



**THINK TWICE
LIFT ONCE**

BACK CARE AND SAFETY

Chiropractors' Association of
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Certified Group Fitness Instructor



Chiropractors'
Association of
Saskatchewan

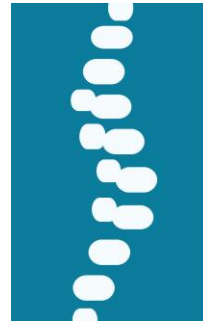
WorkSafe[™]
SASKATCHEWAN

Work to live.



Brain Warm-Up

1. Pick a number between one and ten
2. Multiply the number by 9
3. Add 2 number in product together
4. Subtract 5 from your newest number
5. Using the system A=1 B=2 pick a letter that matches your number
6. Pick and country that begins with that letter
7. Pick an animal that begins with the last letter of that country
8. Why are there no Kangaroos in Denmark ?



Chiropractors'
Association of
Saskatchewan



Work to live.





WHAT WE WILL COVER...



- Why back safety is important
- How the back functions
- How injuries occur
- Injury prevention strategies
- What to do if you get injured



PREVENTION TIP

– BODY WARM UP AND STRETCH -- WORK



Before doing physical work or lifting, warm up.



IMPACT OF BACK PAIN



85%

Of workers will suffer back pain in their lifetime



15%

Of low back pain sufferers are absent from work for over a month



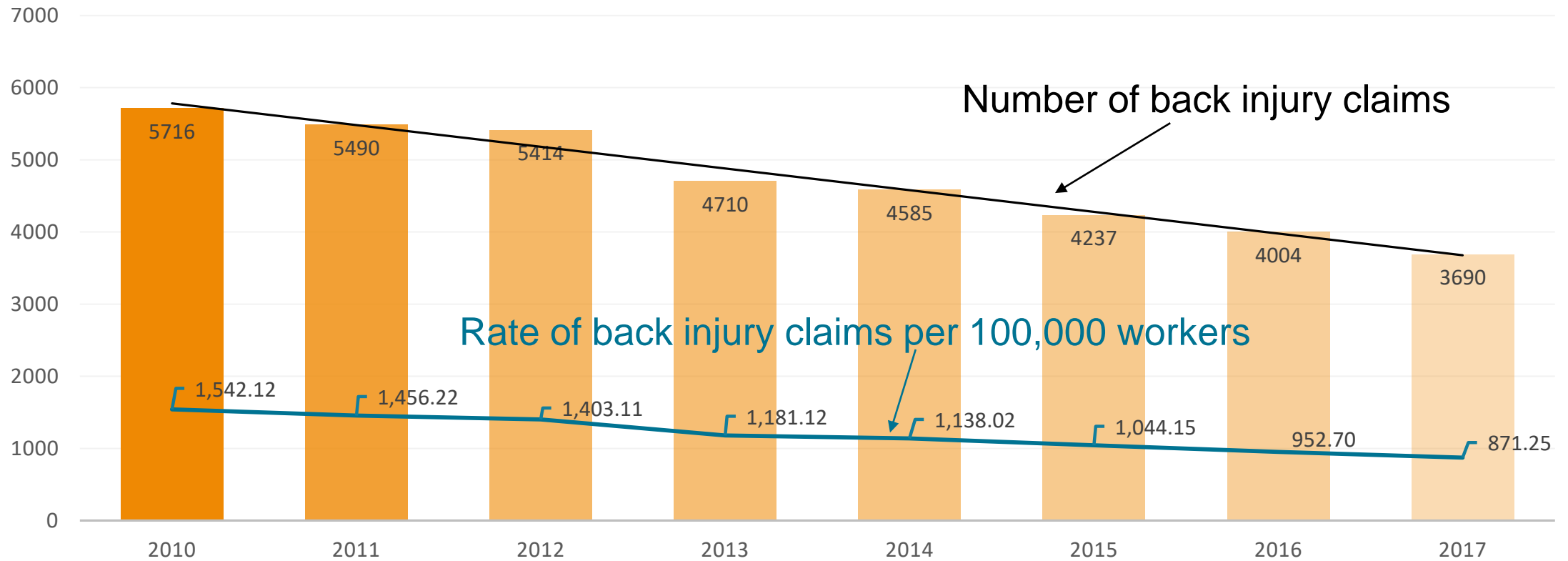
1 in 8

Canadians report having chronic back pain



WCB BACK INJURIES

WCB Back Injury Claims Accepted





WARNING!



