ALBERTA
BONE & JOINT
HEALTH INSTITUTE

Your Daily Routine

Starter Activity

- On the first page of your **Workshop Guide,** write down a list of common activities that you do on an average day

- These can be any activity, such as
  - tying your shoes
  - doing laundry
  - gardening

Agenda

1. Your Posture and Protecting Your Spine
2. Guidelines for Safe Movement
3. The Hip Hinge
4. The Do’s and Don’ts of Safe Movement

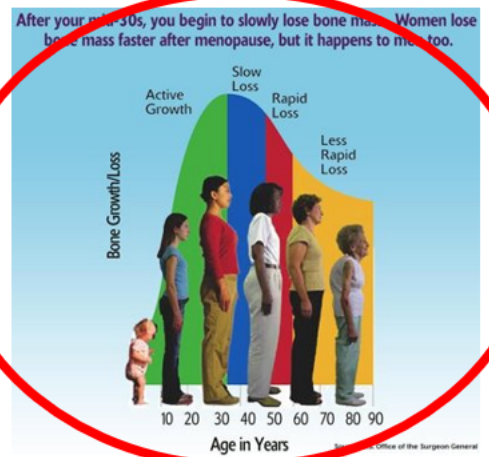
Learning Objectives

I will be able to…

- Identify what good posture will look like and briefly explain why maintaining good posture is important for safe movement
- Demonstrate, independently and while using good posture, how to implement proper body mechanics while executing different common daily activities to encourage active living
- Identify a minimum of three Do's and three Don'ts for Safe Movement
- Demonstrate the hip hinge and identify specific activities of daily living (ADLs) that could be done with the hip hinge in mind

How to navigate the slides

Bone Growth Cycle



- bones are living tissue and are constantly changing
- This process is called "modelling"

I will be able to briefly describe the bone growth cycle

6

slide title

slide image

key information

learning objective

Workshop Guide

As we progress through this workshop, please ensure to complete the appropriate sections of the Workshop Guide provided for you.

This will be your quick reference following this workshop to aid you on your bone health journey.

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Your Posture and Protecting Your Spine

What is Proper Posture?

With the person next to you discuss what it means to have proper posture

- What does having proper posture look like to you?
- What are the benefits of having proper posture?

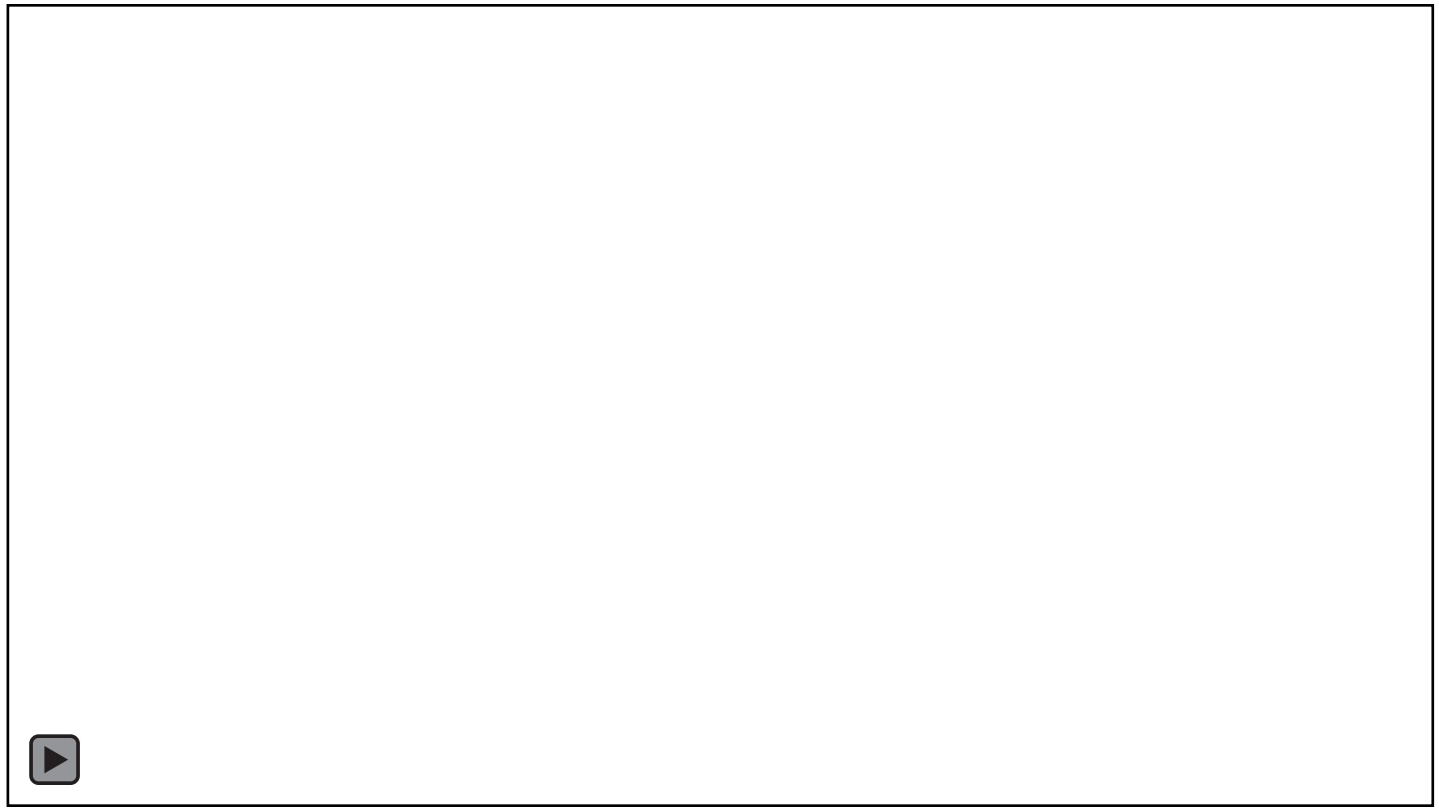
I will be able to identify what good posture will look like and briefly explain why maintaining good posture is important for safe movement.

