

# THE CLOCK IS TICKING FOR STROKE PATIENTS



## Canadians too slow to call EMS for stroke

The Heart and Stroke Foundation and Canadian Stroke Network  
2012 Stroke Month Report warns that Canadians under 50 are risking death or  
permanent disability by reacting too slowly to the signs of stroke



Canadian Stroke Network

Réseau canadien contre  
les accidents cérébrovasculaires

**STROKE  
REPORT  
2012**



**HEART &  
STROKE**  
FOUNDATION

# TAKING THE RIGHT ACTION IS CRITICAL

**A**dults under the age of 50 are risking death or permanent disability far too often by not calling 9-1-1 or their local emergency number at the first sign of stroke, according to new data released by the Heart and Stroke Foundation (HSF) and the Canadian Stroke Network (CSN).

The rest of Canadians aren't doing much better.

And that spells trouble because there are 50,000 strokes in Canada each year.

"When it comes to stroke, there are two enemies: the clock and the clot," says stroke neurologist Dr. Michael Hill, who speaks on behalf of the Heart and Stroke Foundation and the Canadian Stroke Network.

"Canadians need to understand that the clock starts ticking at the first signs of a stroke, and every second of delay leads to more brain cell death and greater risk of death or disability."



The statistics – collected from about 10,000 patient charts at 295 hospitals across Canada<sup>1</sup> – found that half of all adults under the age of 50 took longer than eight hours to arrive at a hospital emergency department. Across all age groups, women took slightly longer than men to arrive at hospital.

"Canadians need to understand that the clock starts ticking at the first signs of a stroke. And every second of delay leads to more brain cell death, and greater risk of death or disability" – Dr. Michael Hill

Overall, two-thirds of Canadians arrive at hospital too late to meet the 3½-hour treatment target for clot-busting drugs or other interventions that can minimize – or even erase – the devastating effects of stroke.

"Faster action would prevent disability for thousands of Canadians and save lives," says Dr. Hill.

Further, polling done for the Heart and Stroke Foundation in May 2012 found that even though most Canadians recognize at least one sign of stroke, more than one in three say they would not likely call 9-1-1 or their local emergency number even if they saw those signs in someone they know.<sup>2</sup>

Among the most-cited reasons for not calling were denial (people thinking that the signs are not a medical emergency) and the misperception that it is faster to drive the person to the hospital themselves.

For every minute of delay in treating a stroke, the typical person loses almost two million brain cells. And for each hour in which treatment does not occur, the brain loses as many neurons as it does in more than three years of normal aging.

<sup>1</sup> The full CSN report, *The Quality of Stroke Care in Canada*, is at this link: <http://www.canadianstrokenetwork.ca/wp-content/uploads/2011/06/QoS-EN1.pdf>

<sup>2</sup> Environics poll commissioned by the Heart and Stroke Foundation, April 19-27, 2012, accurate +/-2.19%, 19 times out of 20.

Two thirds of the people who have a stroke do not arrive at an appropriately prepared hospital in time for treatments such as clot-busting medication.

When you call 9-1-1 or your local emergency number, the system is alerted and treatment is fast-tracked, explains Dr. Hill. In most provinces, bypass protocols enable ambulances to get patients to specialized stroke centres in the fastest possible time.

For the 30 per cent of stroke patients who make their own way to their nearest hospital, arriving by car rather than ambulance can add life-threatening

minutes or hours before diagnosis and treatment can begin. “Your closest hospital may not be the best equipped to deal with stroke – EMS knows which hospital to take you to,” says Hill.

Even for those with mini-strokes (transient ischemic attacks or TIAs) immediate treatment can reduce the risk of having a more severe stroke.