IF THE HELP DESK THINKS YOUR QUESTION
IS STUPID, WE WILL SET YOU ON FIRE



IMPACT OF BACK PAIN ON WORKPLACE

- Lost productivity
- Absenteeism
- Increased cost to employers to backfill and re-train
- Increased WCB dues

“Low back pain is now the leading cause of disability worldwide” (Lancet)



IMPACT OF BACK PAIN ON EMPLOYEE

PHYSICAL



PSYCHOLOGICAL



SOCIAL



FINANCIAL





YOUR BACK





YOUR BACK

Discs

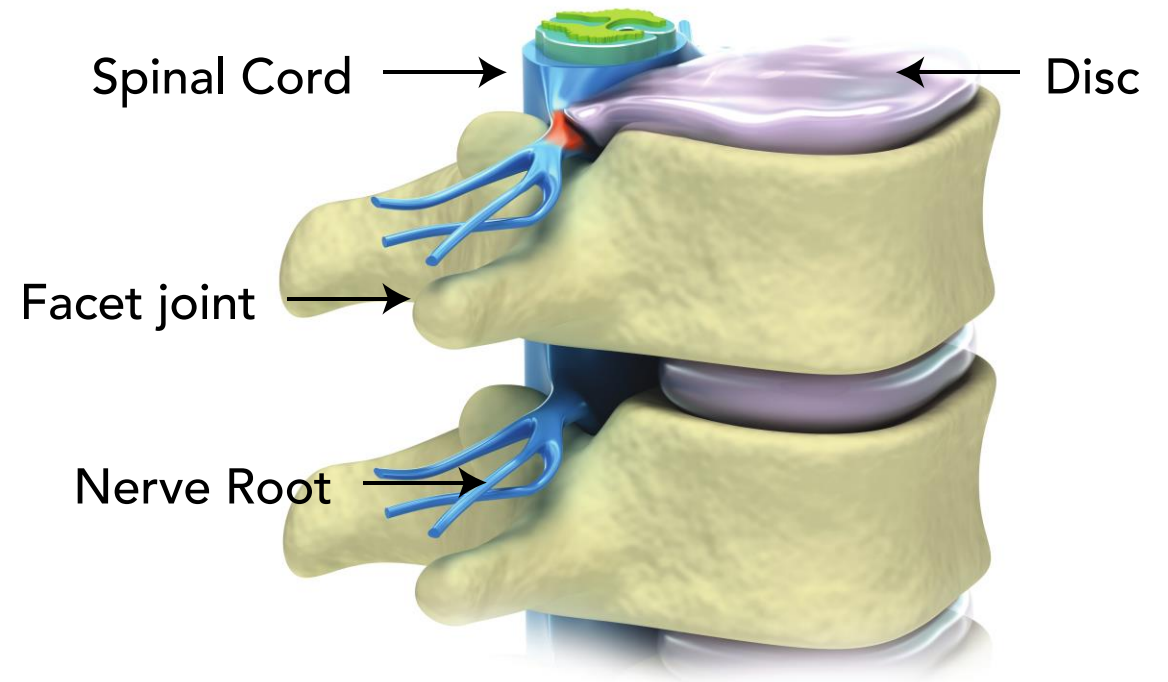
- Flexible spacers between the vertebrae – “shock absorbers”

Joints

- Connect the vertebrae and allow the vertebrae to move on each other

Soft Tissue

- Tendons connect muscles to bones, ligaments help connect bones together and provide strength for joints





Types of Back Injury

Injuries involving the back can include:

- Sprains
- Strains
- Pinched nerves
- Fractures
- Degeneration
- Tears



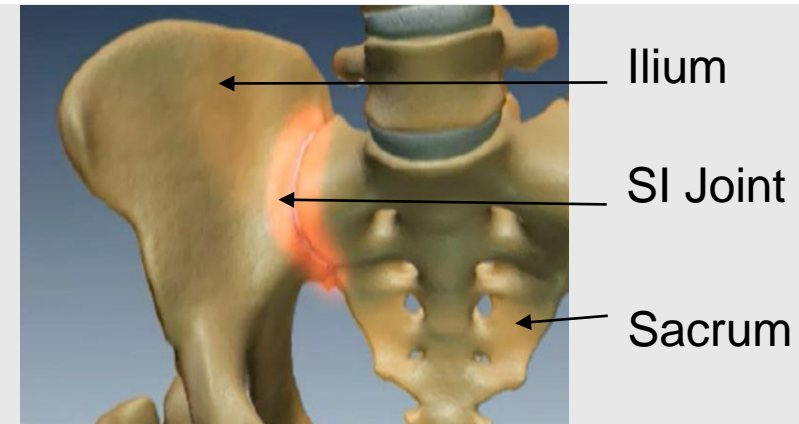
“Slipped Disc”

