

Secondary Prevention

Your guide to taking charge of your stroke recovery

By the numbers



About **1 in 20 people** who have a TIA will have a stroke within **90 days**.

(Shahjouei *et al* 2020)

Timely initiation of secondary prevention therapies and **management strategies** can **significantly reduce** the risk of major stroke after an initial stroke or TIA.

Learn the signs of stroke

Face is it drooping?
Arms can you raise both?
Speech is it slurred or jumbled?
Time to call 9-1-1 right away.

Act **F.A.S.T.** Lifesaving treatment begins the second you call 9-1-1.

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For more information on this topic and to check out similar resources on stroke, visit www.strokebestpractices.ca/resources/patient-resources.

Definition and goal

Secondary prevention aims to reduce the risk of another stroke or TIA. It is a collaborative process between someone who has had a stroke and their healthcare providers. The recommendations promote aggressive management of risk factors for stroke, to help increase survival and quality of life. This may include lifestyle changes and modifications, and management of underlying medical conditions. Secondary prevention can be addressed in many settings including the hospital, with your primary care provider, and stroke prevention services, in person or virtually. It should occur throughout your recovery journey and is life-long.

Ischemic stroke is caused by a blockage or clot in a blood vessel in your brain. The interrupted blood flow can cause brain cells to die leading to injury to the brain. About 85% of strokes are ischemic.

A **Transient Ischemic Attack (TIA)**, often called a 'mini stroke', is caused by a small clot that briefly blocks an artery. TIA and minor ischemic stroke fall along a continuum. TIA symptoms fully resolve within 24 hours (usually within one hour). If any symptoms still exist after 24 hours, then it would be considered a stroke, not a TIA. A TIA event is significant as it can be a warning of a future stroke. They are a medical emergency. Call 9-1-1 or your local emergency number immediately, do not wait.

Hemorrhagic stroke: A stroke caused by the rupture of a blood vessel within the brain. The interrupted blood flow can cause brain cells to die leading to injury to the brain.

After a stroke or TIA your chances of having another are higher. People with stroke also have a higher risk of cognitive issues or vascular dementia. Prevention is key. Know the FAST **signs of stroke**. Some people may experience other symptoms such as: vision changes, sudden severe headache, problems with balance and numbness however, these symptoms can be caused by many other conditions as well.

Be prepared to **act quickly** by calling 9-1-1 or your local emergency medical services if you experience any stroke signs.

Important: Identify your risk factors

Together you and your healthcare team will create a personalized plan of action that you can follow to control some of your risk factors. This plan might include a combination of lifestyle changes such as quitting smoking and increasing physical activity and taking medication for high blood pressure and blood thinners to prevent clots. You should discuss challenges you might have and plan ways to address them.

Medical Risk Factors: some medical conditions can increase your risk of stroke (such as high blood pressure, high cholesterol, diabetes, atrial fibrillation, carotid artery blockages, pregnancy, some heart issues)

Modifiable risk factors: many risk factors can be managed through lifestyle changes, treatment, and medications. These include diet, sodium intake, activity levels, unhealthy weight, smoking and vaping, heavy or binge drinking, recreational drug use, and use of oral contraceptives or hormone replacement therapy.

Non-modifiable risk factors: There are other factors associated with a higher risk of stroke that you cannot control. These include:

- Age (risk increases with age)
- Sex (risk increases after menopause)
- Family history of heart disease, stroke, or TIA (parents or siblings)
- Previous stroke or TIA
- Indigenous heritage
- South Asian or African descent
- Social determinants of health

The **Post-Stroke Checklist** can help you plan your discussions with your healthcare team. Heart & Stroke's **Virtual Care Checklist** helps you prepare for your virtual follow up appointments. Visit Heart & Stroke **Risk and Prevention**.

Take action to prevent another stroke or TIA

Note: This list represents just some of the key stroke and cardiovascular risk factors. Talk to your healthcare team and learn which risk factors are applicable to YOU. Other recommendations may include checking the arteries in your neck for blockages and your heart for problems that may have contributed to your stroke or TIA, and how to manage your medications if you need an operation. Speak to your healthcare team if any of these apply to you.



High blood pressure

High blood pressure is the number one risk factor for stroke. Your blood pressure should be measured routinely (at least once a year and sometimes more frequently). Your healthcare team will provide recommendations to help manage your blood pressure, such as lifestyle changes and/or medication.

- ✓ **Action:** Know your baseline and target blood pressure. Understand what may affect your blood pressure. Learn how to monitor your blood pressure at home. Take your blood pressure medication every day – even after your blood pressure becomes lower.



Preventing blood clots

If your stroke was caused by a clot, you should likely be given a blood thinner medication (**antiplatelet or anticoagulant**) to help prevent more clots and reduce your risk of another stroke or TIA.

- ✓ **Action:** Before your discharge home from the hospital, ask the healthcare team if you should be taking a blood thinner. Ask for the prescription and know who will follow up with you.



Irregular heartbeat (such as atrial fibrillation)

Your heart rhythm should be assessed when you have a stroke or TIA. If you have an irregular rhythm called atrial fibrillation, you should be started on blood thinner medication called an anticoagulant.

- ✓ **Action:** Ask your healthcare team if you have an irregular heartbeat, and the best ways to manage it.



Diabetes

People with stroke or TIA should be screened for diabetes and have it treated.

- ✓ **Action:** If you have diabetes, speak with your healthcare providers about the best way to manage and control your diabetes to further reduce your stroke risk.



High cholesterol

If you had an ischemic stroke, you may benefit from cholesterol-lowering medications and making changes to your diet

- ✓ **Action:** Know your cholesterol level and your target level. Learn how to manage your cholesterol, including healthy eating, lifestyle changes and taking medications as prescribed, even when your levels improve.



Physical activity

Most individuals should start a regular exercise program after stroke or TIA. You should participate in physical activity 4-7 days a week to add up to at least 150 minutes per week, in episodes of 10 minutes or more.

- ✓ **Action:** Learn what physical activity you can do safely and who will guide your recovery. Ask about available community programs. Discuss strategies to overcome barriers (e.g., physical abilities, location, cost) with your healthcare team.



Smoking and vaping

Quitting smoking is one of the most important things you can do to help prevent stroke and heart disease. While vaping is less harmful than smoking, it is not harmless. Some people may use vapes to help them quit smoking but if you do not smoke, do not vape.

- ✓ **Action:** Talk to your healthcare team about smoking cessation programs, medications and resources that are available to support you in your journey to quit.



Healthy eating

People who have had a stroke are encouraged to eat a variety of natural, whole, and minimally processed foods at each meal and to increase consumption of proteins from plant based sources. Strive to reduce intake of sodium and added sugars.

- ✓ **Action:** Talk to your healthcare providers or a dietitian to learn about what healthy, balanced eating looks like for you. Develop an action plan by identifying areas for change, planning around potential barriers and creating small steps you can take towards your personal goals.

Always talk to your healthcare provider before making any changes to your medications, ensure all prescribed medications are taken properly and avoid missing doses. If you experience any new or worsening health symptoms, talk to your healthcare provider right away.