THE FACTS	THE NUMBERS*
Most stroke patients arrive at hospital outside the 3½-hour target for treatment.	Only 35 per cent of patients arrive <b>within the target of 3½ hours</b> .  In Canada, half of stroke patients arrive <b>seven hours</b> after the onset of stroke symptoms – too late to benefit from treatments that include clot-busting medications.  Almost 40 per cent arrive at a hospital <b>more than 12 hours</b> after the onset of symptoms.
Younger stroke patients and the oldest stroke patients take the longest to get to hospital.	Half of those in the age groups 18 to 50 and 90-plus arrive at hospital <b>more than eight hours</b> after the onset of the onset of symptoms.
Women take slightly longer to get to hospital.	Half of women take longer than <b>7.4 hours</b> to arrive at hospital compared to 6.8 hours for men.

\* Canadian Stroke Network data

## KNOWING THE 9-1-1 ON STROKE SAVES TIME, SAVES LIVES



Lisa Fitterman knows first-hand the importance of calling 9-1-1 or local emergency number. When she was in her 20s, the Montreal journalist, who then lived in Victoria, experienced dizziness and garbled speech and thought she might have the flu. She drove herself to the hospital.

Unfortunately, Fitterman had a car accident on the way to hospital. When police arrived, they attributed her slurred speech and inability to stand to inebriation.

Thankfully, an alert motorist urged them to take her to the hospital instead of the drunk tank.

"It hadn't occurred to me that I might be experiencing a stroke," says Fitterman.

"The fact is that stroke is a brain attack, as urgent as a heart attack. Everyone needs to know the warning signs – and that they are a serious medical emergency. Your first reaction should be to call 9-1-1."



## KNOW THE SIGNS!

Stroke is a medical emergency. Recognizing and responding immediately to the warning signs of stroke by calling 9-1-1 or your local emergency number can significantly improve survival and recovery. If a person is diagnosed with a stroke caused by a blood clot, doctors can administer a clot-busting drug available only at a hospital, and only within a few crucial hours after symptoms begin.\* That's why it is very important to be able to recognize the five warning signs of stroke and immediately call 9-1-1 or your local emergency number.



### **Weakness**

Sudden loss of strength or sudden numbness in the face, arm or leg, even if temporary.



### **Trouble Speaking**

Sudden difficulty speaking or understanding or sudden confusion, even if temporary.



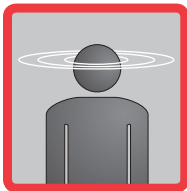
### **Vision Problems**

Sudden trouble with vision, even if temporary.



### **Headache**

Sudden severe and unusual headache.



### **Dizziness**

Sudden loss of balance, especially with any of the above signs.

**If you experience any of these symptoms, call 9-1-1 or your local emergency number immediately.**

\* Health Canada has approved the clot-busting drug called tPA to be used within 3 hours from the time stroke symptoms begin. However, emerging science is now showing that tPA could be effective up to 4 ½ hours afterward. As a result, the Canadian Stroke Strategy has issued new Canadian Best Practices Recommendations for Stroke Care, which include this new treatment time. Still, it will be up to the attending emergency doctors to determine when tPA may be administered or if it is appropriate to the situation.



## HAVE YOU HAD THE S-TALK?

"There's an urgent need for Canadians of all ages to start openly talking about stroke, to know the signs and know how crucial the 9-1-1 call is," says Ian Joiner, Director of Stroke for the Heart and Stroke Foundation. "The bottom line is that people aren't getting to hospital in time for treatment."

To help start conversations among all Canadians, the Heart and Stroke Foundation is launching **The "S-talk,"** a campaign encouraging all of us to talk to our families and friends about the stroke warning signs and the importance of fast action. One of the key points in the S-talk is to recognize and overcome

denial, often the first reaction to the signs of a stroke.

"The most important thing people can do is be aware of the stroke warning signs and know that they are an urgent medical emergency," Joiner adds. "The very idea of stroke can be frightening. Most people would rather avoid discussing it, but it's a talk families need to have."

"If you or someone you know experiences any of the signs of stroke, call 9-1-1 or your local emergency number immediately," says Joiner.

