospital / Joey Gregory, Integris Miami EMS / Jeff Dozier, Integris Miami Hospital / Sarah Kyser, Jane Phillips Memorial Medical Center, Inc / Angie Bidleman, Jane Phillips Nowata Hospital, Inc. / Wilford H Watson III, Jay EMS / Brandon Alexander, LifeNet, Inc. / Kelly McCauley, Mayes Emergency Services Trust Authority / Amanda Early, Mediflight of Oklahoma / Dave Kersey, MERC / Samuel Murray, Mercy Hospital – Joplin / Donna Hughes, Mercy Life Line / Chris Mattes, Mercy Regional EMS / Larry Burrows, Midwest AeroCare / LeAnna Setzkorn, Miller EMS – Osage County / Jeremy Mclemore, Miller EMS – Fairfax / Jeremy Mclemore, Newkirk Fire Department/EMS / Adam Longcrier, Nowata EMS / Nancy Delmas, Oolagah-Tala EMS District / David Davis, Pafford EMS – Oklahoma / Mechele Cruz, Pawhuska EMS / Kenneth Freeman, Pawhuska Hospital, Inc. / Jill Gray, Pawnee Fire Department/EMS / Dennis Walker, Perry Fire Department/EMS / Russell Brand, Ponca City Fire Department/EMS / Ken Eck, Quapaw Tribe EMS / Dean Post, Saint Francis Hospital Vinita, Inc. / Dana Scott, Shilder Fire Department/EMS / Katie Davis, Stillwater Medical – Blackwell / April Edgar, Stillwater Medical – Perry / Regina Mattson, Stillwater Medical Center / Heidi Gilbert, Tonkawa Fire Department/EMS / Justin Kienzle, Tulsa Life Flight – Pryor Substation / Johnny Dobson, Will Crest Hospital / Matt Holum

AGENDA

- I. Call to Order.....(Dan Dalton, Chair)
- II. Roll Call.....(Heidi Gilbert, Secretary/Treasurer)
- III. Introductions and Announcements.....(Dan Dalton, Chair)
- IV. Approval of Minutes - 11-20-2020.....(Dan Dalton, Chair)
- V. Reports
 - A. Emergency Systems quarterly activity report.....(Lori Strider, EMS Administrator)
 - B. Regional Planning Committee quarterly activity report.....(Lori Strider, EMS Administrator)
 - C. Quality Improvement Committee quarterly activity report.....(Judy Dyke, Committee Chair)
 - D. Regional Medical Response System quarterly activity report.....(Kelly Deal)



- E. EMS for Children quarterly activity report.....(Delores Welch)
- VI. Business
 - A. Discussion, consideration, and possible action to appoint a new Chair for Regional Planning Committee.....(Dan Dalton, Chair)
 - B. Discussion, consideration, possible action and vote to approve amendments to the Region 2 Trauma plan pending review of the approved Letter Schedule of Escalation and placement within the Region 2 Trauma Plan.....(Dan Dalton, Chair)
 - C. Discussion, consideration, nominations, possible action and to vote on venue for third and fourth quarter meetings.....(Dan Dalton, Chair)
- VII. Presentation
 - A. Non-Accidental Trauma.....Dr. Larissa Hines
- VIII. New Business (For matters not reasonably anticipated 48 hours prior to the meeting as usual)
- IX. Public Comment
 - *If attending through the Teams website, please raise a virtual hand for your name to be included in the public comments queue.*
 - *Comments will be received with people who raised a virtual hand through Teams, followed by those who are attending by phone conference. The comment order will be alphabetically (a-z) based on the attendee's last name.*
 - *To ensure that everyone who desires to make a public comment has had the opportunity to speak, after comments have been made by attendees who raised a virtual hand in Teams or identified themselves when the beginning letter of their last name was called for phone conference attendees, we will then make one last final call for attendees to identify themselves who want to make a public comment, but have not done so.*
- X. Next Meeting
 - A. Continuous Quality Improvement
July 20th, 2021 – 10:00 am
 - B. Northeast (2) Regional Planning Committee
August 10th, 2021 – 10:00 am
 - C. Northeast (2) Regional Trauma Advisory Board
August 10th, 2021 – 1:00 pm
 - D. OTERAC
June 2nd, 2021 – 1:00 pm
- XI. Closing, Adjournment, and Dismissal.

