

# Canadian C-Spine Rule

For alert (GCS=15) and stable trauma patients where cervical spine injury is a concern.

## 1. Any High-Risk Factor Which Mandates Radiography?

Age  $\geq$  65 years  
or  
Dangerous mechanism\*  
or  
Paresthesias in extremities

### Rule Not Applicable If:

- Non-trauma cases
- GCS < 15
- Unstable vital signs
- Age < 16 years
- Acute paralysis
- Known vertebral disease
- Previous C-spine surgery

No

Yes

## 2. Any Low-Risk Factor Which Allows Safe Assessment of Range of Motion?

Simple rearend MVC\*\*  
or  
Sitting position in ED  
or  
Ambulatory at any time  
or  
Delayed onset of neck pain\*\*\*  
or  
Absence of midline c-spine tenderness

No

Radiography

Yes

Unable

## 3. Able to Actively Rotate Neck?

45° left and right

Able

No Radiography

### \* Dangerous Mechanism:

- fall from elevation  $\geq$  3 feet / 5 stairs
- axial load to head, e.g. diving
- MVC high speed ( $>$ 100km/hr), rollover, ejection
- motorized recreational vehicles
- bicycle struck or collision

### \*\* Simple Rarend MVC Excludes:

- pushed into oncoming traffic
- hit by bus / large truck
- rollover
- hit by high speed vehicle

### \*\*\* Delayed:

- i.e. not immediate onset of neck pain