



EMERGENCY MEDICAL SERVICES TRAUMA TRANSPORT PROTOCOLS



I. DISPATCH PROCEDURES:

1. The Okaloosa County EMS Communications Center is located in Okaloosa County Emergency Operations Complex in the City of Niceville. The Communications Center has enhanced 911 and a computer aided dispatch system. All emergency and non-emergency EMS and Fire calls are received by and dispatched by this center.
2. The Communications Center will solicit, at a minimum, the following information from each caller requesting emergency medical assistance:
 - A. Location of patient
 - B. Number of patients
 - C. Circumstances (type of injury)
 - D. Extent and severity of injury
 - E. Scene security / safety
 - F. Name of caller
 - G. Call-back number
3. Emergency Vehicle Dispatching Methodology
 - A. Okaloosa County Emergency Medical Services Advanced Life Support units and Shift Supervisor will be dispatched on recorded medical channels.
 - B. The Emergency Medical Services dispatcher will dispatch the closest available Advanced Life Support (ALS) unit(s).
 - C. Prior to the first unit's arrival, multiple response units may be dispatched by the request of the Shift Supervisor based on information received from caller(s). The Paramedic, upon arrival, can request multiple response units.
 - D. The Shift Supervisor will be dispatched to any trauma alert or possible trauma alert.
4. Emergency Agency Assistance Dispatching Methodology
 - A. All requests for emergency response agency assistance will be made on recorded medical channels and/or recorded phone lines.
 - B. Fire department is recommended to respond to all vehicle accidents, trauma alerts and unconfirmed trauma alerts.
 - C. Law enforcement is requested to respond to all vehicle accidents, violent or potential violent crimes.
 - D. Public utility agencies will be requested when need is identified.
5. Transport Assistance Request Methodology
 - A. Air support will be requested by the EMS Paramedic, Shift Supervisor, or on scene fire personnel.
 - B. AirMethods is the holder of the air-medical transport COPCN in Okaloosa County and AirComm is its dispatching center.
 - C. Upon request for air transport, Okaloosa EMS Communications will notify AirComm.



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- D. AirComm will launch the closest available aircraft from the following:
- i. AirHeart in Crestview, FL. – Primary
 - ii. Okaloosa MedFlight in Niceville, FL. – Primary
 - iii. Lifeguard 1 in Milton, FL. – Secondary
 - iv. Baptist LifeFlight in Pensacola, FL – Tertiary

II. TRAUMA PATIENT ASSESSMENT

1. Adult Trauma Triage Criteria & Scorecard Methodology: Each EMS provider shall ensure that upon arrival at the location of an incident, EMS personnel shall:
- A. Assess the condition of each adult trauma patient using the adult trauma scorecard methodology, as provided in this section to determine whether the patient should be a trauma alert.
 - B. In assessing the condition of each adult trauma patient, the EMS personnel shall evaluate the patient's status for each of the following components: airway, circulation, best motor response (a component of the Glasgow Coma Scale), cutaneous, long bone fracture, patient's age, and mechanism of injury. The patient's age and mechanism of injury (ejection from a vehicle or deformed steering wheel) shall only be assessment factors when used in conjunction with assessment criteria included in section D below. (NOTE: Glasgow Coma Scale included for quick reference.)
 - C. The EMS personnel shall assess all adult trauma patients using the following **"RED"** criteria in the order presented and if **any one** of the following conditions is identified, the patient shall be considered a **trauma alert** patient:
 - i. **AIRWAY**: Active ventilation assistance required due to injury(ies) causing ineffective or labored breathing beyond the administration of oxygen.
 - ii. **CIRCULATION**: Patient lacks a radial pulse with a sustained heart rate greater than 120 beats per minute or has a blood pressure of less than 90mmHg.
 - iii. **BEST MOTOR RESPONSE (BMR)**: Patient exhibits a score of four or less on the motor assessment component of the Glasgow Coma Scale; exhibits the presence of paralysis; suspicion of a spinal cord injury; or the loss of sensation.
 - iv. **CUTANEOUS**: 2nd or 3rd degree burns to 15 percent or more of the total body surface area; electrical burns (high voltage/direct lightening) regardless of surface area calculations; an amputation proximal to the wrist or ankle; any penetrating injury to the head, neck, or torso (excluding superficial wounds where the depth of the wound can be determined).
 - v. **Longbone Fracture**: Patient reveals signs or symptoms of two or more long bone fractures sites (humerus, radius/ulna, femur, or tibia/fibula).
 - D. Should the patient not be identified as a trauma alert using the **red** criteria listed in section C above, the trauma patient shall be further assessed using the **"BLUE"** criteria in this section and shall be considered a **trauma alert** patient when a condition is identified from **any two** of the following:
 - i. **AIRWAY**: Respiratory rate of 30 or greater.
 - ii. **CIRCULATION**: Sustained heart rate of 120 beats per minute or greater.
 - iii. **BEST MOTOR RESPONSE (BMR)**: BMR of 5 on the motor component of the Glasgow Coma Scale.



