Stroke
How physiotherapy can help

Stroke costs the Canadian economy more than $3.6 billion dollars each year in medical costs and lost productivity. This number will continue to rise with Canada’s rapidly aging population.

It is estimated that more than 13,000 Canadians die each year from stroke, and more than 400,000 Canadians are living with the effects of a stroke. These combine to make stroke one of the biggest causes of both death and disability in Canada.

A stroke is a sudden loss of brain function. It is caused by the interruption of flow of blood to the brain (ischemic stroke) or the rupture of blood vessels in the brain (hemorrhagic stroke). Both cause brain cells (neurons) in the affected area to die due to lack of oxygen. The effects of a stroke depend on where the brain was injured, as well as how much damage has occurred. After a stroke you may have weakness or paralysis on one side of your body or problems with moving, communicating, and doing your everyday activities. No two strokes are alike, so providing a program tailored to you is critical to ensuring you make the best recovery possible. A physiotherapist is a key member of the stroke rehabilitation team, and can help you regain muscle strength and control, improve your balance and ability to walk, and help with bowel and bladder control or incontinence issues.

What is stroke?

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Stroke is a medical emergency, so it is important that you recognize the warning signs and act **FAST**. Do not drive yourself to the hospital. Call 9-1-1, or your local emergency number, to get help right away! It has been said that "time is brain" - the quicker you get medical attention, the less damage your brain will suffer.

**Warning signs and act FAST**

- **FACE** is it drooping?
- **ARMS** can you lift both?
- **SPEECH** is it slurred?
- **TIME** to call 9-1-1 right away.

The care you receive in hospital will depend on many factors, including the symptoms you present with and the results of your brain scan. After you are medically stable, your rehabilitation will start - usually within 24-48 hours. Some people recover fully from their stroke, while others continue to have physical and mental limitations throughout their life.

Most recovery of function occurs in the first three months following the stroke. With guidance, most individuals can continue to improve their performance of functional tasks and aerobic capacity for at least one year after the stroke. The recovery process then slows down but may continue for an extended period of time after that. After discharge from hospital, a rehabilitation program may continue through home care physiotherapy or an out-patient physiotherapy clinic.

Physiotherapists have specialized university training in physical rehabilitation. They are registered by provincial/territorial regulatory bodies to provide physiotherapy services. Physiotherapists trained in stroke rehabilitation will assess patients' range of motion, strength, sensation, balance, endurance, and ability to move and walk. They provide an individualized treatment plan based on their assessment findings to help improve movement and physical function.

Stroke rehabilitation generally involves a team of professionals, and can occur in hospital, rehabilitation facility, community or home setting. Patients (stroke survivors) and their family members are important members of the team, and must be part of the goal setting and treatment planning.

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