Northwest (1) Regional Trauma Advisory Board
REGULAR MEETING
Tuesday, April 27, 2021 – 10:30 a.m.

Location of Meeting: Microsoft Teams
https://teams.microsoft.com/l/meetup-join/19%3ameeting_YWYwNDllZTAtYzgyOC00NTc4LTgwYTktNWE0NWE3Nzg5NGQ1%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: 819 306 152#

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

Jamie McAlister, Chair/ INTEGRIS Bass Baptist Health Center, Emily Powell, Secretary/Treasurer/ AllianceHealth Woodward, Air Evac Lifeteam 70 Woodward/Justin Miller, Air Evac Lifeteam Elk City/Chad Cambell, Air Evac Lifeteam Weatherford/Chad Cambell, Air Eval Lifeteam Kingfisher/Justin Miller, Air MD, LLC dba: Life Save/Mitch Helfferich, Alfalfa County EMS/Betty Meadows, AllianceHealth Clinton/Janae Chittum, Alva Ambulance Service/Julie Dennis, Apollo Medflight/Brandon Leasure, Beaver County EMS/Dusty Sperry, Beaver County Memorial Hospital/Lyn Sizelove, Buffalo EMS District/Evan Yauk, Burns Flat Ambulance/Jessi Perriman, Canton-Longdale EMS/John Sprunger, Cheyenne & Arapaho EMS/Twila Wilson, Cimarron County EMS/Cheryl Taylor, Cimarron Memorial Hospital/Denton Turner, Community Ambulance/Kirk Sander, Cordell EMS/Devin W. Humphrey, Cordell Memorial Hospital/Debbie Kifer, Eaglemed – Kansas/Chad Pore, Elk City Fire Department EMS/Kyle Chervenka, Ellis County EMS/Justin Longhofer, Erick Ambulance/Justin Woodruff, Fairview Regional Medical Center Authority/Tamara Eitzen, Freedom Volunteer Fire & Ambulance/Felicia Green, Goodwell Ambulance/Ashley Ming, Great Plains Regional Medical Center/Angie Clinton, Guymon Fire Department Ambulance/Spencer A Leiter, Harper County Community Hospital/Amy Yauk, Hooker Municipal Ambulance/Marilee Jacobs, Keyes EMS/Lynn Jones, Kingfisher Ambulance (City of)/Anthony R. Stewart, Laverne EMS/Bobbie Mitchell, Leedey Ambulance/Kim Currier, Life EMS/Jimmy Johnson, Life EMS of Hennessey/Jimmy Johnson, Lifeguard Ambulance Service Weatherford/Justin Miller, Major County EMS/Gregg Burlison, Medford Ambulance/James Shepherd, Memorial Hospital of Texas County Authority/Tamara Arnold, Mercy Hospital Kingfisher/Marvin Bishop, Mercy Hospital Watonga/Jennifer Manuel, Miller EMS/Matt Miller, Miller EMS – Garfield County/Matt Miller, Miller EMS – Kingfisher/Matt Miller, Newman Memorial Hospital, Inc./Mayra Estrada, LPN, Okeene EMS/Kathrine Biggs, Okeene Municipal Hospital/Tamara Fischer, Pond Creek Fire & Ambulance/Jake Winn, Region 1 RMRS/Paulette Marshall, Rogers Mills Ambulance/Vickey Manning, Rogers Mills Memorial Hospital/Ellen Kirk, Seiling Municipal Hospital/Wendy Shook, Share Medical Center/Mark Almack, Sinor EMS Clinton/Michelle Addington, Sinor EMS Sayre/Michelle Addington, Sinor EMS Thomas/Michelle Addington, St. Mary's Regional Medical Center/Valerie Schultz, Vici-Camargo EMS/Katrina Bryant, Watonga EMS/Joshua Boden, Waynoka Ambulance Service/Felicia Green, Weatherford Regional Hospital, Inc./Lindsey Zimmerman, Woodward County EMS/Pebbles Luddington

AGENDA

I. Call to Order……Jamie McAlister, Chair

II. Roll Call……Emily Powell, Secretary/Treasurer

III. Introductions and Announcements……Jamie McAlister, Chair

IV. Approval of Minutes – November 13, 2020……Jamie McAlister, Chair

V. Reports/Updates
- A. Emergency Systems…… Rebecca Novak
- B. Quality Improvement Committee……Valerie Schultz
- C. Regional Planning Committee……Jamie McAlister, Chair
- D. Regional Medical Response System……Paulette Marshall
- E. EMS for Children……Delores Welch
- F. Preparing for Chemical Emergencies Ad Hoc Committee……Paulette Marshall
- G. Trauma Plan & Bylaw Ad Hoc Committee……Jamie McAlister, Chair

Northwest (1) Regional Trauma Advisory Board
REGULAR MEETING
Tuesday, April 27, 2021 – 10:30 a.m.

Location of Meeting: Microsoft Teams
https://teams.microsoft.com/l/meetup-join/19%3ameeting_YWYwNDllZTAtYzgyOC00NTc4LTgwYTktNWE0NWE3Nzg5NGQ1%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: 819 306 152#

H. Stroke Regional Planning Ad Hoc Committee……..Erin Fast

VI. Business

A. Discussion, consideration, possible action and vote to approve amendments to the Region 1 Trauma Plan pending review of MERC recommendations and the approved Letter Schedule of Escalation and placement within the Region 1 Trauma Plan……Jamie McAlister, Chair

B. Discussion, consideration, possible action and vote to approve the following amendments to the Region 1 Bylaws……Jamie McAlister, Chair

Section II. Standing Committees:
10. The Trauma Plan shall be reviewed/revised biennially by the Northwest (1) Regional Planning Committee.
AMENDMENT OF BYLAWS
Section 2. The Bylaws shall be reviewed/revised biennially by the Northwest (1) Regional Planning Committee.

VII. Presentation

A. Non-Accidental Trauma……..……..Dr. Larissa Hines

VIII. New Business (For matters not reasonably anticipated 48 hours prior to the meeting)

IX. Next Meetings

A. Quality Improvement Committee
April 27, 2021 – 12:00 p.m.
B. Oklahoma Trauma and Emergency Response Advisory Council
June 2, 2021 – 1:00 p.m.
C. Regional Planning Committee
July 28, 2021 – 9:00 a.m.
D. Regional Trauma Advisory Board
July 28, 2021 – 10:30 a.m.

X. 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.*

Northwest (1) Regional Trauma Advisory Board
Microsoft Teams
https://teams.microsoft.com/l/meetup-join/19%3ameeting_NGYyZGQyNDMtNjQ0Ny00MmE0LTgxOTEtMTYyZTJjNzhkZjg1%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
November 13th, 2020 – 10:30 am

MINUTES

There is no physical meeting location and the following Board Members are participating remotely using the Microsoft Teams teleconferencing platform: Air Evac Lifeteam 70 Woodward, AllianceHealth Clinton, AllianceHealth Woodward, Buffalo EMS District, Cimarron Memorial Hospital, Elk City Fire Department/EMS, Great Plains Regional Medical Center, INTEGRIS Bass Baptist Health Center, Leedey Ambulance, Life EMS, Lifeguard Ambulance Service Weatherford, Mercy Hospital Kingfisher, Newman Memorial Hospital, Inc., Sinor EMS Clinton, St. Mary's Regional Medical Center, Watonga EMS, Weatherford Regional Hospital, Inc., Woodward County EMS

The following General Members are participating remotely using the Microsoft Teams teleconferencing platform: Air Evac Lifeteam Elk City, Air Evac Lifeteam Weatherford, Air Eval Lifeteam Kingfisher, Air MD, LLC dba: Life Save, Alfalfa County EMS, Alva Ambulance Service, Apollo Medflight, Beaver County EMS, Beaver County Memorial Hospital, Burns Flat Ambulance, Butler EMS, Canton-Longdale EMS, Cheyenne & Arapaho EMS, Cimarron County EMS, Community Ambulance, Cordell EMS, Cordell Memorial Hospital, Eaglemed – Kansas, Ellis County EMS, Erick Ambulance, Fairview Regional Medical Center Authority, Freedom Volunteer Fire & Ambulance, Goodwell Ambulance, Guymon Fire Department Ambulance, Harper County Community Hospital, Hooker Municipal Ambulance, Keyes EMS, Kingfisher Ambulance (City of), Laverne EMS, Life EMS of Hennessey, Major County EMS, Medford Ambulance, Memorial Hospital of Texas County Authority, Mercy Hospital Watonga, Miller EMS, Miller EMS - Garfield County, Miller EMS – Kingfisher, Okeene EMS, Okeene Municipal Hospital, Pond Creek Fire & Ambulance, Region 1 RMRS, Rogers Mills Ambulance, Rogers Mills Memorial Hospital, Seiling Municipal Hospital, Share Medical Center, Sinor EMS Sayre, Sinor EMS Thomas, Vici-Camargo EMS, Waynoka Ambulance Service

The meeting notice was filed with the Oklahoma Secretary of State on November 5th, 2020 at 8:39 am. The meeting notice/agenda was posted on the Oklahoma State Department of Health website for the Region 1 RTAB on November 6th, 2020.

I. Call to Order – Chair Jamie McAlister
The meeting was called to order by Chair Jamie McAlister at 10:30 am.

II. Welcome and Introductions – Chair Jamie McAlister
Jamie McAlister welcomed members with no introductions made.

III. Roll Call – Chair Jamie McAlister
Roll call was taken with members present and absent reflected on the attached attendance sheet.

IV. Approval of Minutes – July 28th, 2020 – Chair Jamie McAlister
A motion to approve the minutes as written was made by Great Plains Regional Medical Center and seconded by Watonga EMS. There was no discussion and the motion passed 11-0.

V. Reports/Updates

A. Emergency Systems Quarterly Activity Report – Jennifer Woodrow
Jennifer Woodrow announced staffing changes to include the addition of Katrina Warden as Special Projects Coordinator and the loss of Martin Lansdale as Statistical Research Specialist noting that position is currently open to anyone interested. Emergency Systems will soon be moving to the new Oklahoma Commons Building with many staff still working from home. There were no new updates for the program areas of trauma fund, trauma registry, and OKEMSIS. An updated trauma fund handout will be sent to members when available. The final list for the data dictionary of the Stroke Registry is completed and was presented at the July 15th, 2020 Oklahoma State Stroke Systems Advisory Council (OSSSAC) meeting. New EMS Rules were signed by the Governor and went into effect September 11th, 2020 with the updated rules available on the OSDH website. EMS agencies needing a new unit inspections should use the following link to schedule the inspection:
https://www.ok.gov/health/Protective_Health/Emergency_Systems/EMS_Division/Ambulance_Services_&_EMRAs/Inspections/index.html.

MINUTES

An EMS Director class was held virtually in September with the next class tentatively scheduled for March 2021. Members will be notified and able to RSVP as soon as the date is confirmed. The Oklahoma Trauma and Emergency Response Advisory Council (OTERAC) last met on October 7th, 2020 via Microsoft Teams. Business conducted included approval to support the proposed escalation process for non-response to regional CQI committee letters and approval of 2021 meeting dates. Proposed meeting dates have been set and will be emailed to members with the draft minutes from today's meeting.

B. Quality Improvement Committee Quarterly Activity Report – Valerie Schultz
The committee is currently trying to follow up and obtain a response on letters that were sent out regarding system issues. The committee is also adding new members to include Mark Almack.

C. Regional Planning Committee Quarterly Activity Report – Chair Jamie McAlister
This committee last me today before the RTAB and discussed/reviewed the Region 1 Stroke Plan, Trauma Plan, Bylaws, and a proposed letter regarding stroke education with points of discussion noted in the associated business items.

D. Regional Medical Response System Quarterly Activity Report – Paulette Marshall
No representative was available for report.

E. EMS for Children Quarterly Activity Report – Delores Welch
No representative was available for report.

F. Preparing for Chemical Emergencies Ad Hoc Committee Report – Paulette Marshall
No representative was available for report.

G. Trauma Plan & Bylaw Ad Hoc Committee Report – Chair Jamie McAlister
The review of the Region 1 Trauma Plan and Bylaws has been brought back to the Regional Planning Committee and were reviewed at today's meeting.

H. Stroke Regional Planning Ad Hoc Committee Report – Erin Fast
No representative was available for report.

VI. Business

A. Discussion, consideration, possible action and vote to approve the Region 1 QI Committee's Letter Schedule of Escalation Proposal – Jamie Lee
Jamie Lee reviewed the Region 1 QI Committee's Letter of Schedule of Escalation Proposal noting the committee only reviews cases related to trauma system issues.

B. Discussion, consideration, possible action and vote to approve the QI Committee recommendation that the RTAB and QI Committee Chairs draft and send a letter to licensed hospitals and ambulance services regarding the continuous quality improvement process – Jamie Lee
Jamie Lee noted that the QI Committee is asking for approval of items A and B to ensure all members are aware and approve of the processes in place used to handle facilities not responding to a QI letter regarding system issues. Valerie Schultz asked if the letters would be sent by certified mail to verify receipt. Jamie Lee noted that the QI Committee currently sends all letter by certified mail.
A motion to approve Business items A and B was made by St. Mary's Regional Medical Center and seconded by Watonga EMS. There was no discussion and the motion passed 12-0.

C. Discussion, consideration, possible action and vote to approve 2021 trauma system goals to send to the Regional Planning Committee for planning and implementation – Chair Jamie McAlister
Jamie McAlister presented the following data regarding trauma patients within Region 1:

- 186 out of 278 (66.91%) of Priority 1 patients originating in Region 1 are transported to an in-region Level III or Level IV Trauma Center. The number of patients needed to reduce this by 3% is 5.58.
- The average length of stay at an initial facility for patients with an injury severity score of equal or greater than 16 is 201 minutes. The number of minutes needed to reduce this by 3% is 6.03 minutes.

Northwest (1) Regional Trauma Advisory Board
Microsoft Teams
https://teams.microsoft.com/l/meetup-join/19%3ameeting_NGYyZGQyNDMtNjQ0Ny00MmE0LTgxOTEtMTYyZTJjNzhkZjg1%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
November 13th, 2020 – 10:30 am

MINUTES

In response to the data, the following 2021 trauma system goals were proposed:

- Decrease the number of Priority 1 patients transported by ambulance services to a Level III or Level IV Trauma Center by 3% by the end of the calendar year
- Decrease the statewide average length of stay at Level III and Level IV Trauma Centers for patients having an ISS of ≥16 by 3% by the end of calendar year 2021

A motion to approve the proposed goals was made by AllianceHealth Woodward and seconded by Buffalo EMS District. There was no discussion and the motion passed 11-0.

D. Discussion, consideration, possible action and vote to approve amended Region 1 Trauma Plan – Chair Jamie McAlister

Jamie McAlister reviewed proposed changes to the Region 1 Trauma Plan recommended by the Regional Planning Committee noting changes to EMS descriptions were reflective of information received from the Region 1 EMS survey. Description of EMS Services and Appendix A will be combined and, due to frequent changes, not include staffing numbers. These changes will be brought back to the next meeting for approval. Recommended changes were received from the Region 1 MERC, which included removal of the following:

- The MERC or his/her designee has the authority at any time to deny or discontinue Emergency Department divert based on the needs of the community.
- The MERC or his/her designee also has the authority to place ambulance services on a rotating basis to avoid over-saturation of any one given facility.

These recommendations were reviewed by the Regional Planning Committee with members voicing concern. The committee noted this authority was assigned to the MERC with the approval of the trauma plan and, if the MERC isn't going to fulfill this role, who will? Discussion regarding the recommendations will be continued at the next meeting due to no representative from the MERC available. A motion to approve changes shown on the attached Region 1 Trauma Plan was made by St. Mary's Regional Medical Center and seconded by Buffalo EMS District. There was no discussion and the motion passed 12-0.

E. Discussion, consideration, possible action and vote to approve 2021 Board Members – Chair Jamie McAlister

Jamie McAlister presented the proposed 2021 Board members for approval with no discussion.

F. Discussion, consideration, possible action and vote to approve 2021 Board Officer nominations – Chair Jamie McAlister

1. Chair – Jamie McAlister
2. Vice Chair – Valerie Schultz
3. Secretary/Treasurer – Emily Powell

Jamie McAlister announced the 2021 Board officer nomination for approval with no discussion.

G. Discussion, consideration, possible action and vote to approve 2021 Committee Membership – Chair Jamie McAlister

1. Vote to approve Mark Almack of Share Medical Center to Quality Improvement Committee

Jamie McAlister presented the proposed 2021 committee membership with the addition of Mark Almack to the QI Committee for approval.

H. Discussion, consideration, possible action and vote to approve 2021 Board Meeting dates, times, and venues – Chair Jamie McAlister

1. January 26th, 2021 beginning at 10:30 am at the High Plains Technology Center
2. April 27th, 2021 beginning at 10:30 am at the High Plains Technology Center
3. July 27th, 2021 beginning at 10:30 am at the High Plains Technology Center
4. October 26th, 2021 beginning at 10:30 am at the High Plains Technology Center

Jamie McAlister presented the proposed 2021 Board meeting dates, times, and venues for approval with no discussion. A motion to approve Business items E, F, G, and H was made by Newman Memorial Hospital, Inc. and seconded by St. Mary's Regional Medical Center. There was no discussion and the motion passed 12-0.

Northwest (1) Regional Trauma Advisory Board
Microsoft Teams
https://teams.microsoft.com/l/meetup-join/19%3ameeting_NGYyZGQyNDMtNjQ0Ny00MmE0LTgxOTEtMTYyZTJjNzhkZjg1%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
November 13th, 2020 – 10:30 am

MINUTES

VII. New Business – Chair Jamie McAlister
(For matters not reasonably anticipated 48 hours prior to the meeting)
Jamie McAlister thanked everyone for all of their hard work, long hours, and dedication during the pandemic stating that people are paying attention and the work is very much appreciated.

VIII. Next Meetings – Chair Jamie McAlister
A. Regional Planning Committee
High Plains Technology Center
Woodward, OK 73801
January 26th, 2021 – 9:00 am
B. Regional Trauma Advisory Board
High Plains Technology Center
Woodward, OK 73801
January 26th, 2021 – 10:30 am
C. Quality Improvement Committee
High Plains Technology Center
Woodward, OK 73801
January 26th, 2021 – 12:00 pm
D. Oklahoma Trauma and Emergency Response Advisory Council
As called
Jamie McAlister announced the next meeting dates with no discussion.

IX. Adjournment – Chair Jamie McAlister
A motion to adjourn was made by St. Mary's Regional Medical Center and seconded by Watonga EMS. The meeting adjourned at 11:32 am.

Approved

_____ _____
Jamie McAlister, Chair Date
Northwest (1) Regional Trauma Advisory Board

NORTHWEST (1) REGIONAL TRAUMA ADVISORY BOARD

BOARD MEMBER ATTENDANCE

BOARD MEMBER	REPERESENTATIVE	1Q	2Q	3Q	4Q	2020
Air Evac Lifeteam 70 Woodward	Justin Miller Tammie James			X	A	50%
AllianceHealth Clinton	Janae Chittum Wade Blackwell			A	A	0%
AllianceHealth Woodward	Emily Powell Erin Fast			X	X	100%
Buffalo EMS District	Evan Yauk Melissa Headlee			X	X	100%
Cimarron Memorial Hospital	Denton Turner Marlene Grazier			A	A	0%
Elk City Fire Department/EMS	Kyle Chervenka Darren Murray			X	X	100%
Great Plains Regional Medical Center	Angie Clinton Kevin Martin			X	X	100%
INTEGRIS Bass Baptist Health Center	Jamie McAlister			X	X	100%
Leedey Ambulance	Kim Currier Angel Boyd			X	X	100%
Life EMS	Jimmy Johnson Shawn Svob			A	X	50%
Lifeguard Ambulance Service Weatherford	Justin Miller Tammie James			X	A	50%
Mercy Hospital Kingfisher	Marvin Bishop Amber Albers			X	X	100%
Newman Memorial Hospital, Inc.	Mayra Estrada, LPN Jennifer Hill, LPN			X	X	100%
Sinor EMS Clinton	Michelle Addington Jeremy Pool			X	A	50%
St. Mary's Regional Medical Center	Valerie Schultz Martha Syms			X	X	100%
Watonga EMS	Joshua Boden Derek Vermillion			X	X	100%
Weatherford Regional Hospital, Inc.	Lindsey Zimmerman Cindy Penner			X	A	50%
Woodward County EMS	Pebbles Luddington Julie Dennis			X	X	100%
		□ □	□ □	□ □	□ □	
	Quorum Met	**Y N**	**Y N**	**Y N**	**Y N**	

NORTHWEST (1) REGIONAL TRAUMA ADVISORY BOARD

GENERAL MEMBER ATTENDANCE

GENERAL MEMBER	REPERESENTATIVE	1Q	2Q	3Q	4Q	2020
Air Evac Lifeteam Elk City	Chad Cambell Doug White			X	X	100%
Air Evac Lifeteam Weatherford	Chad Cambell T.J. Jaxon			X	A	50%
Air Eval Lifeteam Kingfisher	Justin Miller Chad Campbell			X	A	50%
Air MD, LLC dba: Life Save	Mitch Helfferich Lisa Baldwin-Bateman			A	A	0%
Alfalfa County EMS	Betty Meadows Scott Hofen			X	A	50%
Alva Ambulance Service	Julie Dennis Felicia Green			X	X	100%
Apollo Medflight	Brandon Leasure Brett Hicks			A	A	0%
Beaver County EMS	Dusty Sperry Kalisa Cooper			A	X	50%
Beaver County Memorial Hospital	Lyn Sizelove Taylor Clubb			A	X	50%
Burns Flat Ambulance	Jessi Perriman Debbie Bloomer			A	A	0%
Butler EMS	Donice Johnson Kenneth Johnson			X	A	50%
Canton-Longdale EMS	John Sprunger Connie Sprunger			X	A	50%
Cheyenne & Arapaho EMS	Twila Wilson Wilma Redbird			X	A	50%
Cimarron County EMS	Cheryl Taylor Glenda Compton			X	A	50%
Community Ambulance	Kirk Sander Thomas Ray			X	X	100%
Cordell EMS	Devin W. Humphrey			A	A	0%
Cordell Memorial Hospital	Jenni Hierl Holly Henderson			X	A	50%
Eaglemed - Kansas	Chag Pore Craig Isom			A	X	50%
Ellis County EMS	Justin Longhofer Denise Longhofer			A	A	0%
Erick Ambulance	Justin Woodruff Michelle Sills			X	A	50%
Fairview Regional Medical Center Authority	Tamara Eitzen Wes Howerton			X	X	100%
Freedom Volunteer Fire & Ambulance	Felicia Green Shelly Oliphant			X	X	100%
Goodwell Ambulance	Ashley Ming Senech Wilson			A	A	0%
Guymon Fire Department Ambulance	Spencer A Leiter Grant Wadley			A	X	50%

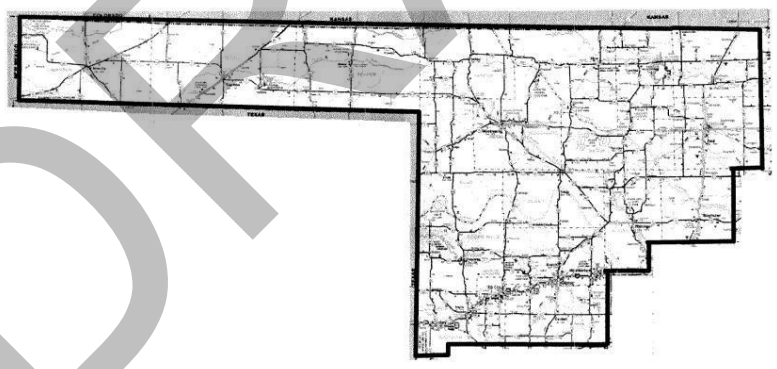
NORTHWEST (1) REGIONAL TRAUMA ADVISORY BOARD

GENERAL MEMBER ATTENDANCE

Harper County Community Hospital	Amy Yauk Melissa Headlee			X	X	100%
Hooker Municipal Ambulance	Marilee Jacobs Rob Wayman			X	A	50%
Keyes EMS	Lynn Jones Glen Copeland			X	A	50%
Kingfisher Ambulance (City of)	Anthony R. Stewart Richard Butts			A	A	0%
Laverne EMS	Bobbie Mitchell Donda Goodwin			A	A	0%
Life EMS of Hennessey	Jimmy Johnson Derek Vermillion			X	X	100%
Major County EMS	Gregg Burlison Junior Aguilar			X	X	100%
Medford Ambulance	James Shepherd Kacy Wallace			X	A	50%
Memorial Hospital of Texas County Authority	Tamara Arnold Kenda Pritchard			X	A	50%
Mercy Hospital Watonga	Jennifer Manuel Jennifer Jackson			X	X	100%
Miller EMS	Matt Miller Parker Stambaugh			X	A	50%
Miller EMS - Garfield County	Matt Miller Parker Stambaugh			X	A	50%
Miller EMS - Kingfisher	Matt Miller Parker Stambaugh			X	A	50%
Okeene EMS	Kathrine Biggs Amanda Halverson			X	X	100%
Okeene Municipal Hospital	Tamara Fischer Emily Poe			X	X	100%
Pond Creek Fire & Ambulance	Jake Winn Josh Stephens			A	A	0%
Region 1 RMRS	Paulette Marshall			X	A	50%
Rogers Mills Ambulance	Vickey Manning Dustin Batterton			X	X	100%
Rogers Mills Memorial Hospital	Ellen Kirk Garrett Logan			X	X	100%
Seiling Municipal Hospital	Wendy Shook Jennifer Alton			X	A	50%
Share Medical Center	Mark Almack Regina Wilson			X	A	50%
Sinor EMS Sayre	Michelle Addington Jeremy Pool			X	A	50%
Sinor EMS Thomas	Michelle Addington Jeremy Pool			X	A	50%
Vici-Camargo EMS	Katrina Bryant Eric Peoples			A	A	0%
Waynoka Ambulance Service	Felicia Green Pebbles Luddington			X	X	100%

Region 1 Trauma Plan

Developed by the RTAB NW Regional Planning Committee



Plan Approval Dates:
Pre-Hospital RTAB: 07-18-2006 OTSIDAC: 08-02-2006 RTAB: 11/13/2020
Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007
EMResource™ RTAB: 05-23-2006 OTSIDAC: 08-02-2006
OTSIDAC Revision to Trauma Triage Algorithm Guidelines: February 2, 2010

Table of Contents

Plan Approval Dates:
Pre-Hospital RTAB: 07-18-2006 OTSIDAC: 08-02-2006 RTAB: 11/13/2020
Inter-facility RTAB: 03-27-2007 OTSIDAC: 08-01-2007
EMResource™ RTAB: 05-23-2006 OTSIDAC: 08-02-2006
OTSIDAC Revision to Trauma Triage Algorithm Guidelines: February 2, 2010

I. GOALS / PURPOSE

The goals of the regional trauma pre-hospital destination/inter-facility transfer plans are to:

A. Assure trauma patients are stabilized and transported to the most appropriate hospital facility with the available resources and capacity to provide care in a timely fashion.

