Notice of changes to trauma triage rules

This document details the changes have been made to the portions of the Ohio Administrative Code (OAC) that cover trauma triage. These changes, based on research performed by the State Board of Emergency Medical Services, create a definition of ‘geriatric trauma patient’ and create specific criteria for the triaging of geriatric trauma patients.

Summary of changes to trauma triage rules (OAC 4765-14)

4765-14-01 Definitions
- Added (H), definition of “body regions”
- Added (I), definition of “evidence of traumatic brain injury”

4765-14-02 Determination Of A Trauma Victim
- Changed (A) to define “adult trauma victim” as being between 16 and 69 years of age
- Added (C) to define “geriatric trauma victim”

4765-14-03 Enforcement Of State Or Regional Trauma Triage Protocols
- No changes or additions

4765-14-04 Education Of State And Regional Trauma Triage Protocols
- No changes or additions

4765-14-05 Exceptions To Mandatory Transport
- No changes or additions

4765-14-06 Amendments Affecting Regional Protocols
- New rule describing how amendments to triage rules affect regional triage variants

Note on formatting of this document:
New language added to this rule is in underline format.
Geriatric criteria that are different from adult criteria are in bold format.
4765-14-01 Definitions.

(A) As used in this chapter and section 4765.01 of the Revised Code, "trauma" or "traumatic injury" means severe damage to or destruction of tissue that satisfies both of the following conditions:

1. It creates a significant risk of any of the following:
   
   (a) Loss of life;
   (b) Loss of a limb;
   (c) Significant, permanent disfigurement;
   (d) Significant, permanent disability; and

2. It is caused by any of the following:

   (a) Blunt or penetrating injury;
   (b) Exposure to electromagnetic, chemical, or radioactive energy;
   (c) Drowning, suffocation, or strangulation;
   (d) A deficit or excess of heat.

(B) "Evidence of poor perfusion" means physiologic indicators of hemorrhage or decreased cardiovascular function, which may include any of the following symptoms:

1. Weak, distal pulse;
2. Pallor;
3. Cyanosis;
4. Delayed capillary refill;
5. Tachycardia.

(C) "Evidence of respiratory distress or failure" means physiologic indicators of decreased ventilatory function, which may include any of the following symptoms:

1. Stridor;
2. Grunting;
3. Retractions;
4. Cyanosis;
5. Hoarseness;
6. Difficulty speaking.

(D) "Evidence of hemorrhagic shock" means physiologic indicators of blood loss that may include any of the following symptoms:

1. Delayed capillary refill;
2. Cool, pale, diaphoretic skin;
3. Decreased systolic blood pressure with narrowing pulse pressure;
4. Altered level of consciousness.

(E) "Seatbelt sign" means abdominal or thoracic contusions and abrasions resulting from the use of a seatbelt during a motor vehicle collision.

(F) "Signs or symptoms of spinal cord injury" means physiologic indicators that the spinal cord is damaged, including, but not limited to, paralysis, weakness, numbness, or tingling of one or more extremities.

(G) "Evidence of neurovascular compromise" means physiologic indicators of injury to blood vessels or nerves including, but not limited to, pallor, loss of palpable pulses, paralysis, paraesthesia, or severe pain.
**OAC 4765-14 with new geriatric triage criteria – Effective December 29, 2008**

(H) “Body region” means a portion of the trauma victim’s body divided into the following areas:

1. Brain
2. Head, face and neck
3. Chest
4. Abdomen and pelvis
5. Extremities
6. Spine

(I) “Evidence of traumatic brain injury” means signs of external trauma and physiologic indicators that the brain has suffered an injury caused by external force including, but not limited to:

1. Decrease in level of consciousness from the victim’s baseline
2. Unequal pupils
3. Blurred vision
4. Severe or persistent headache
5. Nausea or vomiting
6. Change in neurological status

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**4765-14-02 Determination Of A Trauma Victim.**

Emergency medical service personnel shall use the criteria in this rule, consistent with their certification, to evaluate whether an injured person qualifies as an adult trauma victim, **geriatric trauma victim**, or pediatric trauma victim, in conjunction with the definition of trauma in section 4765.01 of the Revised Code and this chapter.