# ISN'T IT ABOUT TIME YOU HAD THE S-TALK?

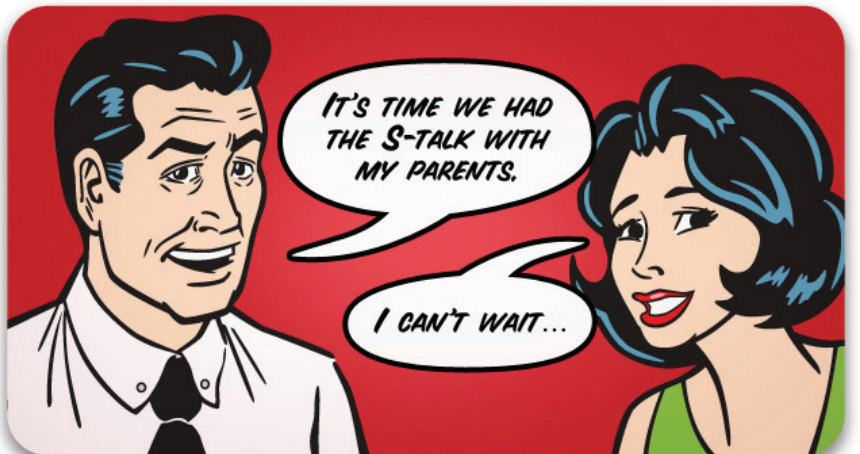
## A simple conversation could save lives.

Protect the ones you love by having a talk about stroke. Help them know the signs, and to call 9-1-1 if it happens.

It's one of the important conversations everyone needs to have. Know the signs of stroke, and what to do. Show someone you care.

Start the conversation today by sending an **S-talk** eCard to friends, family and colleagues.

**heartandstroke.ca**



## THE FACTS

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- More than 50,000 strokes occur in Canada each year – that's one every 10 minutes.
- Stroke is the third leading cause of death in Canada and a leading cause of adult neurological disability and hospitalization.
- It has been estimated that more than 315,000 Canadians are living with mild, moderate or severe disability due to stroke.
- Half of people who have had strokes are never able to return to work.

## STROKE PREVENTION

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You can't control your family history, age, gender or ethnicity. But luckily, you can do something about other factors that could increase your risk of having a stroke.

Stroke occurs when the blood supply to part of the brain is cut off. Without oxygen-rich blood, brain cells begin to die. If the blood supply is not restored, the affected part of the brain dies, causing disability and death.

Help prevent a stroke by learning more about the risk factors you can do something about and those you can't control.

### WHAT IS YOUR RISK?

Are you at risk? Go to [www.heartandstroke.ca/risk](http://www.heartandstroke.ca/risk) and take the **Heart&Stroke Risk Assessment™** and get a personalized risk profile and a customized action plan for healthy living that includes tips, tools, recipes and much more to help you reduce your risk.

Desjardins Financial Security is encouraging Canadians to complete the online risk assessment test.

"As a health insurer, we know that the impact of treatment delays after a stroke can be devastating," says Denis Berthiaume, president of Desjardins Financial Security.

"As part of our mandate to support the health of all Canadians, we are very proud to partner with the Heart and Stroke Foundation to increase awareness of these impacts, the signs to watch for, and the ways to manage your well being."

### RISK FACTORS YOU CAN DO SOMETHING ABOUT

- High blood pressure (hypertension)
- High blood cholesterol
- Heart disease atrial fibrillation
- Diabetes
- Being overweight
- Excessive alcohol consumption
- Physical inactivity
- Smoking
- Stress

### RISK FACTORS YOU CAN'T CONTROL

- Age
- Gender
- Family History
- Ethnicity
- History of stroke or Transient Ischemic Attack (TIA)



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The Heart and Stroke Foundation, a volunteer-based health charity, leads in eliminating heart disease and stroke and reducing their impact through the advancement of research and its application, the promotion of healthy living and advocacy. [heartandstroke.ca](http://heartandstroke.ca)



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The Canadian Stroke Network is a national research network headquartered at the University of Ottawa. It brings together university- and hospital-based stroke researchers to reduce the impact of stroke. [canadianstrokenetwork.ca](http://canadianstrokenetwork.ca)