**If the audio is disconnected at any point during the meeting, Board Members will attempt to rejoin. The meeting will reconvene upon reconnection using the same platform and access codes. If unable to restore connections for a maximum of 15 minutes the meeting will be adjourned.*



Northeast (2) Regional Trauma Advisory Board

https://teams.microsoft.com/join/19%3ameeting_MDRkNTg1ZGUtNjJmMy00YzU2LWFIY2UtNzI4ODcwYTIwYzI5%40thead.v2/0?context=%7b%22Tid%22%3a%229a307864-3e98-4f08-b90a-728b62cf32c5%22%2c%22Oid%22%3a%22463c8334-e408-4d1d-b4eb-52f4b934efe4%22%7d

Optional Ways to Join

1-405-898-0717

Conference ID: 317 130 000#

November 10th, 2020 - 1:00 pm

DRAFT MINUTES

The following Board Members are participating remotely using the Microsoft Teams teleconferencing platform:

Alliance Health Ponca City
Bartlesville Ambulance
Blackwell FD EMS
Grove EMS
Hillcrest Hospital – Claremore
Hillcrest Hospital - Pryor
Integrus Miami Hospital
Integrus Miami EMS
Jane Phillips Medical Center
LifeNet
Mercy Regional EMS

MESTA
Oolagah-Talala EMS
Pafford EMS
Pawhuska Hospital Inc.
Perry Fire Department
Ponca City FD
Quapaw Tribe Fire & EMS
Stillwater Medical Center
Tulsa Life Flight

The following General Members are participating remotely using the Microsoft Teams teleconferencing platform:

Air Evac Lifeteam - Cushing
Air Evac Lifeteam 128 - Stillwater
Air Evac Lifeteam 4- Springdale
Arch – Medflight 1 - Joplin
Arch – Medflight 2 - Nevada, MO
Cleveland Area Hospital
Cushing Fire Department/EMS
Fairfax Community Hospital
Freeman Hospital (Joplin)
Hillcrest Hospital Cushing
Hominy EMS
Integrus Grove Hospital
Jane Phillips Nowata Hospital, Inc.
Jay EMS

Mediflight of Oklahoma
MERC
Mercy Hospital - Joplin
Mercy Life Line
Midwest AeroCare
Miller EMS - Osage County
Miller EMS- Fairfax
Newkirk Fire Department/EMS
Nowata EMS
Pawhuska EMS
Pawnee Fire Department/EMS
Saint Francis Hospital Vinita, Inc.
Shidler Fire Department/EMS
Stillwater Medical – Perry



Stillwater Medical Blackwell
Tonkawa Fire Dept./ EMS

Willow Crest Hospital

I. Call to Order

The meeting was called to order by Chairperson Cory Hanebrink at 1:00 pm.

II. Welcome and Introductions

None at this time.

III. Roll Call

Roll call was taken with the quorum of Board Members met. See attached sheet for complete information.

IV. Approval of Minutes – August 11th, 2020

A motion to approve minutes as written was made by David Davis and seconded by Kelly McCauley. There was no discussion and the motion was passed after unanimous roll call vote.

V. Reports/Updates

A. Emergency Systems quarterly activity report – Lori Strider

Lori Strider introduced Katrina Warden as the new Special Projects Coordinator and noted that staff will be moving to the new Oklahoma Commons Building soon. Linda Dockery is the point of contact for Trauma Fund and the new application deadlines handout was not included in the member packet, but will be emailed to members when available. The final list for the data dictionary is completed and was presented at the July 15th Oklahoma State Stroke System Advisory Council meeting. New EMS Rules were signed and went into effect September 11th, 2020. The updated rules are available on the Emergency Systems website. EMS agencies needing a new unit inspection should use the following link to schedule their inspection:

https://osdhphs.co1.qualtrics.com/jfe/form/SV_cCIJ6SDD4koTxLT

Oklahoma EMS Information System (OKEMSIS). Xana Howard is the point of contact and there are no trainings scheduled for OKEMSIS. Dr. Yang Wan is the point of contact for the Trauma Registry and there is no training scheduled at this time. EMS Director training is now being conducted virtually; upcoming trainings will be announced as scheduled for early 2021. Oklahoma Trauma Education Program has no classes scheduled at this time. If your agency is in need of an OTEP class contact our department and we can try to schedule one virtually. The Trauma Transfer and Referral Center is up and running. Oklahoma Trauma and Emergency Response Advisory Council met October 7th, 2020 – 1:00pm.

B. Regional Planning Committee quarterly activity report – Sarah Kyser

Sarah Kyser reported there was nothing to update, they did not meet today.

C. Quality Improvement Committee quarterly activity report – Judy Dyke

The committee reviewed a total of ten cases and with the follow-up on 16 letters of which 8 were good job letters. The committee reviewed the responses of 24 previously

sent letters to facilities and agencies. The committee approved verbiage to be placed into the Region 2 Trauma Plan and will be sent to the RTAB for consideration. There will be a Statewide QIC meeting on December 8th, 2020.