There is no ‘slipped disc’ – these are actually herniated discs where the jelly-like substance squeezes out of the disc

SI Joints – Sacroiliac Joint Pain

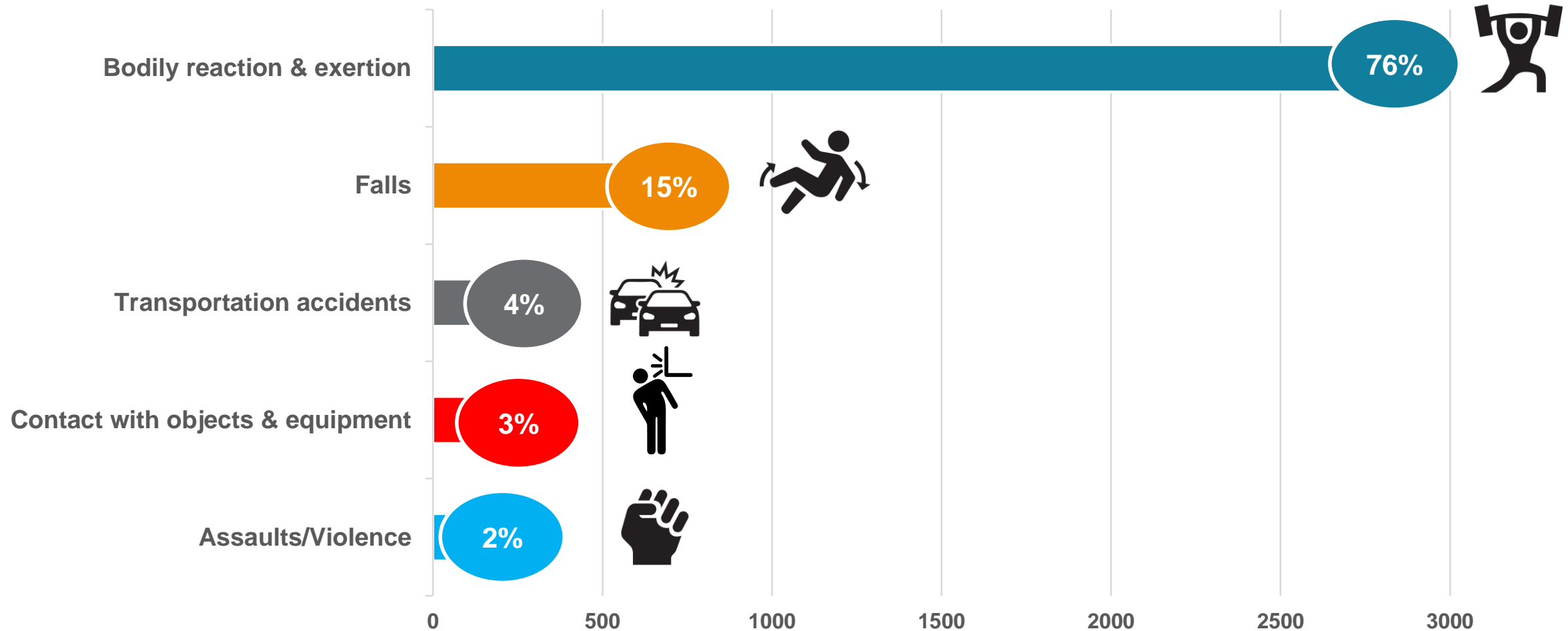
Symptoms can include:

- Lower back pain
- Pain radiating to the lower hip, groin or upper thigh
- Symptoms worsen with sitting, standing, climbing stairs, sleeping, etc.