B. Support the Pre-Hospital/Inter-Facility Trauma Triage and Transport Guidelines to effectively reduce trauma morbidity and mortality.

C. Match a facility's resources with each trauma patient's needs to ensure optimal and cost effective care is achieved.

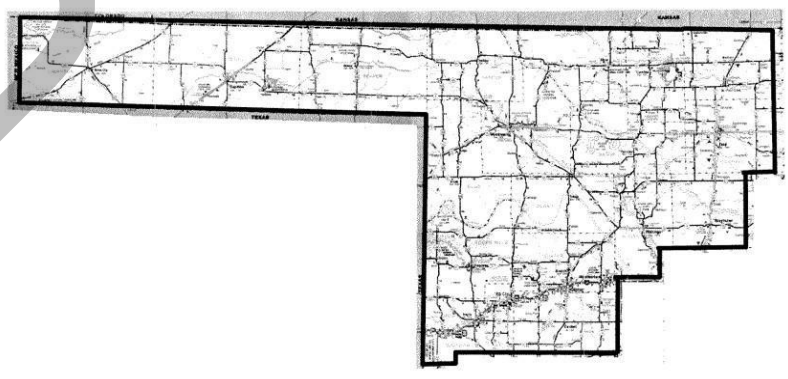
D. This plan will not conflict with any rules and/or regulations that are currently in place, or may be written or changed in the future. In the event new rules and/or regulations are considered, the RTAB should be included in that dialogue prior to implementation.

II. REGION DESCRIPTION

Region 1 consists of the northwest portion of Oklahoma and includes the following counties: Alfalfa, Beaver, Beckham, Blaine, Cimarron, Custer, Dewey, Ellis, Garfield, Grant, Harper, Kingfisher, Major, Roger Mills, Texas, Washita, Woods and Woodward.

Region 1 is the largest region in Oklahoma and encompasses ~~21,334~~ 21,232 square miles with a population of ~~232,461~~238,148. Region 1 has common borders with four states: Colorado, Kansas, New Mexico and Texas.

It is serviced by 4~~0 3~~ ambulance services, two (2) Level III T~~t~~rauma ~~hospitals~~Centers, ~~and eighteen (~~178~~)~~ L~~l~~evel IV T~~t~~rauma ~~hospitals~~ Centers, of which ~~seven (~~147~~)~~ are designated C~~c~~ritical ~~a~~Access Hospitals, and ~~and~~ three~~one~~ (3~~1~~) P~~p~~sychiatric ~~facility~~Hospital. ~~and one (1) Long Term Acute Care hospital.~~



III. TRAUMA PRIORITY CATEGORIZATION

All injured patients must be identified and transported/transferred to the facility that provides the appropriate care based on the clinical needs of the patient. This should be done in a timely fashion with specific attention focused on preserving the highest level of care for major trauma patients. A three-tiered system designed to determine the appropriate hospital destination for all injured patients considers injury severity, severity risk, time and distance from injury to definitive care, and available resources to meet the region's specific needs. This three-tiered system is outlined in Appendix BC and it is imperative that all pre-hospital and hospital medical providers use this system and language.

Three trauma triage priorities are used in determining the appropriate destination for patients.

1. **Priority 1 Trauma Patients:**

   These are patients with blunt or penetrating injury causing physiological abnormalities or significant anatomical injuries. These patients have time-sensitive injuries requiring the resources of a Level I, Level II, or designated Level III Trauma Centers with 24/7 in house ED physicians, 24/7 general and orthopedic surgeon availability. These patients should be directly transported to a Level I, Level II, or designated Level III facility for treatment, but may be stabilized at any Level III or Level IV facility, if needed, depending on location of occurrence and time and distance to the higher-level trauma center. If needed, these patients may receive definitive care in a Level III facility if the appropriate services and resources are available. (e.g. orthopedic, vascular, or maxillofacial surgery).

2. **Priority 2 Trauma Patients:**

   These patients are those that have potentially time-sensitive injuries because of a high-energy event or single system injury. These patients do not have physiological abnormalities or significant anatomical injuries and can be transported to a trauma facility with the resources to perform a complete trauma evaluation and medical screening and can care for their injuries.

3. **Priority 3 Trauma Patients:**

   These patients are without physiological instability, altered mentation, neurological deficit, or significant anatomical or single system injury that have been involved in a low energy event. These patients should be treated at the nearest treating facility or the patient's hospital of choice.

IV. CATEGORIZATION OF HOSPITALS

A. Hospital Providers in Region 1 include: (~~2008~~ 2020 Information). For the latest information regarding facility capabilities, refer to EMResource™.

1. **Level I:** None
2. **Level II:** None
3. **Level III:**
   a. INTEGRIS Bass Baptist Health Center (Enid)
   b. St. Mary's Regional Medical Center (Enid)

4. **Level IV:**
   ~~l. Sayre Memorial Hospital (Sayre)~~
   a. ~~INTEGRIS Clinton Regional Hospital~~ AllianceHealth Clinton (Clinton)
   b. ~~Woodward Regional Health Center~~ AllianceHealth Woodward (Woodward)
   c. Beaver County Memorial Hospital (Beaver)
   d. Cimarron Memorial Hospital (Boise City)
   e. Cordell Memorial Hospital (Cordell)
   f. Fairview ~~Hospital~~ Regional Medical Center Authority (Fairview)
   g. Great Plains Regional Medical Center (Elk City)
   h. Harper County Community Hospital (Buffalo)
   i. Memorial Hospital of Texas County Authority (Guymon)
   j. ~~Kingfisher Regional Hospital~~Mercy Hospital Kingfisher (Kingfisher)
   k. ~~Watonga Municipal Hospital~~ Mercy Hospital Watonga (Watonga)
   l. Newman Memorial Hospital, Inc. (Shattuck)
   m. Okeene Municipal Hospital (Okeene)
   n. Roger Mills Memorial Hospital (Cheyenne)
   o. Seiling Municipal Hospital ~~Authority~~ (Seiling)
   p. Share ~~Memorial Hospital~~ Medical Center (Alva)
   q. Weatherford Regional Hospital, Inc. of Weatherford, Oklahoma (Weatherford)

~~5. Long Term Acute Care Facilities:~~
~~a. INTEGRIS Bass Pavilion~~

6. **Psychiatric Hospitals:**
   a. Northwest Center for Behavioral Health (Ft. Supply)
   b. INTEGRIS Meadow Lake – pediatric & adolescent (Enid)
   ~~a.~~c. St. Mary's Resilience Behavioral Health (Enid)

7. **Other Facilities:**
   a. ~~USPHS Indian Hospital~~Clinton Indian Health Center (Clinton)

b. Oklahoma Veterans Center (Clinton)

B. Out of Region Hospital Resources:

1. **Level I:**
   a. ~~Via Christi Regional Medical Center~~Ascension Via Christi St. Francis~~(St. Francis Campus)~~, Wichita, KS
   b. OU ~~Medical Center~~Medicine, Oklahoma City, OK
   c. University Medical Center Health System, Lubbock, TX
   d. Wesley Medical Center, Wichita, KS
2. **Level II:**
   a. St. John Medical Center, Inc., Tulsa, OK
   b. St. Francis ~~Medical Center~~ Hospital, Inc., Tulsa, OK
3. **Level III:**
   a. Northwest Texas Healthcare System, Amarillo, TX

V. DESCRIPTION OF EMS SERVICES

Region 1 is a very large area encompassing 18 counties (Population ~~232,461~~238,148) and covering approximately 21,232~~334~~ square miles that is serviced by 40~~2~~ ambulance services and seven (7) ~~two~~ air transport service~~s with three bases~~.

A. Ground Ambulance Services: (2020~~08~~ Information). For current information, refer to the EMS Registry available at:
http://www.ok.gov/health/Protective_Health/Emergency_Medical_Services/

1. Alfalfa County:
   One (1)~~2~~ Basic ambulance service~~s~~ cover~~s~~ Alfalfa County with four (4) routine units covering the 866~~81~~ square miles of the county.
2. Beaver County:
   One (1) Basic ambulance service covers Beaver County with two (2) routine units covering the
   1,815~~8~~ square miles of the county.
3. Beckham County:
   Three (3)~~2~~ Basic ambulance services ~~and 1 intermediate ambulance service~~ cover~~s~~ Beckham County with five (5) routine units that cover the 90~~4~~2 square miles of the county.
4. Blaine County:
   Blaine County is covered by three (3)~~4~~ Basic ambulance services with four (4)~~11~~ routine units that cover~~ing~~ the
   92839~~9~~ square miles of the county.
5. Cimarron County:
   Cimarron County is covered by two (2) Basic ambulance services with three (3) routine

units that
cover the 1,8353541 square miles of the county.

6. Custer County:

Custer County is covered by three (3) ~~Intermediate~~ Basic ambulance services, one (~~and~~ 1) ~~Basic~~ Intermediate ambulance service, and one (1) Advanced ambulance service with nine (9)~~10~~ routine units that cover the 9891,002 square miles of the county.

7. Dewey County:
   Dewey County is covered by three (3)~~4~~ Basic services with six (6)~~8~~ routine units that cover the
   999~~1,002~~ square miles of the county.
8. Ellis County:
   Ellis County is covered by one (1) Basic ambulance service with two (2)~~3~~ routine units that cover the
   1,232 square miles of the county.
9. Garfield County:
   Garfield County is covered by one (1) Paramedic ambulance service and one (1) Basic ambulance ~~S~~service with five (5)~~6~~ routine units that cover the 1,058~~60~~ square miles of the county.
10. Grant County:
    Grant County is covered by three (3)~~2~~ Basic ambulance services with three (~~a total of~~ 3)~~4~~ routine units that cover the 1,00~~1~~4 square miles of the county.
11. Harper County:
    Harper County is covered by two (2) Basic ambulance services with two (~~a total of 2) routine~~4 units that cover the 1,039~~41~~ square miles of the county.
12. Kingfisher County:
    Kingfisher County is covered by two (~~1~~2) Paramedic ambulance services and one~~,~~ (1) Intermediate ~~and 1 Basic~~ ambulance service ~~cover Kingfisher County~~ with four (4)~~5~~ routine units that cover the 898~~906~~ square miles of the county.
13. Major County:
    Major County is covered by one (1) ~~-~~Basic Ambulance service with two (2)~~3~~ routine units that cover the
    955~~8~~ square miles of the county.
14. Roger Mills County:
    Roger Mills County is covered by one (1) Basic ambulance service with one (1)4 ~~-~~ routine unit~~s~~ that cover~~s~~ the 1,141~~6~~ square miles of the county.
15. Texas County:
    Texas County is covered by one (1) Intermediate ambulance service and two (2)~~3~~ Basic ambulance services with seven (7) routine units that cover the 2,041~~9~~. square miles of the county.
16. Washita County:
    Washita County is covered by two (~~-~~2)~~3~~ Basic ambulance services with two (2)~~5~~ routine units that cover the 1,003~~9~~ square miles of the county.
17. Woods County:
    Woods County is covered by three (3) Basic ambulance services with four (4)~~6~~ routine units that cover the 1,287~~90~~ square miles of the county.
18. Woodward County:

Woodward County is covered by one (1) Basic ambulance service with six (6)~~5~~ routine units that cover the 1,242~~6~~ square miles of the county.

B. Air Ambulance Services

1. Air Evac Lifeteam, based in Elk City, OK (AE21); Kingfisher, OK (AE131); Weatherford, OK (AE122); and Woodward, OK (AE70), provides rotor wing service to Region 1.
~~1.~~
2. Apollo MedFlight, based in Amarillo, TX, provides fixed wing service to Region 1.
3. Air MD LLC dba: Life Save, ~~Midwest Life Team~~ based in Liberal, KS, provides fixed wing service to Region 1.
~~4.~~ Eagle Med – Kansas, based in ~~Guymon, Oklahoma and Stillwater, Oklahoma (EagleMed8) (Stillwater is~~
~~5.~~4. ~~in Region 2 but provides Air Service to Region 1).~~Wichita, KS, provides fixed wing service to Region 1.~~Eaglemed has one Fixed Wing Aircraft (EagleMed21) located in Yukon, Oklahoma that can service all Regions.~~

VI. TRAUMA TRANSFER AND REFERRAL CENTER (TReC)

The Trauma Transfer and Referral Centers were created by statute (Senate Bill 1554, 2004) and they were implemented on July 1, 2005. The purpose of these centers is to ensure that trauma patients transported or transferred to facilities in Region 7 or 8 are transported to the facility that provides the appropriate level of care based on the clinical needs of the patient. This should be done in a timely fashion with specific attention focused on preserving the highest level of care for major trauma patients. On April 1, 2010, TReC was consolidated to a single call center in Region 7. TReC is located in the Tulsa 911 center and serves the entire State of Oklahoma.

Statewide training sessions were held throughout June 2005 to orient all providers to the use of these centers.

Ambulances from Region 1 are required to call into the center prior to entering Regions 7 or 8 in order to ensure appropriate patient destination. Likewise, hospitals may call these centers for assistance in identifying the appropriate destination for their trauma patients.

These centers will provide information on resource utilization to the OSDH that will be available to the Region 1 RTAB for Quality Improvement purposes.

PRE-HOSPITAL DESTINATION PROTOCOLS

I. PROCEDURE FOR SELECTION OF HOSPITAL DESTINATION

It is recognized that some patients have needs that can only be met at specific destination hospitals. Thus, a trauma patient will often benefit from transfer directly to an appropriate hospital with the capability and capacity to provide definitive trauma care. This care may not necessarily be at the closest or patient preferred facility, and this must be taken into account when treating the patient.

Rapid pre-hospital recognition and appropriate triage of trauma patients using the Oklahoma Trauma Triage and Transport Guidelines is essential in determining the appropriate hospital destination for Priority 1, 2, and 3 trauma patients (see appendix B).

These Destinations are:

ALL PATIENTS:

1. All trauma patients should be rapidly transported to the closest medical facility with the capability and capacity to provide the appropriate level of care as indicated by the patient's injury type and severity.

2. Patients with a traumatic arrest or the need to secure an airway should be transported to the closest facility to the traumatic event.

~~3.~~ Any priority 1 ~~or 2~~ trauma patient who needs immediate life saving treatment or intervention~~stabilization~~ should be transported to the nearest facility ~~with the capability and capacity to provide definitive care~~for stabilization.

~~4~~3. Patient preference as well as the time and distance should factor into where definitive care will be considered for most Priority 2 and 3 trauma patients.

GENERAL TRAUMA PATIENTS:

General trauma patients who meet the State of Oklahoma approved trauma criteria should be transported using the following guidelines. General geographic and transportation borders have been used as boundaries for these transportation designations. These boundaries are used as guidelines and it is understood that there are sites in the region that based on time and distance may need to be transported into a different border area.

1. Priority 1 adult and pediatric trauma patients that meet the state approved trauma criteria should be transported to the nearest Level I~~1~~ or II~~2~~ T~~t~~rauma C~~c~~enter.

    a. OU Medicine ~~Medical Center~~ will be the appropriate center for the majority of Region 1.

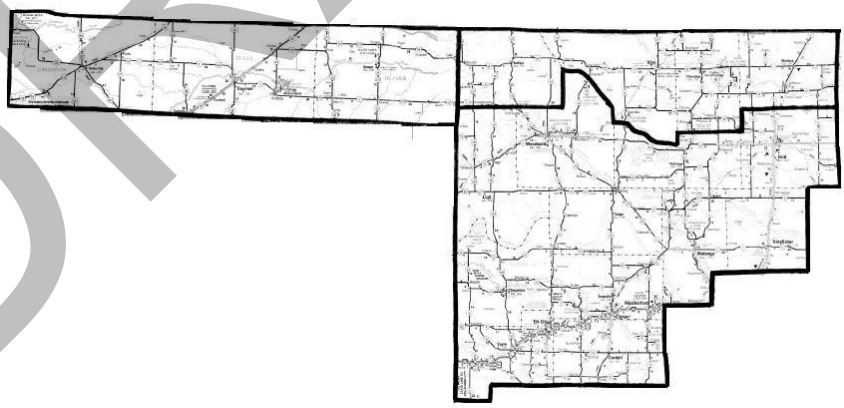
    b. Cimarron, Texas and Beaver counties *may* transport to University Medical Center Health Systems in Lubbock, Ascension Via Christi ~~Regional Medical Center~~St. Francis or Wesley Medical Center in Wichita, and OU Medicine ~~Medical center~~ in Oklahoma City.

    c. Harper, Woods, Alfalfa and Grant counties *may* transport to Ascension Via Christi St. Francis ~~Regional Medical Center~~ or Wesley Medical Center in Wichita, Kansas.

    d. The appropriate method of transport for those patients **outside** of an area **45 minutes** from the appropriate center should activate **air transport** as defined in Section IX, as soon as possible to ensure rapid transport to the appropriate facility.

    e. If air transport is unavailable, ground transport and/or ALS intercept can be utilized for transport. ~~In the event there will be an excessive time delay for transport the patient may be taken to the closest treating facility for stabilization.~~

    Region 1 Priority 1 Trauma Patient Destinations:



2. Priority 2 trauma patients that meet the state approved trauma criteria should be transported using the following guidelines:

    a. These patients are those that have potentially time-sensitive injuries because

of a high-energy event or single system injury. These patients do not have physiological abnormalities or significant anatomical injuries and can be

transported to a trauma facility with the resources to perform a complete trauma evaluation and medical screening and can care for their injuries. Additionally, Priority 2 patients should be transported to a facility with the capability and capacity to provide definitive care.

b. If air transport is unavailable, ground transport and/or ALS intercept can be utilized for transport. In the event there will be an excessive time delay for transport, the patient may be taken to the closest treating facility for stabilization.

c. All single system Priority 2 Pediatrics being transferred or transported into Region 8 will now go directly to The Children's Hospital at OU Medicine~~C~~.

3. Priority 3 adult and pediatric trauma patients should be transported to the nearest appropriate treating facility or the facility of patient preference.

NEUROLOGICAL TRAUMA PATIENTS:

1. Priority 1 adult and pediatric neurological trauma patients.

   a. The majority of Priority 1 neurosurgical trauma patient in Region 1 will go to Oklahoma City via use of the TReC.
   b. Cimarron, Texas, and Beaver counties should transport to ~~the Northwest Texas Healthcare System in Amarillo, Texas.~~ University Medical Center Health Systems in Lubbock, Texas; ~~,~~ Ascension Via Christi St. Francis ~~Regional Medical Center~~ or Wesley Medical Center in Wichita, Kansas; and OU Medicine ~~al center~~ in Oklahoma City, Oklahoma.
   c. Harper, Woods, Alfalfa and Grant counties should transport to Ascension Via Christi St. Francis ~~Regional Medical Center~~ or Wesley Medical Center in Wichita, Kansas.
   ~~d. Adult Priority 1 neurological trauma patients may also be transported to St. Mary's Medical Center in Enid if neurosurgical services are available at the time.~~

2. Priority 2 adult trauma patients should be transported to the appropriate facility in Enid or Oklahoma City based on the time/distance factor with preference given to patient preference and the ability to keep the patient within Region 1.

3. All single system Priority 2 Pediatrics being transferred or transported into Region 8 will now go directly to The Children's Hospital at OU Medicine~~C~~.

4. Priority 3 adult and pediatric trauma patients should be transported to the closest facility for evaluation.

BURN PATIENTS:

1. Combination of burns > 10% or significant burns involving face, airway, hands, feet, or genitalia *without* significant trauma, transport to regional Burn Center. Burns >10% *with* significant trauma, transport to trauma center.

2. Pediatric: Combination of burns > 10% or significant burns involving face, airway, hands, feet, or genitalia *without* significant trauma, transport to Alexander Burn Center at Hillcrest Medical Center ~~Burn Center~~ or OU Medicine~~MC~~ Children's Hospital. Burns >10% *with* significant trauma, transport to trauma center.

II. PROCEDURE FOR MONITORING HOSPITAL STATUS AND CAPABILITY

A. EMResource™

The Medical Emergency Response Center (MERC) C~~c~~oordinator will generate reports from the EMResource™ for use in monitoring hospital status related to destination. These reports will be provided periodically to OSDH and made available to the Region 1 ~~C~~Quality Improvement (QI) Committee. Any problems and/or trends identified through review of this data will be addressed by the CQI committee directly with the provider and, if necessary, through referral to the appropriate state level committee.

B. Quality Improvement (QI) Indicators

A set of QI Indicators has been developed for use in monitoring hospital status and appropriateness of destination. The Region 1 ~~C~~QI Committee will monitor these indicators. Any problems and/or trends through review of the indicators will be addressed by the ~~C~~QI committee directly with the provider and, if necessary, through referral to the appropriate state level committee.

III. ALS INTERCEPT (Ground)

A. Purpose: Appropriate utilization of ground ambulance resources by Region 1 providers.

This differs from other mutual aid requests that may occur during a mass casualty incident or other catastrophe. For the purposes of this protocol, an ALS Intercept occurs when a BLS unit requests assistance for an emergent patient. This support is to be rendered if the ALS unit is available and will not put the ALS response area at risk.