- D. Regional Medical Response System quarterly activity report
David Davis informed the committee that Oolagah-Talala EMS District was awarded the contract for the Region. He stated it has been a busy few days.
- E. EMS for Children quarterly activity report - Delores Welch
No report given

VI. Business:

- A. Discussion, consideration, possible action, and vote to approve the Combined Region 2/4/7 CQI Committee's Letter Schedule of Escalation Proposal – Brandee Keele
A motion to approve 2/4/7 CQI Committees Letter was made by Heidi Gilbert and seconded by Russell Brand. There was no discussion and the motion was passed after unanimous roll call vote.
- B. Discussion, consideration, possible action, and vote to approve the CQI Committee recommendation that the RTAB and QI Committee Chairs draft and send a letter to licensed hospitals and ambulances services regarding the continuous quality improvement process – Brandee Keele
A motion to approve CQI Committees recommendation was made by Heidi Gilbert and seconded by Sarah Kyser. There was no discussion and the motion was passed after unanimous roll call vote.
- C. Vote to approve 2021 Board Rotation – Cory Hanebrink
- D. Vote to approve 2021 Committee Membership - Cory Hanebrink
- E. Vote to approve 2021 Board Officer Nominations - Cory Hanebrink
 - 1. Chair – Dan Dalton
 - 2. Vice-Chair - Kelly McCauley
 - 3. Secretary/Treasurer - Heidi Gilbert
- F. Vote to approve 2021 Board Meeting Dates, Times, and Venue Discussion - Cory Hanebrink
 - 1. February 9th, 2021 at Jane Phillips Medical Center at 1:00 pm
 - 2. May 11th, 2021 at Jane Phillips Medical Center at 1:00 pm
 - 3. August 10th, 2021 at Jane Phillips Medical Center at 1:00 pm
 - 4. November 9th, 2021 at Jane Phillips Medical Center at 1:00 pm

A motion to approve item C, D, E, and F was made by Russell Brand and seconded by David Davis. There was no discussion and the motion was passed after unanimous roll call vote.

VII. New Business (for matters not reasonably anticipated 48 hours prior to the meeting)

VIII. Next Meeting

- A. Oklahoma Trauma and Emergency Response Advisory Council
February 3rd, 2021 – 1:00 pm
Oklahoma State Department of Health
Address to be determined
- B. Quality Improvement Committee



102 January 19th, 2021 – 10:00 am
103 St John Medical Health Plaza
104 1819 East 19th Street
105 Tulsa, Ok 74104
106 C. Regional Planning Committee
107 February 9th, 2021- 10:00 am
108 Place to be determined
109 D. Regional Trauma Advisory Board
110 February 9th, 2021 - 1:00 pm
111 Place to be determined
112

113 **IX. Adjournment**

114 A motion to adjourn the meeting was made by Heidi Gilbert and seconded by Russell Brand
115 at 1:41 pm.
116

Region 2 RTAB Members Attendance - 2020

	Representative	1Q	2Q	3Q	4Q
Air Evac Lifeteam - Claremore	Judy Dyke	X		X	X
Air Evac Lifeteam - Cushing	Judy Dyke	X		X	X
Air Evac Lifeteam 128 - Stillwater	Judy Dyke	X		X	X
Air Evac Lifeteam 4- Springdale	Judy Dyke	X		X	X
Alliance Health Ponca City	Yolanda Ramanos	X		X	X
Arch – Medflight 1 - Joplin	Rod Pace	X		X	X
	Scott McKenzie				
Arch – Medflight 2 - Nevada, MO	Rod Pace	X		X	X
	Scott McKenzie				
Bartlesville Ambulance	Dan Dalton	X		X	X
	Wayne Swift				
Blackwell Fire Department/ EMS	Cory Hanebrink	X		X	X
	Clint Shultz				
Stillwater Medical Blackwell	April Edgar	X		X	X
	Bobbi Buntin				
Cleveland Area Hospital	Lindsey Hester	X		X	X
Cushing Fire Department/EMS	Daniel Myers	X		A	X
	Dalton Novotny				
Fairfax Community Hospital	Terri Koch	X		X	X
	Kathy Brock				
Freeman Hospital (Joplin)	Christine M Hoag-ApeL	X		X	X
	Michelle Wolfe				
Grove EMS	Jeff Dozier	X		A	X
	Bruce Jeffers				
Hillcrest Hospital Claremore	Melisa Daugherty	X		A	X
	Carla Sue Spence				
Hillcrest Hospital Cushing	Jennifer Moore	X		A	A
	Karen Schatz				
Hillcrest Hospital Pryor	Melanie Minor	X		A	X
	Benjamin Stutzman				
Hominy EMS	April Thompson	X		A	A
	James Blackstove				
Integrus Grove Hospital	Joey Gregory	X		A	X
	Bruce Jeffers				
Integrus Miami EMS	Jeff Dozier	X		A	X
	Nathan Seward				
Integrus Miami Hospital	Sarah Kyser	X		X	X
	Angella Conard				
Jane Phillips Memorial Medical Center, Inc.	Angie Bidleman	X		A	X
	Maggie Hadley				
Jane Phillips Nowata Hospital, Inc.	Wilford H Watson III	X		X	X
	Lori Walton				
Jay EMS	Brandon Alexander	X		A	X
LifeNet, Inc.	Kelly McCauley	X		X	X
	Zach Harris				
Mayes Emergency Services Trust	Amanda Early	X		A	A