CAUSES OF BACK INJURIES – SASK 2017





PREVENTION TIP

– SAFE WORK PRACTICES, 3 INJURY TYPES



ELIMINATE RISK FACTORS FOR BACK INJURIES

- Over-Exertion
- Prolonged Load (Altered Posture)
- Repetition

- Fatigue



PREVENTION TIP

– SAFE WORK PRACTICES

OVER-EXERTION

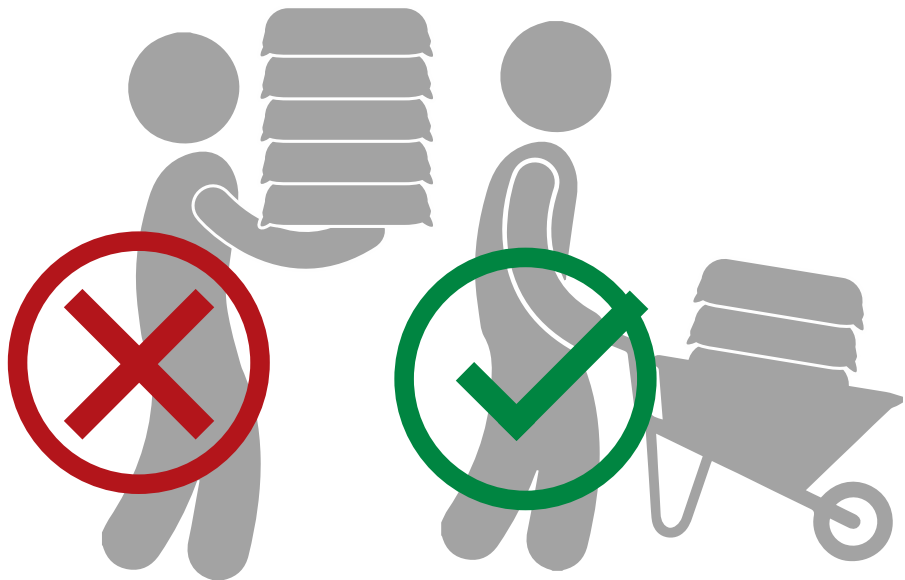
Tasks that require forceful exertions place higher loads on muscles, discs, ligaments and joints and can lead to fatigue and injury.

Risk depends on:

- Weight of an object
- Body posture
- Type of grip

Reduce Risk:

- Use material handling devices
- Divide the load for safer transport
- Push materials rather than lift or pull
- Ask a co-worker to assist your lift
- Golfers lift for light objects





PREVENTION TIP

– SAFE WORK PRACTICES

Prolonged Load

Postures that differ from the neutral position increase stress on the back

Risk factors:

- Bending forward while lifting
- Strenuous activity while the body is in a bent or twisted position
- Sitting posture , computer work

Reduce Risk:

- Change the work height
- Ergonomically correct chairs and desks
- Alternate tasks and change posture
- Postural awareness, neutral spine





PREVENTION TIP

– SAFE WORK PRACTICES



REPETITION

Repeating same motions over and over again places stress on muscles and joints, leading to fatigue and injury.

Risk depends on:

- How often the action is repeated
- Speed of the movement
- Number of muscles involved
- Required force to lift or move material
- Body posture

Reduce Risk:

- Alternate tasks and postures to use different muscles and motions
- Take time to stretch during breaks
- Use material handling devices (dollies, carts, forklift)



PREVENTION TIP

– SAFE WORK PRACTICES



FATIGUE

Jobs that require the same muscles or motions for long durations.

Risk Factors:

- Using same muscles or motions for long periods of time.

Reduce Risk:

- Alternate tasks and postures to use different muscles and motions.
- Take time to stretch during breaks. The longer the period of work, the longer the recovery/rest time required.
- Break up standing tasks with seated tasks, and vice-versa.



PREVENTION TIP

– HEALTHY LIFESTYLE

- Regular physical activity, outside of work
- Eat a healthy, balanced diet
- Stop/ reduce smoking
- Manage stress
- Maintain a healthy weight
- Get plenty of sleep – try for 6-8 hours