B. Conditions of use

BLS units should request ALS units for the purposes of:

1. Airway and respiratory interventions
2. Circulatory Support
3. Other life-sustaining interventions beyond the scope and practice of BLS crewmembers.

BLS units should not request support from ALS units for the purposes of non-emergency transports of the trauma patients, as this will tax resources of supporting agencies. As such, it is only when a BLS unit is transporting Priority 1 and 2 patients should an ALS intercept be considered.

Additionally, the BLS unit should consider location, time constraints, and distance when considering a ground or air unit for support and transportation.

ALS agency or ALS units that can provide ALS intercepts should support requests for intercepts and assistance in the following circumstances:

1. Crew is available for response
2. Adequate time is received for the request to meet the BLS crew before arrival at a receiving facility.
3. Any safety concerns such as hazardous material, violence, weather, and traffic are addressed or within acceptable margins.

IV. HELICOPTER UTILIZATION PROTOCOL

A. Purpose

Appropriate utilization of air ambulance resources by Region 1 providers.

B. "No Fly" Conditions:

Helicopter utilization is seldom indicated for patients without a chance for survival or without serious injury. The following are other situations in which an air ambulance should not be used:

a. Patients at a location where time and distance constraints make air transport to the closest appropriate medical facility more time consuming should be transported by ground. This is generally within 45 minutes of the destination facility.

b. Priority 3 patients should be transported by ground ambulance.

c. Cardiac arrest without return of spontaneous circulation in the field.

C. "Fly" Conditions:

1. The following are conditions that warrant the use of an air ambulance:

   a. Priority 1 trauma patients that are being transported to a facility in which time and distance constraints make air transport more timely, generally for distances with a transport time greater than 45 minutes by ground ambulance.

   b. Priority 2 trauma patients that are being transported to a facility with a transport time greater than 45 minutes by ground ambulance, based on local resource availability.

2. The following are conditions that warrant the use of an air ambulance even when the patient is within a 45 minutes of a medical facility:

   a. The closest facility is not appropriate for the patients' injury and the appropriate facility is at a distance in which time and distance constraints justify air transport.

   b. There are hazardous or impassable road conditions resulting in significant delays for ground transportation.

   c. There are multiple patients of a serious nature requiring rapid transport, overwhelming available ground units.

   d. Based on information available, the lead rescuer determines a lengthy rescue is required and transportation by ground would extend and delay definitive care.

D. The **closest available** medical helicopter will be utilized to improve survival of all patients being transported to a definitive care facility.

E. After the responders have initially treated the patient using standard protocol and the patient is ready for transport, the responders should proceed to the closest pre-existing landing area (PELA site) or to the nearest treating facility if the patients' condition warrants.

F. Early Activation / Standby:

When a dispatch center or ground ambulance service receives a call that meets the following criteria, it is recommended that the air ambulance be "early activated" or placed on ground standby:

1. Significant mechanism of injury as defined in the Trauma Triage Algorithm
2. Multiple patients
3. "Gut Feeling" from the responding crew

**** NOTE: If a Non-EMS/First Responder or bystander activates an air service, the air service will communicate with local EMS to avoid multiple responses to the incident. ****

G. Landing Zone Parameters:
1. Free of wires, trees, signs, poles, vehicles, and people;
2. Landing zone is flat, smooth, and clear of debris;
3. The landing zone should be at least 100 x 100 feet square in size;
4. The landing zone should be well defined at night without lights pointed towards the helicopter;
5. The area should be secured and free of all loose debris as well as clear of all unauthorized personnel;
6. The helicopter should be approached with the crew only and care should be taken to avoid the tail rotor;
7. The landing zone should remain clear and secure for at least one minute after departure for safety reasons.

H. Training:
Landing zone training should be accomplished by all ground ambulance services on an annual basis. Each individual ground ambulance service can contact an air ambulance service for this training.

I. EMTALA:
There are concerns regarding air utilization and rendezvous with a local ground transport at a helipad upon a medical facilities property. This is addressed in Appendix C.

V. DIVERSION

Guidelines to determine the possible need for total Emergency Department divert are: The Emergency Department cannot handle additional emergencies based on the lack of professional personnel.

1. Maximum capacity (beds) of the Emergency Department has been met.
2. Maximum capability (staff) of the Emergency Department has been met.

Notification of Emergency Department diversion status:

1. Each hospital will notify the MERC or his/her designee of the diversion status and a written record shall be maintained documenting the date, time started, and time ended of each interval of divert status.

2. Each hospital shall notify each entity providing emergency medical services, such as ambulance services and hospitals in the catchment's area of the divert status.

3. The EMResource™ will be updated to show current information.

Compliance:

1. If a hospital goes on Emergency Department divert, then the MERC or his/her designee will re-evaluate every 2 hours for continuation of diversion.
2. The MERC or his/her designee has the authority at any time to deny or discontinue Emergency Department divert based on the needs of the community.
3. The MERC or his/her designee also has the authority to place ambulance services on a rotating basis to avoid over-saturation of any one given facility.
4. Update of the EMResource™ will be made accordingly.

INTER-FACILITY TRANSFER PROTOCOLS

I. TRAUMA CENTER PROGRAM

Each hospital shall have a designated Trauma Team that is appropriate for that facilities level of care. It is important to incorporate all facilities in trauma planning and implementation, as well as, in the planning of transfer protocols.

Level III Trauma Center:

In general the Level III Trauma Center is expected to provide initial resuscitation of the trauma patient and immediate operative intervention to control hemorrhage and to assure maximal stabilization prior to transfer to a higher level of care institution. In many instances, patients will remain in the Level III trauma center unless the medical needs of the patient require secondary transfer. The decision to transfer will rest with the physician attending the trauma patient and all Level III centers will work collaboratively with other trauma facilities to develop transfer protocols and a well-defined transfer sequence.

Level IV Trauma Center:

In general the Level IV Trauma Center is a licensed, small, rural facility with a commitment to the resuscitation of the trauma patient and written transfer protocols in place to assure those patients needing a higher level of care are transferred appropriately. These facilities may be staffed by a Physician, or licensed independent practitioner, RN, LPN, Paramedic or Intermediate EMT. The major trauma patient in this facility will be stabilized and transported to the most appropriate facility for the patients on-going care needs.

Trauma Program:

Each hospital shall provide the level of Trauma Services for which the facility is licensed in accordance with the Hospital Standards of Oklahoma Administrative Code 310:667. It is important to incorporate all facilities in trauma planning and implementation, as well as, in the planning of the transfer protocol.

There must be a commitment letter from the Hospital Board and the Medical Staff on behalf of the entire facility, which states the facility's commitment to compliance with the Oklahoma Trauma Care Regulations. A trauma program must be established and recognized by each organization and evidenced by:

1. Hospital Board and Medical Staff commitment to trauma care.
2. Written policies and procedures for the care of the trauma patient.
3. A defined Trauma Team with written roles and responsibilities.
4. Appointed Trauma Medical Director with a written job description.
5. A written Trauma Performance Improvement plan.
6. Appointed Trauma Program Manager (coordinator) with a written job description.
7. Documentation of the trauma center representative's attendance at the Regional Trauma Advisory Boards meetings.

II. TRAUMA TEAM

The team approach is optimal in the care of the injured patient. The trauma center must have a written policy for notification and mobilization of an organized trauma team (in a Level III facility) or to the extent that one is available (Level IV facility). The Trauma Team may vary in size and composition when responding to trauma activation. The physician leader or the mid-level practitioner on the trauma team should have ATLS or possess equivalent training for care of the trauma patient and is responsible for directing all phases of the resuscitation.

Suggested composition of the trauma team includes:

Level III:

a. ED Physicians
b. Physician Specialists
c. Laboratory Technicians
d. Nursing
e. Auxiliary Support Staff

Level IV:

a. Physician or Mid Level Practitioner
b. Nursing
c. Laboratory Technicians
d. Auxiliary Staff

Compliance with the above will be evidenced by:

There will be written resuscitation protocols that adhere to the principles of ATLS guidelines, and a written trauma team criteria activation policy. This policy should include physiologic, anatomical, and mechanism of injury protocols in accordance with the Oklahoma Trauma Triage Algorithms and protocols.

Medical Director:

The Trauma Center should have a physician director for the trauma program. The physician should be responsible for working with all members of the trauma team, and overseeing the implementation of a trauma specific performance improvement plan for the entire facility. Through this process, he/she should have the overall responsibility for the quality of trauma care rendered at the facility. The director should assist in the development of standards of care and assure appropriate policies and procedures are in place for the safe resuscitation and transfer of trauma patients. The physician director should have ATLS or possess equivalent training for care of the trauma patient

Trauma Program Manager (Coordinator):

All Level III trauma centers must have a Registered Nurse working in the role of the Trauma Program Manager (TPM). In conjunction with the Medical Director, the TPM is responsible for organization of the program and all necessary systems for the multidisciplinary approach throughout the continuum of trauma care. He/she is responsible for working with the trauma team to assure optimal care and will liaison with local EMS personnel, the RTAB, and other trauma centers.

The TPM will also develop a methodology for which activation of the trauma team is accomplished in their facility. The activation may be either full or partial depending upon the severity of the trauma patients' injuries.

III. HOSPITAL TRIAGE AND TRANSFER PLAN:

A well designed trauma program within the hospital is crucial to the success for providing optimal care to the trauma patients in Region 1. A written commitment on behalf of the entire facility devoted to the organization of trauma care is vital. Therefore, all hospitals in the region will establish criteria for the activation of their respective trauma programs and these criteria will be clearly defined in each institutions trauma policy. The following are intended as guidelines only for each hospitals policy as each and every hospital is unique in the way it serves its stakeholders.

A. LEVEL III TRAUMA CENTER

A team approach is optimal in the care of the trauma patient. As noted above, the trauma team should consist of those individuals that can expedite care for the trauma patient. In a Level III facility this should include:

i. Emergency Physician(s)
ii. Emergency Room Nurses
iii. Laboratory
iv. Radiology
v. Respiratory Therapy

The Level III trauma center must have an Emergency Department (ER) staffed so that trauma patients are assured immediate and appropriate initial care. An ER physician deemed competent in the care of the trauma patient shall be available 24 hours/day. This ER physician must be in-house 24 hours/day, immediately available at all times, and capable of evaluating trauma patients and provide initial resuscitation. The ER physician will provide team leadership and care for the trauma patient until the surgeon or other specialist arrives to take over care. The ER must have established standards and procedures to ensure immediate and appropriate care for the adult as well as the pediatric trauma patient. The medical director of the ER must participate in the trauma PI process.

The Level III trauma center must also have published on-call schedules and have the following medical specialties immediately available 24 hours/day to the injured patient:

i. General Surgery
ii. Anesthesia
iii. Other medical specialties that may be available in the local area to assist with care of the trauma patient.

A surgical team must be on-call with a well-defined mechanism for notification to expedite transfer to the operating room if the patient's condition warrants.

Clinical support services such as Respiratory Therapy and Radiology technicians shall be available 24 hours/day to meet the immediate needs of the trauma patient. Written policies should exist delineating the prioritization/availability of the CT scanner for trauma patients. The use of tele-radiology is an acceptable practice in the Level III facility.

Clinical laboratory services shall have the following services available in-house 24 hours per day:

i. Blood typing and cross matching capabilities
ii. Access to sufficient quantities of blood and blood products
iii. Microbiology
iv. Blood gas and pH determination
v. Alcohol and drug screening
vi. Coagulation studies.

All Level III trauma centers should have the following:

i. Written transfer agreements with other providers as a transferring facility
ii. Available Helipad.

B. LEVEL IV TRAUMA CENTER

The team approach is optimal in the care of trauma patients. The Level IV trauma center must have a written policy for notification and mobilization of an organized trauma team to the extent that one is available. The team may vary in size and composition depending on the logistics of the facility. The physician leader or mid-level practitioner on the trauma team is responsible for directing all phases of the resuscitation. Suggested composition of the trauma team includes, if available:

i. Physician or Licensed Mid-level practitioner
ii. Emergency Room Nurse
iii. Laboratory
iv. Radiology
v. Ancillary personnel as needed

The ER of the Level IV trauma center should be staffed so trauma patients are assured immediate and appropriate initial care. A system must be developed and in place to assure early notification of the on-call practitioner. Adequate number of nurses must be immediately available 24 hours/day to ensure adequate care of the trauma patient.

The Level IV trauma center should have the following clinical services available for consultation via a communication system on a 24-hour basis:

i. General surgery
ii. Neurology
iii. Neurosurgery
iv. Orthopedics

The Level IV facility must have written transfer agreements with other trauma facilities in the region. A policy must be in place to facilitate and expedite the transfer sequence to assure the most appropriate care is rendered to the patient. Agreements should be in place so that ALL facilities will work together to implement the Trauma Transfer Guidelines.

IV. CRITERIA FOR ACTIVATION OF THE TRAUMA TEAM

In either a Level III or Level IV facility, immediate activation of the trauma system (FULL ACTIVATION) should occur when you have any of the following:

a. Glasgow Coma Scale (GCS) < 10
b. Systolic blood pressure < 90 mmHg (adult)
c. Respiratory rate < 10 or > 30/min
d. Penetrating injury to the head, neck, torso, or extremities above the elbows or knees
e. Flail chest
f. Two or more proximal long bone fractures
g. Pelvic fracture
h. Limb paralysis
i. Amputation proximal to the wrist or ankle
j. Body surface burns > 5% (second or third degree)
k. Burns associate with other traumatic or inhalation injury
l. Trauma transfer patient that is intubated or receiving blood
m. Children under 12 with any of the following criteria
n. Ejection from vehicle
o. Death of same passenger compartment
p. Extrication time greater than 20 minutes
q. Rollover MVC
r. High-speed auto crash greater than 40 mph
s. Auto deformity greater than 20 inches of external damage or intrusion into passenger compartment greater than 12 inches
t. Pedestrian thrown or run over
u. Motorcycle crash greater than 20 mph or separation of rider from the bike.

In a Level III or Level IV facility, PARTIAL ACTIVATION of the trauma team should occur when a patient presents to the ER with a Priority II or Priority III injury. After triage by the appropriate personnel the patient should be treated appropriately for the injury and if necessary full activation of the team may occur.

V. INTER-FACILITY TRANSFERS

In an effort to optimize patient care and deliver the trauma patient to most appropriate destination, rapid assessment of the patient is imperative. When a trauma patient arrives at a destination hospital the trauma team should be activated and the patient will have an immediate medical screening completed. Depending upon the screening and the needs of the patient any of
the following may occur:

1. The patient will be stabilized and then transferred to the most appropriate facility (Priority I or Priority II trauma that is time-sensitive), if appropriate staff and resources are available, stabilization may require surgical intervention, all Priority I patients that are admitted at a level III or IV hospital will have automatic CQI by the RTAB,
2. The patient will be stabilized and then admitted to that facility (Priority II that is not time-sensitive or Priority III),
3. The patient will be stabilized and transferred to their facility of choice (Priority II that is not (time-sensitive), or
4. The Priority III trauma patient will be treated at the closest acute care hospital or the hospital of patient's choice. The patient will be treated and discharged to home with appropriate instruction for their injuries (Priority III trauma).

It is recommended that the transfer of Priority II and Priority III trauma patients follow the same routing as the Pre-Hospital Destination Plan. This is an effort to provide optimal care in the most appropriate amount of time for the trauma patient. As always, the patient's choice of facility will be considered when the injuries are not of a time-sensitive matter.

In accordance with the ATLS guidelines of the American College of Surgeons, "Once the need to transfer is recognized, arrangements should be expedited and not delayed for diagnostic procedures that do not change the immediate plan of care for the patient."

VI. PROCEDURE FOR SELECTION OF HOSPITAL DESTINATION

It is recognized that some patients have needs that can only be met at specific destination hospitals. Thus, a trauma patient will often benefit from transfer directly to an appropriate hospital with the capabilities and capacity to provide definitive trauma care. This care may not necessarily be at the closest or patient preferred facility and this must be taken into account when treating the patient.

Rapid pre-hospital recognition and appropriate triage of trauma patients using the Oklahoma Model Trauma Triage and Transport Guidelines is essential in determining the appropriate selection of Priority I, II, and III trauma patient hospital destination (see appendix B of the Pre-Hospital Trauma Destination Plan).

VII. PROCEDURE FOR MONITORING HOSPITAL STATUS AND CAPABILITY

A. EMResource™

The MERC coordinator will generate reports from the EMResource™ for use in monitoring hospital status related to destination. These reports will be provided periodically to OSDH and made available to the Region 1 CQI Committee. Any problems and/or trends identified through review of this data will be addressed by the CQI committee directly with the provider and if necessary through referral to the appropriate state level committee.

B. QI Indicators

A set of QI Indicators has been developed for use in monitoring hospital status and appropriateness of destination. The Region 1 CQI Committee will monitor these indicators. Any problems and/or trends through review of the indicators will be addressed by the CQI committee directly with the provider and if necessary through referral to the appropriate state level committee.

VIII. HELICOPTER UTILIZATION PROTOCOL

A. Purpose

Appropriate utilization of air ambulance resources by Region 1 providers.

B. "No Fly" Conditions:

Helicopter utilization is seldom indicated for patients without a chance for survival or without serious injury. The following are other situations in which an air ambulance should not be used:

i. Patients at a location where time and distance constraints make air transport to the closest appropriate medical facility more time consuming should be transported by ground. This is generally within 45 minutes of the destination facility.

ii. Priority 3 patients should be transported by ground ambulance.

iii. Cardiac arrest without return of spontaneous circulation in the field.

C. "Fly" Conditions:

The following are conditions that warrant the use of an air ambulance:

i. Priority 1 trauma patients that are being transported to a facility in which time and distance constraints make air transport more timely, generally for distances with a transport time greater than 30 minutes by ground ambulance.

ii. Priority 2 trauma patients that are being transported to a facility with a transport time greater than 45 minutes by ground ambulance, based on local resource availability.

D. The following are conditions that warrant the use of an air ambulance even when the patient is within a 45 minutes of a medical facility:

i. The closest facility is not appropriate for the patients' injury and the appropriate facility is at a distance in which time and distance constraints justify air transport.

ii. There are hazardous or impassable road conditions resulting in significant delays for ground transportation.

iii. There are multiple patients of a serious nature requiring rapid transport, overwhelming available ground units.

iv. Based on information available, the lead rescuer determines a lengthy rescue is required and transportation by ground would extend and delay definitive care.

E. The **closest available** medical aircraft should be utilized to improve survival of all patients being transported to a definitive care facility.

IX. DIVERSION

A hospital on divert can maintain that status for a **maximum** of 2 hours and then the situation should be re-evaluated. If it a hospital is continued on divert status for an additional 2 hour time period the Medical Emergency Response Center (MERC) coordinator in conjunction with the Regional Medical Director will assess the situation and determine if it is appropriate to continue on divert status and activate the MERC if deemed necessary.

X. QUALITY IMPROVEMENT

Each facility in the region shall conduct Quality Improvement (QI) activities with regard to their trauma program. Under the auspices of the Medical Director and the Trauma Program Manager each facility will conduct QI activities in accordance with the approved regional QI process.

EMResource™ Usage

Introduction

For several years EMResource™ has served as a tool for hospitals to display their diversion status in Oklahoma City. Although diversion is still a feature on the EMResource™ we are going to ask that you look at EMResource™ as a communication tool capable of demonstrating resource availability, health alerts and disaster notifications. EMResource™ is now a vital tool that can better enable communication in both routine daily circumstances and during disasters. EMResource's™ ability to serve this function is limited by the use of the system by providers.

Usage Requirements

Within Region 1 all providers are required of to comply with the guidelines established by the State *EMResource™ Joint Advisory Committee* and/or the Oklahoma State Department of Health in the *EMResource™ Manual.* In the event that the *EMResource™ Manual* is updated, the revisions to the *EMResource™ Manual* override the requirements in this document.

Specific usage requirements include but are not limited to:

Contact Information

Each provider is responsible to maintain accurate contact information on the EMResource™
Hospitals shall post the telephone number they wish other providers to use when calling patient referrals or reports in this area of EMResource™

Provider Status

Each hospital is required to maintain current status on the EMResource™ so that their capabilities or capacity can be readily accessed by other hospitals, EMS agencies and the Trauma Transfer and Referral Center.

Critical Concept: Emergency Departments and Hospitals are considered open unless posted otherwise on EMResource™

Emergency Department Status

This is the specific status of the Emergency Department and is the only status appropriate for diversion of pre-hospital transports. The current ED Status categories are: Open, Total ED Divert, Trauma Divert, CT Divert, ED select, Forced Open, and Closed.
If a facility has not updated their status on the EMResource™ their attempt to divert may be overridden by the pre-hospital provider or the Trauma Transfer and Referral Center.

Hospital Status

This status is specific to the inpatient capability/capacity and is only appropriate for diverting inter- facility transfer patients. The current Hospital Status categories are: Open, Caution, and Closed.If a facility has not updated their status on the EMResource™ their attempt to divert may be overridden by the Trauma Transfer and Referral Center.
Critical Concept: Emergency Departments and Hospitals are considered open unless posted otherwise on EMResource™ .

Provider Resource Availability

This status is for displaying hospital specialty coverage on a real time basis. A customized list of eight specialties has been developed to meet the needs of Oklahoma. The status categories for these coverage areas are:
Yes – Coverage is currently available.
No – Coverage is not currently available.
N/A – This service is not offered at this facility.

Air Ambulance Status

This status is for displaying the current status/availability of Air Ambulances. The status categories for this status are:
Available – the areomedical resource is currently ready and able to respond to emergency calls.
Call for Status – current conditions necessitate that providers in need of aeromedical transport call to determine resource availability because:
The aeromedical resource may already be dispatched to a call or be on standby.
Local weather conditions may temporarily impact the ability of this aeromedical resource to respond.
This aeromedical resource may be temporarily unavailable due to routine service or fueling.
Not Available – the aeromedical resource is currently unable to respond in a timely manner.
In region 1 the air ambulances are required to keep their most accurate status current. They may not leave their status as 'call for status' at all times.

System Alerts

Providers in Region 1 are required to maintain EMResource™ in a manner that enables them to receive alerts in a timely manner. It is suggested that all providers maintain a computer specifically for EMResource™ use 24 hours a day.
If a provider is unable to maintain a computer with EMResource™ displayed 24 hours a day the provider is expected to work with the regional EMResource™ administrator to arrange the delivery of all System Alerts to the text enabled device of designated staff responsible to share the alert information with other on-duty staff.
Compliance with appropriate usage will be monitored through routine MERC drills.

Data Reporting

Providers in Region 1 are required to participate in reporting data supported by the EMResource™ application. This reporting requirement includes but is not limited to:
Hospital Daily Report of bed capacity and ED volume;
EMS Daily Report of resources and volume;

Monitoring

Appropriate use of EMResource™ will be enforced in the region through the QI process
The CQI committee will routinely review reports from the Trauma Transfer and Referral Center on diversion of patients and compare the patient diversion list with the list of facility diversion hours generated from the EMResource™.

The CQI committee will review all cases referred to them for inappropriate use of EMResource™ in any of the listed categories. The regional and/or state EMResource™ administrator will perform periodic drills using EMResource™ and monitor appropriateness of provider response. Reports of these drills will be provided to the RTAB CQI committee who will address problems/trends directly with the provider and if necessary through referral to the appropriate state level committee. The CQI committee will work with these providers to come into compliance with EMResource™ usage requirements. If these attempts fail the cases will be referred to the State CQI committee for further action.

Summary

EMResource™ is a vital communication tool that provides the capability of real time communication among trauma system participants. This ability is limited by provider use of the system. Region 1 supports use of this tool through adoption of these requirements.

Appendix A

EMS Provider Descriptions

DESCRIPTION OF EMS SERVICES

EMS Providers within Region 1 include: 2008 Information. For current information go to: http://www.ok.gov/health/Protective_Health/Emergency_Medical_Services/

Alfalfa County

Alfalfa County EMS is a Basic Service with one (1)~~1~~ Emergency Medical~~First~~ Responder~~s~~, 1~~8~~3 ~~Basic~~ EMTs, nine (~~and~~ 9)~~1~~ ~~-~~ Advanced/Intermediate EMTs, and two (2) Paramedics.

