

BONE HEALTH

Falls Prevention, Part 2

STARTER ACTIVITY

- Please, find the “Are you at risk of falling?” quiz on the first page of your **Falls Prevention, Part 2 - Workshop Guide**
- Complete the LEFT SIDE of the chart indicating either “YES” or “NO” for each statement
- We will return to this quiz at the end of the workshop

I will be able to assess my own personal risk of falling and identify strategies for preventing falls within the home.

Agenda

- 1. Preventing Falls on Stairs**
- 2. Tips for Daily Movement**
- 3. Assistive Devices**

LEARNING OBJECTIVES

I will be able to...

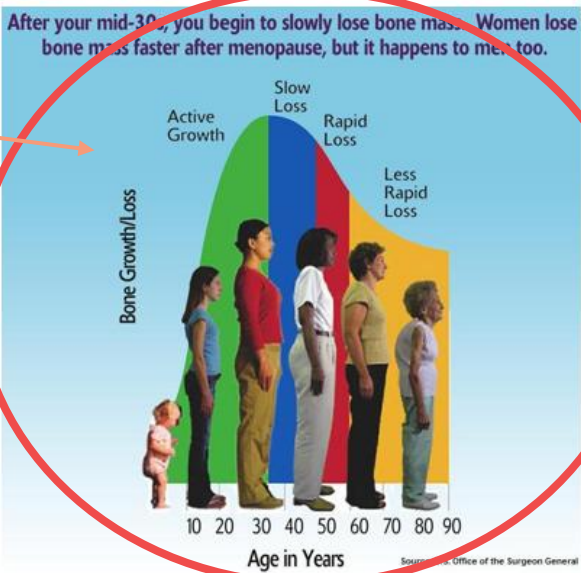
- Assess my own personal risk of falling and identify strategies for preventing falls within the home
- Identify a minimum of three methods for preventing falls on stairs in the home
- Demonstrate, using good posture, the ability to implement proper body mechanics independently while executing different common daily activities to encourage active living

HOW TO NAVIGATE THE SLIDES

slide title

BONE GROWTH CYCLE

slide image



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

key information

learning objective

I will be able to briefly describe the bone growth cycle.

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.

SECTION 1

Preventing Falls on Stairs

REDUCING YOUR RISK OF INJURIES AT HOME

Consider the stairways you might have in your home or place of work.

How can you improve these areas to better help support yourself or those who might find using these stairs difficult?

Record your responses in your **Falls Prevention, Part 2 - Workshop Guide**.

With the person beside you compare your responses and evaluate any ideas that you did not initially consider.

I will be able to identify a minimum of three methods for preventing falls on stairs in the home.

PREVENTING FALLS ON STAIRS

How can we reduce the risk of falls on stairs?

- Avoid visually distracting patterns on the tread (horizontal part of the step) which can make it difficult to distinguish one step from another
- If the edges of the stairs cannot be clearly seen, mark them by painting a permanent strip on the edge in a contrasting colour

I will be able to identify a minimum of three methods for preventing falls on stairs in the home.

PREVENTING FALLS ON STAIRS

- Improve the lighting on the steps and stairs
 - low-intensity night-lighting
 - a switch at the top and bottom of the stairs
- Keep any stair coverings thin and tightly affixed to maximize useable tread space
 - avoid soft treads with a large rounding at the edge

I will be able to identify a minimum of three methods for preventing falls on stairs in the home.

PREVENTING FALLS ON STAIRS

- Remove any objects or loose rugs on steps, landings or at the top and bottom of the stairway
- Use a slip-resistant, rough finish on stairs that are prone to getting wet

I will be able to identify a minimum of three methods for preventing falls on stairs in the home.

PREVENTING FALLS ON STAIRS

- For winding or curved stairs, provide a handrail on both sides of the stairway, regardless of the number of steps
 - ensure that the handrail extends beyond the top and bottom of the stairs
- If renovating, allow for ample tread space and a gentle rise (height of the step) and make sure all steps are uniform in size and height

I will be able to identify a minimum of three methods for preventing falls on stairs in the home.

PREVENTING FALLS ON STAIRS

Most importantly...

- Always be cautious, deliberate and not rushed
- Hold onto handrails, wear shoes or slippers that fit properly and have a non-slip sole

I will be able to identify a minimum of three methods for preventing falls on stairs in the home.

SECTION 2

Tips for Daily Movement

DAILY MOVEMENT

With your group, consider the everyday activities of walking, sitting and standing and discuss the following questions:

- How many of you think about how you are moving when engaging in these activities?
- How would you describe the proper technique for each activity?

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

- 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.