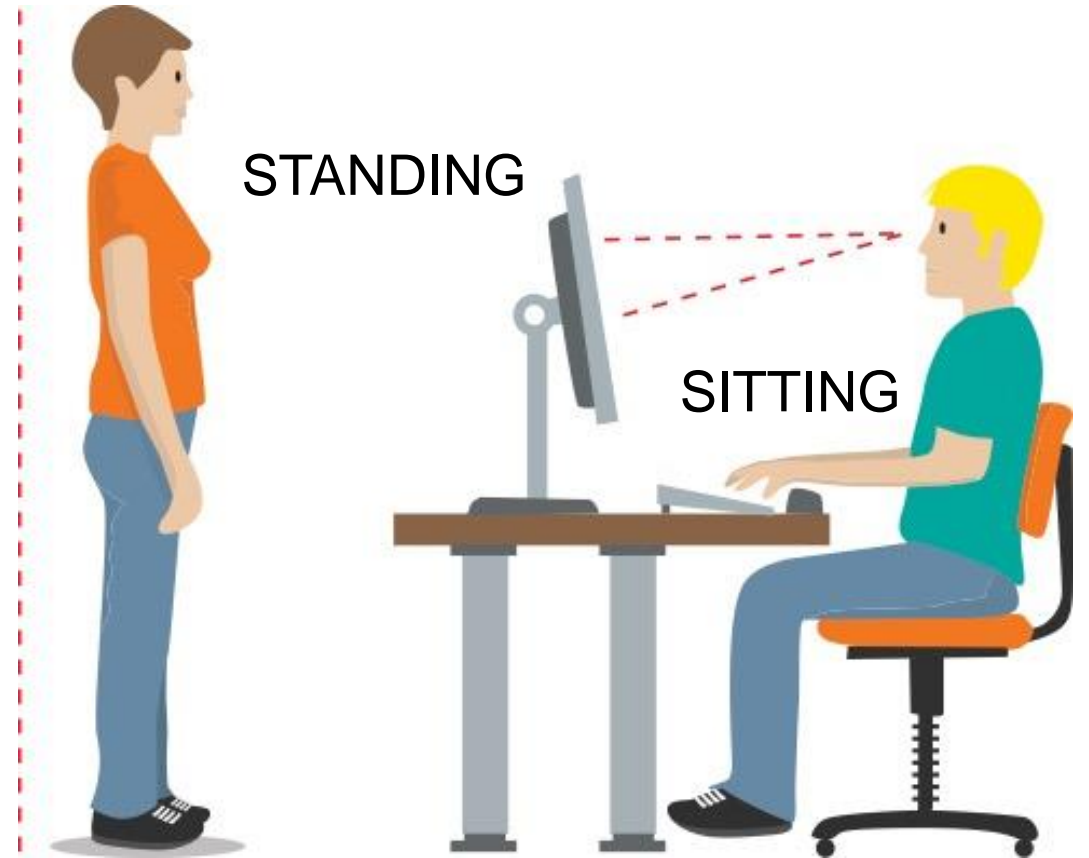
PREVENTION TIP

– GOOD POSTURE – Demo

THINK about
your **POSTURE**

Stop throughout the day
and re-adjust your posture

Take frequent
breaks and
move around

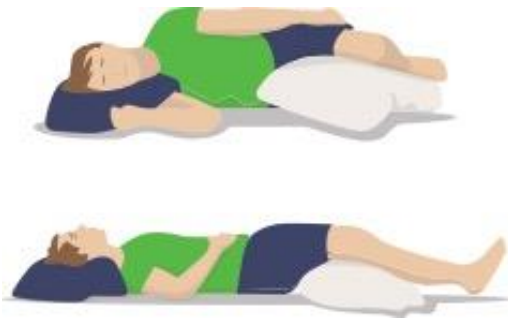




PREVENTION TIP

– GOOD POSTURE

SLEEPING



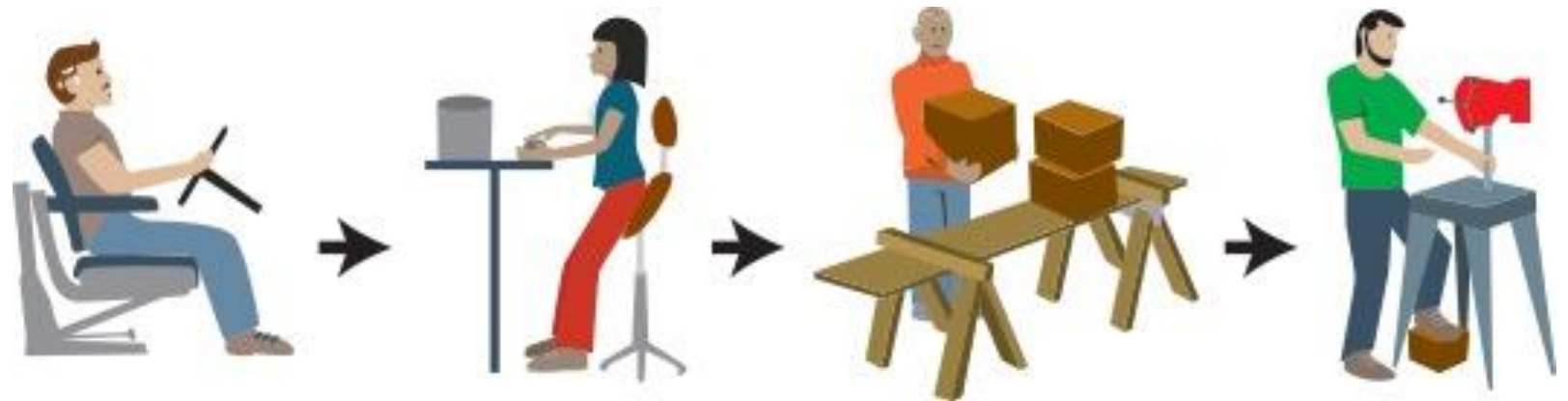
Waking up with back pain?

