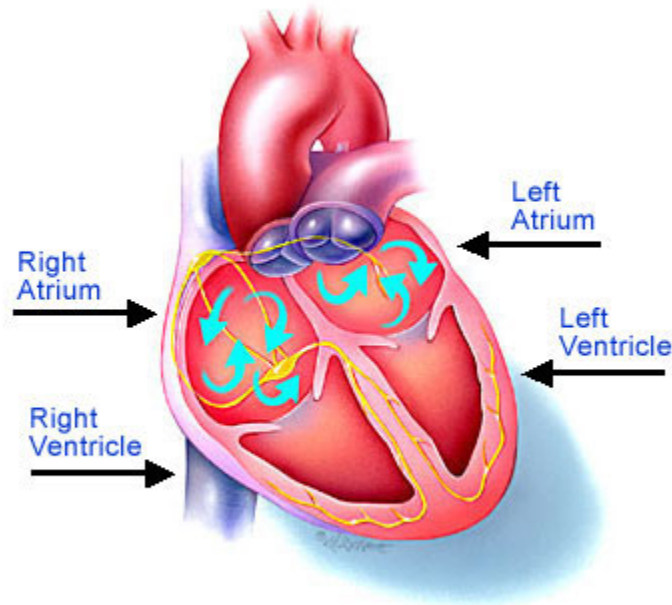


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## What is Atrial Fibrillation?

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Atrial fibrillation (Afib) is a cardiac dysrhythmia (an irregularity of the heart's rhythm) in which there is chaotic electrical activity in the upper chambers (at 350-600 beats per minute) causing them to quiver instead of contracting in an organized way. The electrical impulses travel to the ventricles resulting in an irregular and usually rapid heart rate or pulse.

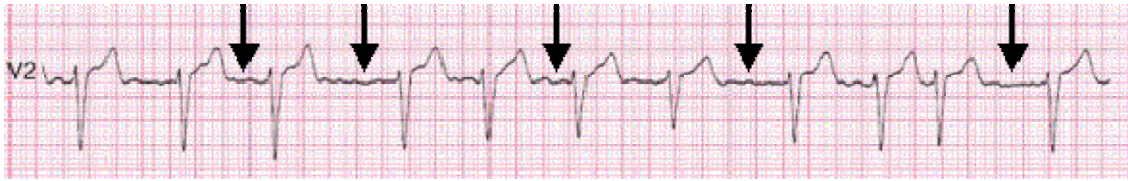


**Atrial Fibrillation.** Many electrical impulses causing the atria to fibrillate. Picture courtesy of the Heart Rhythm Society . [www.hrsonline.org](http://www.hrsonline.org)

Afib is classified into 4 categories based upon frequency and duration of episodes: Initial event, paroxysmal, persistent, and permanent.

On an ECG (electrocardiogram) Afib is recognized by the absence of distinct P waves and the presence of small irregular oscillations or 'fibrillatory' waves and the ventricular response (QRS) is irregular.

**'Fibrillatory' waves**



ECG of Atrial Fibrillation

There is great variability in the presentation and symptoms of afib. Patients may be asymptomatic, particularly if it is permanent, or may be highly symptomatic with palpitations, lightheadedness, syncope, poor exercise tolerance, chest pain, and shortness of breath. It is the most common arrhythmic cause for hospitalization. Additionally there is a 2-fold increase in mortality and a 5 fold increase in stroke in patients with Afib. (Bialy, et al. *JACC* 1992;19:41A; Prystowsky, et al. *Circulation* 1996;93:1262-1277; Wolf, et al *Arch Int Med* 1987;147:1561-1564)

Approximately 2.4 million adults in the United States currently have Afib and this is expected to increase to over 5 million by 2040. (Go, et al. *JAMA* 2001;285:2370-2375). Afib is seen in every adult age group but the prevalence increases with age such that approximately 10% of patients older than 80 years old have this disorder.