What is Proper Posture?

- Having proper posture can be identified when your ear, shoulder and hip are in alignment
- This alignment is called a neutral spine
  - it is the strongest and safest position for the spine

I will be able to identify what good posture will look like and briefly explain why maintaining good posture is important for safe movement.

How to Maintain a Proper Posture



Video courtesy of
Osteoporosis Canada

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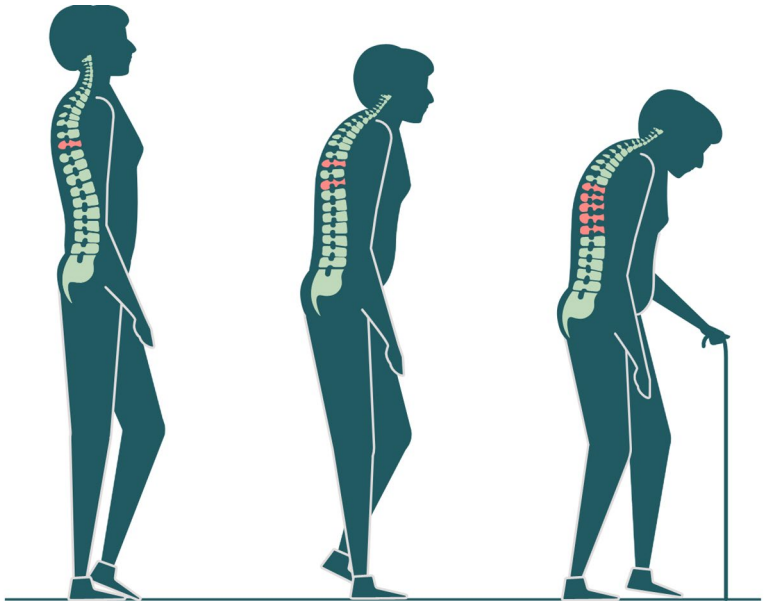
What if we do not protect our spine?



As we get older...

- the neutral position is the best position to protect your spine
  - by training your muscles you can prevent strain on your spine
- hunching over or twisting your spine causes a lot of strain
  - the more strain increases the risk of spinal fractures (also known as vertebral compression fractures)
  - this is compounded in individuals with low bone density

I will be able to identify what good posture will look like and briefly explain why maintaining good posture is important for safe movement.