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- iv. **CUTANEOUS:** Soft tissue loss from either a major degloving injury, or a major flap avulsion greater than 5 inches, or has sustained a gunshot wound to the extremities of the body.
 - v. **LONGBONE FRACTURE:** Patient reveals signs or symptoms of a single long bone fracture resulting from a motor vehicle collision or a fall from an elevation of 10 feet or greater.
 - vi. **AGE:** Patient is 55 years of age or older.
 - vii. **MECHANISM OF INJURY:** Patient has been ejected from a motor vehicle,(excluding any motorcycle, moped, all-terrain vehicle, bicycle or the open body of a pick-up truck), or the driver of the motor vehicle has impacted with the steering wheel causing steering wheel deformity.
- E. If the patient is not identified as a trauma alert after evaluation using the criteria in sections C or D above, the trauma patient will be evaluated using all elements of the Glasgow Coma Scale. If the score is **12 or less**, the patient shall be considered a **trauma alert** (excluding patients whose normal Glasgow Coma Scale Score is 12 or less, as established by medical history or pre-existing medical condition when known).
- F. In the event that none of the conditions are identified using the criteria in sections C, D, or E above, during the assessment of the adult trauma patient, the paramedic can call a trauma alert if, in his or her judgment, the patient's condition warrants such action. Where paramedic judgment is used as the basis for calling a trauma alert, it shall be documented on all patient data records as required in section 64J-1.014, F.A.C.
- G. The results of the patient assessment shall be recorded and reported on all patient data records in accordance with the requirements of section 64J-1.014, F.A.C.
2. Pediatric Trauma Triage Criteria & Methodology: The EMT or Paramedic shall assess the condition of those injured individuals with anatomical and physical characteristics of a person fifteen (15) years of age or younger for the presence of one or more of the following criteria to determine the transport destination per 64E-2.001, Florida Administrative Code, (F.A.C.):
- A. Pediatric Trauma Triage Checklist: The EMS personnel shall assess all pediatric trauma patients using the following **"RED"** criteria and if **any** of the following conditions are identified, the patient shall be considered a **pediatric trauma alert** patient:
 - i. **Airway:** Active ventilation assistance required due to injury(ies) causing ineffective or labored breathing beyond the administration of oxygen.
 - ii. **Consciousness:** Patient exhibits an altered mental status that includes drowsiness; lethargy; inability to follow commands; unresponsiveness to voice or painful stimuli; or suspicion of a spinal cord injury with/without the presence of paralysis or loss of sensation.
 - iii. **Circulation:** Faint or non-palpable carotid or femoral pulse or the patient has a systolic blood pressure of less than 50 mmHg.
 - iv. **Fracture:** Evidence of an open long bone (humerus, radius/ulna, femur, or tibia/fibula) fracture or there are multiple fracture sites or multiple dislocations (except for isolated wrist or ankle fractures or dislocations).
 - v. **Cutaneous:** Major soft tissue disruption, including major degloving injury; or major flap avulsions; or 2nd or 3rd degree burns to 10 percent or more of the total body surface area; electrical burns (high voltage/direct lightening) regardless of surface area calculations; or amputation proximal to the wrist or ankle; or any penetrating injury to the head, neck or torso (excluding superficial wounds where the depth of the wound can be determined)