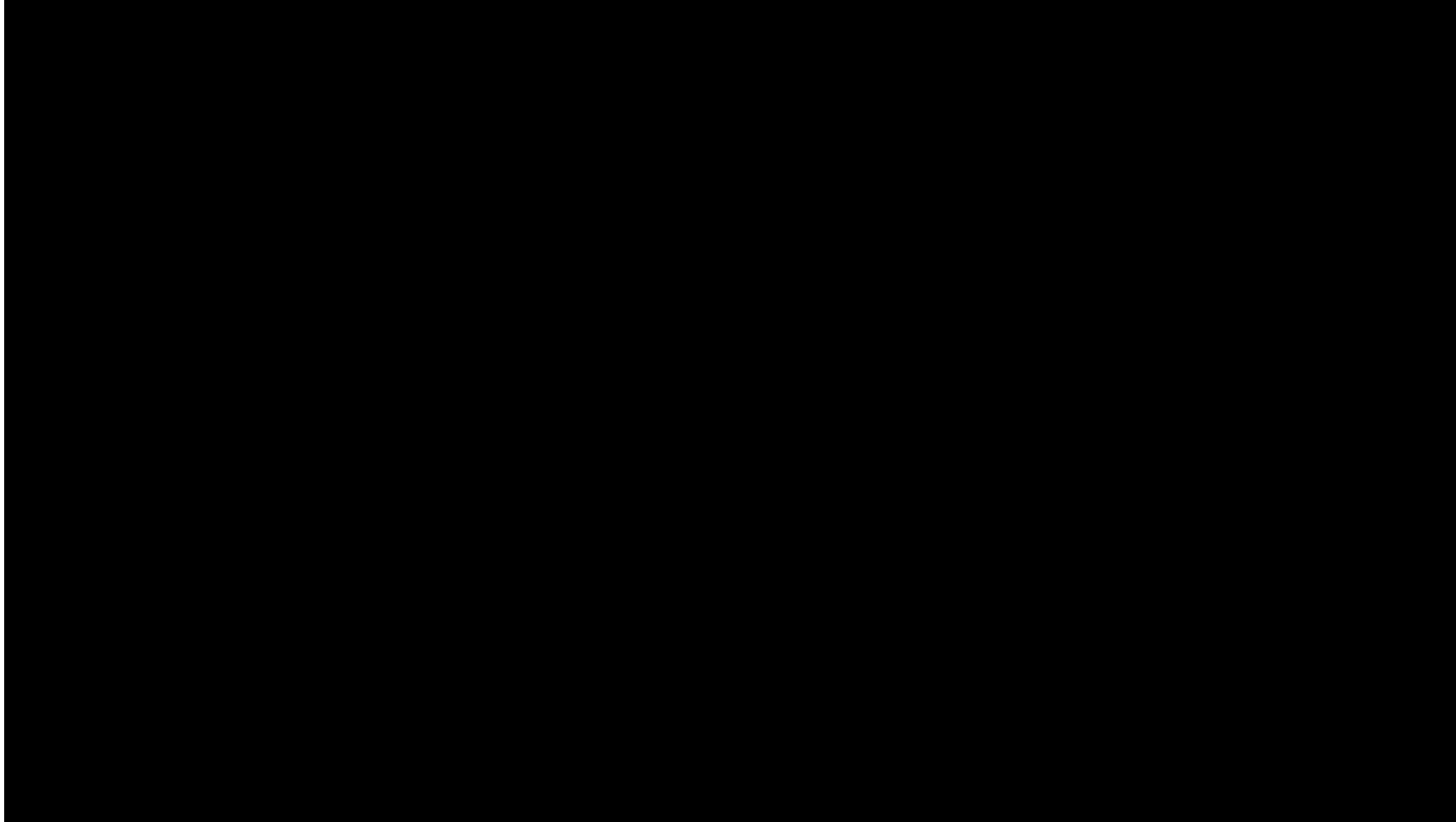
STANDING AND SITTING

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 and knees at the same level
- 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



Video courtesy
of Osteoporosis
Canada

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.

