

Head/Eye/Ear Trauma (113)

Adults	Pediatrics (13 years and under)
Public Safety First Aid Procedures: Only	Public Safety First Aid Procedures: Only
<ul style="list-style-type: none"> Request Fire/EMS Support ABC's Encourage patient to remain still in position of comfort Control external bleeding as needed 	<ul style="list-style-type: none"> Request Fire/EMS Support ABC's Encourage patient to remain still in position of comfort Control external bleeding as needed
BLS Procedures: EMT's and Paramedics start here	BLS Procedures: EMT's and Paramedics start here
<ul style="list-style-type: none"> Perform assessment Spinal motion restriction if indicated Administer O2 if SpO2 <94% or if in respiratory distress; HOWEVER, apply high flow oxygen to all patients with head injury and altered level of consciousness or loss of consciousness. If Head injury: Perform neuro assessment, monitor airway, control hemorrhage. If patient unresponsive or rapidly declining LOC consider supraglottic airway If Ear injury: Control external hemorrhage with direct pressure, apply dressing DO NOT pack ear canal If Eye injury: Trauma, loosely cover both eyes/ stabilize impaled objects. Chemical: Determine chemical/follow SDS or Label directions for eye injuries, if unavailable irrigate with water for 20 minutes. Cover both eyes. Prepare for transport if patient becomes unstable provide rapid transport or ALS rendezvous 	<ul style="list-style-type: none"> Perform assessment Spinal motion restriction if indicated Administer O2 if SpO2 <94% or if in respiratory distress; HOWEVER, apply high flow oxygen to all patients with head injury and altered level of consciousness or loss of consciousness. If Head injury: Perform neuro assessment, monitor airway, control hemorrhage. If patient unresponsive or rapidly declining LOC consider Ventilation with BVM If Ear injury: Control external hemorrhage with direct pressure, apply dressing. DO NOT pack ear canal If Eye injury: Trauma, loosely cover both eyes/ stabilize impaled objects. Chemical: Determine chemical/follow SDS or Label directions for eye injuries, if unavailable irrigate with water for 20 min. Cover both eyes Prepare for transport if patient becomes unstable provide rapid transport or ALS rendezvous
ALS Prior to Base Hospital Contact: Paramedic only	ALS Prior to Base Hospital Contact: Paramedic only
<ul style="list-style-type: none"> If patient unresponsive or rapidly declining level of consciousness, consider ET intubation. Closed Head Injury: If altered level of consciousness or loss of consciousness, give 1000mL IV fluid bolus and may repeat 500mL bolus to maintain BP over 90mm/Hg. Establish large bore IV/IO If poor perfusion enter Shock/ Hypoperfusion Protocol (124) Rapid transport to trauma center 	<ul style="list-style-type: none"> If patient unresponsive or rapidly declining level of consciousness, consider supraglottic airway device only if unable to ventilate. If altered level of consciousness or loss of consciousness due to head injury, give 20mL/kg bolus with 10mL/kg repeat bolus to maintain BP over 70 + 2x(Age). Establish large bore IV/IO If poor perfusion enter Shock/ Hypoperfusion Protocol (124) Rapid transport to trauma center

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Base Hospital Contact Required	Base Hospital Contact Required
<ul style="list-style-type: none"> Give 250 mL fluid bolus to maintain Systolic B/P >80 mmHg 	<ul style="list-style-type: none"> Give 5 mL/kg fluid bolus to maintain Systolic B/P. <ul style="list-style-type: none"> 1-10 years old >70 mmHg 10 + years old >80 mmHg

113 HEAD/EYE/ EAR TRAUMA

Special Considerations

1. Endotracheal intubation should be considered for patients > 13 years with a Glasgow Coma Score of 8 or less.
2. If BVM needed for ventilation, ventilate adults at 10 breaths per minute, pediatrics at 20 breaths per minute and infants at 25 breaths per minute. **DO NOT HYPERVENTILATE.** Maintain End-Tidal 35-45. Must use airway adjuncts and enough personnel to ventilate adequately.
3. Cushing's Triad is associated with increased intracranial pressure and is manifested by a decreased heart rate, increased blood pressure and increased or irregular respiratory rate. Decomensation can be rapid once blood pressure and respiratory rate begins to drop.
4. Fluid challenge in trauma patients should be avoided due to increased mortality.