

# Let's Talk About: Atrial Fibrillation



ST. PAUL'S HOSPITAL  
COMMUNITY FORUMS

## What is Atrial Fibrillation?

Atrial fibrillation (AF) describes an irregular and often rapid heart rhythm. The irregular rhythm or arrhythmia results from abnormal electrical impulses in the heart. The irregularity can be continuous, or it can come and go. It is the most common cardiac arrhythmia (abnormal heart rhythm), and involves the two upper chambers (atria) of the heart. Its name comes from the fibrillating (i.e. quivering) of the heart muscles of the atria.

## Did you know?

- AF affects up to 250,000 Canadians.
- Risk increases with age. About 6% of people 65 and older have AF.
- Women are more affected than men.
- Presence of cardiovascular disease worsens outcome.

## Potential Causes of Atrial Fibrillation

Underlying heart conditions

- High blood pressure, heart failure, heart attack, cardiomyopathy, valvular heart disease, sick sinus syndrome, open heart surgery, genetic / familial

Lung conditions

- Sleep apnea, pneumonia, COPD, pulmonary embolism, pulmonary hypertension

Others

- Excessive alcohol, hyperthyroid, habitual aerobic training

Lone AF

## Types of Atrial Fibrillation

Paroxysmal

- intermittent
- lasting less than 7 days

Persistent

- lasting more than 7 days
- requires treatment to restore normal rhythm

Permanent

- failed rhythm control
- chronic and long term

## Signs and Symptoms That May Indicate Atrial Fibrillation

Some people with atrial fibrillation have no symptoms and are unaware of their condition until it is discovered by a doctor during a physical examination.

Others may feel symptoms, such as:

- A fast pulse
- Light-headedness
- Breathlessness
- Weakness
- Chest discomfort
- Palpitations (sensations of a racing, uncomfortable, irregular heartbeat or a flopping in the chest)

Sources:

*Canadian Cardiovascular Society Atrial Fibrillation Guidelines 2010,*  
[www.ccs guidelineprograms.ca/index.php](http://www.ccs guidelineprograms.ca/index.php)  
*The Heart and Stroke Foundation of BC,*  
[www.heartandstroke.bc.ca](http://www.heartandstroke.bc.ca)  
*Heart Rhythm Society,*  
[www.hrsonline.org](http://www.hrsonline.org)

Join medical experts from Providence Health Care for monthly community forums at St. Paul's Hospital. Each month features a different health topic with time to pose questions to the experts.

The forums are free and take place the third Wednesday of every month.

7:00 – 9:00 pm  
(doors open at 6:30)  
New Lecture Theatre  
St. Paul's Hospital  
1081 Burrard Street

For more information and to register, please email [ownyourhealth@providencehealth.bc.ca](mailto:ownyourhealth@providencehealth.bc.ca) or call 604-806-8495.

This evening's presentations will be available to view on our website:

[www.phcmedicine.ca](http://www.phcmedicine.ca)

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# Atrial Fibrillation Treatment and Research at St. Paul's Hospital

The St. Paul's Hospital Atrial Fibrillation Clinic established in November 2009 was the first of its kind in BC. The program now has about 900 enrolled patients and is one of the fastest growing specialized clinics of Providence Health Care. The UBC Division of Cardiac Electrophysiology has been in the forefront of atrial fibrillation specific patient care, research and education for the last 2 decades.

The UBC Atrial Fibrillation ablation program was the first program to start AF ablation in Canada. It remains one of the leaders in the field and one of the highest volume ablation centres in the country. AV node ablation treatment for patients with AF was reported from this program in 1991. The Electrophysiology team has remained at the forefront in the development of techniques and advanced technology (3D mapping) for AF ablation.

Doctors trained in our labs for AF ablation are leading patient care in centres all over North America, Asia, Australia and Europe.

## Treatment Options

A physician will help decide the best approach in treating patients with atrial fibrillation. A customized treatment plan is based upon the individual's medical profile and the degree to which symptoms interfere with quality of life.

Most patients with AF will likely have to take blood thinners in order to reduce their risk of stroke.

There are two general strategies for the treatment of AF: rhythm control and/ or rate control.

## Rhythm control

These treatments attempt to prevent an irregular heartbeat by restoring and maintaining a normal, regular

heartbeat. The first approach to rhythm control involves taking medications that will attempt to prevent the AF from occurring. Occasionally, some patients will require a controlled electric shock to the heart (called direct current cardioversion) to restore a normal rhythm. In some cases, if medications fail or are not well tolerated, your doctor may refer you to a specialist, who will decide if you are a candidate for AF ablation.

## Rate control

Many patients with atrial fibrillation will be prescribed a medication aimed to slow the heart rate. For some, this type of medication is enough to control the symptoms of AF.

## Catheter Ablation for Atrial Fibrillation

For patients that do not respond to medications and/ or cardioversion, AF ablation may be offered to decrease symptom burden.

During catheter ablation, small wires are inserted in the upper leg and advanced into the heart. Small burns (cautery type) using radiofrequency energy are applied to target areas responsible for signals that cause atrial fibrillation. The energy applied creates scar tissue that can take up to 3 months to mature. Once the scars mature, the abnormal signals which cause AF are blocked, allowing your heart to beat normally.

## Sources:

Canadian Cardiovascular Society,  
[www.ccsguidelineprograms.ca/index.php](http://www.ccsguidelineprograms.ca/index.php)  
The Heart and Stroke Foundation of BC,  
[www.heartandstroke.bc.ca](http://www.heartandstroke.bc.ca)  
Heart Rhythm Society,  
[www.hrsonline.org](http://www.hrsonline.org)

St. Paul's Hospital is an acute care, teaching and research hospital located in downtown Vancouver. It is home to many world-class medical and surgical programs, including heart and lung services, HIV/AIDS and kidney care.

St. Paul's serves both the local community and patients from across BC and the Yukon. St. Paul's is one of 14 health care facilities in Vancouver operated by Providence Health Care, one of Canada's largest faith-based health care organizations. Providence's 1,000 physicians and 6,000 staff deliver compassionate care to patients and residents in British Columbia while training medical professionals and making innovative advances in research.

**To support programs like this at St. Paul's Hospital, please visit [www.helpstpauls.com](http://www.helpstpauls.com) to make a donation to the Department of Medicine Academic Fund.**

[www.phcmedicine.ca](http://www.phcmedicine.ca)