~~*Helena EMS is a Basic Service with 2 First Responders, 6 Basic EMTs, 6 Intermediate EMTs and 1 Paramedic.*~~

Beaver County

Beaver County EMS is a Basic Service with three (3)~~6~~ Emergency Medical~~First~~ Responders, ~~and~~ 11~~12~~ ~~Basic~~ EMTs, and three (3) Advanced/Intermediate EMTs.

Beckham County

Elk City Fire Department EMS is a Basic Service with nine (9) Emergency Medical Responders, 18 EMTs, four (4) ~~1~~ Advanced/Intermediate EMTs, and 11~~4~~ Paramedics.

Erick Ambulance ~~Service~~ is a Basic Service with four (4)~~11~~ Emergency Medical~~First~~ Responders, five (5)~~6 Basic~~ EMTs, one (1) Advanced/Intermediate EMT, and one (1)~~2~~ Paramedic~~s~~.

Sinor EMS (Sayre) is a~~n~~ Basic~~Intermediate~~ Service with one (1) Emergency Medical Responder, one (~~2~~1) ~~Basic~~ EMT~~s~~, and one (1) ~~-~~Advanced/Intermediate EMT ~~and 1 Paramedic~~.

Blaine County

Canton-Longdale EMS is a Basic Service with six (6)~~7~~ ~~Basic~~ EMTs.

Okeene Ambulance is a Basic Service with two (2)~~3~~ Emergency Medical~~First~~ Responders, six (6) ~~5 Basic~~ EMTs, two (2)~~-~~ Advanced/Intermediate EMTs, and one (1) Paramedic.

~~*Parkview Ambulance (Geary EMS) is a Basic Service with 8 Basic EMTs and 1 Paramedic.*~~

Watonga EMS is a Basic Service with one (1)~~4~~ Emergency Medical ~~First~~ Responder~~s~~, 10~~5~~ ~~Basic~~ EMTs, one (1)~~3~~ Advanced/Intermediate EMT~~s~~, and three (3)~~4~~ Paramedics.

Cimarron County

Cimarron County EMS is a Basic Service with two (2) Emergency Medical Responders, four (4)~~8~~ ~~Basic~~ EMTs, two (2)~~1~~ Advanced/Intermediate EMTs, ~~-~~and one (~~3~~ 1) Paramedic~~s., and 1 First Responder.~~

Keyes EMS is a Basic Service with six (6)~~8~~ ~~Basic~~ EMTs, two (2) Advanced/Intermediate EMTs, and two (2) Paramedics.

Custer County

Butler EMS is a Basic Service with six (6) ~~Basic~~ EMTs ~~and 1 Intermediate EMT~~.

Cheyenne-Arapaho Tribes EMS is an Intermediate Service with four (4)~~1~~ Emergency Medical~~First~~ Responders, one (1) EMT~~-~~, four (4) Advanced/~~6~~ Intermediate EMTs, and seven (7) Paramedics.

Lifeguard Ambulance Service Weatherford is an Advanced Service with eight (8) EMTs, two (2) Advanced/Intermediate EMTs, and eight (8) Paramedics.

Sinor EMS Clinton is a~~n Intermediate~~ Basic Service with four (4)~~2 First~~ Emergency Medical ~~-~~Responders, five (5)~~4~~ ~~Basic~~

EMTs, two (2) Advanced/Intermediate EMTs, and six (6) Paramedics.

Sinor EMS Thomas is a Basic Service with one (1) Emergency Medical Responder, two (2) EMTs, and one (1) Advanced/Intermediate EMT.

~~with 8 EMTs, 2 Advanced/Intermediate EMTs, and 8 Paramedics~~

~~*Sinor EMS* (Weatherford) is an Intermediate Service with 5 Basic EMTs and 7 Paramedics.~~

Dewey County

Community Ambulance Service is a Basic Service with nine (9) Emergency Medical~~3 First~~ Responders, eight (8)~~6 Basic~~ EMTs, one (1) Advanced/Intermediate EMT, and one (1) Paramedic.

Leedey Ambulance Service is a Basic Service with three (3)~~4 Basic~~ EMTs, one (1) Advanced/Intermediate EMT, and two (2)~~1~~ Paramedics.

~~*Taloga Ambulance Service* is a Basic Service with 12 First Responders, 8 Basic EMTs and 1 Paramedic.~~

Vici-Camargo EMS is a Basic Service with four (4) Emergency Medical~~5 First~~ Responders and six (~~,~~ 6)~~3 Basic~~ EMTs~~, 1 Intermediate EMT and 3 Paramedics~~.

Ellis County

Ellis County EMS is a Basic Service with one (1) Emergency Medical~~20 First~~ Responder~~,s and~~ eight (8)~~17 Basic~~ EMTs, nine (9) Advanced/Intermediate EMTs, and five (5) Paramedics.

Garfield County

Life EMS is a Paramedic Service with eight (8)~~6 Basic~~ EMTs, five (5) Advanced/~~7~~ Intermediate EMTs, and 12~~4~~ Paramedics~~. and 8 Specialty Care.~~

Miller EMS – Garfield County is a Basic Service with one (1) Emergency Medical Responder and nine (9) EMTs.

Grant County

Medford Ambulance ~~Service~~ is a Basic Service with two (2) Emergency Medical ~~First~~ Responders, four (4)~~6 Basic~~ EMTs, and one (1) Advanced/Intermediate EMT~~ and 2 Paramedics~~.

Miller EMS is a Basic Service with one (1) Emergency Medical Responder, seven (7) EMTs, and six (6) Paramedics.

Pond Creek Fire Department Ambulance is a Basic Service with~~ 13 First Responders, 12~~ seven (7) ~~Basic~~ EMTs~~, 5 Intermediate EMTs~~ and five (~~5~~)~~1~~ Paramedics.

Harper County

Buffalo EMS District is a Basic Service with two (2) Emergency Medical ~~9 First~~ Responders, three (3)~~8 Basic~~ EMTs, and two (2) Advanced/Intermediate EMTs. ~~and 1 Paramedic.~~

Laverne EMS is a Basic Service with six (6) Emergency Medical~~5 First~~ Responders, eight (~~ and~~ 8)~~7 Basic~~ EMTs, and one (1) Advanced/Intermediate EMT.

Kingfisher County

~~*Cashion Fire Department* is a Basic Service with 8 First Responders and 10 Basic EMTs.~~

Kingfisher Ambulance (City of)~~Service~~ is an Intermediate Service with ~~10 Basic EMTs,~~ 16 Advanced/Intermediate EMTs

and four (4)3 Paramedics.
Life EMS of (Hennessey) is a Paramedic Service with six (6) Basic EMTs, seven (7) Advanced/Intermediate EMTs, and 14 Paramedics.
Miller EMS – Kingfisher is a Paramedic Service with six (6) EMTs and six (6) Paramedics.

Major County

Major County EMS is a Basic Service with three (3) Emergency Medical1 First Responders, 4 Basic11 EMTs, eight (8)7 Advanced/Intermediate EMTs, and 12 Paramedics.

Roger Mills County

Roger Mills Ambulance is a Basic Service with 17 First Responders, 104 Basic EMTs, three (53) Advanced/Intermediate EMTs, and five (5)4
Paramedics.

Texas County

Goodwell Ambulance Service is a Basic Service with three (3) Emergency Medical Responders, three (3) 6 Basic EMTs, and two (1 Intermediate EMT and 2) Paramedics.
Guymon Fire Department Ambulance is an Intermediate Service with seven (7) Emergency Medical3 First Responders, eight (14 Basic8) EMTs, 4 Intermediate EMT, and
163 Paramedics.
Hooker Municipal Ambulance is a Basic Service with two (2)4 Emergency MedicalFirst Responders and six (6)7 Basic EMTs.
Texhoma Ambulance Service is a Basic Service with 2 First Responders, 5 Basic EMTs and 2 Intermediate EMTs.

Washita County

Burns Flat Ambulance is a Basic Service with three (3) Emergency FirstMedical Responders, three (8 Basic3) EMTs, two (2)9 Advanced/Intermediate EMTs, and one (1) Paramedic.
Cordell Ambulance is a Basic Service with four (4) Emergency Medical2 First Responders, eight (and 8)6 Basic EMTs, one (1) Advanced EMT, and two (2) Paramedics.
Sentinel City Ambulance is a Basic Service with 2 First Responders and 7 Basic EMTs.

Woods County

Alva Ambulance is a Basic Service with four (4)6 Basic EMTs, six (and 6)1 Advanced/Intermediate EMTs, and one (1) Paramedics.
Freedom Volunteer Fire & Ambulance is a Basic Service with one (1) Emergency Medical Responder, four (4) Basic EMTs, and one (1) Advanced/Intermediate EMT.
Waynoka Ambulance is a Basic Service with three (3)4 Emergency Medical RespondersFirst Responders and five (5) 2

~~Basic~~ EMTs.

Woodward County

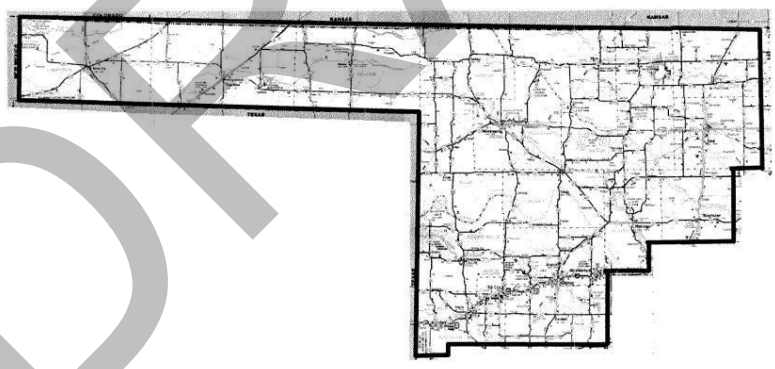
Woodward County EMS is a Basic Service with one (~~2~~1) Emergency Medical~~First~~ Responder~~s~~, ~~6 Basic~~10 EMTs, seven (7) Advanced/~~4~~ Intermediate EMTs, and three (3)~~8~~ Paramedics.

AIR SERVICES

Air Evac Lifeteam Elk City
Air Evac Lifeteam Kingfisher
Air Evac Lifeteam Weatherford
Air Evac Lifeteam Woodward
Air MD, LLC dba: Life Save
Apollo Medflight
Eaglemed - Kansas ~~– Elk City and Woodward~~
~~*OK EagleMed* – Guymon and Stillwater~~
~~*OK Midwest Lifeteam* – Liberal, KS~~

Region 1 Trauma Plan

Developed by the RTAB NW Regional Planning Committee



Plan Approval Dates:
Pre-Hospital: RTAB 07/18/2006, OTSIDAC 08/02/2006, RTAB 11/13/2020, 04/27/2021
Inter-facility: RTAB 03/27/2007, OTSIDAC 08/01/2007
EMResource™: RTAB 05/23/2006, OTSIDAC 08/02/2006
OTSIDAC Revision to Trauma Triage Algorithm Guidelines: 02/10/2010

Northwest Trauma Triage and Destination Regional Trauma Plan

Table of Contents

Plan Approval Dates:
Pre-Hospital: RTAB 07/18/2006, OTSIDAC 08/02/2006, RTAB 11/13/2020, 04/27/2021
Inter-facility: RTAB 03/27/2007, OTSIDAC 08/01/2007
EMResource™: RTAB 05/23/2006, OTSIDAC 08/02/2006
OTSIDAC Revision to Trauma Triage Algorithm Guidelines: 02/10/2010

I. GOALS / PURPOSE

The goals of the regional trauma pre-hospital destination/inter-facility transfer plans are to:

A. Assure trauma patients are stabilized and transported to the most appropriate hospital facility with the available resources and capacity to provide care in a timely fashion.

B. Support the Pre-Hospital/Inter-Facility Trauma Triage and Transport Guidelines to effectively reduce trauma morbidity and mortality.

C. Match a facility's resources with each trauma patient's needs to ensure optimal and cost effective care is achieved.

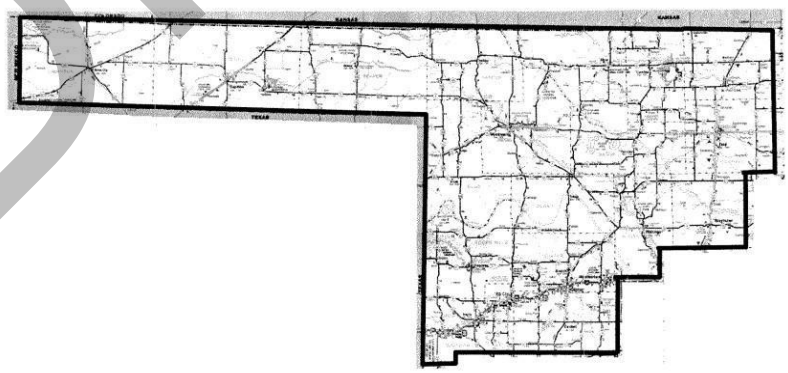
D. This plan will not conflict with any rules and/or regulations that are currently in place, or may be written or changed in the future. In the event new rules and/or regulations are considered, the RTAB should be included in that dialogue prior to implementation.

II. REGION DESCRIPTION

Region 1 consists of the northwest portion of Oklahoma and includes the following counties: Alfalfa, Beaver, Beckham, Blaine, Cimarron, Custer, Dewey, Ellis, Garfield, Grant, Harper, Kingfisher, Major, Roger Mills, Texas, Washita, Woods and Woodward.

Region 1 is the largest region in Oklahoma and encompasses 21,232 square miles with a population of 238,148. Region 1 has common borders with four states: Colorado, Kansas, New Mexico and Texas.

It is serviced by 40 ambulance services, two (2) Level III Trauma Centers, 17 Level IV Trauma Centers, of which 14 are designated Critical Access Hospitals, and three (3) Psychiatric Hospital.



III. TRAUMA PRIORITY CATEGORIZATION

All injured patients must be identified and transported/transferred to the facility that provides the appropriate care based on the clinical needs of the patient. This should be done in a timely fashion with specific attention focused on preserving the highest level of care for major trauma patients. A three-tiered system designed to determine the appropriate hospital destination for all injured patients considers injury severity, severity risk, time and distance from injury to definitive care, and available resources to meet the region's specific needs. This three-tiered system is outlined in Appendix B and it is imperative that all pre-hospital and hospital medical providers use this system and language.

Three trauma triage priorities are used in determining the appropriate destination for patients.

1. **Priority 1 Trauma Patients:**

   These are patients with blunt or penetrating injury causing physiological abnormalities or significant anatomical injuries. These patients have time-sensitive injuries requiring the resources of a Level I, Level II, or designated Level III Trauma Centers with 24/7 in house ED physicians, 24/7 general and orthopedic surgeon availability. These patients should be directly transported to a Level I, Level II, or designated Level III facility for treatment, but may be stabilized at any Level III or Level IV facility, if needed, depending on location of occurrence and time and distance to the higher-level trauma center. If needed, these patients may receive definitive care in a Level III facility if the appropriate services and resources are available. (e.g. orthopedic, vascular, or maxillofacial surgery).

2. **Priority 2 Trauma Patients:**

   These patients are those that have potentially time-sensitive injuries because of a high-energy event or single system injury. These patients do not have physiological abnormalities or significant anatomical injuries and can be transported to a trauma facility with the resources to perform a complete trauma evaluation and medical screening and can care for their injuries.

3. **Priority 3 Trauma Patients:**

   These patients are without physiological instability, altered mentation, neurological deficit, or significant anatomical or single system injury that have been involved in a low energy event. These patients should be treated at the nearest treating facility or the patient's hospital of choice.

IV. CATEGORIZATION OF HOSPITALS

A. Hospital Providers in Region 1 include: (2020 Information). For the latest information regarding facility capabilities, refer to EMResource™.

1. **Level I:** None

2. **Level II:** None

3. **Level III:**
   a. INTEGRIS Bass Baptist Health Center (Enid)
   b. St. Mary's Regional Medical Center (Enid)

4. **Level IV:**
   a. AllianceHealth Clinton (Clinton)
   b. AllianceHealth Woodward (Woodward)
   c. Beaver County Memorial Hospital (Beaver)
   d. Cimarron Memorial Hospital (Boise City)
   e. Cordell Memorial Hospital (Cordell)
   f. Fairview Regional Medical Center Authority (Fairview)
   g. Great Plains Regional Medical Center (Elk City)
   h. Harper County Community Hospital (Buffalo)
   i. Memorial Hospital of Texas County Authority (Guymon)
   j. Mercy Hospital Kingfisher (Kingfisher)
   k. Mercy Hospital Watonga (Watonga)
   l. Newman Memorial Hospital, Inc. (Shattuck)
   m. Okeene Municipal Hospital (Okeene)
   n. Roger Mills Memorial Hospital (Cheyenne)
   o. Seiling Municipal Hospital (Seiling)
   p. Share Medical Center (Alva)
   q. Weatherford Regional Hospital, Inc. of Weatherford, Oklahoma (Weatherford)

6. **Psychiatric Hospitals:**
   a. Northwest Center for Behavioral Health (Ft. Supply)
   b. INTEGRIS Meadow Lake – pediatric & adolescent (Enid)
   c. St. Mary's Resilience Behavioral Health (Enid)

7. **Other Facilities:**
   a. Clinton Indian Health Center (Clinton)
   b. Oklahoma Veterans Center (Clinton)

B. Out of Region Hospital Resources:

1. **Level I:**
   a. Ascension Via Christi St. Francis, Wichita, KS
   b. OU Medicine, Oklahoma City, OK
   c. University Medical Center Health System, Lubbock, TX
   d. Wesley Medical Center, Wichita, KS

2. **Level II:**
   a. St. John Medical Center, Inc., Tulsa, OK
   b. St. Francis Hospital, Inc., Tulsa, OK

3. **Level III:**
   a. Northwest Texas Healthcare System, Amarillo, TX

V. DESCRIPTION OF EMS SERVICES

Region 1 is a very large area encompassing 18 counties (Population 238,148) and covering approximately 21,232 square miles that is serviced by 40 ambulance services and seven (7) air transport services.

A. Ground Ambulance Services: (2020 Information). For current information, refer to the EMS Registry available at:
http://www.ok.gov/health/Protective_Health/Emergency_Medical_Services/

1. Alfalfa County:
   One (1) Basic ambulance service (Alfalfa County EMS) covers Alfalfa County with four (4) routine units covering the 866 square miles of the county.
2. Beaver County:
   One (1) Basic ambulance service (Beaver County EMS) covers Beaver County with two (2) routine units covering the 1,815 square miles of the county.
3. Beckham County:
   Three (3) Basic ambulance services (Elk City Fire Department EMS, Erick Ambulance, and Sinor EMS) cover Beckham County with five (5) routine units that cover the 902 square miles of the county.
4. Blaine County:
   Blaine County is covered by three (3) Basic ambulance services (Canton-Longdale EMS, Okeene Ambulance, and Watonga EMS) with four (4) routine units that cover the 928 square miles of the county.
5. Cimarron County:
   Cimarron County is covered by two (2) Basic ambulance services (Cimarron County EMS and Keyes EMS) with three (3) routine units that cover the 1,835 square miles of the

county.

6. Custer County:
   Custer County is covered by three (3) Basic ambulance services (Butler EMS, Sinor EMS Clinton, and Sinor EMS Thomas), one (1) Intermediate ambulance service (Cheyenne-Arapaho Tribes EMS), and one (1) Advanced ambulance service (Lifeguard Ambulance Service Weatherford) with nine (9) routine units that cover the 989 square miles of the county.
7. Dewey County:
   Dewey County is covered by three (3) Basic services (Community Ambulance Service, Leedey Ambulance Service, and Vici Camargo EMS) with six (6) routine units that cover the 999 square miles of the county.
8. Ellis County:
   Ellis County is covered by one (1) Basic ambulance service (Ellis County EMS) with two (2) routine units that cover the 1,232 square miles of the county.
9. Garfield County:
   Garfield County is covered by one (1) Paramedic ambulance service (Life EMS) and one (1) Basic ambulance service (Miller EMS – Garfield County) with five (5) routine units that cover the 1,058 square miles of the county.
10. Grant County:
    Grant County is covered by three (3) Basic ambulance services (Medford Ambulance, Miller EMS, and Pond Creek Fire Department Ambulance) with three (3) routine units that cover the 1,001 square miles of the county.
11. Harper County:
    Harper County is covered by two (2) Basic ambulance services (Buffalo EMS District and Laverne EMS) with two (2) routine units that cover the 1,039 square miles of the county.
12. Kingfisher County:
    Kingfisher County is covered by two (2) Paramedic ambulance services (Life EMS and Miller EMS) and one (1) Intermediate ambulance service (Kingfisher Ambulance (City of)) with four (4) routine units that cover the 898 square miles of the county.
13. Major County:
    Major County is covered by one (1) Basic Ambulance (Major County EMS) service with two (2) routine units that cover the 955 square miles of the county.
14. Roger Mills County:
    Roger Mills County is covered by one (1) Basic ambulance service (Roger Mills Ambulance) with one (1) routine unit that covers the 1,141 square miles of the county.
15. Texas County:
    Texas County is covered by one (1) Intermediate ambulance service (Guymon Fire Department Ambulance) and two (2) Basic ambulance services (Goodwell Ambulance and Hooker Municipal Ambulance) with seven (7) routine units that

cover the 2,041 square miles of the county.

16. Washita County:
Washita County is covered by two (2) Basic ambulance services (Burns Flat Ambulance and Cordell Ambulance) with two (2) routine units that cover the 1,003 square miles of the county.
17. Woods County:
Woods County is covered by three (3) Basic ambulance services (Alva Ambulance, Freedom Volunteer Fire & Ambulance, and Waynoka Ambulance) with four (4) routine units that cover the 1,287 square miles of the county.
18. Woodward County:
Woodward County is covered by one (1) Basic ambulance service (Woodward County EMS) with six (6) routine units that cover the 1,242 square miles of the county.

B. Air Ambulance Services

1. Air Evac Lifeteam, based in Elk City, OK (AE21); Kingfisher, OK (AE131); Weatherford, OK (AE122); and Woodward, OK (AE70), provides rotor wing service to Region 1.

2. Apollo MedFlight, based in Amarillo, TX, provides fixed wing service to Region 1.

3. Air MD LLC dba: Life Save, based in Liberal, KS, provides fixed wing service to Region 1.

4. EagleMed – Kansas, based in Wichita, KS, provides fixed wing service to Region 1.

VI. TRAUMA TRANSFER AND REFERRAL CENTER (TReC)

The Trauma Transfer and Referral Centers were created by statute (Senate Bill 1554, 2004) and they were implemented on July 1, 2005. The purpose of these centers is to ensure that trauma patients transported or transferred to facilities in Region 7 or 8 are transported to the facility that provides the appropriate level of care based on the clinical needs of the patient. This should be done in a timely fashion with specific attention focused on preserving the highest level of care for major trauma patients. On April 1, 2010, TReC was consolidated to a single call center in Region 7. TReC is located in the Tulsa 911 center and serves the entire State of Oklahoma.

Statewide training sessions were held throughout June 2005 to orient all providers to the use of these centers.

Ambulances from Region 1 are required to call into the center prior to entering Regions 7 or 8 in order to ensure appropriate patient destination. Likewise, hospitals may call these centers for assistance in identifying the appropriate destination for their trauma patients.

These centers will provide information on resource utilization to the OSDH that will be available to the Region 1 RTAB for Quality Improvement purposes.

PRE-HOSPITAL DESTINATION PROTOCOLS

I. PROCEDURE FOR SELECTION OF HOSPITAL DESTINATION

It is recognized that some patients have needs that can only be met at specific destination hospitals. Thus, a trauma patient will often benefit from transfer directly to an appropriate hospital with the capability and capacity to provide definitive trauma care. This care may not necessarily be at the closest or patient preferred facility, and this must be taken into account when treating the patient.

Rapid pre-hospital recognition and appropriate triage of trauma patients using the Oklahoma Trauma Triage and Transport Guidelines is essential in determining the appropriate hospital destination for Priority 1, 2, and 3 trauma patients (see appendix B).