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Guidelines for Safe Movement

Standing and Sitting

- Standing and walking puts less strain on the spine than sitting

When standing…

- maintain your spine in the neutral position
- keep your feet pointed straight with your knees lined up over your second toe
- if standing in one place for a length of time, put one foot up on a stool or open cupboard
    - switch feet periodically

I will be able to demonstrate, independently and using good posture, how to implement proper body mechanics while executing different common daily activities to encourage active living.

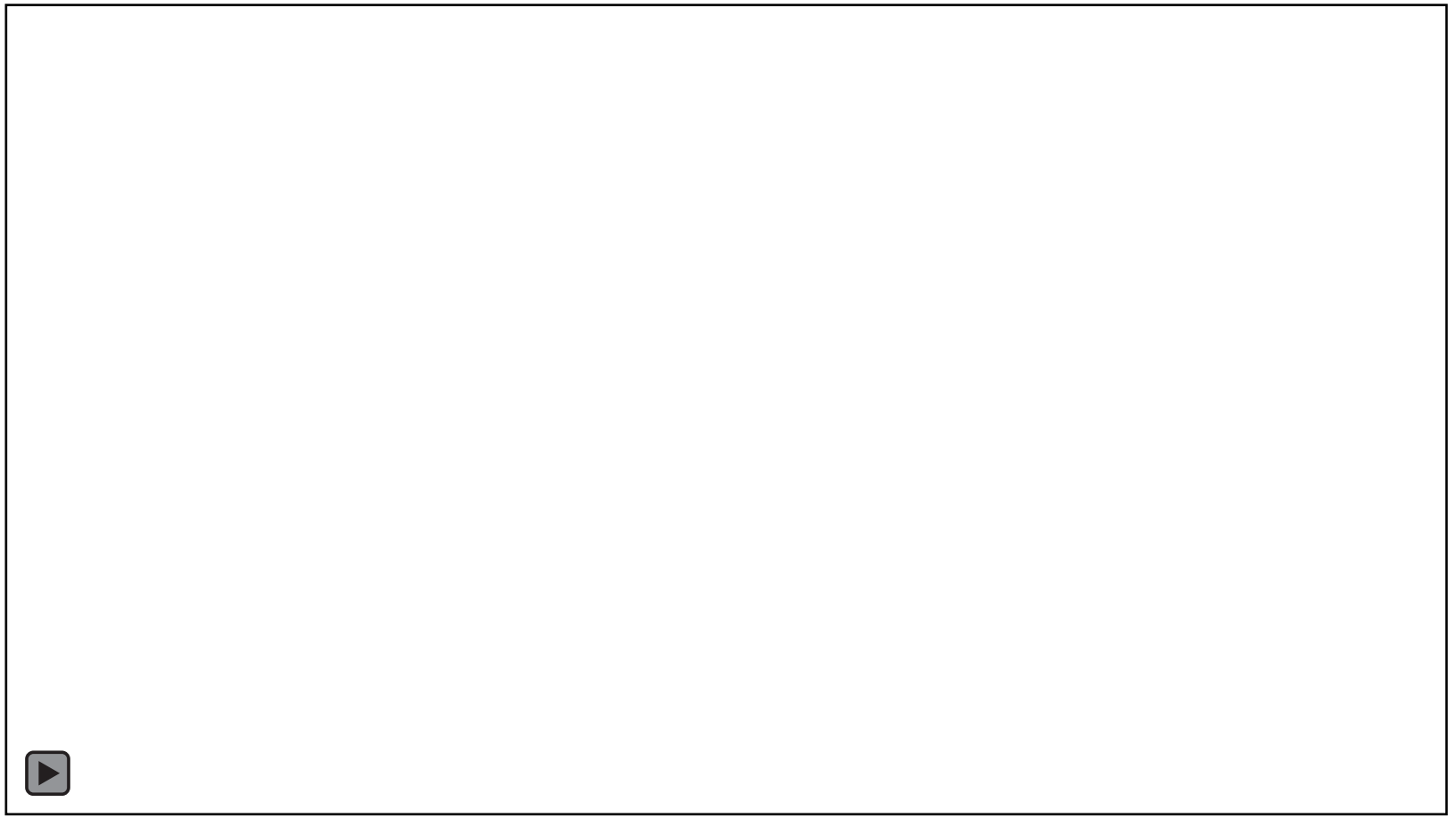
Standing and Sitting

When sitting…

- maintain your spine in the neutral position
- use a rolled towel or pillow to support your lower back
- keep your head, hips and back in alignment
- keep your hips higher than your knees - perch position
- have your feet rest flat on the floor
  - if they do not reach the floor, use a small footstool
- if at a desk, prop up what you are working on so it slants towards you

I will be able to demonstrate, independently and using good posture, how to implement proper body mechanics while executing different common daily activities to encourage active living.

