



# Atrial Fibrillation:

By: Ryan Coker, Casey Dalton, Taylor DeRuiter, Pharm.D. Candidates

## HEALTHCARE CLINIC HOURS:

Monday-Wednesday, Friday

8:00 a.m. to 5:00 p.m.

Thursday

9:00 a.m. to 5:00 p.m.

Phone: (334) 263-8470

Fax: (334) 263-8670

Email: [hcc@alseib.org](mailto:hcc@alseib.org)

## PHARMACY HOURS:

Monday-Wednesday, Friday

7:30 a.m. to 5:30 p.m.

Thursday

9:00 a.m. to 5:30 p.m.

Phone: (334) 263-8460

Fax: (334) 263-8660

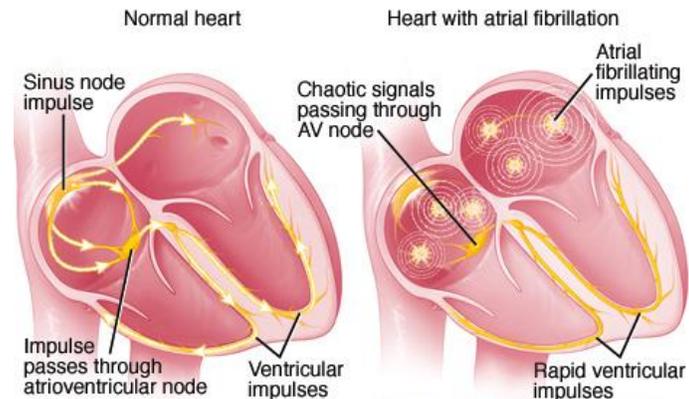
Email: [rx@alseib.org](mailto:rx@alseib.org)

## February is American Heart Month!

Atrial fibrillation, or AFib, is an “arrhythmia” which is a problem with the heartbeat’s rhythm and/or rate. In Afib, the heart’s upper chambers, or atria, have an irregular and faster beat than the rest of the heart. Irregular beats of the atria lead to blood not being completely pumped to the lower chambers.

Blood remaining in the atria can pool, which can result in the formation of a clot. The clots can break off and be pumped throughout the body, most commonly to the brain, which can cause a stroke. While Afib does increase your risk of stroke, the good news is that this risk can be reduced with medications known as anticoagulants, or blood thinners, which can prevent blood clots from forming.

The signs and symptoms of Afib are generally non-specific and include feeling that your heart is racing, chest pain, shortness of breath, lightheadedness, fatigue, and exercise intolerance.



## Prevalence

Afib currently affects ~2.3 million Americans. The current lifetime risk of developing Afib over age 40 is 25%, however, women and African Americans are at a lower overall risk of developing the disease. Because risk of developing Afib increases with age and longer life expectancy, the overall risk of developing Afib is expected to rise in the future.

Overall, Afib increases risk of death by 50-90%, mostly due to increased risk of stroke in patients with Afib. Patients with Afib are 5 x more likely to have a stroke and >15% of strokes in the U.S. are due to Afib.

### Are you at risk?

These conditions increase your risk for developing Afib:

- Athletes
- Advanced age
- Heart disease
- High blood pressure
- Sleep apnea
- Family history of Afib
- Diabetes
- Asthma
- Thyroid problems

### Signs and Symptoms:

- Quivering or fluttering heart beat
- General fatigue
- Dizziness
- Shortness of breath/anxiety
- Chest pain
- Sweating
- Faintness/confusion
- Weakness

## Lifestyle Adjustments:

### Diet:

- Alcohol and caffeine can trigger Afib and should be avoided
- Follow a low-sodium, low-fat diet to maintain a healthy blood pressure and cholesterol

### Smoking:

- Nicotine can aggravate Afib and is a known risk factor for cardiovascular disease

### Exercise:

- Promotes a good night's sleep
  - Important component of weight control
- 

## Afib and Stroke:

In atrial fibrillation, the rapid, erratic contractions of the heart result in slower blood flow. This irregular blood flow through the heart may cause blood to pool in the heart's atria (upper chambers) and form clots. If a blood clot forms, it could dislodge from your heart and travel to your brain. Normally a clot is broken loose when the heart goes from an irregular rhythm back to a normal rhythm. Within the brain, the clot can block blood flow and deprive the brain of oxygen, causing a stroke. A stroke may cause difficulty walking and talking, one-sided paralysis, permanent disability, or death. Often these effects of stroke are irreversible.

The risk of having a stroke in atrial fibrillation increases as you get older, if you've had a previous stroke or heart attack, if you have heart failure, high blood pressure, diabetes, or if you are a female. Anticoagulants, also known as blood thinners, can greatly reduce your risk of a stroke or the damage to other organs caused by blood clots. However, these medications can increase the risk for bleeding or bruising, so they must be closely monitored.