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- B. In addition to the criteria listed above in (1) of this section, a **trauma alert** shall be called when “**Blue**” criteria is identified from **any two** of the components included below:
- i. **Consciousness:** Exhibits symptoms of amnesia, or there is loss of consciousness.
 - ii. **Circulation:** Carotid or femoral pulse is palpable, but the radial or pedal pulses are not palpable or the systolic blood pressure is less than 90 mmHg.
 - iii. **Fracture:** Reveals signs or symptoms of a single closed long bone fracture. Long bone fractures do not include isolated wrist or ankle fractures.
 - iv. **Size:** Pediatric trauma patients weighing 11 kilograms or less, or the body length is equivalent to this weight on a pediatric length and weight emergency tape
- C. In the event none of the above criteria is identified in the assessment of the pediatric patient, the paramedic can call a **trauma alert** if, in his or her judgment, the trauma patient’s condition warrants such action. Where paramedic judgment is used as the basis for calling a trauma alert, it shall be documented as required in the 64J-1.014 F.A.C., on the patient care report.
3. **Trauma Standby Patients: (Adult And Pediatric):** Patients that do not meet Trauma Alert criteria, but present with, in the paramedic’s judgement, a **mechanism of injury suggestive of a significant injury**, may be triaged and transported to Fort Walton Beach Medical Center as a Trauma Standby according to the following criteria:
- A. FALLS: Adult >20 foot; Child >10ft or 3x the child’s height
 - B. Fall from any height if anticoagulated older adult
 - C. High-risk auto crash with:
 - i. Intrusion of vehicle >12" inches in occupant compartment
 - ii. Ejection (partial or complete) from automobile
 - iii. Death in same passenger compartment
 - D. Auto vs. pedestrian/cyclist thrown, run over, or with significant impact (>20 MPH)
 - E. Motorcycle crash >20 MPH
 - F. High-energy dissipation or rapid decelerating incidents, for example:
 - i. Ejection from motorcycle, ATV, animal, and so on
 - ii. Striking fixed object with momentum
 - iii. Blast or explosion
 - G. High-energy electrical injury
 - H. Burns: 10% < TBSA < 15% (second or third degree) and/or inhalation injury
 - I. Blunt abdominal injury with firm or distended abdomen or with seat-belt sign

III. TRAUMA DESTINATION REQUIREMENTS

1. The EMT, paramedic, or Shift Supervisor that finds any trauma patient meeting one or more of the appropriate trauma scorecard criteria, as required in Rule 64J-2.004, F.A.C., or the pediatric trauma scorecard criteria in Rule 64J-2.005, F.A.C., shall immediately notify the Communications Center and issue a Trauma Alert using the words “Trauma Alert”.



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2. All trauma alert patients must be transported to the closest appropriate facility, being a State Approved Trauma Center (SATC) or an Initial Receiving Hospital (IRH). It should be noted that Sacred Heart Children's Hospital in Pensacola is the only pediatric specific SATC in the region and all efforts will be made to transport Trauma Alert patients 15 years or younger to Sacred Heart Hospital Pensacola.
3. Receiving Facilities
 - A. Verified State Approved Trauma Centers (Level):
 - i. Baptist Hospital, Pensacola (II)
 - ii. Sacred Heart Hospital, Pensacola (II)
 - iii. Bay Medical Center, Panama City (II)
 - B. Initial Receiving Hospitals in Okaloosa County
 - i. Fort Walton Beach Medical Center, Fort Walton Beach
 - ii. Twin Cities Hospital, Niceville
 - iii. North Okaloosa Medical Center, Crestview
4. Initial efforts are to direct transportation of the trauma alert patient to the closest SATC nearest the location of the incident; however, if transport time from the scene of the incident to the closest SATC is greater than 30 minutes by ground or air transport, or greater than 50 miles by air transport, the patient will be transported to Fort Walton Beach Medical Center.
5. Air Transport to a State Approved Trauma Center (SATC) will be used when air transport response time is less than 20 minutes.
6. Air Transport to an IRH may occur when TTP of the Air Transport Agency indicates divert for immediate stabilization or in MCI situations.
 - A. For situations with multiple trauma patients, not meeting trauma alert criteria, the non-critical patients should be ground transported to initial receiving hospitals nearest the scene of incident.
 - B. There may be instances in mass casualty situations when the ground units will be overburdened and need air transport to facilitate movement of multiple patients to initial receiving hospitals.
7. Immediate Stabilization Procedures: Immediate Stabilization interventions are those required to sustain life, and preclude immediate transport to a SATC. These interventions are as follows:
 - A. Establishing a patent airway where one does not exist.
 - B. Insertion of a chest tube to correct a tension pneumothorax.
 - C. Performance of a pericardiocentesis to relieve a pericardial tamponade.
 - D. Intravenous access (central or peripheral) in the presence of severe hypotension.
8. If a SATC or an IRH notifies EMS that it is temporarily unable to provide adequate care for the trauma patient, EMS personnel, under the direction of Medical Control will follow the trauma bypass protocols.