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

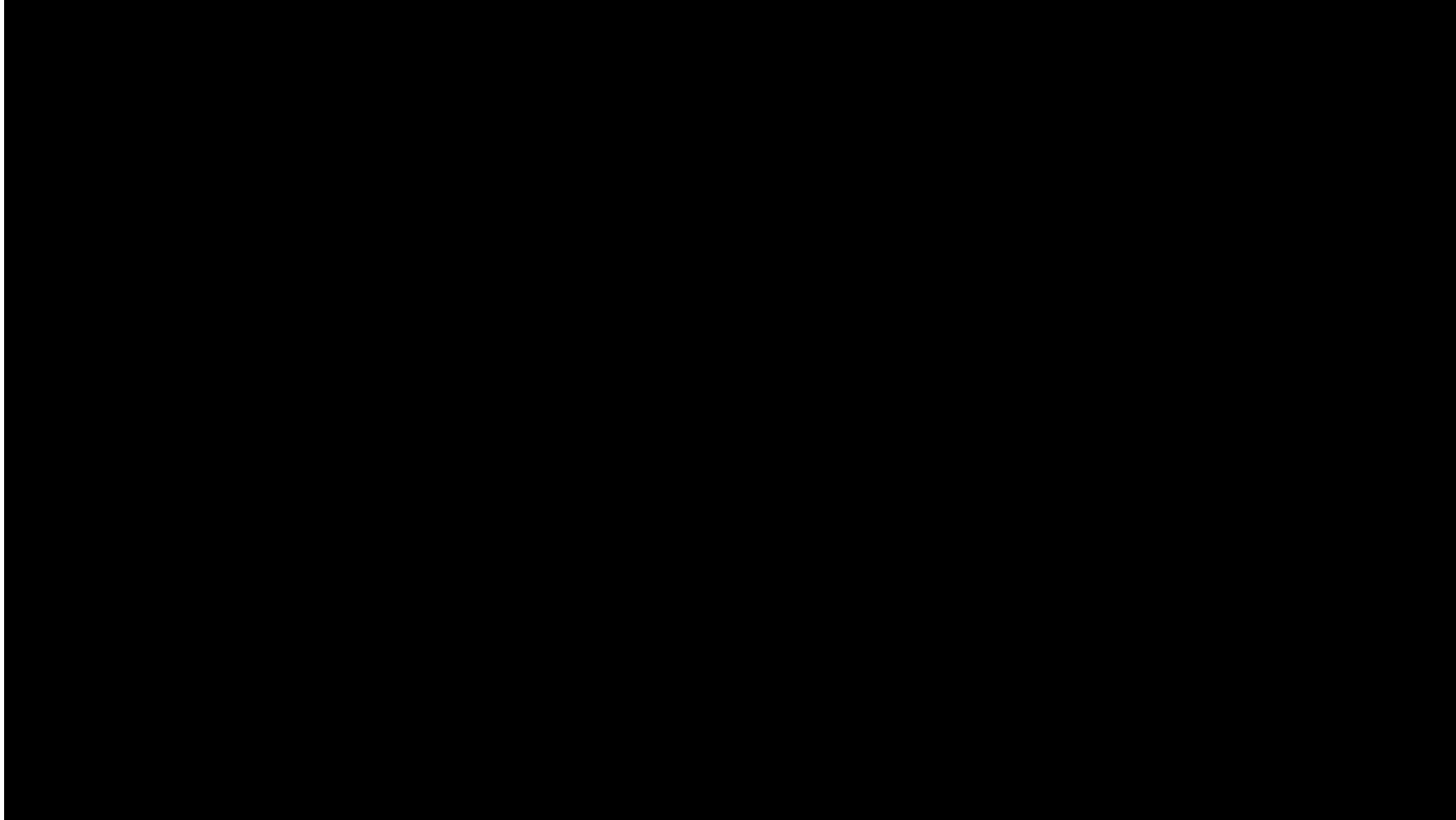


Hip hinge not correct, spine
is rounded, not in good
neutral position

COURTESY SHARRON STEEVES, PHYSIO FITNESS

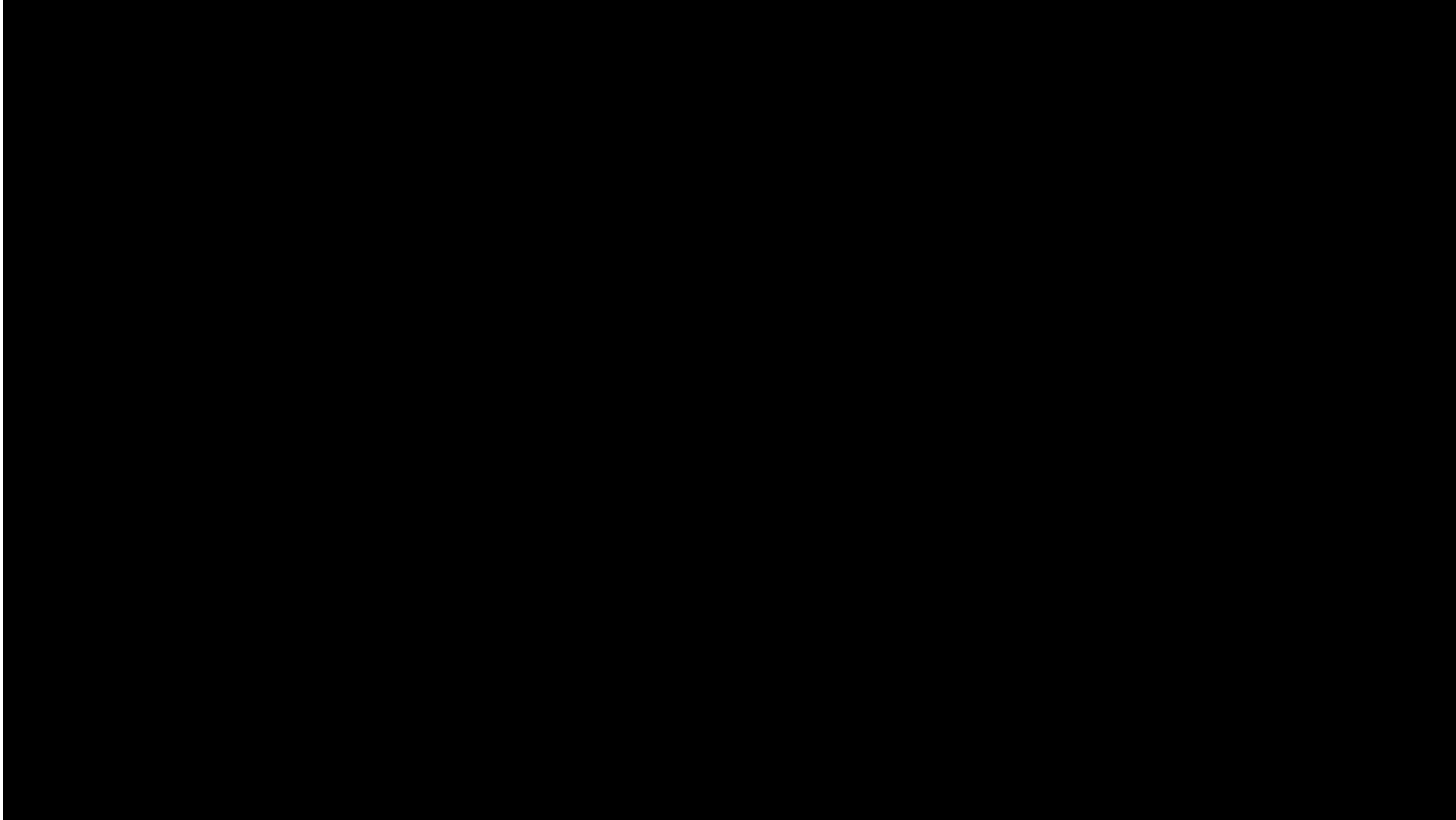
I will be able to demonstrate, independently and using good posture, how to implement proper body mechanics while executing different common daily activities to encourage active living.

THE HIP HINGE



Video courtesy
of Osteoporosis
Canada

SAFE LIFTING AND CARRYING



Video courtesy
of Osteoporosis
Canada

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

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.

SECTION 3

Assistive Devices

WHAT ARE ASSISTIVE DEVICES?

- Assistive devices may help to improve mobility and regain independence
- It is important to ensure that you get a suitable device and use it correctly

CANES AND WALKING STICKS



WALKERS



CRUTCHES



IS AN ASSISTIVE DEVICE RIGHT FOR YOU?

Consider the following questions:

- Do you feel weak or unsteady on your feet?
- Did you have a fall recently?
- Are you afraid to walk without holding onto something or someone?

If this is you, you may want to consider talking to your doctor about how an assistive device may improve your mobility.

THINK ABOUT SAFETY FIRST

- Before purchasing an assistive device, your needs, your lifestyle and your home environment needs to be assessed by a qualified professional
