



Exercising after stroke

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

Regular exercise helps you achieve three major rehabilitation goals: preventing complications of prolonged inactivity, decreasing recurrent stroke and cardiovascular events, and increasing physical fitness. Regular exercise improves your heart and lung function, muscular strength, flexibility and balance. Exercise also significantly reduces your risk of type 2 diabetes, hypertension, some cancers, obesity, falls, osteoporosis, depression, anxiety, stress and health problems related to inactivity.

Physical activity can improve physical function, balance, walking speed, distance, ability and endurance and mobility. It also improves sleep and enables you to enjoy the activities of daily living, mobility and independence, including more active leisure time with family and friends.

Your doctor or stroke specialist may refer you to a physiotherapist or certified specialist health and fitness professional who can work with you and your healthcare team to develop the best exercise plan for you.

If you have had a stroke, you may not be able to exercise straight away; start when you have recovered enough and do what is manageable.

Before exercising, discuss with your doctor or healthcare provider if you have any unstable or uncontrolled health conditions that may affect your ability to exercise safely and effectively. Ask for recommendations and adaptations on suitable exercises.

Follow the rehabilitation advice and guidance of your stroke and physiotherapy team at all times.

Take all medicines as recommended by your doctor or pharmacist.

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 end 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.
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How hard:	Intensity should be determined on an individual basis depending on health status, ability, planned frequency and duration of exercise. Any movement helps. Start with a low intensity and aim for moderate to vigorous intensity - aim to get slightly breathless. Take frequent breaks, if necessary. Always exercise within your abilities and only progress the intensity when you are comfortable exercising at this level.
How long:	Aim to spread out sessions throughout the week. If your fitness level is low, start with 5–10 minute sessions and add 10-minute intervals until you can comfortably exercise for longer.
What type:	All physical activity counts. Try activities within your abilities. Try walking, repetitive sit-to-stand exercises, marching on the spot or stepping/step-up exercises. Household activities such as cleaning, gardening, vacuuming or walking your dog are great activities for your health.

What will it do for me?

Regular exercise improves you ability for daily activities with less exertion.

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. Keep arm movements at or below shoulder level if affected by the stroke.
How long:	Choose 8–10 exercises targeting the major muscle groups of the upper and lower body . Repeat each exercise 10–15 times. Try 1–3 sets of each exercise. Rest for 2-4 minutes between each set.
What type:	A variety of strength exercises using free weights, resistance machines or household items such as a can of beans or a weighted water bottle as a weight. Try sit-to-stands, heel raises, step-ups, squats and lunging. Use chair-based exercises to help you balance, if necessary, and progress to standing or movement with weights exercises. Use any equipment safely.

What will it do for me?

Strength exercises help build muscle mass lost through inactivity. It also improves your confidence, overall strength, stamina, prevents falls and helps with balance and coordination.

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 10-30 seconds.
What type:	Try yoga, Tai Chi, or simple home balance exercises such as standing in stride position, walking on a line or standing on one foot. Ensure the area you are exercising in and the type of balance exercise is safe. If you are at high risk of falling, do seated balance exercises or use a sturdy chair or wall for support. Ensure appropriate stand-by supervision is provided.



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What will it do for me?

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

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 behavior 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 Canadian Partnership for Stroke Recovery has created an informative video on Recreation and Leisure after Stroke. <https://www.heartandstroke.ca/strokerecovery-and-support/stroke-care/rehabilitation/community-exerciseprogram>

The Heart and Stroke Foundation lists evidence-based exercise programs that might be offered in your community. <https://www.heartandstroke.ca/stroke/recovery-and-support/stroke-care/rehabilitation/community-exercise-programs>

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

Exercise safety

Exercise is contraindicated and should be avoided if you have any of the following health problems:

- Uncontrolled hypertension where your systolic blood pressure is greater than 180 mmHg or your diastolic is greater than 100 mmHg
- Serious cardiac disease, including acute, unstable or severe heart failure
- Active or uncontrolled angina, or recent myocardial infarct (< 3 months)
- Active cancer
- Infectious conditions, or an illness with a temperature and/or feel unwell
- Untreated depression
- Musculoskeletal conditions or pain restricting exercise
- Recent injurious fall without medical assessment
- Other neurological conditions in addition to stroke that would restrict participation.

Always exercise safely, within your ability, and stop exercising if you feel unwell. Follow your health management and medicine plan developed with your doctor or healthcare provider.

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!