These Destinations are:

ALL PATIENTS:

1. All trauma patients should be rapidly transported to the closest medical facility with the capability and capacity to provide the appropriate level of care as indicated by the patient's injury type and severity.

2. Patients with a traumatic arrest or the need to secure an airway should be transported to the closest facility to the traumatic event. Any priority 1 trauma patient who needs immediate life saving treatment or intervention should be transported to the nearest facility for stabilization.

3. Patient preference as well as the time and distance should factor into where definitive care will be considered for most Priority 2 and 3 trauma patients.

GENERAL TRAUMA PATIENTS:

General trauma patients who meet the State of Oklahoma approved trauma criteria should be transported using the following guidelines. General geographic and transportation borders have been used as boundaries for these transportation designations. These boundaries are used as guidelines and it is understood that there are sites in the region that based on time and distance may need to be transported into a different border area.

1. Priority 1 adult and pediatric trauma patients that meet the state approved trauma criteria should be transported to the nearest Level I or II Trauma Center.

    a. OU Medicine will be the appropriate center for the majority of Region 1.

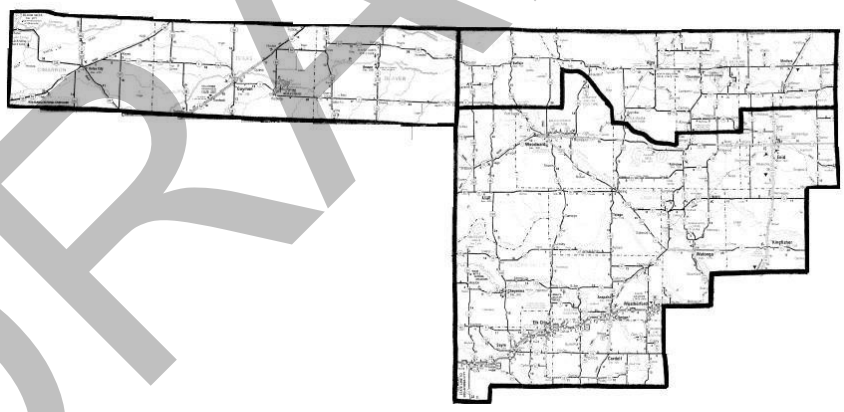
    b. Cimarron, Texas and Beaver counties *may* transport to University Medical Center Health Systems in Lubbock, Ascension Via Christi St. Francis or Wesley Medical Center in Wichita, and OU Medicine in Oklahoma City.

    c. Harper, Woods, Alfalfa and Grant counties *may* transport to Ascension Via Christi St. Francis or Wesley Medical Center in Wichita, Kansas.

    d. The appropriate method of transport for those patients **outside** of an area **45 minutes** from the appropriate center should activate **air transport** as defined in Section IX, as soon as possible to ensure rapid transport to the appropriate facility.

    e. If air transport is unavailable, ground transport and/or ALS intercept can be utilized for transport.

    Region 1 Priority 1 Trauma Patient Destinations:



2. Priority 2 trauma patients that meet the state approved trauma criteria should be transported using the following guidelines:

    a. These patients are those that have potentially time-sensitive injuries because of a high-energy event or single system injury. These patients do not have physiological abnormalities or significant anatomical injuries and can be

transported to a trauma facility with the resources to perform a complete trauma evaluation and medical screening and can care for their injuries. Additionally, Priority 2 patients should be transported to a facility with the capability and capacity to provide definitive care.

b. If air transport is unavailable, ground transport and/or ALS intercept can be utilized for transport. In the event there will be an excessive time delay for transport, the patient may be taken to the closest treating facility for stabilization.

c. All single system Priority 2 Pediatrics being transferred or transported into Region 8 will now go directly to The Children's Hospital at OU Medicine.

3. Priority 3 adult and pediatric trauma patients should be transported to the nearest appropriate treating facility or the facility of patient preference.

NEUROLOGICAL TRAUMA PATIENTS:

1. Priority 1 adult and pediatric neurological trauma patients.

   a. The majority of Priority 1 neurosurgical trauma patient in Region 1 will go to Oklahoma City via use of the TReC.
   b. Cimarron, Texas, and Beaver counties should transport to University Medical Center Health Systems in Lubbock, Texas; Ascension Via Christi St. Francis or Wesley Medical Center in Wichita, Kansas; and OU Medicine in Oklahoma City, Oklahoma.
   c. Harper, Woods, Alfalfa and Grant counties should transport to Ascension Via Christi St. Francis or Wesley Medical Center in Wichita, Kansas.

2. Priority 2 adult trauma patients should be transported to the appropriate facility in Enid or Oklahoma City based on the time/distance factor with preference given to patient preference and the ability to keep the patient within Region 1.

3. All single system Priority 2 Pediatrics being transferred or transported into Region 8 will now go directly to The Children's Hospital at OU Medicine.

4. Priority 3 adult and pediatric trauma patients should be transported to the closest facility for evaluation.

BURN PATIENTS:

1. Combination of burns > 10% or significant burns involving face, airway, hands, feet, or genitalia *without* significant trauma, transport to regional Burn Center. Burns >10% *with* significant trauma, transport to trauma center.

2. Pediatric: Combination of burns > 10% or significant burns involving face, airway, hands, feet, or genitalia *without* significant trauma, transport to Alexander Burn Center at Hillcrest Medical Center or OU Medicine Children's Hospital. Burns >10% *with* significant trauma, transport to trauma center.

II. PROCEDURE FOR MONITORING HOSPITAL STATUS AND CAPABILITY

A. EMResource™

The Medical Emergency Response Center (MERC) Coordinator will generate reports from the EMResource™ for use in monitoring hospital status related to destination. These reports will be provided periodically to OSDH and made available to the Region 1 Quality Improvement (QI) Committee. Any problems and/or trends identified through review of this data will be addressed by the CQI committee directly with the provider and, if necessary, through referral to the appropriate state level committee.

B. Quality Improvement (QI) Indicators

A set of QI Indicators has been developed for use in monitoring hospital status and appropriateness of destination. The Region 1 QI Committee will monitor these indicators. Any problems and/or trends through review of the indicators will be addressed by the QI committee directly with the provider and, if necessary, through referral to the appropriate state level committee.

III. ALS INTERCEPT (Ground)

A. Purpose: Appropriate utilization of ground ambulance resources by Region 1 providers.

This differs from other mutual aid requests that may occur during a mass casualty incident or other catastrophe. For the purposes of this protocol, an ALS Intercept occurs when a BLS unit requests assistance for an emergent patient. This support is to be rendered if the ALS unit is available and will not put the ALS response area at risk.

B. Conditions of use

BLS units should request ALS units for the purposes of:

1. Airway and respiratory interventions
2. Circulatory Support
3. Other life-sustaining interventions beyond the scope and practice of BLS crewmembers.

BLS units should not request support from ALS units for the purposes of non-emergency transports of the trauma patients, as this will tax resources of supporting agencies. As such, it is only when a BLS unit is transporting Priority 1 and 2 patients should an ALS intercept be considered.
Additionally, the BLS unit should consider location, time constraints, and distance when considering a ground or air unit for support and transportation.

ALS agency or ALS units that can provide ALS intercepts should support requests for intercepts and assistance in the following circumstances:

1. Crew is available for response
2. Adequate time is received for the request to meet the BLS crew before arrival at a receiving facility.
3. Any safety concerns such as hazardous material, violence, weather, and traffic are addressed or within acceptable margins.

IV. HELICOPTER UTILIZATION PROTOCOL

A. Purpose

Appropriate utilization of air ambulance resources by Region 1 providers.

B. "No Fly" Conditions:

Helicopter utilization is seldom indicated for patients without a chance for survival or without serious injury. The following are other situations in which an air ambulance should not be used:

a. Patients at a location where time and distance constraints make air transport to the closest appropriate medical facility more time consuming should be transported by ground. This is generally within 45 minutes of the destination facility.

b. Priority 3 patients should be transported by ground ambulance.

c. Cardiac arrest without return of spontaneous circulation in the field.

C. "Fly" Conditions:

1. The following are conditions that warrant the use of an air ambulance:

a. Priority 1 trauma patients that are being transported to a facility in which time and distance constraints make air transport more timely, generally for distances with a transport time greater than 45 minutes by ground ambulance.

b. Priority 2 trauma patients that are being transported to a facility with a transport time greater than 45 minutes by ground ambulance, based on local resource availability.

2. The following are conditions that warrant the use of an air ambulance even when the patient is within a 45 minutes of a medical facility:

a. The closest facility is not appropriate for the patients' injury and the appropriate facility is at a distance in which time and distance constraints justify air transport.

b. There are hazardous or impassable road conditions resulting in significant delays for ground transportation.

c. There are multiple patients of a serious nature requiring rapid transport, overwhelming available ground units.

d. Based on information available, the lead rescuer determines a lengthy rescue is required and transportation by ground would extend and delay definitive care.

D. The **closest available** medical helicopter will be utilized to improve survival of all patients being transported to a definitive care facility.

E. After the responders have initially treated the patient using standard protocol and the patient is ready for transport, the responders should proceed to the closest pre-existing landing area (PELA site) or to the nearest treating facility if the patients' condition warrants.

F. Early Activation / Standby:

When a dispatch center or ground ambulance service receives a call that meets the following criteria, it is recommended that the air ambulance be "early activated" or placed on ground standby:

1. Significant mechanism of injury as defined in the Trauma Triage Algorithm
2. Multiple patients
3. "Gut Feeling" from the responding crew

**** NOTE: If a Non-EMS/First Responder or bystander activates an air service, the air service will communicate with local EMS to avoid multiple responses to the incident. ****

G. Landing Zone Parameters:
1. Free of wires, trees, signs, poles, vehicles, and people;
2. Landing zone is flat, smooth, and clear of debris;
3. The landing zone should be at least 100 x 100 feet square in size;
4. The landing zone should be well defined at night without lights pointed towards the helicopter;
5. The area should be secured and free of all loose debris as well as clear of all unauthorized personnel;
6. The helicopter should be approached with the crew only and care should be taken to avoid the tail rotor;
7. The landing zone should remain clear and secure for at least one minute after departure for safety reasons.

H. Training:
Landing zone training should be accomplished by all ground ambulance services on an annual basis. Each individual ground ambulance service can contact an air ambulance service for this training.

I. EMTALA:
There are concerns regarding air utilization and rendezvous with a local ground transport at a helipad upon a medical facilities property. This is addressed in Appendix B~~C~~.

V. DIVERSION

Guidelines to determine the possible need for total Emergency Department divert are: The Emergency Department cannot handle additional emergencies based on the lack of professional personnel.

1. Maximum capacity (beds) of the Emergency Department has been met.
2. Maximum capability (staff) of the Emergency Department has been met.

Notification of Emergency Department diversion status:

1. Each hospital will notify the MERC or his/her designee of the diversion status and a written record shall be maintained documenting the date, time started, and time ended of each interval of divert status.

2. Each hospital shall notify each entity providing emergency medical services, such as ambulance services and hospitals in the catchment's area of the divert status.

3. The EMResource™ will be updated to show current information.

Compliance:

1. If a hospital goes on Emergency Department divert, then the MERC or his/her designee will re-evaluate every 2 hours for continuation of diversion.
2. The MERC or his/her designee has the authority at any time to deny or discontinue Emergency Department divert based on the needs of the community.
3. The MERC or his/her designee also has the authority to place ambulance services on a rotating basis to avoid over-saturation of any one given facility.
4. Update of the EMResource™ will be made accordingly.

INTER-FACILITY TRANSFER PROTOCOLS

I. TRAUMA CENTER PROGRAM

Each hospital shall have a designated Trauma Team that is appropriate for that facilities level of care. It is important to incorporate all facilities in trauma planning and implementation, as well as, in the planning of transfer protocols.

Level III Trauma Center:

In general the Level III Trauma Center is expected to provide initial resuscitation of the trauma patient and immediate operative intervention to control hemorrhage and to assure maximal stabilization prior to transfer to a higher level of care institution. In many instances, patients will remain in the Level III trauma center unless the medical needs of the patient require secondary transfer. The decision to transfer will rest with the physician attending the trauma patient and all Level III centers will work collaboratively with other trauma facilities to develop transfer protocols and a well-defined transfer sequence.

Level IV Trauma Center:

In general the Level IV Trauma Center is a licensed, small, rural facility with a commitment to the resuscitation of the trauma patient and written transfer protocols in place to assure those patients needing a higher level of care are transferred appropriately. These facilities may be staffed by a Physician, or licensed independent practitioner, RN, LPN, Paramedic or Intermediate EMT. The major trauma patient in this facility will be stabilized and transported to the most appropriate facility for the patients on-going care needs.

Trauma Program:

Each hospital shall provide the level of Trauma Services for which the facility is licensed in accordance with the Hospital Standards of Oklahoma Administrative Code 310:667. It is important to incorporate all facilities in trauma planning and implementation, as well as, in the planning of the transfer protocol.

There must be a commitment letter from the Hospital Board and the Medical Staff on behalf of the entire facility, which states the facility's commitment to compliance with the Oklahoma Trauma Care Regulations. A trauma program must be established and recognized by each organization and evidenced by:

1. Hospital Board and Medical Staff commitment to trauma care.
2. Written policies and procedures for the care of the trauma patient.
3. A defined Trauma Team with written roles and responsibilities.
4. Appointed Trauma Medical Director with a written job description.
5. A written Trauma Performance Improvement plan.
6. Appointed Trauma Program Manager (coordinator) with a written job description.
7. Documentation of the trauma center representative's attendance at the Regional Trauma Advisory Boards meetings.

II. TRAUMA TEAM

The team approach is optimal in the care of the injured patient. The trauma center must have a written policy for notification and mobilization of an organized trauma team (in a Level III facility) or to the extent that one is available (Level IV facility). The Trauma Team may vary in size and composition when responding to trauma activation. The physician leader or the mid-level practitioner on the trauma team should have ATLS or possess equivalent training for care of the trauma patient and is responsible for directing all phases of the resuscitation.

Suggested composition of the trauma team includes:

Level III:

a. ED Physicians
b. Physician Specialists
c. Laboratory Technicians
d. Nursing
e. Auxiliary Support Staff

Level IV:

a. Physician or Mid Level Practitioner
b. Nursing
c. Laboratory Technicians
d. Auxiliary Staff

Compliance with the above will be evidenced by:

There will be written resuscitation protocols that adhere to the principles of ATLS guidelines, and a written trauma team criteria activation policy. This policy should include physiologic, anatomical, and mechanism of injury protocols in accordance with the Oklahoma Trauma Triage Algorithms and protocols.

Medical Director:

The Trauma Center should have a physician director for the trauma program. The physician should be responsible for working with all members of the trauma team, and overseeing the implementation of a trauma specific performance improvement plan for the entire facility. Through this process, he/she should have the overall responsibility for the quality of trauma care rendered at the facility. The director should assist in the development of standards of care and assure appropriate policies and procedures are in place for the safe resuscitation and transfer of trauma patients. The physician director should have ATLS or possess equivalent training for care of the trauma patient

Trauma Program Manager (Coordinator):

All Level III trauma centers must have a Registered Nurse working in the role of the Trauma Program Manager (TPM). In conjunction with the Medical Director, the TPM is responsible for organization of the program and all necessary systems for the multidisciplinary approach throughout the continuum of trauma care. He/she is responsible for working with the trauma team to assure optimal care and will liaison with local EMS personnel, the RTAB, and other trauma centers.

The TPM will also develop a methodology for which activation of the trauma team is accomplished in their facility. The activation may be either full or partial depending upon the severity of the trauma patients' injuries.

III. HOSPITAL TRIAGE AND TRANSFER PLAN:

A well designed trauma program within the hospital is crucial to the success for providing optimal care to the trauma patients in Region 1. A written commitment on behalf of the entire facility devoted to the organization of trauma care is vital. Therefore, all hospitals in the region will establish criteria for the activation of their respective trauma programs and these criteria will be clearly defined in each institutions trauma policy. The following are intended as guidelines only for each hospitals policy as each and every hospital is unique in the way it serves its stakeholders.

A. LEVEL III TRAUMA CENTER

A team approach is optimal in the care of the trauma patient. As noted above, the trauma team should consist of those individuals that can expedite care for the trauma patient. In a Level III facility this should include:

i. Emergency Physician(s)
ii. Emergency Room Nurses
iii. Laboratory
iv. Radiology
v. Respiratory Therapy

The Level III trauma center must have an Emergency Department (ER) staffed so that trauma patients are assured immediate and appropriate initial care. An ER physician deemed competent in the care of the trauma patient shall be available 24 hours/day. This ER physician must be in-house 24 hours/day, immediately available at all times, and capable of evaluating trauma patients and provide initial resuscitation. The ER physician will provide team leadership and care for the trauma patient until the surgeon or other specialist arrives to take over care. The ER must have established standards and procedures to ensure immediate and appropriate care for the adult as well as the pediatric trauma patient. The medical director of the ER must participate in the trauma PI process.

The Level III trauma center must also have published on-call schedules and have the following medical specialties immediately available 24 hours/day to the injured patient:

i. General Surgery
ii. Anesthesia
iii. Other medical specialties that may be available in the local area to assist with care of the trauma patient.

A surgical team must be on-call with a well-defined mechanism for notification to expedite transfer to the operating room if the patient's condition warrants.

Clinical support services such as Respiratory Therapy and Radiology technicians shall be available 24 hours/day to meet the immediate needs of the trauma patient. Written policies should exist delineating the prioritization/availability of the CT scanner for trauma patients. The use of tele-radiology is an acceptable practice in the Level III facility.

Clinical laboratory services shall have the following services available in-house 24 hours per day:

i. Blood typing and cross matching capabilities
ii. Access to sufficient quantities of blood and blood products
iii. Microbiology
iv. Blood gas and pH determination
v. Alcohol and drug screening
vi. Coagulation studies.

All Level III trauma centers should have the following:

i. Written transfer agreements with other providers as a transferring facility
ii. Available Helipad.

B. LEVEL IV TRAUMA CENTER

The team approach is optimal in the care of trauma patients. The Level IV trauma center must have a written policy for notification and mobilization of an organized trauma team to the extent that one is available. The team may vary in size and composition depending on the logistics of the facility. The physician leader or mid-level practitioner on the trauma team is responsible for directing all phases of the resuscitation. Suggested composition of the trauma team includes, if available:

i. Physician or Licensed Mid-level practitioner
ii. Emergency Room Nurse
iii. Laboratory
iv. Radiology
v. Ancillary personnel as needed

The ER of the Level IV trauma center should be staffed so trauma patients are assured immediate and appropriate initial care. A system must be developed and in place to assure early notification of the on-call practitioner. Adequate number of nurses must be immediately available 24 hours/day to ensure adequate care of the trauma patient.

The Level IV trauma center should have the following clinical services available for consultation via a communication system on a 24-hour basis:

i. General surgery
ii. Neurology
iii. Neurosurgery
iv. Orthopedics

The Level IV facility must have written transfer agreements with other trauma facilities in the region. A policy must be in place to facilitate and expedite the transfer sequence to assure the most appropriate care is rendered to the patient. Agreements should be in place so that ALL facilities will work together to implement the Trauma Transfer Guidelines.

IV. CRITERIA FOR ACTIVATION OF THE TRAUMA TEAM

In either a Level III or Level IV facility, immediate activation of the trauma system (FULL ACTIVATION) should occur when you have any of the following:

a. Glasgow Coma Scale (GCS) < 10
b. Systolic blood pressure < 90 mmHg (adult)
c. Respiratory rate < 10 or > 30/min
d. Penetrating injury to the head, neck, torso, or extremities above the elbows or knees
e. Flail chest
f. Two or more proximal long bone fractures
g. Pelvic fracture
h. Limb paralysis
i. Amputation proximal to the wrist or ankle
j. Body surface burns > 5% (second or third degree)
k. Burns associate with other traumatic or inhalation injury
l. Trauma transfer patient that is intubated or receiving blood
m. Children under 12 with any of the following criteria
n. Ejection from vehicle
o. Death of same passenger compartment
p. Extrication time greater than 20 minutes
q. Rollover MVC
r. High-speed auto crash greater than 40 mph
s.Auto deformity greater than 20 inches of external damage or intrusion into passenger compartment greater than 12 inches
t. Pedestrian thrown or run over
u. Motorcycle crash greater than 20 mph or separation of rider from the bike.

In a Level III or Level IV facility, PARTIAL ACTIVATION of the trauma team should occur when a patient presents to the ER with a Priority II or Priority III injury. After triage by the appropriate personnel the patient should be treated appropriately for the injury and if necessary full activation of the team may occur.

V. INTER-FACILITY TRANSFERS

In an effort to optimize patient care and deliver the trauma patient to most appropriate destination, rapid assessment of the patient is imperative. When a trauma patient arrives at a destination hospital the trauma team should be activated and the patient will have an immediate medical screening completed. Depending upon the screening and the needs of the patient any of the following may occur:

1. The patient will be stabilized and then transferred to the most appropriate facility (Priority I or Priority II trauma that is time-sensitive), if appropriate staff and resources are available, stabilization may require surgical intervention, all Priority I patients that are admitted at a level III or IV hospital will have automatic CQI by the RTAB,
2. The patient will be stabilized and then admitted to that facility (Priority II that is not time-sensitive or Priority III),
3. The patient will be stabilized and transferred to their facility of choice (Priority II that is not (time-sensitive), or
4. The Priority III trauma patient will be treated at the closest acute care hospital or the hospital of patient's choice. The patient will be treated and discharged to home with appropriate instruction for their injuries (Priority III trauma).

It is recommended that the transfer of Priority II and Priority III trauma patients follow the same routing as the Pre-Hospital Destination Plan. This is an effort to provide optimal care in the most appropriate amount of time for the trauma patient. As always, the patient's choice of facility will be considered when the injuries are not of a time-sensitive matter.

In accordance with the ATLS guidelines of the American College of Surgeons, "Once the need to transfer is recognized, arrangements should be expedited and not delayed for diagnostic procedures that do not change the immediate plan of care for the patient."

VI. PROCEDURE FOR SELECTION OF HOSPITAL DESTINATION

It is recognized that some patients have needs that can only be met at specific destination hospitals. Thus, a trauma patient will often benefit from transfer directly to an appropriate hospital with the capabilities and capacity to provide definitive trauma care. This care may not necessarily be at the closest or patient preferred facility and this must be taken into account when treating the patient.

Rapid pre-hospital recognition and appropriate triage of trauma patients using the Oklahoma Model Trauma Triage and Transport Guidelines is essential in determining the appropriate selection of Priority I, II, and III trauma patient hospital destination (see appendix B of the Pre-Hospital Trauma Destination Plan).

VII. PROCEDURE FOR MONITORING HOSPITAL STATUS AND CAPABILITY

A. EMResource™

The MERC coordinator will generate reports from the EMResource™ for use in monitoring hospital status related to destination. These reports will be provided periodically to OSDH and made available to the Region 1 CQI Committee. Any problems and/or trends identified through review of this data will be addressed by the CQI committee directly with the provider and if necessary through referral to the appropriate state level committee.

B. QI Indicators

A set of QI Indicators has been developed for use in monitoring hospital status and appropriateness of destination. The Region 1 CQI Committee will monitor these indicators. Any problems and/or trends through review of the indicators will be addressed by the CQI committee directly with the provider and if necessary through referral to the appropriate state level committee.

VIII. HELICOPTER UTILIZATION PROTOCOL

A. Purpose

Appropriate utilization of air ambulance resources by Region 1 providers.

B. "No Fly" Conditions:

Helicopter utilization is seldom indicated for patients without a chance for survival or without serious injury. The following are other situations in which an air ambulance should not be used:

i. Patients at a location where time and distance constraints make air transport to the closest appropriate medical facility more time consuming should be transported by ground. This is generally within 45 minutes of the destination facility.

ii. Priority 3 patients should be transported by ground ambulance.

iii. Cardiac arrest without return of spontaneous circulation in the field.

C. "Fly" Conditions:

The following are conditions that warrant the use of an air ambulance:

i. Priority 1 trauma patients that are being transported to a facility in which time and distance constraints make air transport more timely, generally for distances with a transport time greater than 30 minutes by ground ambulance.
ii. Priority 2 trauma patients that are being transported to a facility with a transport time greater than 45 minutes by ground ambulance, based on local resource availability.

