

## Cervical Spine RELIABLE Exam Algorithm

### Does the patient have any of the following?

- Altered mental status (GCS <14)
- Young age (careful consideration given to those under 2 years)
- Developmental or pre-existing musculoskeletal concerns
- Posterior midline neck tenderness to palpation
- Neck pain, including with range of motion
- Abnormal head posture or torticollis
- Weakness, paresthesias, or other focal neurologic deficit
- Distracting injury (femur fracture, visible or known substantial injury to chest/abdomen/pelvis requiring admission or surgery)
- Concerning mechanism: axial load, diving, "clothes-line," suspicion for intracranial injury secondary to child physical abuse [CPA], high-risk MVC\*

#### \*High risk MVC:

- Head-on collision
- Rollover
- Ejection from vehicle
- Death in same crash
- Speed >55 mph

Clinical Clearance:

- Perform exam:
  1. GCS  $\geq$ 14
  2. NO posterior midline tenderness to palpation **AND**
  3. FULL normal active range of motion with extension, flexion, and right and left lateral movement

Can c-spine be clinically cleared

Yes

- Remove cervical collar
- Document exam using:  
EPIC inpatient smart text: IP Trauma Cspine Clearance Note  
EPIC ASAP ".edcervicalspineclearance"

No

Apply appropriately sized cervical collar

#### Cervical radiographs:

- Skull base – T1
- <5 yrs; AP, lateral (2v)
- >5 yrs; AP, lateral, odontoid (3v)

Is the x-ray normal?

Yes

Go to B tier

No

- Maintain cervical collar
- Neurosurgery consult
- Treatment as recommended

Yes

No

**B Tier**

**Reassessment**

- Repeat motor and sensory exam
- Evaluate for signs of autonomic dysfunction
- Evaluate for persistent shoulder/extremity pain not explained by musculoskeletal findings

**Clinical Clearance:**

- Perform exam:
  1. GCS  $\geq 14$
  2. NO posterior midline tenderness to palpation **AND**
  3. FULL normal active range of motion with extension, flexion, and right and left lateral movement

