

# Canadian C-Spine Rule

## Purpose

To determine when radiography should be utilized in patients following trauma.

YES to ANY

1. **Any High-Risk Factor that Mandates Radiography?**  
**Age greater than or equal to 65**  
or  
**Dangerous Mechanism\***  
or  
**Paraesthesia in Extremities**

NO to ALL

2. **Any Low-Risk Factor that Allows Safe-Assessment of Range of Motion?**  
**Simple Rear-End MVC\*\***  
or  
**Sitting Position in ED**  
or  
**Ambulation at Any Time**  
or  
**Delayed Onset of Neck Pain\*\*\***  
or  
**Absence of Midline C-Spine Tenderness**

YES to ANY

3. **Able to Actively Rotate Neck?**  
**45 Degrees Left and Right**

ABLE

**IMAGING  
RECOMMENDED**

NO  
to  
ALL

UNABLE

**IMAGING NOT  
RECOMMENDED**

### Rules Not Applicable if:

- Pregnant
- Acute Paralysis
- Less than 16 years old
- Known Vertebral Disease
- Non-trauma
- Glasgow Coma Scale less than 15
- Unstable Vital Signs
- Previous C-Spine Surgery

### **\*Dangerous Mechanism**

- Fall from elevation less than or equal to 3 ft or 5 stairs
- Axial load to head
- MVC high speed (>100Km/hr), rollover, ejection
- Motorized recreational vehicle
- Bicycle collision

### **\*\*Simple Rear-End MVC**

- Pushed into oncoming traffic
- Hit by bus/large truck
- Rollover
- Hit by high speed vehicle

### **\*\*\*Delayed Onset of Neck Pain**

- Not immediate onset of neck pain

## ANPT

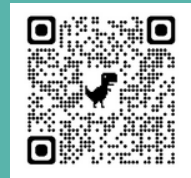
## Concussion/mTBI Knowledge Translation Task force

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### Clinical Practice Guideline Physical Therapy Evaluation and Treatment After Concussion/Mild Traumatic Brain Injury

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### References

1. Stiell IG, Wells GA, Vandemheen KL, Clement CM, Lesiuk H, De Maio VJ, Laupacis A, Schull M, McKnight RD, Verbeek R, Brison R. The Canadian C-spine rule for radiography in alert and stable trauma patients. *Jama*. 2001 Oct 17;286(15):1841-8.
2. Stiell IG et al. The Canadian C-Spine Rule versus the NEXUS Low-Risk Criteria in patients with trauma. *N Engl J Med* 2003;349:2510-8.