D. The following are conditions that warrant the use of an air ambulance even when the patient is within a 45 minutes of a medical facility:

i. The closest facility is not appropriate for the patients' injury and the appropriate facility is at a distance in which time and distance constraints justify air transport.
ii. There are hazardous or impassable road conditions resulting in significant delays for ground transportation.
iii. There are multiple patients of a serious nature requiring rapid transport, overwhelming available ground units.
iv. Based on information available, the lead rescuer determines a lengthy rescue is required and transportation by ground would extend and delay definitive care.

E. The **closest available** medical aircraft should be utilized to improve survival of all patients being transported to a definitive care facility.

IX. DIVERSION

A hospital on divert can maintain that status for a **maximum** of 2 hours and then the situation should be re-evaluated. If it a hospital is continued on divert status for an additional 2 hour time period the Medical Emergency Response Center (MERC) coordinator in conjunction with the Regional Medical Director will assess the situation and determine if it is appropriate to continue on divert status and activate the MERC if deemed necessary.

X. QUALITY IMPROVEMENT

Each facility in the region shall conduct Quality Improvement (QI) activities with regard to their trauma program. Under the auspices of the Medical Director and the Trauma Program Manager each facility will conduct QI activities in accordance with the approved regional QI process.

EMResource™ Usage

I. Introduction

For several years EMResource™ has served as a tool for hospitals to display their diversion status in Oklahoma City. Although diversion is still a feature on the EMResource™ we are going to ask that you look at EMResource™ as a communication tool capable of demonstrating resource availability, health alerts and disaster notifications. EMResource™ is now a vital tool that can better enable communication in both routine daily circumstances and during disasters. EMResource's™ ability to serve this function is limited by the use of the system by providers.

II. Usage Requirements

Within Region 1 all providers are required of to comply with the guidelines established by the State *EMResource™ Joint Advisory Committee* and/or the Oklahoma State Department of Health in the *EMResource™ Manual.* In the event that the *EMResource™ Manual* is updated, the revisions to the *EMResource™ Manual* override the requirements in this document.

Specific usage requirements include but are not limited to:

Contact Information

Each provider is responsible to maintain accurate contact information on the EMResource™ Hospitals shall post the telephone number they wish other providers to use when calling patient referrals or reports in this area of EMResource™

Provider Status

Each hospital is required to maintain current status on the EMResource™ so that their capabilities or capacity can be readily accessed by other hospitals, EMS agencies and the Trauma Transfer and Referral Center.

Critical Concept: Emergency Departments and Hospitals are considered open unless posted otherwise on EMResource™

Emergency Department Status

This is the specific status of the Emergency Department and is the only status appropriate for diversion of pre-hospital transports. The current ED Status categories are: Open, Total ED Divert, Trauma Divert, CT Divert, ED select, Forced Open, and Closed.

If a facility has not updated their status on the EMResource™ their attempt to divert may be overridden by the pre-hospital provider or the Trauma Transfer and Referral Center.

Hospital Status

This status is specific to the inpatient capability/capacity and is only appropriate for diverting inter- facility transfer patients. The current Hospital Status categories are: Open, Caution, and Closed.If a facility has not updated their status on the EMResource™ their attempt to divert may be overridden by the Trauma Transfer and Referral Center.

Critical Concept: Emergency Departments and Hospitals are considered open unless posted otherwise on EMResource™ .

Provider Resource Availability

This status is for displaying hospital specialty coverage on a real time basis. A customized list of eight specialties has been developed to meet the needs of Oklahoma. The status categories for these coverage areas are:
Yes – Coverage is currently available.
No – Coverage is not currently available.
N/A – This service is not offered at this facility.

Air Ambulance Status

This status is for displaying the current status/availability of Air Ambulances. The status categories for this status are:
Available – the areomedical resource is currently ready and able to respond to emergency calls.
Call for Status – current conditions necessitate that providers in need of aeromedical transport call to determine resource availability because:
The aeromedical resource may already be dispatched to a call or be on standby.
Local weather conditions may temporarily impact the ability of this aeromedical resource to respond.
This aeromedical resource may be temporarily unavailable due to routine service or fueling.
Not Available – the aeromedical resource is currently unable to respond in a timely manner.
In region 1 the air ambulances are required to keep their most accurate status current. They may not leave their status as 'call for status' at all times.

System Alerts

Providers in Region 1 are required to maintain EMResource™ in a manner that enables them to receive alerts in a timely manner. It is suggested that all providers maintain a computer specifically for EMResource™ use 24 hours a day.
If a provider is unable to maintain a computer with EMResource™ displayed 24 hours a day the provider is expected to work with the regional EMResource™ administrator to arrange the delivery of all System Alerts to the text enabled device of designated staff responsible to share the alert information with other on-duty staff.
Compliance with appropriate usage will be monitored through routine MERC drills.

Data Reporting

Providers in Region 1 are required to participate in reporting data supported by the EMResource™ application. This reporting requirement includes but is not limited to:
Hospital Daily Report of bed capacity and ED volume;
EMS Daily Report of resources and volume;

III. Monitoring

Appropriate use of EMResource™ will be enforced in the region through the QI process
The CQI committee will routinely review reports from the Trauma Transfer and Referral Center on diversion of patients and compare the patient diversion list with the list of facility diversion hours generated from the EMResource™.

The CQI committee will review all cases referred to them for inappropriate use of EMResource™ in any of the listed categories. The regional and/or state EMResource™ administrator will perform periodic drills using EMResource™ and monitor appropriateness of provider response. Reports of these drills will be provided to the RTAB CQI committee who will address problems/trends directly with the provider and if necessary through referral to the appropriate state level committee. The CQI committee will work with these providers to come into compliance with EMResource™ usage requirements. If these attempts fail the cases will be referred to the State CQI committee for further action.

IV. Summary

EMResource™ is a vital communication tool that provides the capability of real time communication among trauma system participants. This ability is limited by provider use of the system. Region 1 supports use of this tool through adoption of these requirements.

Regional Quality Improvement Activities

Every licensed hospital and ambulance service is to participate with the Continuous Quality Improvement process. Participation in the process will be demonstrated by meaningful responses to committee correspondence, and with respectful consideration being given to the recommendations made by the committee. Those who do not participate with the CQI committee process will be subject to the schedule of escalation outlined in Appendix D.

Appendix

A~~B~~

Oklahoma Trauma Patient Definitions and Triage Algorithms

Plan Approval Dates:
Pre-Hospital: RTAB 07/18/2006, OTSIDAC 08/02/2006, RTAB 11/13/2020, 04/27/2021
Inter-facility: RTAB 03/27/2007, OTSIDAC 08/01/2007
EMResource™: RTAB 05/23/2006, OTSIDAC 08/02/2006
OTSIDAC Revision to Trauma Triage Algorithm Guidelines: 02/10/2010

TRAUMA PATIENT
TRIAGE DEFINITIONS

Trauma Triage

Since patients differ in their initial response to injury, trauma triage is an inexact science. Current patient identification criteria does not provide 100% percent sensitivity and specificity for detecting injury. As a result, trauma systems are designed to over-triage patients in order not to miss a potentially serious injury. Under-triage of patients should be avoided since a potentially seriously injured patient could be delivered to a facility not prepared to manage their injury. Large amounts of over-triage is not in the best interest of the Trauma System since it will potentially overwhelm the resources of the facilities essential for the management of severely injured patients.

Priority 1 Trauma Patients

These are patients with high energy blunt or penetrating injury causing physiological abnormalities or significant single or multisystem anatomical injuries. These patients have time sensitive injuries requiring the resources of a designated Level I, Level II, or Regional Level III Trauma Center. These patients should be directly transported to a Designated Level I, Level II, or Regional Level III facility for treatment but may be stabilized at a Level III or Level IV facility, if needed, depending on location of occurrence and time and distance to the higher level trauma center. If needed these patients may be cared for in a Level III facility if the appropriate services and resources are available.

Physiological Compromise Criteria:

Hemodynamic Compromise-Systolic BP <90 mmHg

Other signs that should be considered include:

- Sustained Tachycardia
- Cool diaphoretic Skin

Respiratory Compromise-RR<10 or >29 Breaths/Minutes

Or <20 in infant <1 year

Altered Mentation- of trauma etiology- GCS <14

Anatomical Injury Criteria

Penetrating injury of head, neck, chest/abdomen, or extremities proximal to elbow or knee.
Amputation above wrist or ankle.
Paralysis or suspected spinal fracture with neurological deficit.
Flail chest.
Two or more obvious proximal long bone fractures (upper arm or thigh).
Open or suspected depressed skull fracture.
Unstable pelvis or suspected pelvic fracture.
Tender and/or distended abdomen.
Burns associated with Priority I Trauma
Crushed, degloved, or mangled extremity

Priority 2 Trauma Patients

These are patients with potentially time sensitive injuries due to a high energy event (positive mechanism of injury) or with a less severe single system injury but currently with no physiological abnormalities or significant anatomical injury.

I. Significant Single System Injuries

Neurology: Isolated head trauma with transient loss of consciousness or altered mental status but currently alert and oriented.

Orthopedic: Single proximal and distal extremity fractures (including open) from high energy event, isolated joint dislocations-knee, hip, elbow, shoulder without neurovascular deficits, and unstable joint (ligament) injuries without neurovascular deficits.

Maxillofacial trauma: Facial lacerations; such as those requiring surgical repair, isolated open facial fractures or isolated orbit trauma with or without entrapments, or avulsed teeth.

TRAUMA PATIENT
TRIAGE DEFINITIONS

High Energy Event

Patient involved in rapid acceleration deceleration events absorb large amounts of energy and are at an increased risk for severe injury despite normal vital signs on their initial assessment. Five to fifteen percent of these patients, despite normal vital signs and no apparent anatomical injury on initial evaluation, will have a significant injury discovered after a full trauma evaluation with serial observations. Determinates to be considered are direction and velocity of impact and the use of personal protection devices. Motor vehicle crashes when occupants are using personal safety restraint devices may not be considered a high-energy event. Personal safety devices will often protect the occupant from absorbing high amounts of energy even when the vehicle shows significant damage. High Energy Events:

Ejection of the patient from an enclosed vehicle
Auto/pedestrian or auto/bike or motorcycle crash with significant impact (> 20 mph) impact with the patient thrown or run over by a vehicle.
Falls greater than 20 feet for adult, >10 feet for pediatric or distance 2-3 times height of patient
Significant assault or altercations
High risk auto crash

- The following motor vehicle crashes particularly when the patient has not used personal safety restraint devices:
  - Death in the same passenger compartment
  - Rollover
  - High speed auto crash
  - Compartment intrusion greater than 12 inches at occupant site or >18 inches at any site
  - Vehicle telemetry data consistent with high risk injury.

Medic Discretion

Since trauma triage is an inexact science and patients differ in their response to injury, clinical judgment by the medic at the scene is an extremely important element in determining the destination of all patients. If the medic is concerned that a patient may have a severe injury which is not yet obvious, the patient may be upgraded in order to deliver that patient to the appropriate level Trauma Center. Paramedic suspicion for a severe injury may be raised by but not limited to the following factors:

Age greater than 55
Age less than 5
Extremes of environment
Patient's previous medical history such as:

- Anticoagulation or bleeding disorders
- End stage renal disease on dialysis

Pregnancy (>20 weeks)

Priority 3 Trauma Patients

These patients are without physiological abnormalities, altered mentation, neurological deficit, or a significant single system injury that has been involved in a low energy event. These patients should be treated at the nearest treating facility or the patient's hospital of choice.

Example: Same level fall with extremity or hip fracture.

ADULT PRE-HOSPITAL
TRIAGE AND TRANSPORT GUIDELINES
Oklahoma Model Trauma Triage Algorithm

INABILTY TO SECURE AIRWAY
TRAUMATIC ARREST

YES →

GO DIRECTLY TO NEAREST APPROPRIATE FACILITY

PRIORITY I

PHYSIOLOGICAL COMPROMISE CRITERIA

Hemodynamic Compromise [1]—Systolic BP <90 mmHg
Or signs that should be considered include:
Sustained tachycardia
Cool diaphoretic skin
Respiratory Compromise [2] — RR <10 or >29 breaths/min
or <20 in infant < 1 yr
Altered Mentation of trauma etiology [3] — GCS <14

YES →

INITIATE TRAUMA TREATMENT PROTOCOL
ACTIVATE TRAUMA SYSTEM

RAPID transport to the designated Level I, II, or Regional Level III Trauma Center according to the Regional Trauma Plan but may stabilized at a Level III or IV facility depending on location of receiver and time and distance to the higher level trauma center.

Air Rendezvous may be necessary considering time and distance constraints. If conditions do not permit air transport then consider ALS rendezvous. Stabilization may occur either in the field or a the nearest appropriate facility.

NO ↓

ANATOMICAL INJURY

Penetrating injury of head, neck, chest, abdomen or extremities proximal to elbow or knee.
Combination of burns > 10% or significant burns involving face, airway, hands, feet or genitalia without significant trauma transport to Regional Burn Center. Burns >10% with significant trauma transport to trauma center.
Amputation above wrist or ankle
Paralysis or suspected spinal fracture with neurological deficit
Flail chest
Two or more obvious proximal long bone fractures [upper arm or thigh]
Open or suspected depressed skull fracture
Unstable pelvis or suspected unstable pelvic fracture
Tender and/or distended abdomen
Crushed, degloved, or mangled extremity

YES →

Combinations of burns >10% or significant burns involving face, airway, hands, feet or genitalia *without* significant trauma transport to Regional Burn Center. Burns >10% *with* significant trauma transport to trauma center.

NO ↓

PRIORITY II

RISK OF SERIOUS INJURY—SINGLE SYSTEM INJURY

Patients with potentially time sensitive injuries due to a high energy event (positive mechanism of injury) but currently with no physiological abnormalities or significant anatomical injury or patients with less severe single system injuries [4].

Ejection (partial or complete) of the patient from an enclosed vehicle auto/pedestrian, auto/bike, or motorcycle crash with significant impact (>20 mph) and patient thrown or run over by vehicle.
Falls greater than 20 feet or 2-3 times height of patient
Significant assault or altercations
High risk auto crash [5]
Neurology: Isolated head trauma with transient loss of consciousness or altered mental status but currently alert and oriented
Orthopedic: Single proximal and distal extremity (including open) from high energy event, isolated joint dislocations-knee, hip, elbow, shoulder without neurovascular deficits, and unstable joint (ligament) injuries without neurovascular deficits.
Maxillofacial trauma: Facial lacerations, such as those requiring surgical repair, isolated open facial fractures or isolated orbit trauma with or without entrapments, or avulsed teeth.

YES →

INITIATE TRAUMA TREATMENT PROTOCOL

PROMPT transport to the designated Level III Trauma Center or higher depending on location according to the Regional Trauma Plan

YES ↗

NO ↓

PRIORITY III

CONSIDER[6] - Co-morbid factors
- Gestalt—EMS clinical judgement

NO →

TRANSPORT to either the closet Level IV Trauma Center or higher depending on location according to the Regional Trauma Plan or facility of the patients choice

Approved: OTSIDAC 02-01-06 Revised: OTSIDAC 08-01-07; 02-06-08, 08-06-08, 02-03-10 Clarification: Revision by MAC 11-19-08

ADULT PRE-HOSPITAL
TRIAGE AND TRANSPORT GUIDELINES
Oklahoma Model Trauma Triage Algorithm

1. In addition to hypotension: pallor, tachycardia, or diaphoresis may be early signs of hypovolemia
2. Tachypnea (hyperventilation) alone will not necessarily initiate this level of response
3. Altered sensorium secondary to sedative-hypnotic will not necessarily initiate this level of response
4. High Energy Event signifies a large release of uncontrolled energy. Patient is assumed injured until proven otherwise and multisystem injuries may exist. Determinants to be considered by medical professionals are direction and velocity of impact, use of personal restraint devices, patient kinematics and physical size, and the residual signature of energy release (e.g. major vehicle damage). Motor vehicle crashes when occupants are using personal safety restraint devices may not be considered a high energy event because the personal safety restraint will often protect the occupant from absorbing high amounts of energy.
5. The following motor vehicle crashes particularly when the patient has not used personal safety restraint devices:
   a. Death in the same passenger compartment
   b. Rollover
   c. High speed auto crash
   d. Compartment intrusion greater than 12 inches at occupant site or >18 inches at any site
   e. Vehicle telemetry data consistent with high risk of injury
6. Since trauma triage is an inexact science and patients differ in their response to injury, clinical judgment by the medic at the scene is an extremely important element in determining the destination of all patients. If the medic is concerned that a patient may have a severe injury which is not yet obvious, the patient may be upgraded in order to deliver that patient to the appropriate level Trauma Center. EMS provider suspicion for a severe injury may be raised by, but not limited to, the following factors:
   Age greater than 55
   Age less than 5
   Extremes of environment
   Patient's previous medical history such as:
      Anticoagulation or bleeding disorders
      End state renal disease on dialysis
   Pregnancy (>20 weeks)

PEDIATRIC (≤16 YEARS) PRE-HOSPITAL TRIAGE AND TRANSPORT GUIDELINES

Oklahoma Model Trauma Triage Algorithm

INABILTY TO SECURE AIRWAY
TRAUMATIC ARREST

YES → GO DIRECTLY TO NEAREST APPROPRIATE FACILITY

PHYSIOLOGICAL COMPROMISE CRITERIA

Hemodynamic Compromise [1]—Systolic BP <90 mmHg
Or signs that should be considered include:
Sustained tachycardia
Cool diaphoretic skin
Respiratory Compromise [2] — RR <10 or >29 breaths/min
or <20 in infant < 1 yr
Altered Mentation of trauma etiology [3] — GCS <14

PRIORITY I

YES →

INITIATE TRAUMA TREATMENT PROTOCOL
ACTIVATE TRAUMA SYSTEM

RAPID transport to the designated Level I, II, or Regional Level III Trauma Center according to the Regional Trauma Plan but may stabilized at a Level III or IV facility depending on location of receiver and time and distance to the higher level trauma center.

Air Rendezvous may be necessary considering time and distance constraints. If conditions do not permit air transport then consider ALS rendezvous. Stabilization may occur either in the field or a the nearest appropriate facility.

NO ↓

ANATOMICAL INJURY

Penetrating injury of head, neck, chest, abdomen or extremities proximal to elbow or knee.
Combination of burns > 10% or significant burns involving face, airway, hands, feet or genitalia without significant trauma transport to Regional Burn Center. Burns >10% with significant trauma transport to trauma center.
Amputation above wrist or ankle
Paralysis or suspected spinal fracture with neurological deficit
Flail chest
Two or more obvious proximal long bone fractures [upper arm or thigh]
Open or suspected depressed skull fracture
Unstable pelvis or suspected unstable pelvic fracture
Tender and/or distended abdomen
Crushed, degloved, or mangled extremity

Pediatric Trauma Score ≤ 5

YES → Combinations of burns >10% or significant burns involving face, airway, hands, feet or genitalia *without* significant trauma transport to Regional Burn Center. Burns >10% *with* significant trauma transport to trauma center.

NO ↓

PRIORITY II

RISK OF SERIOUS INJURY—SINGLE SYSTEM INJURY

Patients with potentially time sensitive injuries due to a high energy event (positive mechanism of injury) but currently with no physiological abnormalities or significant anatomical injury or patients with less severe single system injuries [4].

Ejection (partial or complete) of the patient from an enclosed vehicle auto/pedestrian, auto/bike, or motorcycle crash with significant impact (>20 mph) and patient thrown or run over by vehicle.
Falls greater than 20 feet or 2-3 times height of patient
Significant assault or altercations
High risk auto crash [5]
Neurology: Isolated head trauma with transient loss of consciousness or altered mental status but currently alert and oriented
Orthopedic: Single proximal and distal extremity (including open) from high energy event, isolated joint dislocations-knee, hip, elbow, shoulder without neurovascular deficits, and unstable joint (ligament) injuries without neurovascular deficits.
Maxillofacial trauma: Facial lacerations, such as those requiring surgical repair, isolated open facial fractures or isolated orbit trauma with or without entrapments, or avulsed teeth.

Pediatric Trauma Score 6-8

YES →

INITIATE TRAUMA TREATMENT PROTOCOL

PROMPT transport to the designated Level III Trauma Center or higher depending on location according to the Regional Trauma Plan

YES ↗

NO ↓

PRIORITY III

CONSIDER[6] - Co-morbid factors
- Gestalt—EMS clinical judgement

Pediatric Trauma Score 9-12

NO →

TRANSPORT to either the closet Level IV Trauma Center or higher depending on location according to the Regional Trauma Plan or facility of the patients choice

Approved: OTSIDAC 02-01-06 Revised: OTSIDAC 08-01-07; 02-06-08, 08-06-08, 02-03-10 Clarification: Revision by MAC 11-19-08

PEDIATRIC (≤16 YEARS) PRE-HOSPITAL
TRIAGE AND TRANSPORT GUIDELINES
Oklahoma Model Trauma Triage Algorithm

1. In addition to hypotension: pallor, tachycardia, or diaphoresis may be early signs of hypovolemia
2. Tachypnea (hyperventilation) alone will not necessarily initiate this level of response
3. Altered sensorium secondary to sedative-hypnotic will not necessarily initiate this level of response
4. High Energy Event signifies a large release of uncontrolled energy. Patient is assumed injured until proven otherwise and multisystem injuries may exist. Determinants to be considered by medical professionals are direction and velocity of impact, use of personal restraint devices, patient kinematics and physical size, and the residual signature of energy release (e.g. major vehicle damage). Motor vehicle crashes when occupants are using personal safety restraint devices may not be considered a high energy event because the personal safety restraint will often protect the occupant from absorbing high amounts of energy.
5. The following motor vehicle crashes particularly when the patient has not used personal safety restraint devices:
   a. Death in the same passenger compartment
   b. Rollover
   c. High speed auto crash
   d. Compartment intrusion greater than 12 inches at occupant site or >18 inches at any site
   e. Vehicle telemetry data consistent with high risk of injury
6. Since trauma triage is an inexact science and patients differ in their response to injury, clinical judgment by the medic at the scene is an extremely important element in determining the destination of all patients. If the medic is concerned that a patient may have a severe injury which is not yet obvious, the patient may be upgraded in order to deliver that patient to the appropriate level Trauma Center. EMS provider suspicion for a severe injury may be raised by, but not limited to, the following factors:
   Age greater than 55
   Age less than 5
   Extremes of environment
   Patient's previous medical history such as:
      Anticoagulation or bleeding disorders
      End state renal disease on dialysis
   Pregnancy (>20 weeks)

PEDIATRIC (≤16 YEARS) PRE-HOSPITAL
TRIAGE AND TRANSPORT GUIDELINES
Oklahoma Model Trauma Triage Algorithm

Pediatric Trauma Score (PTS)				
Components	+2	+1	-1	Score
Weight	>20 kg (44 lb)	10-20 kg (22-44 lb)	<10 kg (<22 lb)	
Airway	Patent *	Maintainable ^	Unmaintainable #	
Systolic (cuff) or BP (pulses)	>90 mmHg Radial	50-90 mmHg Femoral/Carotid	<50 mmHg None palpable	
CNS	Awake, no LOC	Obtunded Some LOC †	Comatose, unresponsive	
Fractures	None	Closed (or suspected)	Multiple open or closed	
Wounds	None	Minor	Major‡, Burns, or penetrating	
TOTAL			Range -6 to +12	

Score: Possible Range -6 to +12, decreasing with increasing injury severity

Generally:

9 to 12 = minor trauma
6 to 8 = potentially life threatening
0 to 5 = life threatening
<0 = usually fatal

* No assistance required
^ Protected by patient but constant observation required for position, patency, or O_2 administration
# Invasive techniques required for control (e.g. intubation)
† Responds to voice, pain, or temporary loss of consciousness
‡ Abrasions or lacerations

Approved: OTSIDAC 02-01-06 Revised: OTSIDAC 08-01-07; 02-06-08, 08-06-08, 02-03-10 Clarification: Revision by MAC 11-19-08

ADULT INTERFACILITY

TRIAGE AND TRANSFER GUIDELINES

Oklahoma Model Trauma Triage Algorithm

Anatomy of the Injury

Penetrating injury of the head, neck, torso or groin.