Moving between Standing and Sitting



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Getting In and Out of a Car

- use the same method for getting on and off a chair
- bring a small towel or pillow to keep your spine as upright as possible
  - you may benefit from a wedge-shaped cushion (found in the automotive department of most retailers)

COURTESY SHARRON STEEVES, PHYSIO FITNESS

I will be able to demonstrate, independently and using good posture, how to implement proper body mechanics while executing different common daily activities to encourage active living.

Walking

When walking...

- maintain your spine in the neutral position
- point your feet straight ahead
- your knees should be lined up over your 2nd toe in your shoe
- do not let your knees lock back as you bring your weight over your foot - keep them slightly bent
- keep knees, hips and toes lined up when climbing stairs

I will be able to demonstrate, independently and using good posture, how to implement proper body mechanics while executing different common daily activities to encourage active living.

Coughing or Sneezing

When coughing or sneezing…

- develop the habit of supporting your back with one hand whenever you cough or sneeze
  - this protects the spine from damage caused by the sudden bend forward

I will be able to demonstrate, independently and using good posture, how to implement proper body mechanics while executing different common daily activities to encourage active living.

STABLE Acronym

S - maintain your SPINE in a neutral position

T - avoid TRUNK twisting

A - keep your ARMS close to your body

B - maintain a wide BASE of support

L - use your LEGS

E - EVALUATE the load, environment, abilities and limitations

I will be able to identify a minimum of three Do's and three Don'ts for Safe Movement.

The Hip Hinge

Bending with a Neutral Spine

- There are many daily activities that require us to bend over or lean forward - such as brushing our teeth or washing our face

- a helpful movement to know is called the hip hinge, which significantly reduces the strain on the spine

I will be able to demonstrate the hip hinge and identify specific activities of daily living (ADLs) that could be done with the hip hinge in mind.

The Hip Hinge

- bend your knees slightly while keeping your back straight from hip to shoulder
- stick out your tailbone behind you to bend forward from the hips

