

---

---

# CENTRAL PA HEALTH CARE QUALITY UNIT NEWSLETTER FOR HEALTHY OUTCOMES

---

---

April 2009 - Volume 9, Issue 4

*a monthly newsletter provided by the Central PA Health Care Quality Unit*

M.C. 24-12,100 North Academy Avenue, Danville, Pa. 17822 Phone: (570) 271-7240 Fax: (570) 271-7241

Website: <http://www.geisinger.org/hcqu>

---

---

## “For the Health of It”



Pictured above: Denise Friedhoff of Ganister Station ADP in Williamsburg and Sandra Corrigan RN, HCQU Nurse for Blair County

On March 3, 2009, HCQU Staff, Patty Patterson and Lynn Libby, traveled to Williamsburg to meet with the staff and individuals of Ganister Station to present them with the first copy of our finished project, “For the Health of It.” Ganister Station piloted our project which contains numerous activities for individuals, on different levels, related to health and wellness. As a result of their efforts they offered many valuable recommendations (and art work) that were incorporated into the booklet, making it the success it is.

The booklet is now being distributed by HCQU nurses to activity programs across our region and we are asking that the activities be shared with individuals and that evaluations be completed to determine its benefit. Thanks to Patty and Ganister Station for all their hard work.

### INSIDE THIS ISSUE

- |   |  |
|---|--|
| 1 | “For the Health of It”                 |
| 2 | Aging Changes in the Heart and Vessels |
| 3 | Allergic Reactions                     |
| 4 | Coping with Panic Attacks              |

# Aging Changes in the Heart and Vessels

*From MerckSource.com*

The heart has two sides. The right side pumps blood to the lungs to receive oxygen and get rid of carbon dioxide. The left side pumps oxygen-rich blood to the body. Blood flows out of the heart through arteries, which branch out and get smaller and smaller as they go into the tissues. In the tissues, they become tiny capillaries. Capillaries are where the blood gives up oxygen and nutrients to the tissues, and receives carbon dioxide and wastes back from the tissues. Then, the vessels begin to collect together into larger and larger veins, which return blood to the heart.

Aging causes changes in the heart and in the blood vessels. Heart and blood vessel diseases are some of the most common disorders in the elderly.

- The heart has a natural pacemaker system that controls the heartbeat. Some of the pathways of this system may develop fibrous tissue and fat deposits. The natural pacemaker (the SA node) loses some of its cells. These changes may result in a slightly slower heart rate.
- A slight increase in the size of the heart, especially the left ventricle, is not uncommon. The heart wall thickens, so the amount of blood that the chamber can hold may actually decrease despite the increased overall heart size. The heart may fill more slowly.
- Heart changes cause the ECG of a normal, healthy, older person to be slightly different than the ECG of a healthy younger adult. Abnormal rhythms (arrhythmias) such as atrial fibrillation are common in older people. They may be caused by heart disease.
- Normal changes in the heart include deposits of the "aging pigment". The heart muscle cells degenerate slightly. The valves inside the heart, which control the direction of blood flow, thicken and become stiffer. A heart murmur caused by valve stiffness is fairly common in the elderly.
- Blood vessels
- Receptors, called baroreceptors, monitor the blood pressure and make changes to help maintain a fairly constant blood pressure when a person changes positions or activities. The baroreceptors become less sensitive with aging. This may explain why many older people have orthostatic hypotension, a condition in which the blood pressure falls when a person goes from lying or sitting to standing. This causes dizziness because there is less blood flow to the brain.
- The capillary walls thicken slightly. This may cause a slightly slower rate of exchange of nutrients and wastes.
- The main artery from the heart (aorta) becomes thicker, stiffer, and less flexible. This is probably related to changes in the connective tissue of the blood vessel wall. This makes the blood pressure higher and makes the heart work harder, which may lead to thickening of the heart muscle. The other arteries also thicken and stiffen. In general, most elderly people experience a moderate increase in blood pressure.
- The blood itself changes slightly with age. Normal aging causes a reduction in total body water. As part of this, there is less fluid in the bloodstream, so blood volume decreases.
- The number of red blood cells are reduced. This contributes to fatigue. Most of the white blood cells stay at the same levels, although certain white blood cells important to immunity decrease in number and ability to fight off bacteria. This reduces the ability to resist infection.