Abdominal/Pelvic Injuries

- Hemodynamically unstable patient with physical evidence of abdominal or pelvic trauma
- Unstable pelvic ring disruption
- Pelvic fracture with shock or other evidence of continuing hemorrhage
- Open pelvic fracture
- Penetrating wound of abdomen with suspicion of penetration of the peritoneum
- Ruptured hollow viscous

CNS

- Penetrating Head Injury or Depressed skull fracture
- Open Head Injury
- GCS <= 10 or deterioration of 2 or more points
- Lateralizing signs
- New neurological deficits
- CSF Leak
- Spinal cord injury with neurological deficits
- Unstable spinal cord injuries

Chest

- Widened mediastinum or other signs suggesting great vessel injury Major chest wall or pulmonary injury with respiratory compromise Cardiac injury (blunt or penetrating)
- Cardiac tamponade
- Patients who may require prolonged ventilation
- Suspected tracheobronchial tree or esophageal injury

Hemodynamic Instability

- SBP consistently <90 following 20cc/kg of resuscitation fluid
- Respiratory distress with rate <10 or >29

Major Extremity Injury

- Fracture/dislocation with loss of distal pulses Amputation of extremity proximal to wrist or ankle Pelvic fractures with hemodynamic instability
- Two or more long bone fracture sites
- Major vascular injuries documented by arteriogram ***or*** loss of distal pulses
- Crush Injury or prolonged extremity ischemia

Multiple System

- Head Injury combined with face, chest, abdominal, or pelvic injury
- Significant injury to two or more body regions
- Combination of burns > 10% or significant burns involving face, airway, hands, feet or genitalia *without* significant trauma transport to regional Burn Center. Burns >10% *with* significant trauma transport to trauma center.

Secondary Deterioration

- Prolonged mechanical ventilation
- Sepsis
- Single or multiple organ system failure (deterioration in CNS, cardiac, pulmonary, hepatic, renal or coagulation systems)
- Major tissue necrosis

PRIORITY I

YES → Initiate internal Trauma Treatment Protocol if definitive surgical care and critical care monitoring are available

If definitive surgical care or critical care monitoring are not available then immediate stabilization and transfer to appropriate designated facility according to regional plan. Stabilization may involve surgical intervention prior to transfer. Air transport may be necessary considering time and distance constraints.

NO → Proceed to Priority II Interfacility Transfer Criteria

Approved: OTSIDAC 02-01-06 Revised: OTSIDAC 08-01-07; 02-06-08, 08-06-08, 02-03-10 Clarification: Revision by MAC 11-19-08

ADULT INTERFACILITY
TRIAGE AND TRANSGER GUIDELINES
Oklahoma Model Trauma Triage Algorithm

PRIORITY II

Abdominal/Pelvic Injuries
- Stable pelvic fractures
- Hemodynamically stable isolated abdominal trauma
  - diffuse abdominal pain/tenderness
  - seat belt contusions
  - visceral injuries
- Hemodynamically stable isolated solid organ injuries

CNS
- Head Injury with GCS > 10
- Head Injury with Transient loss of consciousness < 5 min
- Head Injury with Transient neurological deficits
- Spinal cord injury without neurological deficits

Chest
- Isolated Chest Trauma- pain, mild dyspnea
- Rib fractures, sternal fractures, pneumothorax, hemothorax *without* respiratory compromise
- Unilateral pulmonary contusion without respiratory compromise

Comorbid
- Age <5 or > 55
- Known cardiac, respiratory or metabolic disease
- Pregnancy
- Immunosupression
- Bleeding disorder or anticoagulants

Major Extremity Injury
- Single proximal extremity fractures, including open
- Distal extremity fractures, including open
- Isolated joint dislocations-knee, hip, elbow, shoulder without neurovascular deficits
- Unstable joint (ligament) injuries without neurovascular deficits
- Degloving injuries without evidence of limb threatening injury

Mechanism
- Ejection of patient from enclosed vehicle
- Adult auto/pedestrian, auto/bike, or motorcycle crash with significant impact and patient thrown or run over by vehicle
- Falls greater than 20 feet
- Significant assault or altercations
- Other "high energy" events based on Paramedic discretion4, e.g.: patients involved in motor vehicle crashes with significant vehicular damage and not using personal safety restraint devices

Other
- Isolated open facial fractures
- Isolated orbit trauma with or without entrapments, without visual deficits

YES → Perform complete trauma evaluation and appropriate serial observation. Consider admission if condition remains stable.

↓

Deterioration of Glasgow Coma Scale, vital signs or patient's condition or significant findings on further evaluation.

YES → If definitive surgical care or critical care monitoring are not available, activate Trauma System and prepare for RAPID transfer to the appropriate designated Trauma Facility according to the Regional Trauma Plan. Stabilization may involve surgical intervention.

NO → Consider admission if condition remains stable.

NO →

PRIORITY III

Perform appropriate emergency department evaluation. Consider discharge or admit if condition remains stable.

↓

Deterioration of Glasgow Coma Scale, vital signs or patient's condition or significant findings on further evaluation: Initiate Trauma Treatment Protocol—Activate Trauma System and prepare for RAPID transfer to the appropriate designated Trauma Facility according to the Regional Trauma Plan if definitive surgical care and critical care monitoring are not available.

Approved: OTSIDAC 02/01/06 Revised: OTSIDAC 08/01/07; 02/06/08, 08/06/08; 02/03/10 Clarification: Revision by MAC: 11/19/08

PEDIATRIC (≤16 YEARS) INTERFACILITY
TRIAGE AND TRANSFER GUIDELINES
Oklahoma Model Trauma Triage Algorithm

Anatomy of the Injury

Penetrating injury of the head, neck, torso or groin.

Abdominal/Pelvic Injuries

- Hemodynamically unstable patient with physical evidence of abdominal or pelvic trauma
- Unstable pelvic ring disruption
- Pelvic fracture with shock or other evidence of continuing hemorrhage
- Open pelvic fracture
- Penetrating wound of abdomen with suspicion of penetration of the peritoneum
- Ruptured hollow viscous

CNS

- Penetrating Head Injury or Depressed skull fracture
- Open Head Injury
- GCS <= 10 or deterioration of 2 or more points
- Lateralizing signs
- New neurological deficits
- CSF Leak
- Spinal cord injury with neurological deficits
- Unstable spinal cord injuries

Chest

- Widened mediastinum or other signs suggesting great vessel injury Major chest wall or pulmonary injury with respiratory compromise Cardiac injury (blunt or penetrating)
- Cardiac tamponade
- Patients who may require prolonged ventilation
- Suspected tracheobronchial tree or esophageal injury

Hemodynamic Instability

- SBP consistently <90 following 20cc/kg of resuscitation fluid
- Respiratory distress with rate of:
  - Newborn <30 or >60
  - Up to 1 yr <24 or >36
  - 1-5 yr <20 or >30
  - Over 5 yr <15 or >30

Major Extremity Injury

- Fracture/dislocation with loss of distal pulses Amputation of extremity proximal to wrist or ankle Pelvic fractures with hemodynamic instability
- Two or more long bone fracture sites
- Major vascular injuries documented by arteriogram ***or*** loss of distal pulses
- Crush Injury or prolonged extremity ischemia

Multiple System

- Head Injury combined with face, chest, abdominal, or pelvic injury
- Significant injury to two or more body regions
- Combination of burns > 10% or significant burns involving face, airway, hands, feet or genitalia *without* significant trauma transport to regional Burn Center. Burns >10% *with* significant trauma transport to trauma center.

Secondary Deterioration

- Prolonged mechanical ventilation
- Sepsis
- Single or multiple organ system failure (deterioration in CNS, cardiac, pulmonary, hepatic, renal or coagulation systems)
- Major tissue necrosis

Pediatric Trauma Score <5

PRIORITY I

YES →

Initiate internal Trauma Treatment Protocol if definitive surgical care and critical care monitoring are available

If definitive surgical care or critical care monitoring are not available then immediate stabilization and transfer to appropriate designated facility according to regional plan. Stabilization may involve surgical intervention prior to transfer. Air transport may be necessary considering time and distance constraints.

NO →

Proceed to Priority II Interfacility Transfer Criteria

Approved: OTSIDAC 02-01-06 Revised: OTSIDAC 08-01-07; 02-06-08, 08-06-08, 02-03-10 Clarification: Revision by MAC 11-19-08

PEDIATRIC (≤16 YEARS) INTERFACILITY
TRIAGE AND TRANSGER GUIDELINES
Oklahoma Model Trauma Triage Algorithm

PRIORITY II

Abdominal/Pelvic Injuries
- Stable pelvic fractures
- Hemodynamically stable isolated abdominal trauma
  - diffuse abdominal pain/tenderness
  - seat belt contusions
  - visceral injuries
- Hemodynamically stable isolated solid organ injuries

CNS
- Head Injury with GCS > 10
- Head Injury with Transient loss of consciousness < 5 min
- Head Injury with Transient neurological deficits
- Spinal cord injury without neurological deficits

Chest
- Isolated Chest Trauma- pain, mild dyspnea
- Rib fractures, sternal fractures, pneumothorax, hemothorax *without* respiratory compromise
- Unilateral pulmonary contusion without respiratory compromise

Comorbid
- Age <5 or > 55
- Known cardiac, respiratory or metabolic disease
- Pregnancy
- Immunosupression
- Bleeding disorder or anticoagulants

Major Extremity Injury
- Single proximal extremity fractures, including open
- Distal extremity fractures, including open
- Isolated joint dislocations-knee, hip, elbow, shoulder without neurovascular deficits
- Unstable joint (ligament) injuries without neurovascular deficits
- Degloving injuries without evidence of limb threatening injury

Mechanism
- Ejection of patient from enclosed vehicle
- Adult auto/pedestrian, auto/bike, or motorcycle crash with significant impact and patient thrown or run over by vehicle
- Falls greater than 20 feet
- Significant assault or altercations
- Other "high energy" events based on Paramedic discretion4, e.g.: patients involved in motor vehicle crashes with significant vehicular damage and not using personal safety restraint devices

Other
- Isolated open facial fractures
- Isolated orbit trauma with or without entrapments, without visual deficits

---

Pediatric Trauma Score 6-8

YES →

Perform complete trauma evaluation and appropriate serial observation. Consider admission if condition remains stable.

↓

Deterioration of Glasgow Coma Scale, vital signs or patient's condition or significant findings on further evaluation.

YES ↓

If definitive surgical care or critical care monitoring are not available, activate Trauma System and prepare for RAPID transfer to the appropriate designated Trauma Facility according to the Regional Trauma Plan. Stabilization may involve surgical intervention.

NO ↓

Consider admission if condition remains stable.

NO ↓

PRIORITY III

Perform appropriate emergency department evaluation. Consider discharge or admit if condition remains stable.

Pediatric Trauma Score 9-12

↓

Deterioration of Glasgow Coma Scale, vital signs or patient's condition or significant findings on further evaluation: Initiate Trauma Treatment Protocol—Activate Trauma System and prepare for RAPID transfer to the appropriate designated Trauma Facility according to the Regional Trauma Plan if definitive surgical care and critical care monitoring are not available.

Approved: OTSIDAC 02/01/06 Revised: OTSIDAC 08/01/07; 02/06/08, 08/06/08; 02/03/10 Clarification: Revision by MAC: 11/19/08

Appendix BC

EMTALA Clarification

EMTALA Clarification

EMTALA Clarification

I. EMTALA Regarding Helipad Usage

There have been some concerns of possible EMTALA violations when using a hospitals helipad to transfer a patient from a ground ambulance to an air ambulance. The following two (2) circumstances will not trigger EMTALA. (Excerpt from the State Operations Manual, Appendix V – Interpretive Guidelines – Responsibilities of Medicare Participating Hospitals in Emergency Cases)

1. The use of a hospital's helipad by local ambulance services or other hospitals for the transport of individuals to tertiary hospitals located throughout the state does not trigger an EMTALA obligation for the hospital that has the helipad on its property when the helipad is being used for the purpose of transit as long as the sending hospital conducted the Medical Screening Exam (MSE) prior to transporting the individual to the helipad for medical helicopter transport to a designated recipient hospital. The sending hospital is responsible for conducting the MSE prior to transfer to determine if an Emergency Medical Condition (EMC) exists and implementing stabilizing treatment or conducting an appropriate transfer. Therefore, if the helipad serves simply as a point of transit for individuals who have received an MSE performed prior to the transfer to the helipad, the hospital with the helipad is not obligated to perform another MSE prior to the individuals continued travel to the recipient hospital. If, however, while at the helipad the individuals condition deteriorates, the hospital at which the helipad is located must provide another MSE and stabilizing treatment within its capacity if requested by medical personnel accompanying the individual.

2. If as part of the EMS protocol, EMS activates helicopter evacuation of an individual with a potential EMC, the hospital that has the helipad does not have an EMTALA obligation if they are not the recipient hospital, **unless a request** is made by EMS personnel, the individual, or a legally responsible person acting on the individuals behalf for the examination or treatment of an EMC.

II. EMTALA EMERGENCY DEPARTMENT DEFINITIONS & DESCRIPTIONS

Situations may occur in which patients are diverted to other healthcare facilities provided EMTALA is followed.

Emergency Medical Treatment and Active Labor Act ("EMTALA") refers to Sections 1866 and 1867 of the Social Security Act, 42 U.S.C. Section 1395dd, which obligates hospitals to provide medical screening, treatment, and transfer of individuals with emergency medical conditions or women in labor. It is also referred to as the "anti-dumping" statute and COBRA.

Emergency Medical Condition:

1. A medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain, psychiatric disturbances, and/or symptoms of substance abuse) such that the absence of immediate medical attention could reasonably be expected to result in:
    a. Placing the health of the individual or, with respect to a pregnant woman, the health of a woman and her unborn child in serious jeopardy;
    b. Serious impairment of bodily functions, or
    c. Serious dysfunction of any bodily organ or part; or

EMTALA Clarification

2. With respect to a pregnant woman who is having contractions:
    a. That there is inadequate time to effect a safe transfer to another hospital before delivery; or
    b. That transfer may pose a threat to the health or safety of the woman or the unborn child.

Capacity means the ability of the hospital to accommodate the individual requesting examination or treatment of the transferred individual. Capacity encompasses number and availability of qualified staff, beds, equipment, and the hospital's past practices of accommodating additional patients in excess of its occupancy limits.

- Such as Emergency Department beds are filled, patients are backed up in the Emergency Department waiting room, and there are no other beds or personnel available to provide appropriate care for the patients.

Capabilities of a medical facility or main hospital provider means the physical space, equipment, supplies, and services (e.g. trauma care, surgery, intensive care, pediatrics, obstetrics, burn unit, neonatal unit, or psychiatry), including ancillary services available at the hospital. The capabilities of the hospital's staff mean the level of care that the hospitals personnel can provide within the training and scope of their professional licenses. For off-campus departments, the capability of the hospital as a whole is included. The obligations of the hospital provider must be discharged within the hospital as a whole. However, the hospital is not required to locate additional personnel or staff to off-campus departments to be on-call for possible emergencies.

Under no circumstances will an Emergency Department patient who has an emergency medical condition be transferred to another facility because of inability to pay for services or based on any illegal form of discrimination (national origin, race, gender, religion, etc.). Prior to any Emergency Department transfer, the Emergency Department staff will comply fully with EMTALA. A transfer form is to be used for patients who are transferred to a different acute care facility.

If a patient Comes to the Hospital Property or Premises and has an emergency medical condition, the hospital must provide either: (a) further medical examination and treatment, including hospitalization, if necessary, as required to stabilize the medical condition within the capabilities of the staff and facilities available at the hospital; or (b) a transfer to another more appropriate or specialized facility.

- **Comes to the Emergency Department** with respect to an individual presenting for examination and treatment for what may be an emergency medical condition means that the individual is on the hospital property and premises. An individual in a non-hospital owned ambulance on hospital property or premises is considered to have come to the hospitals Emergency Department.

Appendix C~~D~~

Advanced Life Support Intercept Protocol

Plan Approval Dates:
Pre-Hospital: RTAB 07/18/2006, 08/02/2007, RTAB Revised 01/29/2008
Inter-facility: RTAB 03/27/2007, OTSIDAC 08/01/2007
EMResource™: RTAB 05/23/2006, OTSIDAC 08/02/2006

ALS INTERCEPT PROTOCOL FOR REGION 1

Purpose:

To provide guidelines to Emergency Medical Services personnel on when to request Advanced Life Support (ALS) assistance from neighboring ambulance services.

Policy:

The following will apply to ensure that BLS/ALS assistance requests are managed appropriately.

ALS Assist is defined as any request for an air or ground advanced life support unit to respond to and/or intercept with an EMS Unit for the purpose of providing an advanced level of patient care. A licensed Intermediate or Paramedic level of care should provide ALS Assist.

ALS Assist/intercept requests should be made in any situation where the EMS provider has determined that the patient may be unstable or has life-threatening injuries or illness. Medics should refer to the Oklahoma Trauma Triage and Transportation guidelines for classification of the patient.

Procedure:

1. Consideration must be given as to the location of the EMS unit, and anticipated location of intercept. The decision to request ALS should be made immediately.
2. The location of the intercept shall be decided as soon as possible.
3. Only if it is deemed to be in the best interest of the patient should the patient be transferred from a BLS unit to a ground ALS unit.
4. The ALS provider should be licensed at the Intermediate or Paramedic level or an Air Ambulance.
5. BLS and ALS personnel may elect to request air medical support based on the Regional Trauma Plan. BLS personnel need not wait for an assessment prior to requesting air medical support. Landing zone selection and security shall be coordinated with local resources. Transportation to the closest most appropriate medical facility shall not be inordinately delayed while waiting for air support.
6. A full verbal patient care report shall be given to the ALS personnel upon arrival and a full patient care report will be left with the patient at the hospital.

Appendix D

Letter Schedule of Escalation

Letter Schedule of Escalation

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

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.

Letter Schedule of Escalation

NORTHWEST
REGIONAL TRAUMA ADVISORY BOARD
BYLAWS

NAME AND GEOGRAPHIC DESCRIPTION

Section I. Name

The Board shall be known as the Northwest Regional Trauma Advisory Board, subsequently referred to as the Regional Trauma Advisory Board, Advisory Board, Board or RTAB.

Section II. Geographic description

Northwest region or Region 1 consists of all of the following counties, as determined by the Oklahoma State Trauma Advisory Council (OSTAC) in February 2004:

Alfalfa	*Custer*	*Harper*	*Washita*
Beaver	*Dewey*	*Kingfisher*	*Woods*
Beckham	*Ellis*	*Major*	*Woodward*
Blaine	*Garfield*	*Roger Mills*	
Cimarron	*Grant*	*Texas*	

MISSION STATEMENT

In support of the statewide system, create a regional system of optimal care for all trauma patients, to ensure the right patient goes to the right place in the right amount of time.

PURPOSE

Section I. The purpose of the Regional Trauma Advisory Board (RTAB) is to assist the Oklahoma Trauma and Emergency Response Advisory Council (OTERAC) and Oklahoma State Department of Health with the development and implementation of a formal trauma care system regionally and statewide.

Section II. The Regional Trauma Advisory Board shall be empowered, but not limited to:

1. Assessing the current resources and needs within the region respective to Emergency Medical Services (EMS), acute care facilities, rehabilitation facilities, communication systems, human resources, professional education, public education and advocacy.
2. Organizing regional human resources into coalitions and/or alliances, which will be proactive in trauma system development.
3. Development of Regional Trauma System Development Plan.
4. Development and implementation of Regional Trauma Quality Improvement program.
5. Providing public information and education programs regarding the need for a formal trauma care system.
6. Providing region-specific input to the Oklahoma Trauma System Improvement and Development Advisory Council and Oklahoma State Department of Health concerning trauma care issues.
7. Professional information and education program.

NORTHWEST
REGIONAL TRAUMA ADVISORY BOARD
BYLAWS

INITIAL STRUCTURE

The Commissioner of Health shall appoint the first chair of the board who will serve for the first year. This chair will work with the other providers identified for the initial membership rotation to identify the other individuals who will serve the first year. The term of the initial chair will expire with the election of a chair from the board membership.

ORGANIZATIONAL STRUCTURE

The RTAB shall consist of:

1. General Membership
2. Board Members
3. Board Officers

GENERAL MEMBERSHIP

General membership is composed of representatives from all of the licensed hospitals and ambulance service providers in the region, who are not current board members, as well as other interested individuals. Other interested individuals may include interested out of state healthcare providers.

Section I. Responsibilities of the General Membership

The General Members are expected to attend meetings regularly to provide input and receive updates on matters under consideration by the Board, but do not maintain voting privileges.

Section II. Committee Service

General Members may serve on committees, work groups and task forces.

Section III. Attendance Expectations

1. The general member may be subject to licensure action if a member misses one (1) or more schedule meetings in a year
2. Attendance from the required quarterly meeting may be excused by notification in writing to Board Officers. Notification may be by telephone, but must be followed by fax, mail or email.
3. An individual may represent more than one general member organization. In order to do this they must specify when signing in which organizations they are representing and answer roll for both organizations. They are responsible to take meeting information back to both member organizations.

NORTHWEST
REGIONAL TRAUMA ADVISORY BOARD
BYLAWS

BOARD MEMBERSHIP

Representation will rotate between the member organizations in the region based upon the approved rotation schedule (Attachment A); but will maintain a ratio of approximately:

50% Hospital representative
50% EMS representative

This ratio with equal permanent membership between hospital and emergency medical service providers will be considered for revision annually at the annual meeting. Board Membership should be multidisciplinary with broad representatives from the following list of disciplines, but not limited to:

Hospital	*Emergency Medical Services*
1. Administrator/CEO/CNO	1. Administrator
2.	2. Non Administrator EMT-B
3. QI practitioner	3. Non Administrator EMT-I
4. Emergency department physician	4. Non Administrator EMT-P
5. Surgeon	5.
6. Trauma nurse coordinator	6. EMS Medical Director/Designee
7. Trauma registrar	
8. Emergency department nurse	
9. Operating room nurse	
10. Rehabilitation practitioner	
11. Safety officer	
12. Case Manager	

Section I. Powers and Responsibilities

The Board members are responsible for overall policy and direction of the RTAB.

Section II. Duties of the Board Members

Board members shall exercise ordinary business judgment in managing the affairs of the organization. In acting in their official capacity as Board Members of this organization they shall act in good faith and take actions they reasonably believe to be in the best interest of the organization and that are not unlawful. In all other instances, the Board Members shall not take any action that they should reasonably believe would be opposed to the organization's best interests or would be unlawful. Responsibilities of the Board Members include but are not limited to:

1. Conduct the business of the organization.
2. Specify the composition of and direct the activities of committees.
3. Consider for approval recommendations from committees.
4. Prepare and administer the budget, prepare annual reports of the organization.
5. Prepare grant applications for the organization.
6. Approve, execute and/or ratify contracts made in ordinary course of business of the organization.

7. Make continuous and regular reviews of RTAB matters and business affairs in order to provide information to general membership.

Section III. Number of Board Members

The Board shall consist of no fewer than nine (9) members and no more than twenty (20) members.

Section IV. Actions of the Board

Each Board Member shall be entitled to one (1) vote on each matter submitted to a vote at a meeting of the Board.

A simple majority of the Members present and voting at a meeting at which a quorum is present shall be sufficient to constitute action by the Board.

Section V. Term

1. The term of Board Members is as follows:
   A. Hospital rotating members will serve two year rotating terms.
   B. EMS rotating members with 2004 total run volume > 90 will serve two year rotating terms.
   C. EMS rotating members with 2004 total run volume of 90 or less will serve one year terms.
   D. In the first term, board members shall be staggered with half of the two year board members serving a two year term and the remaining half serving a three year term. An initial term for all board members is specified by year in Attachment A.