IV. TRAUMA BY-PASS

1. The following 7 points, including the terminology, are a summary of an agreement between the initial receiving facilities and Okaloosa EMS. Trauma by-pass will be recognized only for the following circumstances:



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- A. CT SCAN – Lack of availability of CT scan will result in a by-pass situation for trauma patients with an isolated head injury and a Glasgow Coma Score of 12 or less.
 - B. TRAUMA SURGERY – When the surgeon on-call is involved in a previous trauma alert and another surgeon is unavailable; when adequate operating room facilities are unavailable.
 - C. NEUROSURGERY – When the on-call neurosurgeon is unavailable due to involvement in emergency surgery, a by-pass situation will result for an involvement in emergency surgery, a by-pass situation will result for a trauma patient with an isolated head injury and/or a Glasgow Coma Score of 12 or less.
 - D. INTERNAL DISASTER – Any hospital which has a facility accident or emergency that closes that facility in its entirety or its surgery unit, will go on by-pass until such time as it is back in service.
 - E. SPECIAL SITUATIONS – Twin Cities Hospital will always be on trauma by-pass for adult neuro/multi-systems trauma due to lack of the necessary surgical personnel and/or facilities to handle these patients. These patients will be transported to Fort Walton Beach Medical Center for stabilization. In the event that Fort Walton Beach Medical Center is on trauma by-pass, all trauma patients will be transported to the closest facility.
 - F. Each hospital is responsible for making proper notification to Okaloosa County EMS Communications that it is on trauma by-pass. In the event that the closest appropriate facility is on by-pass, the next closest appropriate facility will be utilized.
 - G. In the event that a facility providing a specialty required by particular patient is on by-pass, it will be considered no more capable of handling that patient than a facility not offering the particular specialty, and the patient will therefore be transported to the nearest facility for stabilization, and then transferred to a facility that is able to provide the necessary care.
2. **Trauma by-pass override:** If the need for immediate stabilization of a trauma patient exists, as defined in Immediate Stabilization Procedures above, the EMS crew has the right to override the by-pass and transport the patient to the closest facility.

V. TRANSFER OF PATIENT CARE INFORMATION

In all cases, regardless of the method of transportation or the destination of the Trauma Alert patient, an Okaloosa County run report will be completed for each patient as required in sections 64J-1.014(2), (3) and (5), F.A.C. The report will be delivered to the receiving facility and/or EMS agency.

VI. TRAUMA ALERT PROCEDURES

1. The EMT, paramedic, or Shift Supervisor that finds any trauma patient meeting one or more of the appropriate trauma scorecard criteria, as required in Rule 64J-2.004, F.A.C., or the pediatric trauma scorecard criteria in Rule 64J-2.005, F.A.C., shall immediately notify the Communications Center and issue a Trauma Alert using the words “Trauma Alert”.
2. The paramedic will advise the Communications Center of the following information about the trauma alert scene
 - A. Total number of patients
 - B. The total number of trauma alert patients



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- C. The criteria by which the alert was called
- D. The mechanism of injury

VII. EMERGENCY INTER-FACILITY TRANSFERS

Emergency interfacility transfer of trauma alert patients from Okaloosa County hospitals shall be handled in the following manner:

1. Sending facility will call 911 and report a Trauma Alert in their Emergency Department. This call will automatically initiate a response from Okaloosa County EMS.
2. Sending facility will call the closest Trauma Center (adult vs. pediatric) and advise the trauma section of the Trauma Alert. This call should be from the sending emergency department physician to the receiving trauma surgeon.
3. Okaloosa County EMS shall respond to the emergency department and transport the patient to the nearest trauma center as identified by the sending hospital.
4. At the start of the transport, the transporting EMS unit shall notify the receiving trauma center that the unit is enroute to their facility and provide the trauma center with an estimated time of arrival.

Attestation of Medical Director's Participation, Review, and Approval of TTPs

"As the medical director of Okaloosa County Emergency Medical Services, I developed and/or directed the development of the trauma transport protocols presented in this document."

Chris Tanner MD

Print Name of Medical Director

ME0065153

M.D./D.O. License Number

Chris Tanner MD

Signature of Medical Director

3/22/16

Approval Date



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Okaloosa County Emergency Medical Services Trauma Triage Criteria & Scorecard Adult



Criteria: <input type="checkbox"/> 1. Meets color-coded triage system (see below) <input type="checkbox"/> 2. GCS \leq 12 (Patient must be evaluated via GCS if not identified as a trauma alert after application of criterion 1.) <input type="checkbox"/> 3. Meets local criteria (specify): _____ <input type="checkbox"/> 4. Patient does not meet any of the trauma criteria listed above but, in the judgment of the EMT or paramedic, should be transported as a trauma alert (document) _____		
COMPONENT		
AIRWAY	RESPIRATORY RATE OF 30 or GREATER <input type="checkbox"/> B	ACTIVE AIRWAY ASSISTANCE¹ <input type="checkbox"/> R
CIRCULATION	SUSTAINED HR OF 120 BEATS PER MINUTE or GREATER <input type="checkbox"/> B	LACK OF RADIAL PULSE WITH SUSTAINED HEART RATE (>120) or BP <90 mmHg <input type="checkbox"/> R
BEST MOTOR RESPONSE	BMR =5 <input type="checkbox"/> B	BMR = 4 or LESS or PRESENCE OF PARALYSIS, or SUSPICION OF SPINAL CORD INJURY or LOSS OF SENSATION <input type="checkbox"/> R
CUTANEOUS	SOFT TISSUE LOSS² or GSW TO THE EXTREMITIES <input type="checkbox"/> B	2ND OR 3RD ⁰ BURNS TO 15% or MORE TBSA or AMPUTATION PROXIMAL TO THE WRIST or ANKLE or ANY PENETRATING INJURY TO HEAD, NECK, or TORSO³ <input type="checkbox"/> R
LONGBONE FRACTURE⁴	SINGLE FX SITE DUE TO MVA or FALL 10' or MORE <input type="checkbox"/> B	FRACTURE OF TWO or MORE LONGBONES <input type="checkbox"/> R
AGE	55 YEARS or OLDER <input type="checkbox"/> B	
MECHANISM OF INJURY	EJECTION FROM VEHICLE⁵ or DEFORMED STEERING WHEEL⁶ <input type="checkbox"/> B	
	<input style="width: 15px; height: 15px; background-color: blue; border: none;" type="checkbox"/> B = any two (2) - transport as a trauma alert	<input style="width: 15px; height: 15px; background-color: red; border: none;" type="checkbox"/> R = any one (1) - transport as a trauma alert
<ol style="list-style-type: none"> 1. Airway assistance beyond administration of oxygen. 2. Major degloving injuries, or major flap avulsion (>5 in.) 3. Excluding superficial wounds in which the depth of the wound can be determined. 4. Longbone (Including humerus, (radius, ulna), femur, (tibia or fibula). 5. Excluding motorcycle, moped, all terrain vehicle, bicycle, or open body of a pickup truck. 6. Only applies to driver of vehicle. 		



