Alabama Trauma System
Region Four Plan

Region 4
West Alabama EMS

ALABAMA TRAUMA SYSTEM

ALABAMA GREAT SEAL

THE ALABAMA DEPARTMENT OF PUBLIC HEALTH 1875

Published by the Alabama Department of Public Health (ADPH)/Office of Emergency Medical Services (OEMS)

Original Release Date
First Edition, V1.0/January 2010

Update History Version
1.0/July 2013
Version 1, 1.1/March 2015
Version 2.0/April 2018

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Table of Contents

I. Goal of the Alabama Trauma System (ATS)

The primary goal of the ATS and this Regional Trauma Plan is:

To administer a system which continues to decrease trauma mortality and morbidity in the 14 counties of the West Region and complies with or exceeds all ADPH/OEMS requirements.

II. Regional ATS Overview

This system will operate in Bibb, Choctaw, Dallas, Fayette, Greene, Hale, Lamar, Marengo, Marion, Perry, Pickens, Sumter, Tuscaloosa, and Wilcox counties.

The state requires an oversight authority (Lead Agency) to meet State Board of Health requirements. Alabama Department of Public Health/EMS Region Four is the Lead Agency for the West Region.

III. System Operation

The EMS Provider (EMSP) reports all ATS patients to a centralized communication's center, the Alabama Trauma Communications Center (ATCC). The ATCC monitors the trauma resources of all trauma centers on a minute-to-minute basis. The closest hospital with available trauma resources can then be selected as the most appropriate destination for that patient.

The ATCC is staffed 24 hours a day and will provide information about patient destination as established by protocols. The ATCC performs the following functions:

1. Assign a TCC I.D. number for each patient for tracking purposes.
2. Collect brief patient information.
3. Provide information on system entry criteria based on protocols as requested by EMSP.
4. Maintain knowledge of the status of all system hospitals.
5. Maintain knowledge of the activity in the prehospital setting.
6. Coordinate patient destination, when patient meets system entry criteria.
7. Establish a communications link between the EMSP and the receiving facility, as requested.
8. Record and enter prehospital data for the ATS database.

After determination that a patient meets system entry criteria, the EMSP entering the patient into the ATCC (see protocols) should contact the ATCC at the earliest practical time to enter the patient into the system. The ATCC will present the closest appropriate trauma center to the EMSP. The reporting EMSP should identify themselves, along with their agency, and ask to be patched through to the receiving hospital and provide the following information:

1. Basic patient data (number of victims, age, and sex).
2. Injury mechanism data.
3. Major anatomic injuries.
4. Current primary survey status (airway, breathing, circulation, level of consciousness, and vital signs).
5. Incident location.
6. Estimated scene departure time.
7. Proposed mode of transport (if ground, state transporting unit number).

If radio failure should occur direct contact between the EMS unit and its dispatch should be established with relay of information to the ATCC by telephone.

IV. Emergency Resource Display

The Emergency Resource Display (ERD) is part of the communication component. The ERD provides each participating hospital and the ATCC with the status display of all trauma centers. Each system hospital will maintain the status notation of the primary trauma resources in that hospital. Trauma centers will be able to change their status and activity level at any time.

Trauma/Stroke/Cardiac Emergency Resource Display																			
	Level																		
Hospital	T[1]	S[2]	C[3]	ED-T	ED	ANES	OR	X-RAY	TICU	TS	SS	OS	NS	CT	SICU	NEURO	CCU	CARD	Clab
A	1																		
B	3																		
C	3																		
D	2																		
E	1																		
F	2																		

Numbers are color coded: Green for available, yellow for resource unavailable (but still accepting some patients), red for not available. Hospital abbreviations are automatically color coded for online status: Green for active, yellow for resource unavailable (but still accepting some patients), red for inactive, based on individual resource availability in the hospital at that time. [1]Trauma [2]Stroke [3]Cardiac (ED-T: emergency department trauma, ED: emergency department, ANES: anesthesiology, OS: orthopedic surgeon , TICU: trauma intensive care unit, TS: trauma surgeon, SS: secondary surgeon, NS: neurosurgeon, CT: computed tomography, SICU: stroke intensive care unit, NEURO: neurology, CCU: critical care unit, CARD: cardiology, Clab: cardiac laboratory).

V. Regional Advisory Council

The Regional Advisory Council (RAC) was established by the Statewide Trauma and Health Systems Advisory Council (STHSAC) for the purpose of operation of the Regional Trauma Plan and to fulfill the legislative and rules requirements of a statewide trauma system.

RAC appointments will occur in the following manner:

1. The RAC shall have a minimum of 11 members. The RAC membership shall be appointed in a similar manner as the STHSAC and shall be composed of representatives of the same groups.
2. Four representatives of hospitals, who shall be appointed by the Board of Trustees of the Alabama Hospital Association (AlaHA). Two of the appointees shall be from hospitals located in the urban areas and two shall be from hospitals located in rural areas of the region. At least two of the appointees shall be from hospitals that are currently trauma centers in the system.
3. Four representatives who shall be licensed physicians appointed by the Medical Association of the State of Alabama (MASA).
4. One representative of the council who shall be the Regional Medical Director's designee.
5. One member who shall be a licensed EMSP from the region who shall be appointed by the Regional Medical Director.
6. Regional Medical Director shall be the chairperson of the RAC.

