



## STROKE

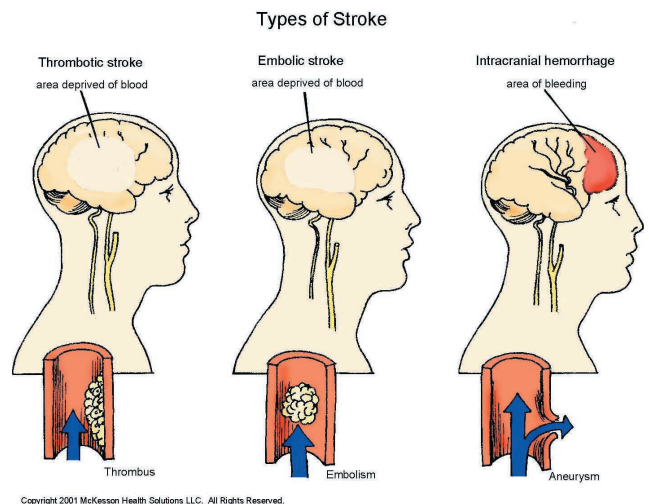
Stroke is one of the major causes of disability and handicap in adults. Canadian physiotherapists play a key role in the rehabilitation of people who have had a stroke, helping them return to their highest possible level of physical mobility.

A stroke causes damage to specific parts of the brain either from the interruption of the flow of blood to the brain (an ischemic stroke) or the rupture of blood vessels in the brain (a hemorrhagic stroke). The brain cells in the affected area cease functioning which may result in the loss of movement, sensation and/or thought processes, including speech.

### DISABILITIES CAUSED BY STROKE

The effects of stroke vary, depending on the area of the brain affected and the severity of the damage. Some of the most common problems related to stroke include:

- Loss of control of movement (paralysis or paresis) and / or loss of feeling in some parts of the body, usually on the side of the body opposite from the location of the stroke in the brain;
- Change in muscle tone on the affected side, e.g. flaccid (no muscle contractions); or spastic (strong involuntary muscle contractions)
- Difficulty sitting, standing or walking;
- Disturbance of balance;
- Problems with speaking and / or understanding speech;
- Confusion, poor memory;
- Reduced control over bladder or bowel;
- Difficulty swallowing; and
- Reduced control over emotions.



### WARNING SIGNS

Learn to recognize the warning signs of a stroke:

- **Weakness** - Sudden weakness, numbness or tingling in the face, arm or leg;
- **Trouble Speaking** - Sudden temporary loss of speech or trouble understanding speech;
- **Vision Problems** - Sudden loss of vision, particularly in one eye, or double vision;
- **Headache** - Sudden severe and unusual headache; and
- **Dizziness** - Sudden loss of balance, especially with any of the above signs.

**People who think they are experiencing symptoms of a stroke should seek medical attention immediately. Early intervention may reduce the long term effects of stroke.**

### HOW PHYSIOTHERAPISTS CAN HELP

After receiving medical attention for a stroke, the patient should begin a rehabilitation treatment program with a physiotherapist as soon as possible while still in hospital. In fact, physicians may refer their patient to a physiotherapist for treatment within 48 hours of having a stroke if they are medically stable.

Some people recover from the effects of stroke within days, but for most, improvement will be seen gradually over time throughout the rehabilitation period. 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.

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**S** This information sheet is part of the CPA's **S.M.A.R.T.** approach to your mobility (focusing on **Stretching, Moving, Adding it up, Reducing Strain** and **Talking to a physiotherapist**). The information provided is intended for general use and is not meant to substitute for the professional, personal assessment your physiotherapist offers.

**1** Cette fiche de renseignements fait partie du programme de l'ACP « **cinq points** pour assurer votre liberté de mouvement » (**1. Étirez-vous; 2. Bougez; 3. Additionnez les minutes; 4. Réduisez la fatigue; 5. Consultez un physiothérapeute**).  
**2** Ces renseignements sont fournis à titre général seulement et ne prétendent pas remplacer l'évaluation professionnelle, personnalisée offerte par votre physiothérapeute.

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**cont'd: 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 are specifically trained to assess movement difficulties and / or sensory loss that may occur as a result of a stroke. Through movement re-education, the physiotherapist works to retrain mobility and functional activities such as standing up from sitting, walking and using the affected arm.

Specifically, physiotherapists focus on:

- Mobility and strengthening exercises for the affected arm and leg;
- ‘Normalizing’ tone in the affected muscle groups;
- Trunk stability and strengthening;
- Balance retraining to improve stability and movement coordination;
- Improving exercise tolerance and endurance;
- Functional activities to promote independence and participation in daily activities;
- Gait retraining to promote safe, functional walking; and
- Sensory retraining to help compensate for changed or reduced sensation.

**STROKE PREVENTION**

Physiotherapists recommend the following tips for reducing your risk of stroke:

- **Be physically active** - Regular physical activity helps to reduce the risk of stroke. To gain mobility plan activities throughout your day that keep you moving for periods of at least 10 minutes. To maintain your mobility, make every movement count. Add up all you do in a day and aim for a minimum of 60 minutes of movement every day.
- **Be smoke-free** - If you smoke, become smoke-free. Talk to your doctor about ways to do this. Within five to 15 years of becoming smoke-free, your stroke risk will be the same as someone who has never smoked. If you are a non-smoker, avoid second-hand smoke.
- **Take steps to help control your blood pressure** - Eat a healthy diet. Have your blood pressure checked regularly. If you have high blood pressure and are prescribed blood pressure-lowering medications, take them exactly as prescribed by your doctor.
- **Maintain a healthy weight** - It is essential to maintain a healthy body weight. Being overweight increases your risk of high blood pressure, high cholesterol and diabetes.
- **Reduce stress** - Certain individuals with high levels of stress, or prolonged stress, may have higher blood cholesterol levels and experience increases in their blood pressure. There is even some evidence that their blood may be more likely to form clots.

**N.B. If you have a pre-existing medical condition or have not been physically active, consult your physician before beginning an exercise program or a diet.**

Physiotherapists are healthcare professionals who help people of all ages and lifestyles gain and maintain their desired level of active living and physical mobility. With their applied knowledge and understanding of the human body in action, physiotherapists are able to help you to increase your mobility, relieve pain, build strength and improve balance and cardiovascular function. Physiotherapists not only treat injuries, they also teach you how to prevent the onset of pain or injury that can limit your activity.

**HOW DO I FIND A PHYSIOTHERAPIST?**

Finding a physiotherapist may vary from province to province. Here are some suggestions:

- Check the yellow pages of your local telephone book for listings of physiotherapists and physiotherapy clinics. You can make an appointment with a physiotherapist directly anywhere in Canada.
- Ask for a recommendation from your family doctor. While a direct referral is not necessary, your physician may be able to suggest a physiotherapist for your particular concern. Further, while many physiotherapy services are covered by provincial health care plans, Workers Compensation plans and private insurance, some insurance plans require a doctor's referral for reimbursement.
- Visit the Canadian Physiotherapy Association's web site at [www.physiotherapy.ca](http://www.physiotherapy.ca), to access our “Find A Physiotherapist” directory and to find out more information about physiotherapy. The CPA web site can also link you to resources for finding physiotherapists through provincial branches and regulatory colleges.