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Okaloosa County Emergency Medical Services Trauma Triage Criteria & Scorecard Pediatric



Criteria:			
<input type="checkbox"/> 1) Pediatric Trauma Triage Checklist: The individual is assessed based on each of the six (6) physiologic components listed below (left column). The single, most appropriate criterion for each components is selected (along the row to the right). Refer to the color-coding of each criteria and legend below to determine the transport destination: <input type="checkbox"/> 2) Meets local criteria (specify): all pediatric trauma alert patients will be transported to the closest facility if air support is not available. <input type="checkbox"/> 3) Patient does <u>not</u> meet any of the trauma criteria listed above, but the EMT or Paramedic can call a "Trauma Alert" if, in his or her judgment, the trauma patient's condition warrants such action. Must be documented on run report pursuant to 64E-2.013, (F.A.C.)			
COMPONENT			
SIZE	> 20 Kg (44+ lbs.) <input type="checkbox"/> G	>11-20 Kg (24-44 lbs.) <input type="checkbox"/> G	WEIGHT ≤ 11 Kg or LENGTH ≤ 33 INCHES ON A PEDIATRIC LENGTH AND WEIGHT EMERGENCY TAPE <input type="checkbox"/> B
AIRWAY	NORMAL <input type="checkbox"/> G	SUPPLEMENTED O ₂ <input type="checkbox"/> G	ASSISTED OR INTUBATED (1) <input type="checkbox"/> R
CONSCIOUSNESS	AWAKE <input type="checkbox"/> G	AMNESIA OR LOSS OF CONSCIOUSNESS <input type="checkbox"/> B	ALTERED MENTAL STATUS (2) OR COMA or PRESENCE OF PARALYSIS OR SUSPICION OF SPINAL CORD INJURY or LOSS OF SENSATION <input type="checkbox"/> R
CIRCULATION	GOOD PERIPHERAL PULSES; SBP > 90 mmHg <input type="checkbox"/> G	CAROTID OR FEMORAL PULSES PALPABLE, BUT THE RADIAL OR PEDAL PULSE NOT PALPABLE or SBP < 90-mmHg <input type="checkbox"/> B	FAINT OR NON-PALPABLE CAROTID OR FEMORAL PULSE or SBP < 50 mmHg <input type="checkbox"/> R
FRACTURE	NONE SEEN OR SUSPECTED <input type="checkbox"/> G	SINGLE CLOSED LONG BONE (3) FRACTURE (4) <input type="checkbox"/> B	OPEN LONG BONE (3) FRACTURE (5) OR MULTIPLE FRACTURE SITES OR MULTIPLE DISLOCATIONS (5) <input type="checkbox"/> R
CUTANEOUS	NO VISIBLE INJURY <input type="checkbox"/> G	CONTUSION OR ABRASION <input type="checkbox"/> G	MAJOR SOFT TISSUE DISRUPTION (6) OR MAJOR FLAP AVULSION OR 2° OR 3° BURNS TO ≥10% TBSA OR AMPUTATION (7) or ANY PENETRATING INJURY TO HEAD, NECK, OR TORSO (8) <input type="checkbox"/> R
	<input style="display: inline-block; width: 15px; height: 10px; background-color: green; border: 1px solid black; vertical-align: middle;"/> G = GREEN, follow local protocols	<input style="display: inline-block; width: 15px; height: 10px; background-color: blue; border: 1px solid black; vertical-align: middle;"/> B = BLUE, any two (2) - transport as a trauma alert	<input style="display: inline-block; width: 15px; height: 10px; background-color: red; border: 1px solid black; vertical-align: middle;"/> R = RED, any one (1)-transport as a trauma alert
<ol style="list-style-type: none"> 1. Airway assistance includes manual jaw thrust, continuous suctioning, or use of other adjuncts to assist ventilatory efforts. 2. Altered mental states include drowsiness, lethargy, inability to follow commands, unresponsiveness to voice, totally unresponsive. 3. Long bones include the humerus, (radius, ulna), femur, (tibia or fibula). 4. Long bone fractures do not include isolated wrist or ankle fractures. 5. Long bone fractures do not include isolated wrist or ankle fractures or dislocations. 6. Includes major degloving injury. 7. Amputation proximal to wrist or ankle. 8. Excluding superficial wounds where the depth of the wound can be determined 			