7. The RAC shall meet as outlined by the ADPH/OEMS contract with the Region, but may meet more frequently upon the call of the Chair. The RAC may meet by electronic means and shall establish rules of procedure for its meetings.
8. The RAC may appoint subcommittees and work groups. Subcommittees shall consist of council members and work groups my consist of non-council members.
9. All other governance requirements of the RAC shall be established by rule of the Board.
10. Members shall serve without compensation, but shall be entitled to reimbursement for expenses incurred in the performance of their duties at the same rates as state employees.
11. The members shall represent the demographic composition of the Region to the extent possible.
12. The duties of the RAC are those assigned by this plan and by ADPH/OEMS rules, requests, or contracts.
13. All members of the council shall serve terms in the same manner as members of the STHSAC.

VI. Secondary Triage

Secondary triage involves a determination of the severity status once a decision has already been made that a patient is to be entered into the system (primary triage). Secondary triage is used to determine trauma center designation. Secondary triage is based on physiologic status, mechanism of injury, anatomic criteria, the use of EMSP discretion, and evaluation of co-morbid factors. Secondary triage standards are:

A. Physiologic Entry Criteria

1. Physiologic entry criteria take precedence over other criteria, except Glasgow Coma Score (GCS), even if patients also meet mechanism and/or anatomic criteria.
2. Any patient entered into the system meeting physiologic criteria is to be transported to a Level I trauma Center if the transport time is under 30 minutes. If the Level I trauma center is yellow because of no trauma surgeon (backup surgeon green), the patient should still be taken there unless a closer Level II trauma center is within 20 minute transport time. If Level I trauma center is yellow due to neurosurgical services or CT is red then transport the patient to the closest Level II trauma center or Level III trauma center enrolled in the stroke system with green neurosurgical services and CT (see *transport time* in notes below).
3. Any patient who is entered under the altered central nervous system (CNS) status physiologic criteria is to be transported to the closest available Level I trauma center, unless a closer Level II or III is available with a neurosurgeon available (green).
4. Trauma System Divert to closest facility.

Criteria for diverting to the closest hospital includes:

1. Loss of airway
2. Hemodynamic instability (with no IV/IO access)
3. Uncontrolled bleeding (external)

Notify ATCC of intent to divert to closest facility for listed criteria.

Hospital transfers to an adult or pediatric specialty center can proceed as soon as the patient is stable enough for transport (not necessarily full and complete resuscitation or

evaluation/initial care). For expediency (time savings), data collection purposes, and adherence to ATS standards, OEMS prefers that hospital transfers be coordinated by the ATCC.

B. Anatomic Criteria—for patients with stable vital signs (for unstable patients see Physiologic Entry Criteria above):

1. Flail Chest
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I
2. Long bone fracture
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I
3. Penetrating head injury (Intracranial penetration thought present)
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I
4. Combination of burn and trauma
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I
5. Amputation (amputated part recovered and not mangled)
    a. Closest available Level I with Implant Service if < 30 minute transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I
6. Amputation (amputated part not recovered or is mangled)
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I
7. Paralyzed limb(s)
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I
8. Pelvic fracture
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I

C. Mechanism of Injury Criteria—for stable patients (for unstable patients see Physiologic Entry Criteria above)**:**

1. Death in same passenger area
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I
2. Ejection
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I
3. Motorcycle/bicycle—closest available Level I, II, or III
4. Auto versus pedestrian—closest available Level I. II, or III
5. Fall
    a. Closest available Level I if < 30 minute total transport time
    b. Closest available Level II or III if > 30 minute total transport time to Level I

D. EMSP Discretion

If a patient has been entered into the system and does not meet specific secondary triage criteria or the EMSP has a specific reason to upgrade the triage decision, the EMSP may do so and transport the patient to the closest available Level I, II, or III trauma center if there is less than a 30 minute transport time. The EMSP is to specifically note on the e-PCR the reason for utilization of this discretion process. The EMSP is to specifically inform the ATCC at the time the decision is made using the EMSP discretion criteria.

Any patient entered into the ATS who is stable but has many of the following factors may have a change in protocol-based destination as listed below. Unstable patients follow the unstable physiologic criteria (see A above).

1. Age 15 or younger
    a. Closest available pediatric Level I trauma center if < 60 minute total transport time
    b. Closest available Level I or II trauma center if > 60 minute total transport time to available pediatric center
    c. Closest available Level III trauma center if > 60 minute total transport time to a Level I or II trauma center
2. Pregnancy
    a. Closest available Level I trauma center if < 30 minute total transport time
    b. Closest available Level II or III trauma center if > 30 minute total transport time to Level I
3. Age greater than 55, no change.
4. Environmental extremes, no change.
5. Previous medical disease history, no change.
6. Extrication time > 20 minutes, no change.
7. Motorcycle crash, no change.

Notes

1. Transport time is the time which the field EMSP estimates considering the mode of transport, weather, traffic, and other variables and incorporates the time from scene departure to trauma center arrival.
2. Transport mode (ground versus air) will be determined by the field EMSP. Medical Direction may wish to modify the transport mode.
3. Based on prehospital trauma activity, transport needs, and resource availability, the ATCC will assist in direction of patient destinations as well as ground and air transport between the on-site EMSP, trauma centers, and the helicopter service.
4. Should a trauma center destination be changed from the original destination chosen at the time of ATCC contact, a QA will be initiated. A quarterly report of all of these issues will be made to the RAC.

VII. Hospital Destination

Hospital destination will be determined by secondary triage evaluation and the current activity status of hospitals in the system.

VIII. Prehospital System Activities

EMSPs entering patients into the ATS will receive their medical direction from the receiving Trauma Center.

On scene times should be kept at a minimum. Initiation of transport should occur within 10 minutes in most cases of major trauma.

IX. Maintaining Component and Organization Standards

1. Prehospital component: EMSP should have a basic knowledge of the ATS.
2. Hospital component: Meet ATS requirements for its trauma center designation level.