ACTIVE LIVING ALLIANCE
FOR CANADIANS WITH A DISABILITY

**Helping Canadians with Disability/Chronic Disease Get Physically Active: Tip Sheets for Intermediaries**

*For Canadians with a disability, regular physical activity may be even more important than it is for the rest of the population. For a person with a disability, an active lifestyle can open doors to increased health, social inclusion and self-empowerment - doors which might otherwise remain closed. Access to physical activity can eliminate the likelihood of acquiring secondary health conditions like diabetes, high blood pressure or heart disease. Being active builds resiliency and can provide an all-important outlet for a person with a disability.*

*These tip sheets are designed to provide general information in support of Canada's Physical Activity Guidelines, developed by the Canadian Society for Exercise Physiology.*

# STROKE

## General Information

### Facts and Figures

- Strokes are the third leading cause of death in Canada. Over 14,000 Canadians die from stroke each year;
- Stroke and heart disease continue to be the leading cause of hospitalization in Canada;
- 9 out of 10 Canadians have at least one of the risk factors for stroke or heart disease (cigarette smoking, alcohol, lack of physical activity, high blood pressure, obesity, cholesterol, diabetes);
- Strokes can occur at any age, but are most common in older adults;
- High blood pressure, obesity, heart disease, and diabetes increase the risk of having a stroke.

### What is a Stroke?

A stroke is a condition wherein brain cells die due to a lack of oxygen, caused either by an obstruction to the blood flow or the rupture of an artery which feeds the brain. For a stroke victim, this may lead to an inability to speak, memory problems or partial paralysis.

The technical name for a stroke is cerebral vascular accident (CVA). A stroke usually occurs as a result of a blood clot, which travels to the brain and disrupts the supply of blood and oxygen that is necessary for the brain to function. This is known as an Ischemic stroke and it accounts for about three quarters of all strokes. Stroke can also occur as a result of a ruptured blood vessel in the brain, known as a Hemorrhagic stroke.

Due to the lack of oxygen immediately following a stroke, some of the structures in the brain may be affected, which will also impact the function of certain parts of the body that these structures ordinarily control. For the stroke victim, the outcome will depend on where the stroke occurred and how much of the brain was affected. Weakness in a leg or arm could be the result of a smaller stroke, whereas paralysis or death could occur as a result of a larger stroke.

Living a healthy lifestyle can go a long way towards stroke prevention. Among the factors which lessen likelihood of stroke include controlling blood pressure, not smoking, lowering fat, salt and cholesterol intake, moderate alcohol consumption, managing stress, and regular exercise.

**Impact of Stroke**

For many people, a stroke can be a devastating and life-altering experience. People may undergo a wide range of deficits following a stroke. Some will experience severe limitations in their daily activities, while others will only experience mild limitations.

The most common deficits which occur following a stroke include:

- paralysis or weakness of one side of the body;
- difficulties speaking and communicating with others;
- sensory difficulties (i.e. difficulty seeing, hearing, and feeling);
- perceptual difficulties (i.e. difficulty for a person to interpret what they see, hear, and feel);
- cognitive deficits (i.e. problems with memory, planning and organizing, and confusion).

**Working with a Person who has had a Stroke**

**Tips for getting Active**

Some people who are recovering from a stroke commonly have abnormal muscle tone, and quite often, high muscle tone, referred to as Spasticity. Spasticity is very debilitating and can severely restrict the person's range of motion and ability to take part in daily activities.

For a person who has had a stroke, as for anyone, physical activity is necessary to ensure a healthy body. It is critical that regular exercise be a part of the lives of stroke survivors to decrease the risk of having another stroke. People who have experienced a stroke have a much higher risk for having another.

When working with a person who has had a stroke, consider the following:

- Choose activities that the person really enjoys. Suggest ways to incorporate physical activity into those activities;
- Suggest ways to incorporate physical activity into daily routines - i.e. taking the stairs, walking a pet, exercises that the person can do while watching a favourite television show;
- Involve the person in physical activity goal setting - make sure goals are realistic;
- Educate the person and their family about the importance of physical activity;
- Increase confidence through doing - people who have experienced a stroke are often demoralized by their resulting deficits and limitations, and may lack confidence to try new things or become active. It is important that you show them what they CAN do, instead of what they can't do;
- Know the individual's strengths and limitations - remember that everyone will have different limitations as a result of a stroke.

**Physical Activity Tips and Modifications**

- Keep it simple - especially for people who have challenges with memory and concentration. For example, decrease the number of steps in an activity and limit distractions;
- Be careful not to push too hard - people who are recovering from a stroke often have difficulties conserving their energy for daily activities. You want to find a balance that enhances overall health and vitality, but which does not expend too much energy that will limit them from other daily activities;
- Be aware of overexertion - have participants carry out the Talk Test. During physical activity, the person should be able to talk. If the person becomes short of breath, dizzy, or uncomfortable in any way, activity should stop immediately;
- Move it or lose it - for people who have hemiplegia (i.e. weakness or paralysis of one side of the body), it is critical to encourage exercise and use of the affected side whenever possible. People with hemiplegia will often neglect the affected side of their body, which will only further limit their function;
- Spasticity - Avoid activities that will increase spasticity in the muscles (i.e. quick jerky movements and jumping). Encourage intermittent relaxation and stretching to keep the muscles loose and functional;
- Be aware of potential balance problems and adapt activities accordingly. You may want to provide extra protective equipment for people who are prone to falling as a result of balance problems;
- Adapt activities so that they can be performed with only one hand if necessary;
- Ensure safety at all times!

**Resources:**

Heart and Stroke Foundation - www.heartandstroke.ca

The “Talk Test" - www.unm.edu/~lkravitz/Article%20folder/talktest.html

What is a Stroke? - www.medicalnewstoday.com/articles/7624.php

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