

THE *SAFE* ZONE

BACK INJURY PREVENTION

The Spinal Column:

Supports and stabilizes the upper body.
 Permits upper body flexibility.
 Transmits upper body weight
 - to the pelvis when sitting
 - to the feet when standing.
 Forms a protective channel for the spinal cord.
 Gel-filled discs absorb shock.

The Back Injury Epidemic:

One third of adult Canadians will suffer at least one episode of back pain.
 In Nova Scotia lost time work accidents, the back is the most frequently injured part of the body.
 At Dalhousie, over-exertion back injuries cause more lost time than any other injury.

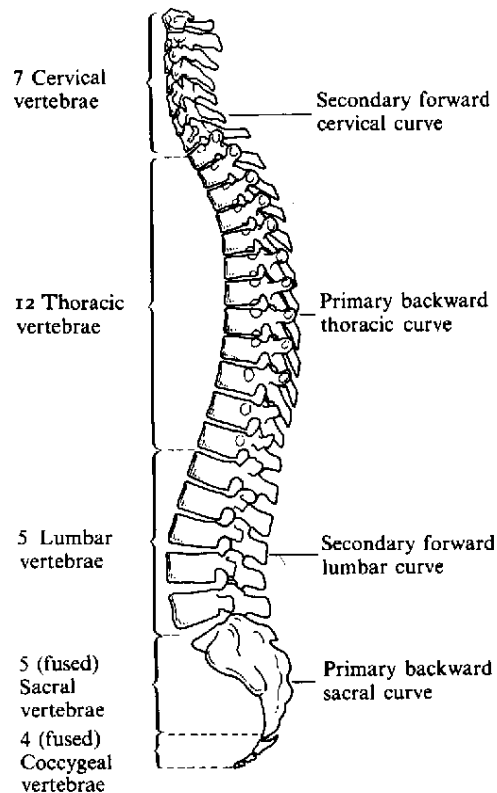
Types of Back Injury:

A blow or a fall can break a vertebrae.
 Single or repetitive strains caused by falling, lifting or poor posture injure back muscles and ligaments.
 Excessive strain - especially on the lower back - damages the fluid-filled disc causing a "herniated disc".

Recovery periods can be prolonged. Some people never fully recover.

Care for Yourself:

Look after your back.
 Keep fit. Exercise regularly and eat a balanced diet.
 Make a habit of good posture. Stand up and sit up straight.
 Warm up before lifting or doing other strenuous work.
 Be very careful if you have previously suffered a back injury.



THE **SAFE** ZONE CONTINUED . . .

Any lift can cause injury, but some lifts and some loads are particularly dangerous.

Dangerous Lifts:

- Start below knee level.
- End above mid chest level.
- Performed repeatedly or in awkward postures.

Dangerous Loads:

- Heavy or unexpectedly heavy.
- Bulky or awkwardly shaped.
- Smooth providing poor grip.
- Unbalanced.

PREVENTING BACK INJURIES IN HANDLING MATERIALS

Look for ways to avoid or reduce lifting and carry loads.

Avoid Dangerous Lifts:

- Arrange work to avoid handling materials outside the knee to mid-chest region.
- Only lift when you can adopt a good lifting posture.
- Don't lift unless you know the weight of the load.

Avoid Dangerous Loads:

- Mechanize when possible.
- Divide heavy loads into several lighter ones. Be especially careful with loads weighting over 25 kg.
- Get help with bulky, awkwardly shaped or large loads.
- Take particular care with smooth or slippery loads.

Avoid Accidents While Moving Materials:

- Use carts or trolleys when possible to avoid carrying loads.
- Do not carry loads that obstruct your vision.
- Ensure your route is free of obstructions and areas of poor footing.

Lifting Safety:

- Plan the lift so that you will not have to twist, turn or reach while holding the load.
- Place your feet so load is directly in front of you and as near as possible to you.
- Bend at the knees keeping your back as vertical as possible.
- Get a firm and balanced grip on the load.
- Shift the load carefully to ensure that it is within your lifting capability.
- Lift by straightening your legs.