(A) An adult trauma victim is a person between the ages of sixteen and sixty-nine years of age inclusive exhibiting one or more of the following physiologic or anatomic conditions:

1. **Physiologic conditions**
   
   (a) Glasgow coma scale less than or equal to thirteen:
   (b) Loss of consciousness greater than five minutes;
   (c) Deterioration in level of consciousness at the scene or during transport;
   (d) Failure to localize to pain;
   (e) Respiratory rate less than ten or greater than twenty-nine;
   (f) Requires endotracheal intubation;
   (g) Requires relief of tension pneumothorax;
   (h) Pulse greater than one hundred twenty in combination with evidence of hemorrhagic shock;
   (i) Systolic blood pressure less than ninety, or absent radial pulse with carotid pulse present;

2. **Anatomic conditions**
   
   (a) Penetrating trauma to the head, neck, or torso;
   (b) Significant, penetrating trauma to extremities proximal to the knee or elbow with evidence of neurovascular compromise;
   (c) Injuries to the head, neck, or torso where the following physical findings are present:
      
      (i) Visible crush injury;
      (ii) Abdominal tenderness, distention, or seatbelt sign;
      (iii) Pelvic fracture;
      (iv) Flail chest;

   (d) Injuries to the extremities where the following physical findings are present:
(i) Amputations proximal to the wrist or ankle;
(ii) Visible crush injury;
(iii) Fractures of two or more proximal long bones;
(iv) Evidence of neurovascular compromise;
(e) Signs or symptoms of spinal cord injury;
(f) Second degree or third degree burns greater than ten per cent total body surface area, or other significant burns involving the face, feet, hands, genitalia, or airway.

(B) A pediatric trauma victim is a person under sixteen years of age exhibiting one or more of the following physiologic or anatomic conditions:

(1) Physiologic conditions

(a) Glasgow coma scale less than or equal to thirteen;
(b) Loss of consciousness greater than five minutes;
(c) Deterioration in level of consciousness at the scene or during transport;
(d) Failure to localize to pain;
(e) Evidence of poor perfusion, or evidence of respiratory distress or failure.

(2) Anatomic conditions

(a) Penetrating trauma to the head, neck, or torso;
(b) Significant, penetrating trauma to extremities proximal to the knee or elbow with evidence of neurovascular compromise;
(c) Injuries to the head, neck, or torso where the following physical findings are present:
   (i) Visible crush injury;
   (ii) Abdominal tenderness, distention, or seatbelt sign;
   (iii) Pelvic fracture;
   (iv) Flail chest;
(d) Injuries to the extremities where the following physical findings are present:
   (i) Amputations proximal to the wrist or ankle;
   (ii) Visible crush injury;
   (iii) Fractures of two or more proximal long bones;
   (iv) Evidence of neurovascular compromise.

(e) Signs or symptoms of spinal cord injury;
(f) Second or third degree burns greater than ten per cent total body surface area, or other significant burns involving the face, feet, hands, genitalia, or airway.

(C) A geriatric trauma victim is a person seventy years of age or older exhibiting one or more of the following causes of injury or physiologic or anatomic conditions:

(1) Physiologic conditions

(a) Glasgow coma scale less than or equal to fourteen in a trauma patient with a known or suspected traumatic brain injury
(b) Glasgow coma score less than or equal to thirteen;
(c) Loss of consciousness greater than five minutes;
(d) Deterioration in level of consciousness at the scene or during transport;
(e) Failure to localize to pain;
(f) Respiratory rate less than ten or greater than twenty-nine;
(g) Requires endotracheal intubation;
(h) Requires relief of tension pneumothorax;
(i) Pulse greater than one hundred twenty in combination with evidence of hemorrhagic shock;
(j) Systolic blood pressure less than one-hundred, or absent radial pulse with carotid pulse present;