Under normal circumstances, the heart continues to adequately supply all parts of the body. However, an aging heart may be slightly less able to tolerate increased workloads, because changes reduce this extra pumping ability. Some of the things that can increase heart workload include illness, infections, emotional stress, injuries, extreme physical exertion, and certain medications.

You can help your circulatory system (heart and blood vessels). Heart disease risk factors that you have some control over include high blood pressure, cholesterol levels, diabetes, obesity, and smoking.

- Eat a heart-healthy diet with reduced amounts of saturated fat and cholesterol, and control your weight. Follow your health care provider's recommendations for treatment of high blood pressure, high cholesterol, or diabetes. Minimize or stop smoking.
- Exercise may help prevent obesity and helps people with diabetes control their blood sugar.
- Exercise may help you maintain your maximum abilities as much as possible and reduces stress.
- Have regular check-ups for your heart and engage in moderate exercise within your capabilities, regularly.

# Allergic Reactions

From: MerckSource.com

Allergic reactions are sensitivities to substances, called allergens, that are contacted through the skin, inhaled into the lungs, swallowed, or injected. Allergic reactions are common. The immune response that causes an allergic reaction is similar to the response that causes hay fever. Most reactions happen soon after contact with an allergen. Many allergic reactions are mild, while others can be severe and life-threatening. They occur more often in people with a family history of allergies. Substances that don't bother most people (such as venom from bee stings and certain foods, medications, and pollens) can trigger allergic reactions in certain people. While first-time exposure may only produce a mild reaction, repeated exposures may lead to more serious reactions. Once a person has had an allergic reaction (is sensitized), even a very limited exposure to a very small amount of allergen can trigger a severe reaction. They can be confined to a small area of the body or may affect the entire body.

Most severe allergic reactions occur within seconds or minutes after exposure to the allergen. However, some reactions can occur after several hours, particularly if the allergen causes a reaction after it has been ingested. In very rare cases, reactions develop after 24 hours. Anaphylaxis is a sudden and severe allergic reaction that occurs within minutes of exposure. Immediate medical attention is needed for this condition. It can get worse very, very fast and lead to death within 15 minutes if treatment is not received.

**Common allergens** include: Animal dander; Bee stings or stings from other insects; Foods, especially nuts, fish, and shellfish; Insect bites; Medications; Plants; and Pollens.

**Common symptoms** of a mild allergic reaction include: Hives (especially over the neck and face); Itching; Nasal congestion; Rashes; and Watery, red eyes. Symptoms of a moderate or severe reaction include: Cramps or pain in the abdomen; Chest discomfort or tightness; Diarrhea; Difficulty breathing; Difficulty swallowing; Dizziness or light-headedness; Fear or feeling of apprehension or anxiety; Flushing or redness of the face; Nausea and vomiting; Swelling of the face, eyes, or tongue; Weakness; Wheezing; and Unconsciousness.

First Aid for a mild to moderate reaction is to calm and reassure the person having the reaction, as anxiety can worsen symptoms; Try to identify the allergen and have the person avoid further contact with it. If the allergic reaction is from a bee sting, scrape the stinger off the skin with something firm (such as a fingernail or plastic credit card). Do not use tweezers; squeezing the stinger will release more venom. If the person develops an itchy rash, apply calamine lotion and cool compresses. You may also apply over-the-counter cortisone cream. Watch the person for signs of increasing distress. Get medical help. For a mild reaction, a physician may recommend over-the-counter medications (such as antihistamines).

## DO NOTS

- Assume that any allergy shots the person has already received will provide complete protection.
- Place a pillow under the person's head if he or she is having trouble breathing. This can block the airway.
- Give the person anything by mouth if the person is having trouble breathing.