Region 2 RTAB Members Attendance - 2020

Mediflight of Oklahoma	Dave Kersey	X		X	X
	Blake Vowel				
MERC	Samuel Murray	X		X	X
Mercy Hospital - Joplin	Donna Hughes	X		X	X
	Jason Graves				
Mercy Life Line	Chris Mattes	X		X	X
	Jason Hahn				
Mercy Regional EMS	Larry Burrows	X		X	X
	Brianne Smedley				
Midwest AeroCare	LeAnna Setzkorn	A		A	A
Miller EMS - Osage County	Jeremy Mclemore	X		X	A
	Lisa Fitzgerald				
Miller EMS- Fairfax	Jeremy Mclemore	X		X	X
	Lisa Fitzgerald				
Newkirk Fire Department/EMS	Adam Longcrier	X		A	X
	Timothy Walker				
Nowata EMS	Cole Brooks	A		A	X
	Nancy Delmas				
Oolagah – Talala EMS District	David Davis	X		X	X
	Shelbie Wayman				
Pafford EMS – Oklahoma	Mechele Cruz	A		X	X
	Ed Fowler				
Pawhuska EMS	Kenneth Freeman	X		A	X
	Ed Martin				
Pawhuska Hospital, Inc.	Jill Gray	X		A	X
	Angelica Burdick				
Pawnee Fire Department/EMS	Dennis Walker	X		X	X
	Rhonda James				
Perry Fire Department/EMS	Russell Brand	X		X	X
	Wayne Emmons				
Ponca City Fire Department/EMS	Ken Eck	X		X	X
	Butch Herring				
Quapaw Tribe EMS	Dean Post	X		A	X
	Leon Crow				
Saint Francis Hospital Vinita, Inc.	Dana Scott	A		X	X
	Rhonda Orr				
Shidler Fire Department/EMS	Katie Davis	X		X	A
	Cody Golay				
Stillwater Medical - Perry	Regina Mattson	X		X	X
	Deborah Herod				
Stillwater Medical Center	Heidi Gilbert	X		X	X
	Lori Looney				
Tonkawa Fire Dept./ EMS	Justin Kienzle	X		X	X
	Brad Esch				
Tulsa Life Flight – Pryor Sub-Station		X		X	X
	Evie Steenhoek				
Willow Crest Hospital	Matt Holum	X		X	A
	Christina Holum				

Appendix G

Letter Schedule of escalation

North East Regional Trauma Triage and Destination Plan

The purpose of this proposal is to establish and define a statewide process to address organizations that fail to respond to letters received from the Regional Continuous Quality Improvement Committee in order to encourage participation in continuous quality improvement activities as required by Title 63 §1-2530.3 for the betterment of the Oklahoma State Trauma System.

Tier 1- Initial Letter from the Regional Continuous Quality Improvement (CQI) Committee is signed by the committee signatory (ies) and sent to the appropriate recipient named below.

EMS Agencies-Initial letter for system errors or queries will be sent to the Medical Director and the EMS Director on file with The Oklahoma State Department of Health (OSDH).

Hospitals- Initial letters for system errors or queries that occur related to the function of the Emergency Department (ED) will be sent to the ED Medical Director and the ED Director/ Manager. Initial letters for system errors or queries that occur related to the function of areas outside of the ED will be sent to the Chief Medical Officer/ Chief of Staff and Chief Executive Officer/ President.

Response deadline: 30 days from the documented receipt of the letter.

Tier 2- No response to the initial letter from the CQI Committee by the Tier 1 deadline.

