



Exercising with peripheral arterial disease

Every move counts

Move more and reduce your sedentary time each day by incorporating different types of movement. It is never too late to start, some is always better than none!

How to get started

Exercise is one of the most beneficial treatments that reduces the pain caused by peripheral artery disease (PAD). Regular exercise improves circulation to the leg muscles and helps to improve your maximal walking distance and pain-free walking. Regular exercise also significantly reduces your risk of heart disease, stroke, hypertension, obesity, some cancers, type 2 diabetes and osteoporosis. It also has been shown to improve your exercise capacity and mobility, improve blood sugar control and your lipid profile, and reduce blood pressure, depression and anxiety.

Your doctor or healthcare provider can help you develop an exercise plan to maximize your health benefits and/or refer you and provide additional advice if you have other long-term health problems.

The health benefits of exercise are improved significantly if you don't smoke.

Warm up and cool down

Always start your exercise session with a 10–15-minute warm up to loosen up the muscles and raise the heart rate safely. Warm-up exercises include dynamic stretches, range-of-motion activities and low intensity movements. This can be done standing up, walking around, marching on the spot or seated.

Always start your exercise session with a 10–15-minute cool-down to ensure your heart rate and breathing rate return to normal safely. Cool down exercises include slowly decreasing the intensity of your activity and simple stretches.

Be active

Some is good, more is better

How much:	Aim for at least 150-300 minutes a week of moderate intensity or at least 75-150 minutes a week of vigorous intensity physical activity. Start moving more each day increasing to regular movement every day and add sessions as your strength and stamina improve.
How hard:	Any movement helps. Aim for moderate to vigorous intensity—aim to get slightly breathless. Take frequent breaks, if necessary. Set your initial workload on the treadmill or walking pace to a speed and incline that causes pain within 3–10 minutes and causes you to slow down. Walk at this pace until you achieve pain symptoms of moderate severity, then stand or rest. Repeat this exercise–rest–exercise cycle as part of your exercise plan. Progress your exercise plan to the aim of walking pain-free at an increased distance over a period of 6 months. After this time, continue your walking plan but add in a variety of other activities.
How long:	Aim to spread out your sessions throughout the week. If your fitness level is low, start with 5–10-minute sessions and slowly increase until you can exercise continuously following the exercise–rest–exercise cycle and close to the pain threshold.

What type:	All physical activity counts. Try activities within your abilities. Treadmill and track walking are the most effective exercise for reducing pain on walking, improving circulation in the legs and your overall mobility and fitness. Other suitable exercises are walking outdoors, nordic walking and using a stepper machine. When you are comfortable exercising for 30-60 minutes continuously, try other activities such as cycling, rowing and swimming that also help improve your health. Your symptoms will improve over time, so vary your exercise plan to stay motivated. Recreational team sports such as soccer, tennis, or volleyball are great social activities too! Household activities such as cleaning, gardening, vacuuming or walking your dog are great activities for your health. Your symptoms may improve over time, so vary your exercise plan to stay motivated.
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What will it do for me?

Regular exercise significantly improves leg pain and muscle tone, helps maintain or lower weight and reduces your risk factors of other diseases.

Build strength

How much:	At least twice a week.
How hard:	Start with light muscle strengthening exercises and progress to moderate or greater intensities over time. Avoid over-gripping or lifting heavy weights above your shoulders as both can increase blood pressure.
How long:	Choose 8–10 exercises targeting the upper and lower body and repeat each exercise 10–15 times. Try 1–3 sets of each exercise.
What type:	Try weight training or join a circuit class using gym equipment. At home, try squats, calf raises, wall push-ups, arm curls, front and side arm raises, chair stands using weights or a household item such as a can.

What will it do for me?

Regular strength exercises help maintain bone, muscle and joint health and improve pain-free walking time.

Improve balance

How much:	At least three days a week.
How hard:	Try 2–3 balance exercises and repeat each exercise 10-15 times.
How long:	Hold each balance for 10 seconds.
What type:	Try yoga, Tai Chi, or simple home balance exercises. Balance exercise can be done standing up using a chair, against a wall or sitting down. Ensure the area you are exercising in and the type of balance exercise is safe.

What will it do for me?

Practising balance exercises helps to train your body to react more quickly to a loss of balance and can help reduce the risk of falls, fractures and injuries.



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Sedentary living

Reduce the amount of time being sedentary. Move more and break up sedentary time. Sedentary behavior is defined as time spent sitting or lying with low energy expenditure, while awake in the context of occupational, educational, home and community settings, and travel. Higher amounts of sedentary behavior can increase the risk of heart disease, type 2 diabetes and some cancers.

Replace sedentary behavior with more physical activity of any intensity (including light intensity). It is possible to avoid sedentary behaviour and be physically active while sitting or lying, through, for example, upper body led activities, inclusive and/or wheelchair-specific sport and activities. Try seated stretches for those with limited mobility; using active forms of transport; standing while working (within your abilities and environment), and other accessible active options to replace sedentary time.

Your exercise, your way!

Choose activities that are easy to start with, and that you enjoy. Always exercise within your abilities. If mobility is difficult, adapted cycling, swimming and chair-based exercises may be better alternatives. Exercise with friends and family or join a group class to improve your motivation levels and engage in social activities. Try exercising both indoors and outdoors and see which you prefer! Most importantly: **some physical activity is better than none.**

Helpful resources

The Cardiac Rehabilitation Network of Ontario (CRNO) is a provincial interprofessional association dedicated to the rehabilitation of individuals with cardiovascular disease and the prevention of cardiovascular disease. Find a cardiac rehabilitation program near you. <https://www.crno.ca/directory>.

The Heart and Stroke Foundation gives great tips to stay active. <https://www.heartandstroke.ca/healthy-living/stay-active>

Exercise safety

Starting to exercise regularly may identify heart-related symptoms. **Stop** exercising immediately if you feel unwell or experience any chest pain, irregular heartbeats, extreme fatigue or breathlessness and seek medical assistance.

Take all medicines as recommended by your doctor or pharmacist, and contact your doctor or healthcare provider for further advice and instruction.

Avoid exercise in too hot or too cold environments.

Start with shorter sessions (e.g. 10–15 minutes) and slowly build up to the recommended level. Aim to get slightly out of breath, but exercise sensibly and stop the activity if you feel unwell.

Always wear comfortable clothing and shoes that give good support and don't rub or cause discomfort to prevent sores or infection.

Take frequent breaks if necessary and drink water before, during and after exercise.

Ensure you exercise safely during all exercises and ask for assistance and supervision if you are unsure about any exercises.

Choose environments that you can access freely and safely. Choose routes with resting places. Please ask your healthcare provider or local leisure organizations for advice on the best option for you.

Please ask your healthcare provider for information on modification or adaption for exercises within your abilities.

Scan for more physical activity resources!

