# Head Injury Level II

**Head Injury Level II**  
(No Level I)

**Skill Level:** RN or LPN  
**Definition:** Trauma to the head that does not result in any alteration of cerebral function

<table>
<thead>
<tr>
<th>Subjective:</th>
<th>Assessment:</th>
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</thead>
</table>
| • “I hit my head” or “I was hit in the head.”  
• Awake and answering questions appropriately.  
• No Loss of consciousness | • Alteration in comfort r/t head trauma  
• Risk for progression of symptoms |

<table>
<thead>
<tr>
<th>Objective:</th>
<th>Plan:</th>
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</thead>
</table>
| • No evidence of skull fracture or multiple injuries to head, face and neck that would suggest a high risk head injury  
• No evidence or positive battle sign with ecchymosis behind ears or periorbital ecchymosis  
• Age < 60  
• Not on anti-coagulation medications  
• No new balance disturbance  
• No new seizure episodes associated with head trauma  
• Opens eyes spontaneously, obeys commands, converses without difficulty  
• Stable vital signs or patients base line  
• Oriented to person, place, time and situation  
• No focal neurological deficits  
• No vomiting | • Neuro checks every 4 hours for 24 hours. If stable may release to GP. (Use attached form for evaluation tool)  
• If less than 24 hour facility or facilities without infirmaries, consult with medical provider  
• Ice to injuries, prn  
• For minor pain management may use Ibuprofen or acetaminophen from housing unit. If pregnant, acetaminophen (no Ibuprofen)  
• No Aspirin  
• No Opiates (if patient takes Opiates prn, contact provider)  
**Naprosyn, aspirin, and ibuprofen are not recommended for pain management for pregnant patients, please instruct all pregnant patient to use acetaminophen (available in housing units) for minor pain management.**  
• Consider bedrest and sports restrictions  
• Provider visit next available time  
**Refer to Emergency Head Trauma Protocol:**  
• Suspicion of skull fracture, open wounds to scalp, or exposed brain matter  
• Suspicion of serious neck or spinal injury (Spinal immobilization; refer to emergency protocol)  
• Alteration in mental status, level of consciousness or loss of consciousness  
• Persistent vomiting  
• If on anti-coagulation therapy or age is > 60, notify provider  
• New onset of balance or gait disturbance  
• New episodes of seizure  
• Suspicion of Cerebral Spinal Fluid leaking from nose or ears  
• Periorbital ecchymosis (Raccoon Eyes), or ecchymosis over the mastoid area behind ears (Positive Battle Sign)  
• Unstable Vital signs |
Head Injury Level II  
*Nursing Education*:  
1. Moderate or severe head trauma is almost always associated with a high risk head injury, usually a motor vehicle accident, repeated direct trauma or a fall from a height. At risk patients are those who are 60 or over and/or anti-coagulated. These patients often have persistent neurological impairment, including persistent confusion, focal neurological findings, and symptoms of nausea, vomiting, dizziness and significant headache.

2. A variant of moderate head trauma is when patients talk and deteriorate. These patients usually present with minor neurological impairment, and their status worsens over the course of the first 48 hours after injury. Many of them have subdural or epidural hematomas or brain injury with edema. All patients with moderate of severe head trauma need neural imaging (non-contrast CT) and close observation.

3. Positive Battle sign may develop over a period of hours after injury and is indicative of basilar skull fracture. Do not pack ears or nose in the event of head injury. Increased intracranial pressure may result.

4. GCS greater than 12 meets criteria for mild TBI (Traumatic Brain Injury). GCS score of 9 – 12 is Moderate TBI and a score <9 is considered severe TBI.

*Patient Teaching*:  
The symptoms associated with a head injury may vary. This may impact your ability to partake in normal daily activities. It is important you get plenty of rest and do not engage in physically demanding activities until your doctor clears you to do so. The following instructions are guidelines for convalescence.

1. Avoid strenuous activities. No heavy lifting, straining or operating machinery until your doctor clears you.

2. May use Tylenol or Ibuprofen from housing unit as directed. If already taking anti-inflammatories, do not use Ibuprofen.

3. If you experience persistent or severe headaches, depression, difficulty concentrating, dizziness, nausea, vomiting, confusion, increased drowsiness, seizures, difficulty walking or staggering, blood tinged drainage from ears or nose, double vision or difficulty with your eyesight, notify medical immediately.