OSDH staff will place a call to the authorized Regional Trauma Advisory Board (RTAB) representative to enlist help providing a reminder to the letter recipient to respond and communicate the new deadline for receipt.

Response deadline: 15 days from successful contact with RTAB representative.

Tier 3- No response to the initial letter from the CQI Committee by the Tier 1 deadline or reminder call from OSDH staff with the Tier 2 deadline (approximately 45 days from receipt of initial letter).

A letter addressing the lack of response signed by RTAB Chair with a copy of the initial letter and sent to the appropriate recipient named below.

EMS Agency: Medical Director and the EMS Director on file with The Oklahoma State Department of Health (OSDH) as well as the appropriate License Owner/City Manager.

Hospital: CEO and CMO

Response deadline: 15 days from documented receipt of the Tier 3 letter.

Tier 4- No response to Tier 3 letter

North East Regional Trauma Triage and Destination Plan

A letter addressing the lack of response signed by the Oklahoma Trauma and Emergency Response Advisory Council (OTERAC) chair with copies of all previous tier letters and sent to the appropriate recipient named below.

EMS Agency: Medical Director and the EMS Director on file with The Oklahoma State Department of Health (OSDH) as well as the appropriate License Owner/City Manager.

Hospital: CEO and CMO

Response deadline: 10 days from documented receipt of the Tier 4 letter.

Child Abuse Recognition

Larissa Hines, MD
 Child Abuse Pediatrician and Fostering Hope Pediatrician
 Oklahoma Children's Hospital at OU Health
 Clinical Assistant Professor
 University of Oklahoma Health Sciences Center at OU Health

1

What is Child Abuse?

The Federal Child Abuse Prevention and Treatment Act (CAPTA), (42 U.S.C.A. §5106g), as amended and reauthorized by the CAPTA Reauthorization Act of 2010, defines child abuse and neglect as, at minimum:

“Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation; or an act or failure to act which presents an imminent risk of serious harm.”

<https://www.childwelfare.gov>

2

Physical Abuse

- Nonaccidental physical injury (ranging from minor bruises to severe fractures or death) that is inflicted by a parent, caregiver, or other person who has responsibility for the child.
- Such injury is considered abuse regardless of whether the caregiver intended to hurt the child.
- Physical discipline, such as spanking or paddling, is not considered abuse as long as it is reasonable and causes no bodily injury to the child.

<https://www.childwelfare.gov>

3

Neglect

- Failure of a parent, guardian, or other caregiver to provide for a child's basic needs
- Physical (e.g., failure to provide necessary food or shelter, or lack of appropriate supervision)
- Medical (e.g., failure to provide necessary medical or mental health treatment)
- Educational (e.g., failure to educate a child or attend to special education needs)
- Emotional (e.g., inattention to a child's emotional needs, failure to provide psychological care, or permitting the child to use alcohol or other drugs)

<https://www.childwelfare.gov>

4

Sexual Abuse

- Activities by a parent or caregiver such as fondling a child's genitals, penetration, incest, rape, sodomy, indecent exposure, and exploitation through prostitution or the production of pornographic materials

<https://www.childwelfare.gov>

5

Emotional Abuse

- Pattern of behavior that impairs a child's emotional development or sense of self-worth
- May include constant criticism, threats, or rejection, as well as withholding love, support, or guidance
- Often difficult to prove, and therefore, child protective services may not be able to intervene without evidence of harm or mental injury to the child
- Almost always present when other types of maltreatment are identified

<https://www.childwelfare.gov>

6

Abandonment

- A child is considered to be abandoned when the parent's identity or whereabouts are unknown, the child has been left alone in circumstances where the child suffers serious harm, or the parent has failed to maintain contact with the child or provide reasonable support for a specified period of time

<https://www.childwelfare.gov>

7

Substance Abuse

- Prenatal exposure of a child to harm due to the mother's use of an illegal drug or other substance
- Manufacture of methamphetamine in the presence of a child
- Selling, distributing, or giving illegal drugs or alcohol to a child
- Use of a controlled substance by a caregiver that impairs the caregiver's ability to adequately care for the child

<https://www.childwelfare.gov>

8

Epidemiology

- 3.6 million referrals alleging maltreatment to CPS involving 6.6 million children
- 702,000 victims of maltreatment
- 1,580 fatalities
- 9.4 child victims per 1,000 children
- The youngest children are the most vulnerable to death from maltreatment

NCANDS. Child Maltreatment 2014.

9

Epidemiology

- Neglect is the most common at 75% of cases
- Physical abuse is the second most common
- 17% of cases are physical abuse
- 119,517 victims of physical abuse

NCANDS. Child Maltreatment 2014.

