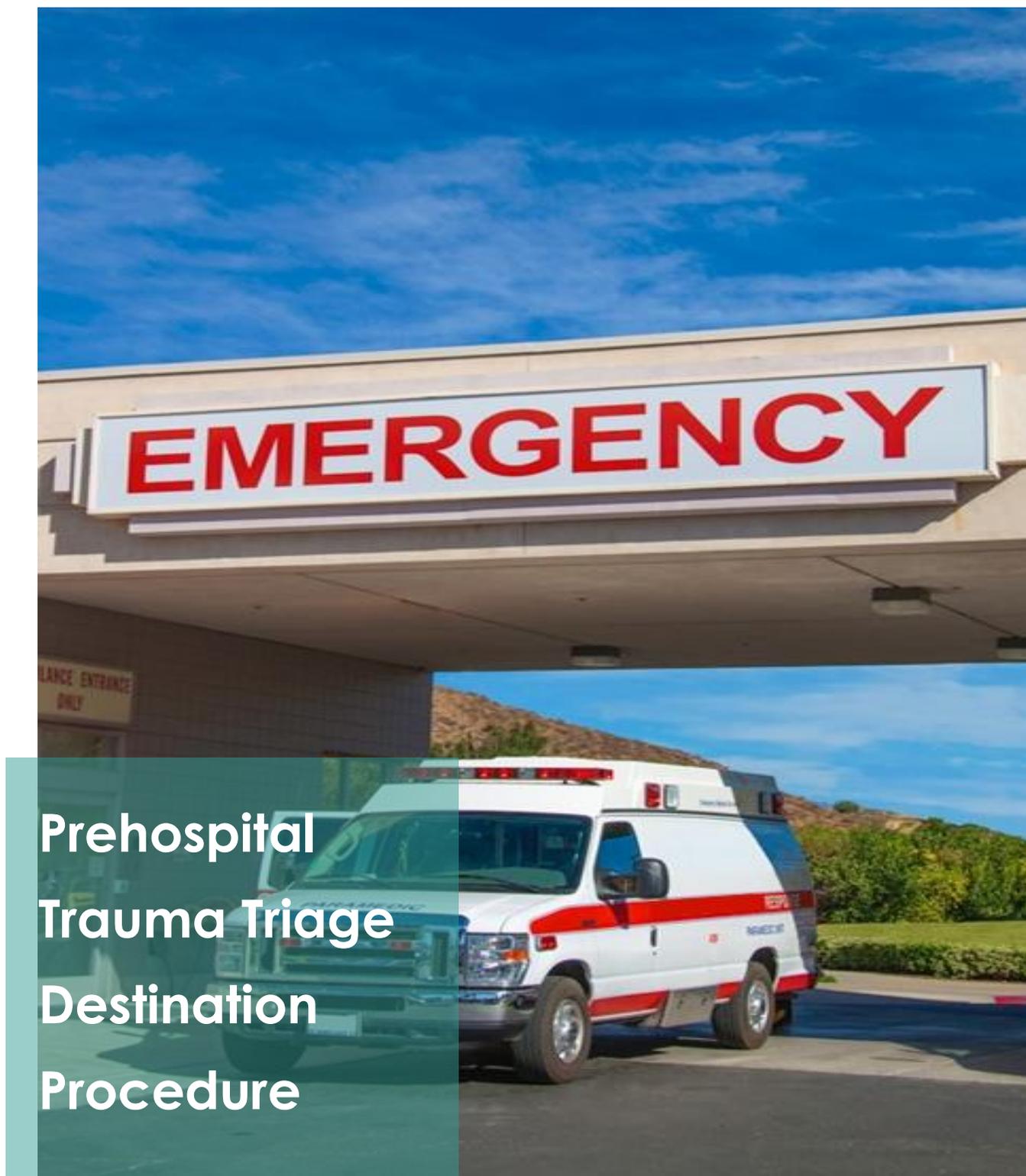


2023 Washington State



Purpose

The National Guideline for Field Triage of Injured Patients was developed by a multidisciplinary panel led by the American College of Surgeons Committee on Trauma. The guideline has been adopted by the Department of Health (DOH) based on the recommendation of the State Emergency Medical Services (EMS) and Trauma Steering Committee in association with the Prehospital and Hospital Technical Advisory Committees.

The guideline represents the current best practice for the triage of trauma patients and allows EMS providers to quickly and accurately determine if the casualty is a major or moderate trauma patient. It also aids in decision making to determine the most appropriate transfer facility location.

The triage procedure is described below in Figure 1. It consolidates triage criteria into two main categories based on risk of serious injury: **High-Risk Criteria (red box)** includes Injury Patterns, Mental Status, and Vital Signs. **Moderate-Risk Criteria (yellow box)** includes Mechanism of Injury and EMS Judgment. Each risk category is aligned with recommendations for a destination trauma service. Figure 1. is intended to be read from top to bottom, left to right.

Any certified EMS provider can identify a major trauma patient and alert receiving hospitals. Hospitals will activate their trauma team based on their internal policies and procedures. EMS providers should follow regional Patient Care Procedures (PCPs) and County Operating Procedures (COPs) for engaging other system partners such as air ambulance and advanced level ground ambulance services to coordinate the most appropriate and expedient transport modality for a trauma patient.

Red Criteria / High Risk for Serious Injury

Assess Injury Patterns, Mental Status & Vital Signs

Assessment of injury patterns, mental status, and vital signs meeting red criteria should require alerting and rapidly transporting to the closest level I or II trauma service within 30 minutes transport time. If the transport time is greater than 30 minutes, transfer should be to the nearest most appropriate trauma service. If unable to maintain a patent airway, consider rendezvous with an Advanced Life Support (ALS) unit or transporting to the nearest facility capable of definitive airway management. The presence of specific injury patterns with normal vital signs, lack of pain, or normal levels of consciousness; requires calling medical control and alerting the receiving hospital. Pediatric patients meeting the red criteria should be preferentially triaged to designated pediatric trauma service.