- Your doctor and physiotherapist will help you determine the most suitable assistive device and ensure that it is a proper fit for your needs

COOL-DOWN ACTIVITY

Review your “Are you at risk of falling?” quiz on the first page of your **Falls Prevention, Part 2 - Workshop Guide**

For any of the questions that you answered “YES”, complete the RIGHT side of the chart, “How to lower your risk of falling”

Create an action plan for implementing your ideas for lowering your risk of falling around your home.

I will be able to assess my own personal risk of falling and identify strategies for preventing falls within the home.

ADDITIONAL RESOURCES

Osteoporosis Canada

- osteoporosis.ca

Dr. David Hanley Osteoporosis Centre

- osteoporosiscalgary.com

National Osteoporosis Foundation

- nof.org

SPONSORS



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/>.

(2020). Choosing the Right Walking Aids. Retrieved from <https://elderlyfallprevention.com/assistive-devices/walking-aids/>.

Finding Balance Alberta. (2017). *Are you at risk of falling?*.

Alberta Health Services. (2012). *Better Bones 4 Life: Learning to Exercise and Move with Osteopenia or Osteoporosis*. (pp. 17, 19).

Bradley, S.M., Hernandez, C.R. (2011). Geriatric Assistive Devices. *American Family Physician*, 2011 Aug 15;84(4):405-411.