10

Under Reporting

- The estimated number of victims is actually much higher
- Physical abuse remains under reported (and often under detected)
 - Individual and community variations in what is considered "abuse"
 - Inadequate knowledge and training among professionals in the recognition of abusive injuries
 - Unwillingness to report suspected abuse
 - Professional bias

11

Duty to Report Child Abuse and Neglect

All professionals in the state of Oklahoma have a duty to report any reasonable suspicion of child maltreatment.

12

Physical Abuse

13

Clinical Approach

- Stabilize and resuscitate
- Careful and well documented history is the most critical element of the medical evaluation
 - Using quotes whenever possible
 - Description of the mechanism of injury or injuries
 - Onset and progression of symptoms
 - Child's developmental capabilities

14

Physical Examination

- Detailed documentation
 - Photographs
 - Body diagrams
- Specific attention to
 - All areas of skin
 - External ears
 - Conjunctiva
 - Frenula

15

Cutaneous Findings

16

Sentinel Injuries

- Minor injuries, such as a bruise or intraoral injury
- Premobile infant
- Visible or detectable to a caregiver
- Poorly explained and unexpected

17

Sentinel Injuries

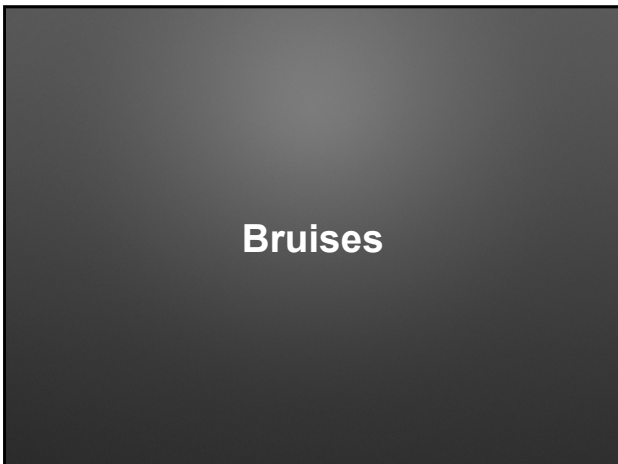
- A sentinel injury preceded severe abuse in 27.5% of cases
- A history of a sentinel injury is rare in infants evaluated for maltreatment and found to not be abused
- All sentinel injuries were observed by a parent
- 42% of the sentinel injuries were known to a medical provider but the infants were not protected from further harm
- Recognition of and appropriate response to sentinel injuries could prevent many cases of child physical abuse

Sheets. Pediatrics 2013;131:701-7.

18



19



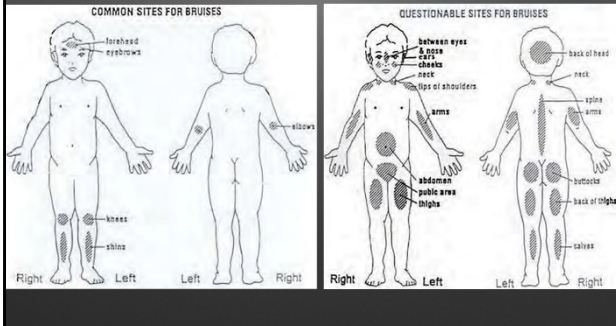
20

If you don't cruise, you don't bruise

- Bruising in infants who don't pull to a stand or walk are rare
- Bruising increases exponentially once an infant begins to cruise
- Bruising is generally found over bony prominences