Hip hinge

Hip hinge training, correct neutral spine

Hip hinge not correct, spine is rounded, not in good neutral position

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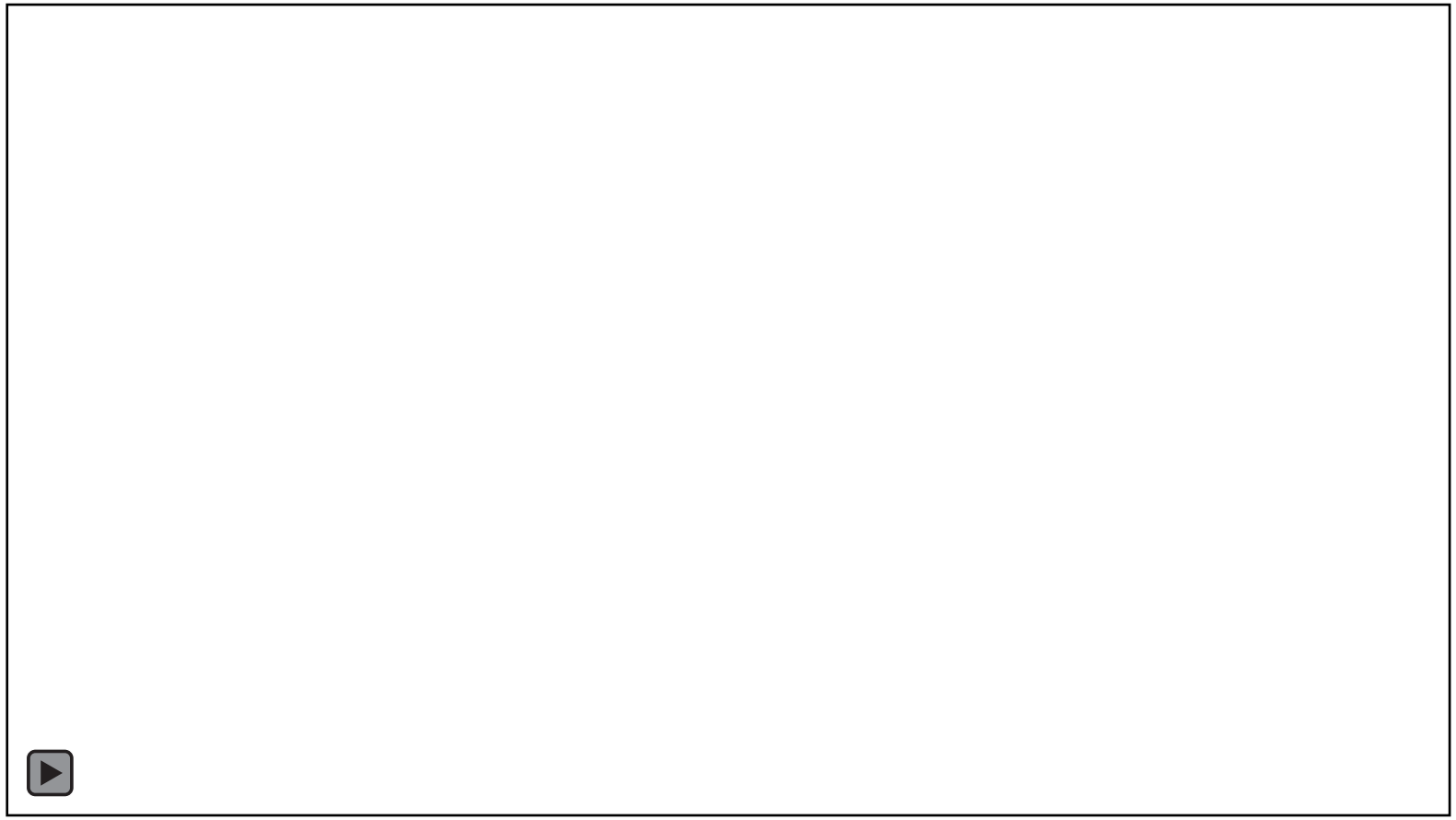
The Hip Hinge