Section VI. Appointments

Member organizations will appoint a representative and an alternate to the board, but will have only one (1) vote each meeting. If both primary and alternate member are present at a meeting, the primary representative shall hold the voting right. If one year board members have appointed their representative for the following year by the meeting in which officer nominations occur then they will be eligible for consideration for officer nomination.

Section VII. Meetings

Meetings of the Board shall be held in accordance with the Oklahoma Open Meeting Act. Meetings of the Board Members shall be held at such times and places as determined by the Board Members. These meetings must be held at least quarterly.

The Board shall not review patient specific information or medical records at these meetings.

Section VIII. Attendance Expectations/Removal of Board Members

1. A Member is automatically removed from the Board if he/she misses two (2) consecutive posted meetings or 40% of the scheduled meetings in any year without arranging for a proxy.
2. Vacancies
   In the event that a Board Member is removed from the board, the effected member organization will be asked to appoint a new member to take the place of the member.
3. Any member organization that subsequently fails to ensure participation by their representative shall be reported to both the Oklahoma Trauma System Improvement and Development Advisory Council and the member organization's licensing authority.

Section IX. Proxy

A Proxy for attendance and voting at a meeting must be initiated by the authorized representative, or the member organization administrator. This must be a signed statement on the represented organization's letterhead stating the authority of a specifically named substitute to attend and vote on their behalf. The proxy shall be delivered to the RTAB meeting prior to Calling to Order of the meeting, and shall be retained with the roll call. A proxy shall only be valid at the meeting for which it is executed.

Section X. Multiple Representation

An individual may only represent one Board Member Organization. However, a Board member may additionally represent a General Member Organization by specifying that they are doing this when signing in and by answering roll for the general member organization during roll call.

Section XI. Quorum

A simple majority of the Board shall constitute a quorum to conduct business at any meeting.

Section XII. Board Compensation

Persons serving on the Board shall not receive salaries for their services, but by resolution of the Board a reasonable amount of compensation for expenses incurred in attending to authorized duties may be allowed.

OFFICERS

Section I. The following officers shall be elected from the Board Members:

1. Chair
2. Vice-Chair
3. Secretary/Treasurer

Section II. The same person shall hold no more than one office.

Section III. The term for officers shall be one year.

Section IV. Nominations

Nominations of candidates for office shall occur at least one month prior to the election.

1. The candidates shall be Board Members.
2. The candidates shall express a willingness to serve.

Section V. Additional Officers

The Board Members may create additional officer positions, define the authority and duties of each such position, and elect persons to fill the position.

Section VI. Attendance Expectations/Removal of Officers

An Officer is automatically removed from office if he/she misses either two (2) consecutive posted meetings or 40% of the scheduled meetings in any year without making arrangements for a proxy to attend.

Section VII. Vacancies

A vacancy in any office may be filled by the Board for the unexpired portion of the officer's term.

DUTIES OF OFFICERS

Section I. The **Chair** shall be the executive officer of the RTAB and shall:

1. Set the agenda and preside at all meetings of the RTAB.
2. Appoint committee chairs on special committees.
3. Sign agreements and contracts after authorization by the Board.
4. Call special meetings when necessary.
5. Ensure that the RTAB is represented at Oklahoma Trauma System Improvement and Development Advisory Council meetings
6. Ensure that the RTAB is represented at all appropriate state and regional meetings.
7. Ensure that the RTAB membership is informed of all appropriate state and legislative activities.
8. Perform other tasks as deemed necessary by the Board Members.

Section II. The **Vice-Chair** shall perform the duties of the Chair in the absence of the Chair and perform such duties as assigned by the Chair or the Board.

Section III. Duties of the **Secretary** shall include:

1. Ensure dissemination of all notices required by the Bylaws and the Oklahoma Open Meetings Act.
2. Assure a meeting attendance roster is maintained.
3. Assure a register of the name and mailing address of each member organization is maintained.
4. Ensure minutes are kept of all proceedings of the Board meetings.
5. Manage the correspondence of the organization.
6. Ensure board membership is in compliance with the proposed regional rotation and provides report to chair.

Section IV. Duties of the **Treasurer** shall include:

1. Manage all funds and assets of the RTAB.
2. Monitor monies due and payable to the RTAB.
3. Ensure the preparation of the annual budget and present it to the Board Members for approval.
4. Monitor the financial records of the RTAB and arrange for an independent audit when so directed by the Board Members.

MEETINGS

Section I. Meetings of the Board shall be held in accordance with the Oklahoma Open Meeting Act.

Section II. An Annual Board Meeting shall occur at the last regularly scheduled meeting of the year. A meeting notice shall be mailed to all member-organizations at least 30 days prior to the meeting. The meeting dates, times and places for the forthcoming year shall be established at the annual meeting.

Section III. Meetings for the forthcoming year shall be posted with the Secretary of State in accordance with the Oklahoma Open Meeting Act prior to December 15. Any changes to the meeting schedule shall be duly noted to the Secretary of State.

Section IV. Notice of the date, time and place of each meeting, including the agenda and minutes, shall be mailed or e-mailed to each Board Member at least seven (7) days prior to the date of that meeting. The notice of each meeting shall include an agenda of the matters to be considered.

Section V. These meetings shall be held quarterly, or as often as deemed necessary.

Section VI. The Board shall not review patient specific information or medical records at these meetings.

Section VII. Members of the General Membership are encouraged to attend these meetings to provide input on topics under consideration by the board.

Section VIII. Special Meetings

Special meetings of the Board may be called by the Chair of the Board, Vice-Chair of the Board, or by any three members of the Board on not less than forty-eight (48) hours notice. Notice of such a meeting must be posted as a special meeting with the Secretary of State. Notice to Board Members can be communicated by mail, e-mail, telegram, telephone, or fax.

COMMITTEES

Section I. Quality Improvement Committee

1. Each RTAB is required by statute to conduct quality improvement activities.
2. The function of this committee is to decrease death and disability by reducing inappropriate variation in care through progressive cycles of performance review.
3. A multidisciplinary standing committee for Quality Improvement shall be created in each region.
   A. Minimum membership requirement:
      i. Emergency Department Physician, and/or a Surgeon and/or an EMS Medical Director
      ii. Physician Assistant and/or ARNP
      iii. Emergency Department Nurse
      iv. Operating Room Nurse
      v. Emergency Medical Technician – BLS
      vi. EMT - ALS
      vii. Air Ambulance provider
      viii. Quality Improvement Practitioner
   B. Each member must be from an Oklahoma licensed and Oklahoma based hospital or ambulance service, and hold appropriate current/active professional licensure when applicable.
   C. Other members for this committee may be identified based upon the need of the region. It is suggested that the membership be kept to 10 members but no less than 3 members.
   D. Other specific disciplines that are not regular members of the committee may be called on to meet specific quality improvement needs.
   E. A simple majority shall constitute a quorum to conduct business.
   F. Upon approval by the chair, a committee member is automatically removed from the committee if he/she misses two (2) consecutive scheduled meetings or 40% of the scheduled meetings in any year.
   G. Vacancies

i. Notice of a vacancy shall be distributed to Board members at least ten (10) days prior to a scheduled meeting.
ii. Volunteers or recommendations to fill the vacancy in membership on this committee shall be accepted and voted on at the next scheduled meeting of the Board.

4. Volunteers/recommendations for membership on this committee shall be accepted at the annual meeting, and membership appointments decided by a vote of the board members at the following meeting.
5. Each region shall adopt confidentiality policies for this committee.
6. The state Oklahoma Trauma System Improvement and Development Advisory Council, Medical Audit Committee & State QI committee shall define minimum quality improvement activities.
7. The regional committee may identify other activities to monitor based upon regional need.
8. Committee Tenure Membership on this committee is for a term of two (2) years. Half of the initial appointments to this committee shall be for a term of one year to ensure staggered terms.
9. This committee shall be for the duration of the RTAB, or as required by statute/

Section II. Standing Committees shall be established by a majority vote of the Board

1. Standing committees may include but are not limited to: Hospital Care Committee, Pre-Hospital Care Committee, Injury Prevention Committee, EMS/Hospital Disaster Committee, Trauma Coordinator Committee, Trauma Registry Committee, Finance, Professional Education, Membership, Bylaws, Public Relations, and Research.
2. At least one Board Member shall serve on each standing committee.
3. The Chair may recommend the remaining membership on these committees.
4. Each standing committee shall elect a Chair.
5. Each person on a committee shall continue to serve on the committee until the next annual meeting of the Board and until his/her successor is appointed unless sooner removed or the committee is dissolved.
6. The Chair of the Board, the Chair of the committee or a majority of the committee may call meetings of a committee. Each standing committee shall meet at least annually.
7. Notice of the committee meetings must be given in accordance with the Oklahoma Open Meetings Act.
8. A standing committee may be dissolved by a majority vote of the Board.
9. A committee member wishing to attend a meeting or vote by Proxy must prepare and sign a statement on their institution's letterhead stating their authorization of a specifically named alternate to attend the meeting and/or cast a vote on their behalf. The proxy should be presented to the committee chair prior to the meeting being called to order. A proxy shall only be valid at the meeting for which it is executed, unless otherwise indicated by board member and approved by the Chair.

~~9.~~10. The Trauma Plan shall be reviewed/revised biennially by the Northwest (1) Regional Planning Committee.

Section III. Special Committees

The chair or the board may create special, ad hoc, or task force committees.

1. Members of these committees are not required to be members of the Board.
2. The Chair shall appoint members of these committees.
3. These committees will have no power to act other than as specifically authorized by the Board.
4. The chair will decide the tenure of these committees or the board based upon the specific need for the committee.

Section IV. Committee Resignations, Removal and Vacancies

1. Any person on a committee may resign from the committee at any time by giving a written notice to the chair of the Board, chair of the committee or to the secretary of the Board.
2. The Chair of the Board shall have the authority to remove committee member at will.

Section V. Committee Minutes

The Chair of each committee shall be responsible to ensure complete and accurate minutes of each meeting and promptly forward duplicate originals thereof to the Secretary of the Board. The Chair may appoint member/members to assist with meeting proceedings as necessary.

Section VI. Committee Recommendation

Recommendations by committees are to be taken back to the Board for action.

Section VII. Committee Compensation

Persons serving on a committee shall not receive salaries for their services, but by resolution of the Board a reasonable amount for expenses incurred in attending to authorized duties may be allowed.

PROCEDURES

All matters in reference to procedural policies that are not addressed by these bylaws will be deferred to the Robert's Rules of Order.

FINANCES

Section I. Deposits

All monies received by the corporation shall be deposited with a bank, trust company or other depository, that the Board selects, in the name of the corporation. All checks, notes, drafts and acceptances of the corporation shall be signed in the manner designated by the Board Members.

Section II. Gifts

1. The Board may accept on behalf of the RTAB any contribution, gift, bequest or legacy that is not prohibited by any laws or regulations in the State of Oklahoma.
2. The Board may make gifts and charitable contributions that are not prohibited by the Bylaws, state law and are not inconsistent with the requirement for maintaining the RTAB's status as an organization exempt from taxation under Section 501(c)(3) of the Internal Revenue code.

Section III. Conflicts of Interest

1. The Board shall not make a loan to any Board Member or member organization.
2. The Board shall not borrow money from a Board member, a member organization, an employee of a member organization or a family member of a member organization unless:
   A. The transaction is described fully in a legally binding instrument;
   B. The transaction is found to be in the best interests of the RTAB after full disclosure of all relevant facts at a scheduled meeting of the Board; and
   C. Such action requires a 2/3-majority vote of the Board (excluding the vote of any person having a personal interest in the transaction) at a meeting when a quorum is present.
   D. Disclosure of intent to undertake such action is declared to the OSDH and the OTERAC for approval prior to action.
3. The Board shall not transact business with a Board Member, a member organization, an employee of a member organization or a family member of a member organization unless:
   A. The transaction is described fully in a legally binding instrument;
   B. The transaction is found to be in the best interests of the RTAB after full disclosure of all relevant facts at a scheduled meeting of the Board; and
   C. Such action requires a 2/3-majority vote of the Board (excluding the vote of any person having a personal interest in the transaction) at a meeting when a quorum is present.
   D. Disclosure of intent to undertake such action is declared to the OSDH and the OTERAC for approval prior to action.

PARTICIPATION

All member organizations are required to participate in RTAB activities. Member organizations that are not currently represented on the Board may meet this requirement by attending meetings at least quarterly to give input to the Board.

Section I. Remote Locations

Individual RTABs may arrange for remote locations to Video Conference into their meetings to facilitate participation by the general membership. It is understood that

Board members must physically attend at the published meeting location to meet the participation requirements.

EMRESOURCE™

The RTAB adopts the policies, standards and definitions recommended by the Oklahoma State Department of Health for the operations of EMResource™. Any recommendations for changes to these documents will be made to the appropriate OSDH division that is administering EMResource™ to be considered for statewide adoption. As this is a statewide system, all changes must be made on a statewide basis.

Any necessary regional operational procedures will be available for review by the RTAB prior to implementation.

AMENDMENT OF BYLAWS

The Bylaws may be altered, amended or repealed, or new bylaws may be adopted by a majority vote of the Board Members at a regularly scheduled meeting or at a meeting specially called for the purpose of altering, amending or repealing the Bylaws or at the Annual meeting.

Section I. The notice of any meeting at which the Bylaws are to be altered, amended or repealed shall include the text of the proposed provisions as well as the text of any existing provisions proposed for alteration, amendment or repeal. Such notice must be distributed to members at least 2 weeks in advance.

Section 2. The Bylaws shall be reviewed/revised biennially by the Northwest (1) Regional Planning Committee.

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

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

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

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

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

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

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

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

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.

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.

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

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.

Physical Abuse

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

Physical Examination

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

Cutaneous Findings

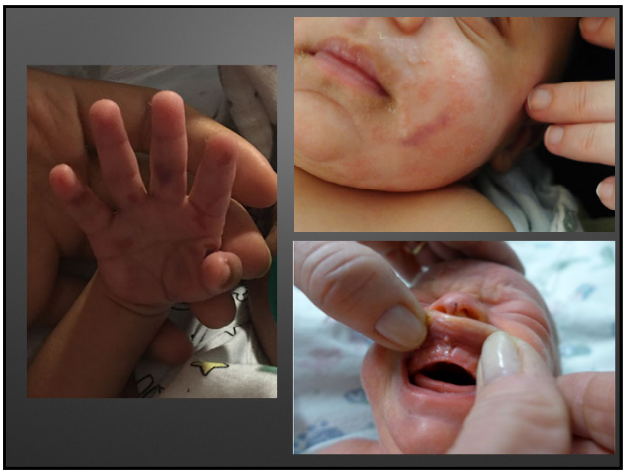
Sentinel Injuries

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

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.

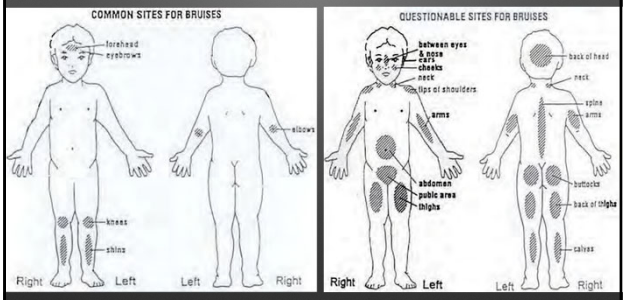


Bruises

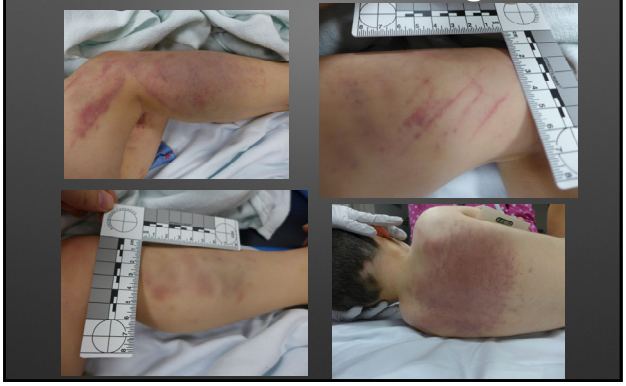
If you don't cruise, you don't bruise

- 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

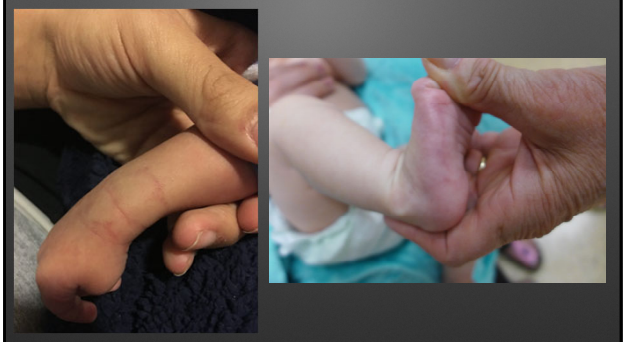
Location



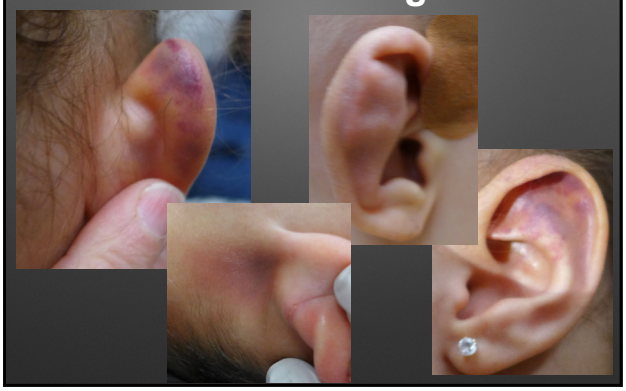
Patterned Bruising



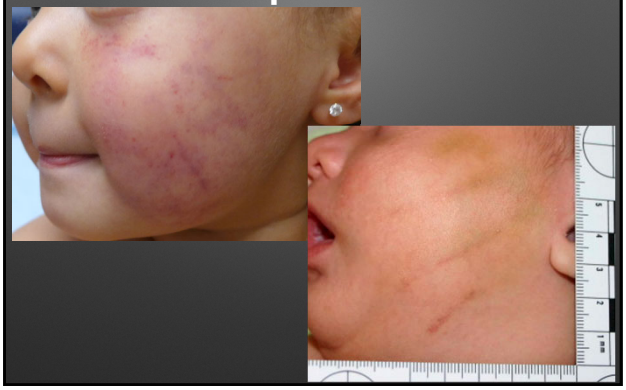
Squeeze Marks



Ear Bruising



Slap Marks



Burns

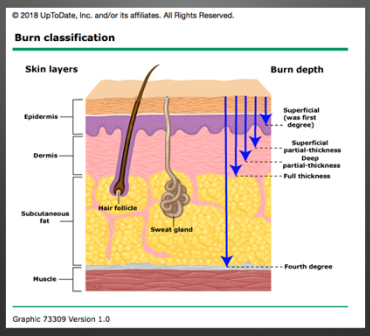
Epidemiology

- 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

Burn Classification

- Superficial - Epidermal layer only — 1st degree
- Superficial Partial Thickness - Epidermis and superficial dermis — 2nd degree
- 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

Burn Classification



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

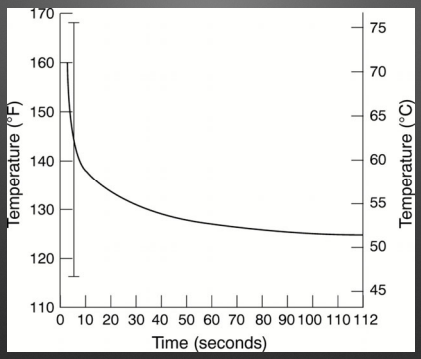
Temperature of Water

- 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

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

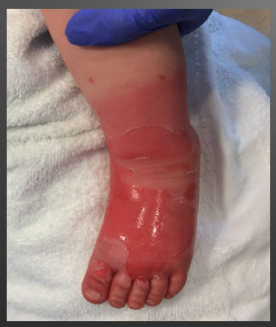
Burn Curve

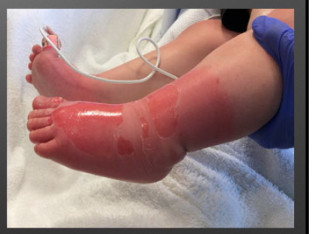


Immersion Burns

- 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)

Immersion Burns

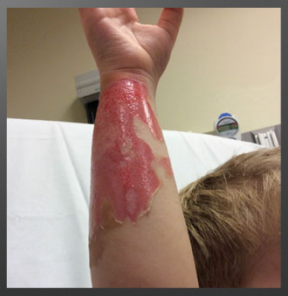




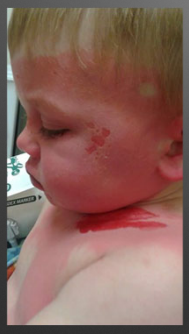
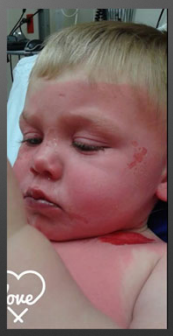
Flowing Liquid

- 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

Flowing Liquid

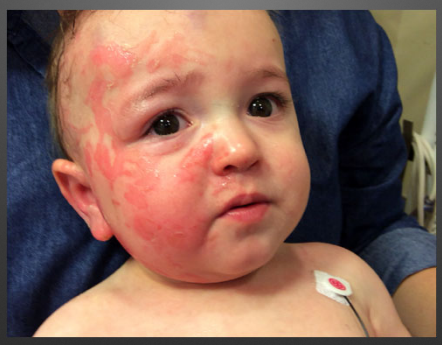
Flowing Liquid

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

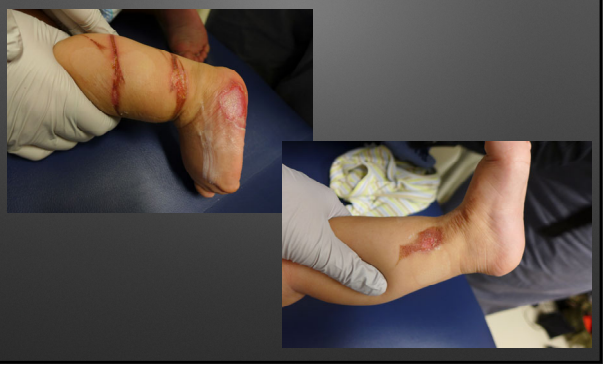
Splash Burns



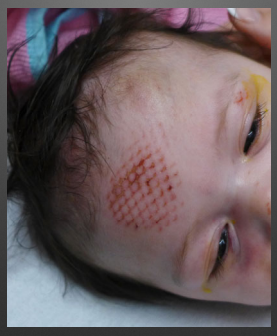
Heated Solid Objects

- 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

Heated Solid Objects



Heated Solid Objects



Abusive Head Trauma

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

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

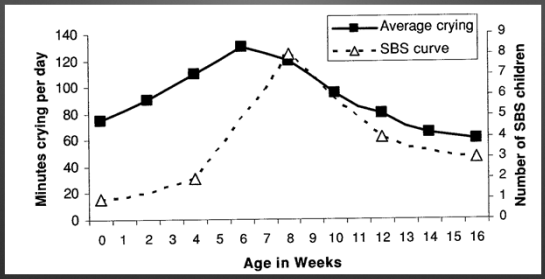
Kleinman, P. Diagnostic imaging of child abuse. 3rd ed.

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

Incidence of crying and shaken baby syndrome



Acta Pediatrica. 2008;97:782-785

Clinical presentation

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

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

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?

Child Protection Team

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

OKLAHOMA
State Department
of Health

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

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: _____

ALTERNATE REPRESENTATIVE: (please print legibly)

Name: _____

Job Title: _____

Email: _____

Telephone: _____

Facsimile: _____

*** *Please fax to the Emergency Systems at (405) 900-7560*** Update Annually***

Oklahoma State Department of Health
Emergency Systems
123 Robert S. Kerr Ave Ste. 1702, Oklahoma City, Oklahoma 73102-6406

Office Use Only:
___ Distribution List ___ Attendance Roster
___ Sign in Form ___ Vote Call Form
(If new facility/agency – update rotation – trauma plans)