21

Location



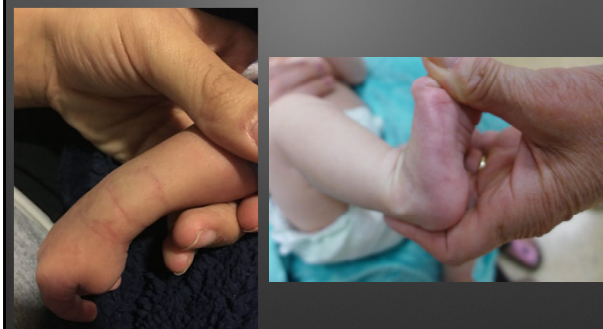
22

Patterned Bruising



23

Squeeze Marks



24

Ear Bruising



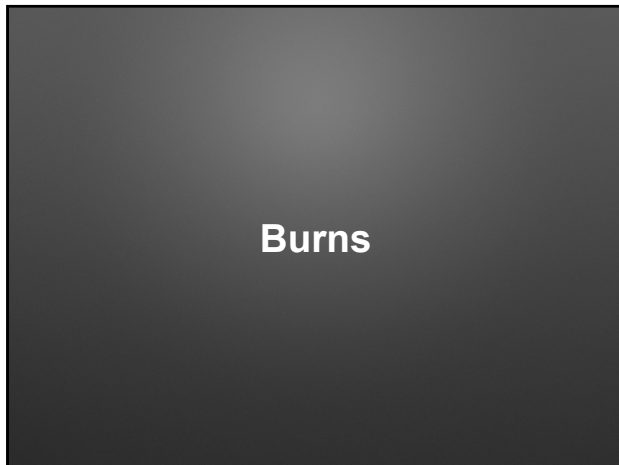
25

Slap Marks



26

Burns



27

Epidemiology

- Abusive burns account for 11-25% of burns in hospitalized children
- Infants and toddler represent the greatest percentage of cases
- Typically occur in children younger than 6 years
- Mean age of injury between 2-3 years

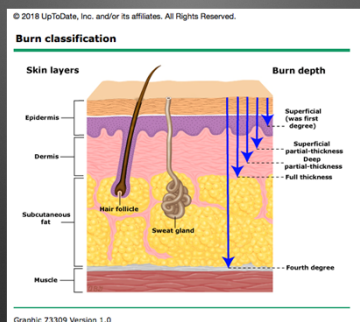
28

Burn Classification

- | | |
|--|------------|
| • Superficial - Epidermal layer only | 1st degree |
| • Superficial Partial Thickness - Epidermis and superficial dermis | |
| • Deep Partial Thickness - Epidermis and deep dermis | 2nd degree |
| • Full Thickness - Epidermis, entire dermis and into underlying subcutaneous tissue | 3rd degree |
| • Extension to Deep Tissues - Through skin and underlying soft tissues, can involve muscle or bone | 4th degree |

29

Burn Classification



30

Patterns of Injury Concerning for Abuse

- Large surface area of burn
- Uniform degree of burn injury
- Full-thickness burn
- Presence of delineated burn margins
- Symmetrical burns
- Absence of burn in areas of skin flexion
- Sparing of skin with surrounding burn secondary to contact with cooler surfaces
- Scald injury without splash/drip marks

31

Temperature of Water

- Children bathe comfortably at 101 degrees
- Hot tubs are generally set at 102-104 degrees
- Adults sense water as painful at 112-114 degrees
- Recommended water heater setting is 120 degrees

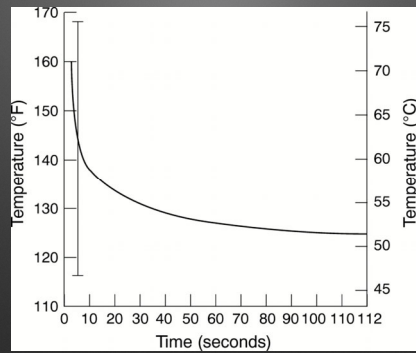
32

Temperature of Water

- At 120 degrees it would take 10 minutes to produce a deep partial thickness burn
- At 130 degrees there is a difference between children and adult skin burn times
- Above 130 degrees, children burn in 1/4 the time of adults
- Hot water splash burns require 140 degrees to produce tissue injury

33

Burn Curve



34

Immersion Burns

- Burn patterns:
 - Uniformity of burn depth
 - Flexion sparing
 - Linear contour between burned and unburned skin
 - Absence of splash marks
 - Bilateral burn symmetry
 - Skin sparing in areas where the skin was in contact with cooler surfaces (doughnut)

35

Immersion Burns



36

Flowing Liquid

- Can be altered by clothing
- Triangular (V) shaped pattern (flow pattern)
- Type of liquid can significantly affect the burn
- Liquids with greater boiling point (higher heat source) and viscosity (prolonged contact with skin) can result in deeper more significant burns

37

Flowing Liquid



38

Flowing Liquid



39

Splash/Splatter Burns

- Require a minimum temperature of 140 degrees to produce tissue injury
- Lower temperatures will cool to a point where thermal cutaneous injury will not occur

40

Splash Burns



41

Heated Solid Objects

- Due to prolonged contact with hot solid
- Abusive:
 - Distinct margins
 - Grouped burn lesions
 - Clearly inscribed patterns
- Injuries on parts of the body normally covered by clothing

42

Heated Solid Objects



43

Heated Solid Objects



44

Abusive Head Trauma

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Nomenclature

- In 2009, the AAP recommended adoption of a less mechanistic term, "abusive head trauma", to describe the constellation of cerebral, spinal and cranial injuries that result from inflicted head injury to infants and young children
- The term shaken baby syndrome is still used in education and prevention efforts

Pediatrics. 2009;123(5):1409-11

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Definition

- AHT is defined as inflicted injury to the head of an infant or young child
- Mechanisms include crush head injury, shaking, shaking with impact, impact alone, or strangulation

Kleinman, P. Diagnostic imaging of child abuse. 3rd ed.