(2) Anatomic conditions

(a) Penetrating trauma to the head, neck, or torso;
(b) Significant, penetrating trauma to extremities proximal to the knee or elbow with evidence of neurovascular compromise;

(c) Injuries to the head, neck, or torso where the following physical findings are present:

(i) Visible crush injury;
(ii) Abdominal tenderness, distention, or seatbelt sign;
(iii) Pelvic fracture;
(iv) Flail chest;

(d) Injuries to the extremities where the following physical findings are present:

(i) Amputations proximal to the wrist or ankle;
(ii) Visible crush injury;
(iii) Fracture of one proximal long bone sustained as a result of a motor vehicle crash;
(iv) Fractures of two or more proximal long bones;
(v) Evidence of neurovascular compromise.

(e) Signs or symptoms of spinal cord injury;
(f) Second degree or third degree burns greater than ten per cent total body surface area, or other significant burns involving the face, feet, hands, genitalia, or airway;

(g) Injury sustained in two or more body regions.

(3) Cause of injury

(a) Pedestrian struck by a motor vehicle
(b) Fall from any height, including standing falls, with evidence of a traumatic brain injury

(D) Emergency medical service personnel shall also consider mechanism of injury and special considerations, as taught in the EMT-basic, EMT-intermediate, or EMT-paramedic curriculum, when evaluating whether an injured person qualifies as a trauma victim.

4765-14-03 Enforcement Of State Or Regional Trauma Triage Protocols.

(A) EMS medical directors shall be responsible for enforcing state or regional trauma triage protocols for EMS personnel under their medical direction through a performance improvement or peer review process.

(B) EMS medical directors may request assistance from the RPABs to address issues related to quality improvement and peer review of state or regional trauma triage protocols.

(C) The board shall investigate all complaints regarding violations of state or regional trauma triage protocols consistent with its current procedures for investigations.
4765-14-04  Education of State and Regional Trauma Triage Protocols.

The board shall consult with the state trauma committee, emergency medical service organizations and personnel, regional directors and regional physician advisory boards, emergency medical service instructors, and persons who regularly provide medical direction to emergency medical service personnel in this state for assistance in developing and implementing educational opportunities regarding state and regional trauma triage protocols. The board may also enlist the assistance of the division of EMS or direct the division of EMS to participate in developing and implementing educational opportunities regarding state and regional trauma triage protocols in a manner to be determined by the board.

4765-14-05  Exceptions to Mandatory Transport.

(A) Emergency medical service personnel shall transport a trauma victim, as defined in section 4765.01 of the Revised Code and this chapter, directly to an adult or pediatric trauma center that is qualified to provide appropriate adult or pediatric care, unless one or more of the following exceptions apply:

1. It is medically necessary to transport the victim to another hospital for initial assessment and stabilization before transfer to an adult or pediatric trauma center;

2. It is unsafe or medically inappropriate to transport the victim directly to an adult or pediatric trauma center due to adverse weather or ground conditions or excessive transport time;

3. Transporting the victim to an adult or pediatric trauma center would cause a shortage of local emergency medical service resources;

4. No appropriate adult or pediatric trauma center is able to receive and provide adult or pediatric trauma care to the trauma victim without undue delay;

5. Before transport of a patient begins, the patient requests to be taken to a particular hospital that is not a trauma center or, if the patient is less than eighteen years of age or is not able to communicate, such a request is made by an adult member of the patient's family or a legal representative of the patient.

4765-14-06  Amendments Affecting Regional Protocols

If the state trauma triage protocols are amended to include criteria that do not appear in a region’s protocols, such amendments will automatically be applied to the region’s protocols until such time as the region amends their protocols, in accordance with section 4765.40 of the Revised Code.