## Call for immediate medical emergency assistance if:

The person is having a severe allergic reaction, always call 911. Do not wait to see if the reaction is getting worse.  
The person has a history of severe allergic reactions (check for a medical ID tag).

## Prevention

- Avoid triggers such as foods and medications that have caused an allergic reaction, even a mild one, in the past. This includes asking detailed questions about ingredients when you are eating away from home. Also carefully examine ingredient labels.
- People who know that they have had serious allergic reactions should wear a medical ID tag.
- If you have a history of serious allergic reactions, carry emergency medications (such as diphenhydramine and injectable epinephrine or a bee sting kit) according to your health care provider's instructions.
- Do not use your injectable epinephrine on anyone else. They may have a condition (such as a heart problem) that could be negatively affected by this drug.

# Coping With Panic Attacks

During a panic attack, the body misinterprets an ordinary situation as an awful, terrifying event. Caused by a misfiring of chemicals in the brain, panic attacks are common. Fortunately, they are usually treatable.

**Symptoms of a Panic Attack** include feelings of terror or dread, a racing or pounding heartbeat, chest pains, dizziness, lightheadedness, nausea, smothering sensation, trouble breathing, flushes or chills, and a sense of losing control.

Once you've had a panic attack, you may begin to fear having another one. This fear and anxiety is called **panic disorder**. You may connect certain situations and places with attacks—grocery shopping, crowds, elevators, malls, cars. This can lead to a condition called **agoraphobia**, where you restrict your movements to a few limited areas where you feel safe.

## Panic Attacks Can Be Treated

Panic attacks are terrifying, but by working with your doctor or other health care provider, you can learn how to regain control of your life.

## What Are Panic Attacks?

In the early days, when humans were still living in caves, we needed to react quickly to danger to survive. A response called **fight or flight** developed. When faced with a threat, such as a hungry saber-toothed tiger, a release of chemicals in the body made us act quickly, without thinking, to defend ourselves or run away. This reaction, which is still with us today, may be the basis of panic attacks. During a panic attack, the fight-or-flight reaction is triggered at an inappropriate time—a false alarm. The causes of false alarms aren't clear. Research suggests that stress may play a role in some cases. Marijuana or large amounts of caffeine can sometimes set off an attack. Panic attacks tend to run in families and usually affect young adults, but no age, race, or gender is immune.

## Getting Help

If you're having panic attacks, don't be afraid to get help. The attacks are real, and the feelings you're having are not your fault. Treatment for panic attacks is covered by most health insurance plans. Check what's covered under your plan. Then see your doctor or other mental health professional for evaluation and treatment. During your evaluation, you'll be asked about your symptoms. Answer these questions as honestly as possible. A physical exam or tests can rule out an underlying physical problem as the cause of your symptoms. After you've been evaluated, you may be given medications to help block symptoms of panic attacks, and counseling to help you overcome the fear surrounding them.

## Medications

Several types of medications are used to treat panic attacks. Your doctor will choose the medication and dosage best suited for you. It may take a few tries before the best one is found, but stick with it.

## Counseling

If fear of panic attacks is restricting your life, counseling can help. Counseling gives you information and teaches you skills, such as relaxation techniques and ways to change negative thinking, that help you control your fear instead of having it control you.

## What to Do During an Attack

- Remind yourself that your body is having a false alarm. Nothing bad will happen to you. You've survived attacks before, and you will this time, too.
- Try not to think frightening thoughts about what might happen. You won't die or go crazy.
- Don't fight your feelings. Let them come and ride them out. Focus on a task like counting backward from 100. Think about someplace relaxing, such as a tropical island or quiet meadow. Ask your doctor or counselor to suggest other relaxation techniques.
- Keep in mind that places and activities don't cause attacks. Separate the attack from the situation, and make an effort not to avoid the situation in the future.

---

*The information offered in this newsletter is to increase your awareness of health related conditions and situations and not intended to be a substitute for professional medical advice. If you believe you or someone you support has a condition, please seek the advice of a physician.*

---