Mattress >10 years old?

- Consider a new mattress

Waking up with neck pain?

- Consider a new pillow



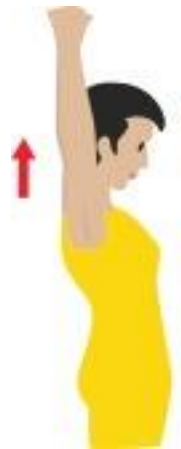
Alternate work postures such as standing, sitting, and working with one foot elevated, to reduce stress on your back



PREVENTION TIP

– WARM UP AND STRETCH

Sitting for too long can lead to muscle tension, fatigue and occasionally pain. Move around, change positions every 30 – 50 minutes, and take a quick stretch break.



UPPER BODY STRETCH

Interlace your fingers, then turn your palms upward and straighten arms above your head. Extend your arms as you feel a stretch through your arms and upper sides of your rib cage. Hold 15-20 seconds.



SHOULDER AND ARM STRETCH

With your right arm behind your head as shown, use your left hand to gently pull the elbow until you feel a stretch in the shoulder and back of upper arm. Hold 10 seconds, repeat on left side.



BACK AND HIP STRETCH

Sit with your left leg bent over your right leg and look over your left shoulder. Place your right hand on left thigh and apply gentle pressure toward the right. Hold 10 seconds, and repeat on the right side.



PREVENTION TIP

– PROPER LIFTING

Think Twice – Lift Once. **Know your limit and think twice before lifting o**

When lifting, know your body's limitations and use proper techniques to protect your back from injury.

DO

- ✓ Plan the lift
- ✓ Bend at the hips and knees. Back straight. Chest up. Engage core muscles.
- ✓ Keep it close
- ✓ Lift with your legs
- ✓ Move with your feet