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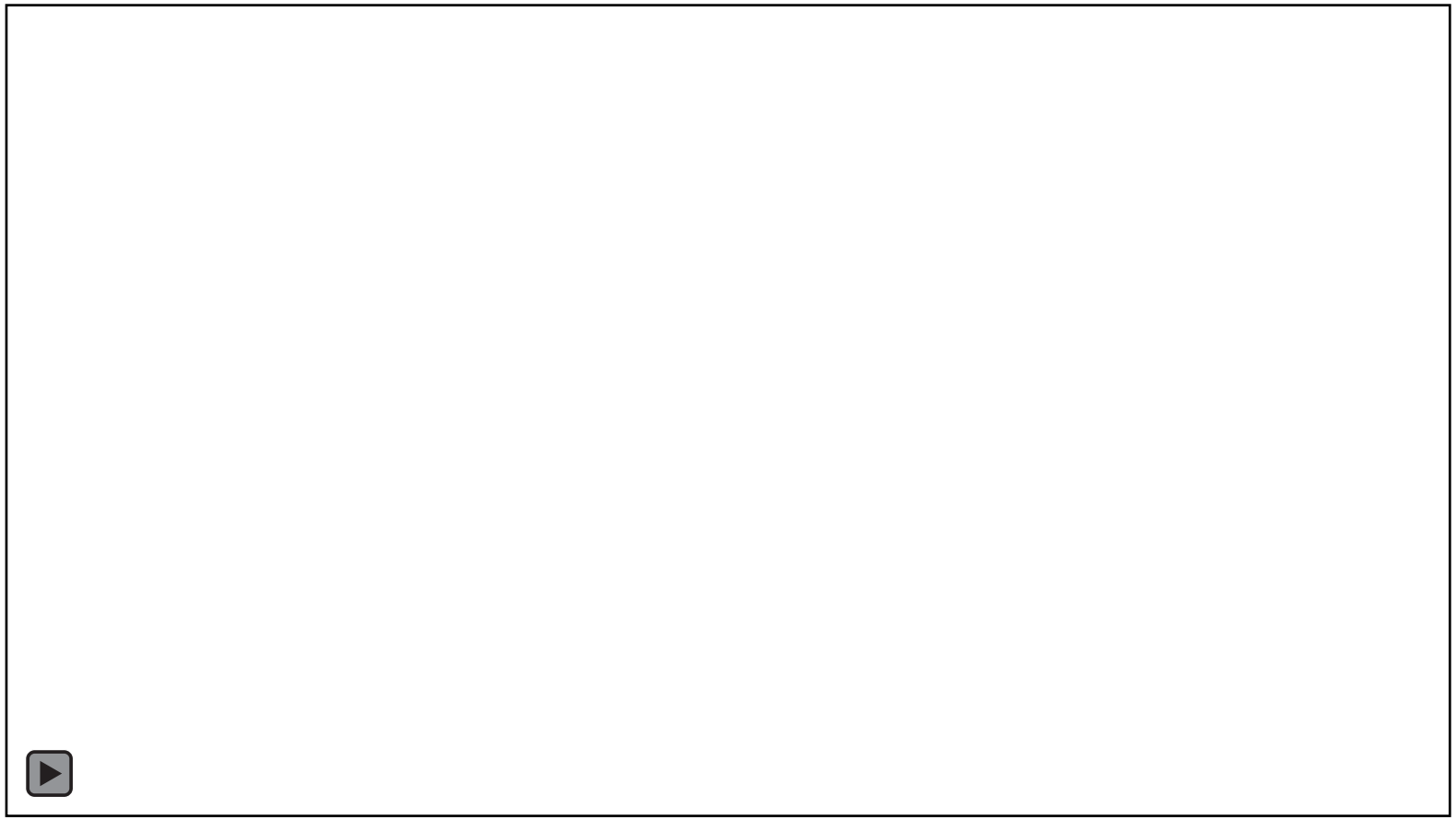
Safe Lifting and Carrying



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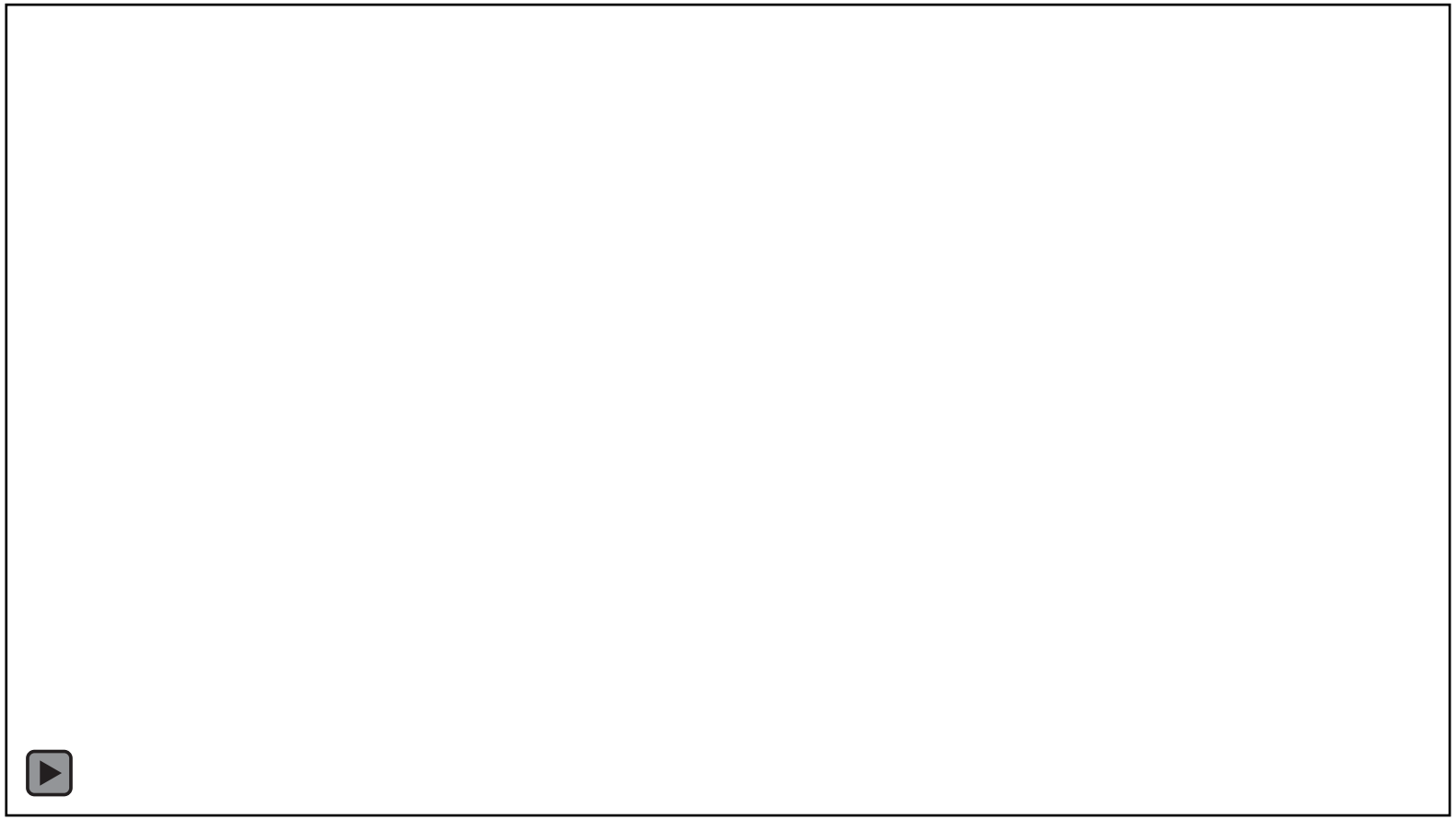
Safe Sweeping