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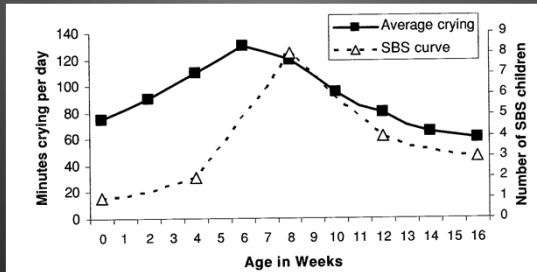
Epidemiology

- 14 to 30 per 100,000 cases of AHT in infants < 1 year of age
- Peak hospitalization rates for AHT occur at 2-4 months of age
- Peak rates of AHT fatalities in the first 2 months of life
- The leading cause of death in child abuse victims under 4 years of age

Kleinman, P. Diagnostic imaging of child abuse. 3rd ed.
Parks, S. Inj Prev. 2012;18(6):392-8

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Incidence of crying and shaken baby syndrome



Acta Paediatrica, 2008;97:782-785

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Clinical presentation

- Irritability
- Lethargy
- Vomiting
- ALTE/BRUE
- Seizures
- Respiratory distress
- Cardiopulmonary arrest
- Coma
- Brain death

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Misdiagnosis

- 31% of children and infants with AHT were initially misdiagnosed
- Misdiagnosed victims were more likely to be:
 - Younger
 - White
 - Less severe symptoms
 - Live with both parents

Jenny C. JAMA. 1999;281:621-6

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Obtaining the History

- When was the child last seen well?
- When did symptoms first occur?
- What were the symptoms?
- What did the caregivers do at that time?
- Was CPR attempted?
- When was help called?
- What kind of help was called?

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Child Protection Team

- Provider on call 24/7
- Always happy to answer questions
- 271-3636

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**OKLAHOMA TRAUMA SYSTEM QUALITY IMPROVEMENT PROCESS
REFERRAL FORM**

Please complete this form and attach related records.

Reporting individual contact information		☐ I wish to remain anonymous
Date		
Full name and title		
Organization		
Telephone number		
Email address		
Patient information for review		
Date of incident		
Name of patient		
Patient date of birth		
Your medical record#		
Name of any other involved agency/facility		
Reason for requesting review: (Check all applicable boxes and include a brief narrative)		
☐ Good Job!		
☐ Incorrect application of the Trauma Triage, Transport, and Transport Algorithm		
☐ Deviation from Regional Trauma Plan		
☐ Delay in care		
☐ Communication problems		
☐ Refusal		
☐ Other(please specify)		
Additional information:		

Mail, fax, or email to:
OKLAHOMA STATE DEPT. OF HEALTH
EMERGENCY SYSTEMS: Attn. CQI
123 Robert S Kerr Ste.1702 Oklahoma City, OK 73102
Phone: (405) 271-4027 Fax (405) 271-1045
Email: esystems@health.ok.gov

REGIONAL TRAUMA ADVISORY BOARD
Authorized Representative Form

DATE: _____

- ☐ NEW APPOINTMENT
☐ UPDATED APPOINTMENT

TRAUMA REGION:

- | | | |
|-----------------------------------|--|--------------------------------------|
| ☐ NW REG-1 | ☐ EC REG-4 | ☐ TULSA REG-7 |
| ☐ NE REG-2 | ☐ SE REG-5 | ☐ OKC REG-8 |
| ☐ SW REG-3 | ☐ CENTRAL REG-6 | |

ORGANIZATION NAME: _____

INDIVIDUAL AUTHORIZING APPOINTMENT OF RTAB REPRESENTATIVES:

Name: _____

Job Title: ☐ Hosp Admin. /or _____ ☐ EMS Director /or _____

Signature: _____

DESIGNATED REPRESENTATIVE: (please print legibly)

Name: _____

Job Title: _____

Email: _____

Telephone: _____

Facsimile: _____

ALTERNATE REPRESENTATIVE: (please print legibly)

Name: _____

Job Title: _____

Email: _____

Telephone: _____

Facsimile: _____

*** Please fax to the Emergency Systems at (405) 271-4240*** Update Annually***