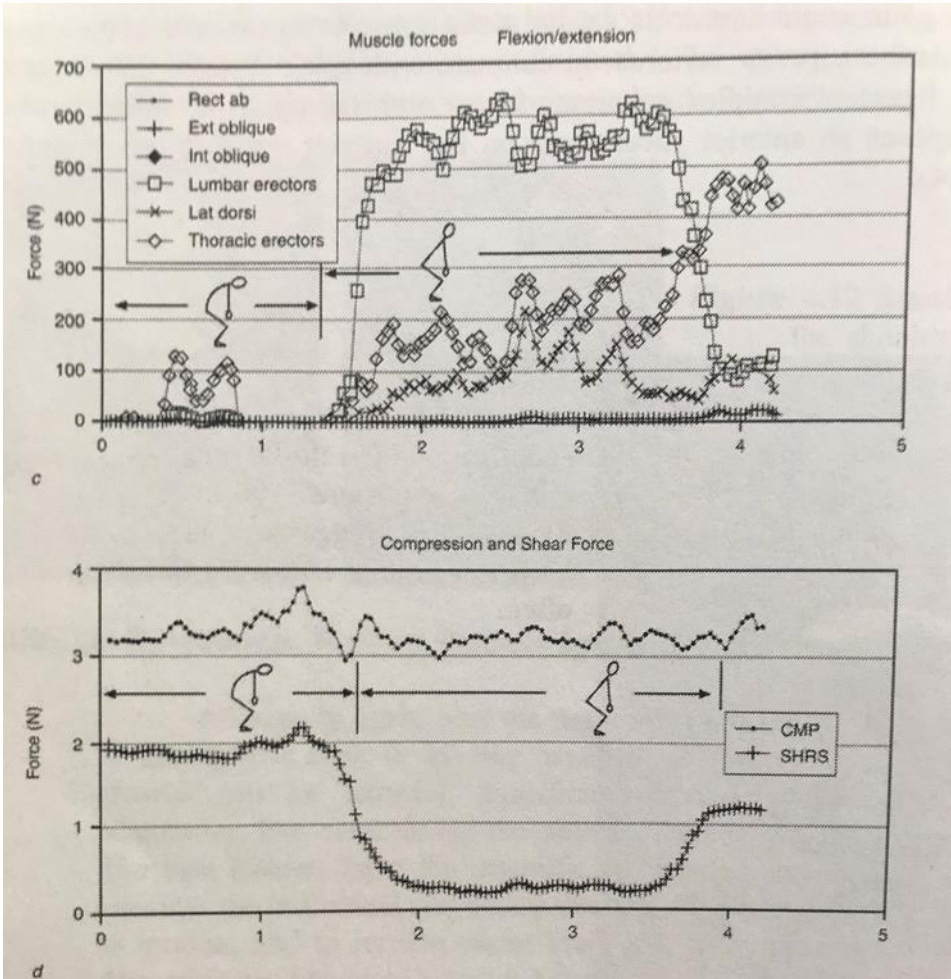


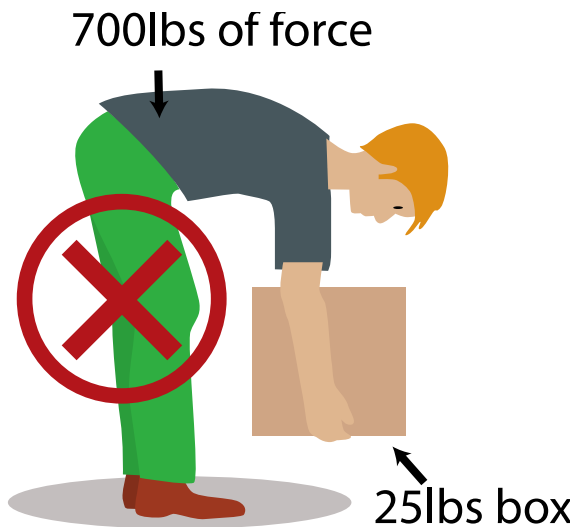
Figure 4.14 The fully flexed spine (a) is associated with myoelectric sil extensors and strained posterior passive tissues and high shear in lumbar spine (from both reaction shear on the upper body and ligament strain (see previous chapter). A more neutral spine (b) the pars lumborum muscle groups (c) to support the reaction reduces total joint shear (d) (to approximately 200 N in this example). Reprinted with permission S.M. McGill, *J. Biomech.* 30 (5), 1997 Elsevier Science.



PREVENTION TIP

– PROPER LIFTING

Think Twice – Lift Once. **Know your limit and think twice before lifting o**



When lifting, know your body's limitations and use proper techniques to protect your back from injury.

Avoid



- X** Lifting anything you are not comfortable lifting
- X** Lifting while reaching or stretching
- X** Twisting and lifting



PREVENTION TIP

– PROPER LIFTING - Demo

Think Twice – Lift Once. **Know your limit and think twice before lifting** o

<p>1</p>  <p>PLAN THE LIFT</p> <ul style="list-style-type: none">• Can you safely lift it?• Is it a two person lift?• Do you require a mechanical aid?• Can the load be broken down into smaller pieces and moved?	<p>2</p>  <p>ESTABLISH A BASE</p> <ul style="list-style-type: none">• Hips face same direction as shoulders• Feet shoulder width apart	<p>3</p>  <p>BEND AT THE HIPS AND KNEES. BACK STRAIGHT. CHEST UP. ENGAGE CORE MUSCLES.</p> <ul style="list-style-type: none">• Engaging core muscles means tightening your stomach, buttock and back muscles, similar to bracing for an impact.	<p>4</p>  <p>KEEP IT CLOSE</p> <ul style="list-style-type: none">• Keep the load close to your body, with a good grip. Avoid reaching when possible	<p>5</p>  <p>LIFT WITH YOUR LEGS</p> <ul style="list-style-type: none">• Use your leg strength to lift, straightening your hips and knees.• Keep your back straight, chest up, and keep core muscles tight.	<p>6</p>  <p>MOVE YOUR FEET</p> <ul style="list-style-type: none">• Avoid turning or twisting while holding a heavy object.• Use your feet to change direction, taking small steps.• Lead with your hips as you change direction, keeping shoulders and hips in line.
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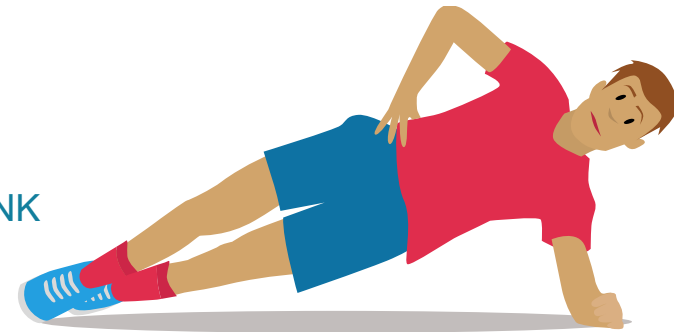
Lower objects the same way you lift them – knees bent, back straight, core muscles engaged