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Activities of Daily Living

- Another great resource for other common daily activities can be found here (found in your **Workshop Guide**):

https://melioguide.com/health-guides/activities-of-daily-living/

Examples of activities listed:

- raking leaves
- shovelling and weeding in the garden
- mowing your lawn
- shovelling the snow

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The Do's and Don'ts of Safe Movement

The Do’s of Safe Movement

- Always pay attention to proper posture
  - lift your breastbone
  - keep your head erect and look forward
  - keep your shoulders back and slightly “pinch” your shoulder blades
  - tighten your abdominal muscles and buttocks
- Whenever possible, walk or climb the stairs
  - when walking the stairs, use the handrail
- Always bend from the hips and knees, not from the waist

I will be able to identify a minimum of three Do’s and three Don’ts for Safe Movement.

The Don’ts of Safe Movement

Don’t…

- walk or exercise on slippery surfaces
- wear backless bedroom slippers or shoes with slippery soles
- slouch when standing, walking or sitting at a desk
- sit in a deep, cushioned chair or couch that causes you to sink into it
- move too quickly

I will be able to identify a minimum of three Do’s and three Don’ts for Safe Movement.

The Don’ts of Safe Movement

Don’t…

- engage in sports or activities that require twisting the spine or bending forward from the waist before talking to your healthcare provider
  - for example: sit-ups, toe-touches or swinging a golf club
- force yourself to complete a task or exercise if you feel short of breath, are in pain or are fatigued
- take to your chair or bed for extended periods of time
  - inactivity is one of the worst things for osteoporosis

I will be able to identify a minimum of three Do’s and three Don’ts for Safe Movement.

Cool-down Activity

- Review your activity list from the starter activity at the beginning of the workshop
  - Identify for which activities you are already practicing safe movement techniques and for which some modifications are required

- With the person next to you, discuss what changes you can make to some of the more common activities to ensure that you are practicing safe movement

Additional Resources

Osteoporosis Canada

- osteoporosis.ca

Dr. David Hanley Osteoporosis Centre

- osteoporosiscalgary.com

National Osteoporosis Foundation

- nof.org

Bibliography

(n.d.) A Few Self-Help Guidelines for Day-to-Day Activities After A Spine Fracture. Retrieved from https://osteoporosis.ca/bone-health-osteoporosis/living-with-the-disease/after-the-fracture/table-of-contents/

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