

# The 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 Immobilization?

- Age  $\geq$  65 Years
- or
- Dangerous Mechanism \*
- or
- Numbness or tingling in extremities

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

C-Spine Immobilization

Unable

Yes

## 3. Patient Voluntarily Able to Actively Rotate Neck 45° Left and Right Regardless of Pain

Able

No C-Spine Immobilization

### \* Dangerous Mechanism

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

### \*\* Simple Rearend 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