Yellow Criteria / Moderate Risk for Serious Injury

Assess Mechanism of Injury and EMS Judgement

An assessment of the mechanism of injury meeting yellow criteria should require alerting and rapidly transporting to the closest appropriate trauma service within 30 minutes (air or ground). The destination trauma service need not be the highest-level trauma service. Risk factors coupled with "provider judgment" are reasons for the provider to contact Medical Control and discuss appropriate destinations for these patients. In some cases, the decision may be to transport to the nearest trauma service or a resource hospital. Patients with combined burns and trauma should be preferentially transported to a trauma center with burn care capability. Pediatric patients should be preferentially transported to a designated pediatric trauma service.

PCPs and local COPs provide additional details about the appropriate hospital destination. They are intended to further define how the system operates. The Prehospital Trauma Triage Destination Procedure and PCPs work in "hand in glove" fashion to address trauma patient care needs.

References

- Fischer, P. E., Gestring, M. L., Sagraves, S. G., Michaels, H. N., Patel, B., Dodd, J., Campion, E. M., VanderKolk, W. E., & Bulger, E. M. (2022). The national trauma triage protocol: how EMS perspective can inform the guideline revision. *Trauma surgery & acute care open*, 7(1), e000879. <https://doi.org/10.1136/tsaco-2021-000879>
- Lupton, JR, Davis-O'Reilly, C, Jungbauer, RM, et al. Mechanism of injury and special considerations as predictive of serious injury: A systematic review. *Acad Emerg Med*. 2022; 29: 1106- 1117. doi: 10.1111/acem.14489
- Morgan Schellenberg, Stephen Docherty, Natthida Owattanapanich, Brent Emigh, Paige Lutterman, Lindsey Karavites, Emily Switzer, Matthew Wiepking, Carl Chudnofsky, Kenji Inaba. (2022) Emergency physician and nurse discretion accurately triage high-risk trauma patients. *European Journal of Trauma and Emergency Surgery* 83.
- Newgard, C. D., Fischer, P. E., Gestring, M., Michaels, H. N., Jurkovich, G. J., Lerner, E. B., Fallat, M. E., Delbridge, T. R., Brown, J. B., Bulger, E. M., & Writing Group for the 2021 National Expert Panel on Field Triage (2022). National guideline for the field triage of injured patients: Recommendations of the National Expert Panel on Field Triage, 2021. *The journal of trauma and acute care surgery*, 93(2), e49–e60. <https://doi.org/10.1097/TA.0000000000003627>
- National Guideline for the Field Triage of Injured Patients: Recommendations of the National Expert Panel on Field Triage, 2021. *Journal of Trauma and Acute Care Surgery*. DOI: 10.1097/TA.0000000000003627

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.

Figure 1: Trauma Triage Criteria and Categories

Red Criteria: High Risk for Serious Injury

Injury Patterns	Mental Status & Vital Signs
<ul style="list-style-type: none"> • Penetrating injuries to head, neck, torso, and proximal extremities • Skull deformity, suspected skull fracture • Suspected spinal injury with new motor or sensory loss • Chest wall instability, deformity, or suspected flail chest • Suspected pelvic fracture • Suspected fracture of two or more proximal long bones • Crushed, degloved, mangled, or pulseless extremity • Amputation proximal to wrist or ankle • Active bleeding requiring a tourniquet or wound packing with continuous pressure 	<p>All Patients</p> <ul style="list-style-type: none"> • Unable to follow commands (motor GCS < 6) • RR < 10 or > 29 breaths/min • Respiratory distress or need for respiratory support • Room-air pulse oximetry < 90% <p>Age 0–9 years</p> <ul style="list-style-type: none"> • SBP < 70mm Hg + (2 x age in years) <p>Age 10–64 years</p> <ul style="list-style-type: none"> • SBP < 90 mmHg or • HR > SBP <p>Age ≥ 65 years</p> <ul style="list-style-type: none"> • SBP < 110 mmHg or • HR > SBP

Patients meeting any RED criteria should be transported to the closest level I or II trauma service within 30 minutes transport time (air or ground). Transport times greater than 30 minutes, take to the closest most appropriate trauma service.

Yellow Criteria: Moderate Risk for Serious Injury

Mechanism of Injury	EMS Judgement
<ul style="list-style-type: none"> • High-risk auto crash <ul style="list-style-type: none"> - Partial or complete ejection - Significant intrusion (including roof) <ul style="list-style-type: none"> ▪ >12 inches occupant site OR ▪ >18 inches any site OR ▪ Need for extrication for entrapped patient - Death in passenger compartment - Child (age 0-9 years) unrestrained or in unsecured child safety seat - Vehicle telemetry data consistent with severe injury • Rider separated from transport vehicle with significant impact (e.g., Motorcycle, ATV, horse, etc.) • Pedestrian/bicycle rider thrown, run over, or with significant impact • Fall from height > 10 feet (all ages) 	<p>Consider risk factors, including:</p> <ul style="list-style-type: none"> • Low-level falls in young children (age ≤ 5 years) or older adults (age ≥ 65 years) with significant head impact • Anticoagulant use • Suspicion of child abuse • Special, high-resource healthcare needs • Pregnancy > 20 weeks • Burns in conjunction with trauma • Children should be triaged preferentially to pediatric capable centers <p>If concerned, take to a trauma service</p>

Patients meeting YELLOW criteria, WHO DO NOT MEET THE RED CRITERIA, should be transported to a designated trauma service, it need not be the highest level.