**APPROVED:**

_________________________  _______________________
Medical Services Manager  Date

_________________________  _______________________
Chief Medical Officer  Date

_________________________  3/15/2018
Clinical Medical Director  Date

Effective Date: ______________
Revised: March 2018
Supersedes: February 2015
Head Injury Level II

Head Trauma Algorithm

Are any of the following present?

- Glasgow coma Scale <15
- Open or depressed skull fracture, lacerations hematomas or bony step off’s
- SX/S basilar skull fracture i.e., positive Battle Sign (ecchymosis behind ears over mastoid)
- Raccoon Eyes (periorbital ecchymosis)
- Otorrhea, rhinorrhea
- 2 or more episodes of vomiting
- New neurological deficit i.e., cranial nerve, motor, sensory, coordination, gait disturbance, cognitive impairment
- Presence of bleeding with use of an anticoagulant
- Seizure
- >60 years old
- Retrograde amnesia of 30 minutes or longer after trauma
- Potential for high impact trauma (Fall from >3 feet, down 5 or more stairs, kicking, punching or hitting head and face.
- Severe headache (“Worst headache ever”) along with sharp neck or back pain, vomiting

YES               NO

Refer to Emergency Protocol for Head Trauma and prepare to Transport to Emergency Department for further evaluation and higher level of care

Adapted from “Up To Date 2018”
# Head Injury Level II

## Oregon Department of Corrections

### Health Service Section

#### Minor Head Trauma Assessment

Instructions: Complete the appropriate response in each column, or enter code (see legend bottom of form). Complete initial assessment then at 2, 4, 8, 12 and 24 hours post injury, discuss deterioration with practitioner or consider transport to ED. GCS less than 13 transport to ED.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>LOC</th>
<th>Eyes open</th>
<th>Verbal</th>
<th>Motor</th>
<th>Score</th>
<th>Gait/ Balance</th>
<th>Facial</th>
<th>Upper Ext</th>
<th>Lower Ext</th>
<th>Movement / Strength</th>
<th>Cognition</th>
<th>Word recall 0 / 5 min</th>
<th># of digits backwards</th>
<th>Global</th>
<th>Signature</th>
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<tbody>
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## Observations and Comments

<table>
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<tr>
<th>Date</th>
<th>Time</th>
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### LOC

<table>
<thead>
<tr>
<th>Eye Opening</th>
<th>Verbal Response</th>
<th>Motor Response</th>
<th>Movement/Strength</th>
<th>Gait</th>
<th>Words</th>
<th>Digits</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Alert</td>
<td>4 - Spontaneous</td>
<td>6 - Obeys Commands</td>
<td>N - Normal gait</td>
<td>Cat</td>
<td>5,2,8</td>
<td>Sz - Seizure</td>
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<tr>
<td>D - Drowsy</td>
<td>3 - To Speech</td>
<td>5 - Oriented</td>
<td>R==L - Rt greater than L</td>
<td>Pen</td>
<td>6,2,9,4</td>
<td>NV - Nausea/Vomiting</td>
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<tr>
<td>S - Stuporous</td>
<td>2 - To Pain</td>
<td>4 - Confused</td>
<td>ST - Stumbles</td>
<td>Shoe</td>
<td>8,3,2,7,9</td>
<td>BV - Blurred Vision</td>
<td></td>
</tr>
<tr>
<td>C - Comatose</td>
<td>1 - None</td>
<td>3 - Inappropriate</td>
<td>L&gt;R - Lt greater than Rt</td>
<td>Shoe</td>
<td>8,3,2,7,9</td>
<td>HA - Headache</td>
<td></td>
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<tr>
<td></td>
<td>Closed by edema</td>
<td>2 - Incomprehensible</td>
<td>AT - Ataxia</td>
<td>Shoe</td>
<td>8,3,2,7,9</td>
<td>Dz - Dizziness</td>
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<td></td>
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<td>1 - None</td>
<td>Balance</td>
<td>Book</td>
<td>7,3,9,1,4,2</td>
<td>Statement of overall</td>
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<td>Can stand 15 sec</td>
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<td>eyes closed Y/N</td>
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### Patient Label