

AGE RELATED CHANGES IN BALANCE AND AGILITY



Health Awareness Resource: Balance and Agility

There are many tasks in forestry work that require a high degree of balance and agility. Using three point contact and appropriate footwear will help, but walking through slash or stepping up into a cab, it's your ability to stay balanced and stable on slippery surfaces at changing angles that will protect you and your ability to move quickly and easily that gets you where you need to go. Luckily, we all have a built in set of reflexes designed to respond immediately when balance is disturbed. When they are working well, they help us adjust our center of gravity and avoid a fall. Unfortunately, inattention, previous injuries and poor fitness all slow down the reflexes that control our ability to respond to the things that disturb our balance, making it more likely that a fall will result from a slip or trip. A more sedentary lifestyle, excess body weight, weakened muscles, joint pain and poor posture, are some other reasons that we lose our ability to balance and move well.

It is possible to restore good balance and agility, all it takes is a bit of retraining of the protective reflexes. The exercises are easy to do and don't take much time, but they do need to be done on a regular basis. With a bit of focus and work you can continue to move well throughout your lifespan.

Facts:

- Poor balance and agility contribute to slips, trips and falls which can in turn lead to serious injuries that can impact your ability to work.
- Regular focused movement is necessary to maintain a high level of balance and agility. Practicing correct technique for specific movements from your job for just a few minutes every day improves balance and agility and reduces injuries.
- In order to keep the high level of balance and agility required for forestry work, it is important to rehab injuries properly, maintain a healthy weight and exercise regularly, especially if you spend most of your time on the job sitting down.
- Getting enough rest, drinking water and eating healthy foods can also help maintain fast reflexes and a good level of balance and agility.
- There are also more serious reasons for loss of balance including problems with your inner ear, high blood pressure, diabetes or even a stroke. If you feel lightheaded or dizzy, or have a sudden increase in blurred vision or loss of balance, stop work and see medical help immediately.

What to expect:

- After an injury or with chronic joint pain, stiffness and muscle weakness increase over time. It becomes harder to balance and move easily through uneven terrain or step up into your machine. This effect is worse as we age, but it is correctable.
- Vibrations can disturb your ability to sense your balance. When dismounting from your machine be aware that you won't be able to balance as well as normal. Always use 3-point contact to give your body time to adjust.
- Balance and agility exercises fit into anyone's day, but you have to do them regularly. Even spending a few minutes a day on your posture, balance and

agility will improve your ability to move well at work and at home. This becomes more and more important as we age.

What you can do:

- If you are more than 20 lbs overweight get help to adjust your diet and lifestyle to lose excess fat. It will improve your health and make it much easier to move well. You can roll back the clock by 10 years by maintaining a healthy weight.
- Keep active even if your job does not require you to move. Exercise is the single most powerful health aid we have and will keep your balance and agility levels high as you age.
- If you have an old injury that causes pain during movement see a registered physiotherapist and get some rehab exercises, then make sure you do them. It's unlikely that the pain will go away on it's own and will only get worse as you age.
- Come to work well rested, and ready to focus on the work at hand. Bring enough water and food to ensure you can stay hydrated and have enough energy for your day.
- Any time you have a few moments while waiting and can get out of your machine safely, practice the following exercises - but always begin by standing tall so that your spine and pelvis are in neutral. You should have a slight curve in your low back. Tighten your low abdomen muscles slightly.
 - Balance on one leg. Begin by holding onto something so that you can keep a good posture and don't wobble on your standing leg. Hold for 30 seconds and switch sides. As you get better at this, let your hand go for a few seconds at a time. When you can balance well for the full 30 seconds, hold on again and this time close your eyes. You can also try swinging your arms or twisting your upper body to increase the challenge.
 - Balance on one leg and touch the lifted foot out to the front, back, sides and corners so that you touch the ground in a star shape. Begin by holding onto something so that you can keep a good posture and don't wobble on your standing leg. The knee of your standing leg should be slightly bent and should stay over the toes of that foot – it must not drop in to the center. Touch all the points of the star twice and then switch sides. When you can maintain good posture and balance, try letting go with your hand for a few seconds at a time until you can do the whole star twice without holding on.
 - Take a big step forward and bend both knees into a lunge. Go only as low as you can and still maintain your balance – if you need to, touch one hand to something so that you don't wobble. It's more important to keep your posture and not let the front knee drop into the middle than it is to get low. Push off the front foot and come back to a two-foot stance. Do 5 lunges forward and switch legs. As you get more comfortable with the movement, add lunges to the side and back, and increase the depth of the lunge until your back knee is just off the ground and your front knee makes a right angle.
 - Skip or hop from foot to foot as quickly as possible for 30 seconds. Pick up your feet and put them down positively.

- Stretch your calves, quads, hamstrings and back. If you don't know how to do this properly go see a movement specialist and learn how. It can make a huge difference in your ability to move well.

What Employers and Supervisors can do:

- If anyone on your crew is more than 20 lbs overweight, run a healthy weight challenge. Get everyone involved and challenge another team or department, with incentives and family activities. There are lots of good resources available. Here is one directed towards men in BC <https://www.bchealthyiving.ca/what-we-do/working-on-wellness/healthy-eating/>
- Similarly, if your team is not physically active in their daily work, try a physical activity challenge to encourage people to increase their leisure time physical activity. Charting weekly activity hours or linking activity hours to fundraising for a local charity are good ways to motivate people. For more ideas check out <https://www.bchealthyiving.ca/what-we-do/working-on-wellness/physical-activity/>
- Watch how your team members move. If you see them displaying poor postures (hunched over, tipped to one side), hesitating before stepping up or stumbling frequently invite a physiotherapist to come and visit your workplace. They can demonstrate some corrective posture and agility exercises on site, ideally wearing work boots and other PPE so that the routine is as applicable to your group as possible. Make sure that everyone knows what benefits are available to help pay for additional work with the physiotherapist.
- Incorporate the postural sequence (standing tall, spine and pelvis in neutral, with a slight curve in the low back), a few balance and agility exercises and a couple of stretches into your meetings. If you take even just 5 minutes from your daily meetings for these kinds of activities you are reinforcing just how important they are to offset the loss of balance and agility that are associated with aging.