---

# MEDICATIONS

	Drug	How it Works	Side Effects/Comments
<b>Rate Control</b>	<b>Beta blockers</b>		
	Atenolol	Slow the heart rate by blocking epinephrine and norepinephrine, which both increase heart rate.	Cold hands/feet, tiredness, increased asthma symptoms, worsening heart failure  May mask the symptoms of hypoglycemia (low blood sugar) in diabetes
	Bisoprolol		
	Carvedilol		
	Metoprolol		
	Metoprolol ER		
	Propranolol		
	Nadolol		
	<b>Calcium channel blockers</b>		
	Diltiazem ER	Slow the heart rate and reduce the strength of the heart's contraction.	Fluid retention, headache, dizziness, constipation
Verapamil ER			
<b>Others</b>			
Digoxin	Slows heart rate by blocking electrical impulses that pass into the lower heart chamber	Dizziness, headache, nausea, mental disturbances.	
<b>Rhythm Control</b>	<b>Sodium Channel Blockers</b>		
	Disopyramide ER	Interfere with sodium channels in the heart to make heart cells more stable and less excitable	Increased heart rate, dry mouth, fatigue, nausea and vomiting, headache, dizziness
	Quinidine		
	Flecainide		
	Propafenone ER		
	<b>Potassium Channel Blockers</b>		
	Amiodarone	Blocks certain electrical signals in the heart that can cause an irregular heartbeat	Abnormal gait, dizziness, malaise, headache, insomnia, skin photosensitivity, memory loss, altered sense of smell
	Dofetilide		
Dronedarone			
Sotalol			
<b>Anticoagulants</b>	Warfarin	Stops the body from making factors necessary for clots to form by blocking your body from using vitamin K	Requires routine INR monitoring and has special dietary considerations pertaining to Vitamin K (eg. green leafy vegetables, liver).
	Dabigatran (Pradaxa®)	Lowers the chance of blood clots forming in your body by blocking thrombin—the blood's central clotting agent	Increases bleeding risk, but does not require monitoring
	Apixaban (Eliquis®)	Lowers the chance of blood clots forming in your body by blocking clotting factor X, which is needed for clots to form.	Increases bleeding risk, but does not require monitoring
	Rivaroxaban (Xarelto®)		
	Edoxaban (Savaysa®)		

## References:

1. Fiscella RG, Lesar TS, Deepak EP. Arrhythmias. In DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM, editors. Pharmacotherapy: A pathophysiologic approach. 9th ed. New York: McGraw-Hill Medical; c2014. Chapter 6. P 40-55.
2. American Heart Association. What are the Symptoms of Atrial Fibrillation (AFib or AF)? The American Heart Association. 2014 April 16 [updated: 2015 Nov 12; cited: 2016 Jan 20]. Available from: [http://www.heart.org/HEARTORG/Conditions/Arrhythmia/AboutArrhythmia/What-are-the-Symptoms-of-Atrial-Fibrillation-AFib-or-AF\\_UCM\\_423777\\_Article.jsp#](http://www.heart.org/HEARTORG/Conditions/Arrhythmia/AboutArrhythmia/What-are-the-Symptoms-of-Atrial-Fibrillation-AFib-or-AF_UCM_423777_Article.jsp#).
3. January CT, Wann LS, Alpert JS, et al. 2014 AHA/ACC/HRS guideline for the management of patients with atrial fibrillation: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the Heart Rhythm Society. J Am Coll Cardiol. 2014;64(21):e1-76.
4. Lome S. Atrial Fibrillation Review. Healio. c2015 [cited 2016 Jan 20]. Available from: <http://www.healio.com/cardiology/>.



www.alseib.org

Please let us know how we are doing by filling out a survey at the following link:

[https://auburn.qualtrics.com/SE/?SID=SV\\_3DXRxyUp8KC7Lzn](https://auburn.qualtrics.com/SE/?SID=SV_3DXRxyUp8KC7Lzn)

## State Wellness Center

101 S. Union Street  
Montgomery, AL 36104

All active employees, covered spouses of active employees, non-Medicare retirees and covered non-Medicare spouses of retirees that use the State Employees' Health Insurance Plan (Group 13000) as their primary insurance plan are eligible for a wellness premium discount. Each wellness plan year is November 1 through October 31.

SEIB and Local Government employees along with SEIB retirees are able to use the State Wellness Center Pharmacy. The pharmacy offers various over the counter products at discounted prices and a **free medication delivery service**. Delivery can be provided to the patients located in Montgomery. Please designate which site you would like your medication delivered to, and if it is to your residence someone must be available at the home to receive the delivery.

## State Wellness Center Healthcare Clinic

The SEIB clinic has a quality healthcare **TEAM** that includes nurse practitioners, an ambulatory care pharmacist, a physician, and nurses who work closely together to take care of your health and wellness needs.

### Services Include:

- Treat minor illnesses
- Provide health education & monitoring
- Check health progress between appointments
- Share information with your physician
- Monitor efficacy & safety of every medication
- Evaluate out of pocket medication expense
- Smoking cessation & weight loss services
- Diabetes education program
- Immunizations & injectable medications
- Develop a personalized medication plan
- Monitor control of chronic illnesses
- Medication check-ups
- Medication therapy management