STRENGTH EXERCISES - Home

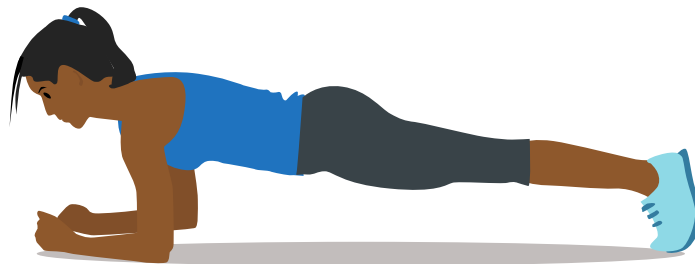
BIRD DC



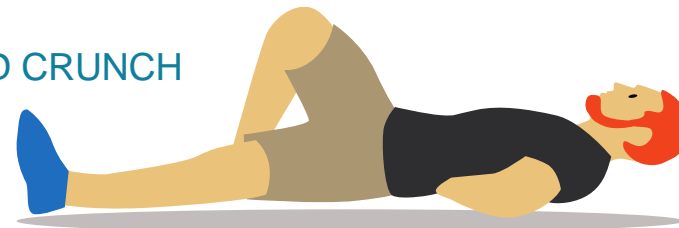
SIDE PLANK



PLANK



MODIFIED CRUNCH





THINK TWICE
LIFT ONCE





THINK TWICE
LIFT ONCE





IF YOU GET INJURED...



1

Get medical attention immediately, if you need it

Your employer should provide appropriate first aid and arrange transportation so you can receive treatment from a qualified health care professional.



2

Report your injury to your employer immediately.



3

Report your injury to WCB by completing the W1 form immediately.



4

Stay active! For most back problems, light activity helps speed the healing process. Reduce or modify normal physical activities, but continue to be as active as possible.



5

Apply cold - Apply ice as soon as possible, and for the first 48-72 hours after injury.

10/10/10 method - 10 minutes ice; 10 minutes rest without ice; 10 minutes ice again. Applying heat during this period can make inflamed muscles worse. Ice reduces inflammation to your injured muscles, joints and tissues



6

See a health care professional. As soon as possible, consult a physician, chiropractor, physiotherapist or nurse practitioner to assess your specific needs and identify a course of action that's right for you. They can provide treatment, report to the WCB and identify any physical restrictions resulting from your injury.



IF YOU GET INJURED...

BACK INJURY – Common Myths



1

MYTH: Bed rest is a great treatment for back pain

FACT: Bed rest can worsen your back pain until it's so bad you can't move

2

MYTH: Apply heat to a sore back

FACT: Applying heat can worsen inflammation; use ice – for the first 2-3 days of acute pain; 10 to 15 minutes at a time, then a break

3

MYTH: Back pain is the main indication something is wrong

FACT: You don't always feel pain in your back when there's a problem

4

MYTH: I need an x-ray for my back pain

FACT: In most cases, x-rays or other imaging tests are not required



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LIFT ONCE





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LIFT ONCE





**THINK TWICE
LIFT ONCE**

- **Worksafe Saskatchewan and the Chiropractors' Association of Saskatchewan Partnership:**

- Educational back safety material for workers
- **NO COST** Presentations by chiropractors at workplace **SAFETY MEETINGS**

To register or express interest:

Email: ED@saskchiro.ca

Phone: (306) 585-1411

STOP BY OUR BOOTH!



Chiropractors'
Association of
Saskatchewan



Work to live.