COLD WEATHER AND YOUR HEART
by Karena Sauser, ARNP

If you have heart disease, staying healthy during cold weather can be challenging. Being in a cold environment causes our bodies to make certain biological adjustments to preserve our core body temperature. These normal adjustments can present challenges to people with heart failure and heart disease. A rapid drop in temperature can lead to worsening symptoms, increased risk of hospitalization, and even death. This is due to a possible increase in heart rate and blood pressure, your heart possibly needing to work substantially harder, or an increase in the tendency for blood clotting. When cold temperatures arrive, take these special precautions:

1. Limit your cold exposure. If you must go out in cold weather, dress warmly and in layers. Air is left between layers, forming a protective insulation. Wear warm socks and shoes. Heat can be lost through your hands, feet, and head/face quickly. Cover them with hats, gloves/mittens, and scarves. Scarves help to warm the air before you breathe it in.
2. Avoid over exertion. Walking through heavy, wet snow and snow drifts can strain a person’s heart. If you are going to shovel snow, do so when there is an inch or less on the ground. Use a small shovel and push rather than lift snow. Do NOT shovel heavy, wet, or deep snow. A shovel load of snow can weigh up to 16 lbs.
3. Do not become overheated. Dressing warmly and then participating in physical activity can lead to overheating. Overheating causes blood vessels to dilate, or become larger, which can lead to hypotension or a low blood pressure. If you are in the cold and find yourself sweating, you are overheated. Consider sweating a danger sign, stop what you are doing, and go inside to rest.
4. Do not drink alcohol. Avoid alcohol before going outdoors in the cold. Alcohol gives an initial feeling of warmth because the blood vessels in the skin expand. Heat is then drawn away from your vital organs.
5. Get a flu shot. Cold air and indoor heating lowers humidity, raising your chances of contracting the flu. The flu is potentially dangerous for those with heart disease or heart failure. If you feel flu symptoms, talk with your provider before medicating yourself.

In addition to cold temperatures, high winds, rain, and snow can steal body heat as well. Wind can be particularly dangerous because it removes the layer of heated air from around your body. Dampness can also cause the body to lose heat faster than drier conditions.

If precautions are not taken, accidental hypothermia can occur. Hypothermia is when your body temperature falls below 95 degrees Fahrenheit and your body cannot produce enough energy to keep you warm enough. This is a medical emergency as it can be fatal. Heart failure causes most deaths in hypothermia. Symptoms include lack of coordination, confusion, slow response, shivering, sleepiness/exhaustion/drowsiness, fumbling hands, slurred speech, and memory loss. If you or someone you know are experiencing symptoms of hypothermia, seek immediate medical attention!

Cold temperatures can cause physiological stress on anyone but can be especially dangerous or even life-threatening for someone with heart failure. Be sure to take precautions in cold temperatures and ask your provider if you have any concerns.

CAUTION: PACEMAKER OR DEFIBRILLATOR INTERACTION WITH PHONES OR FITNESS WRISTBANDS
by Julie Ehlinger, ARNP

Newer models of some smartphones, such as the iPhone 12, have magnets within to help them charge faster. These magnets, in rare cases, can prevent an implanted pacemaker or defibrillator from working. It’s more important than ever to keep all cell phones, iPods, or electronic devices at least six inches away from an implanted pacemaker or defibrillator. Experts also recommend that fitness trackers be worn with a non-magnet band, be kept at least 6 inches away from the device, and not worn while sleeping. A woman recently went to sleep wearing her fitness watchband with a magnetic closure and woke to warning beeps from her implanted defibrillator. If you have any questions, please call us!
**COVID-19 VACCINES: WHAT HEART FAILURE PATIENTS NEED TO KNOW**

by Caroline Ott, Concordia School of Pharmacy and Rachel Whitesitt, Univ. of Iowa College of Pharmacy

COVID-19 has caused millions of people to get sick and hundreds of thousands of deaths in the United States alone. Many that have had COVID-19 have long-term health effects, including effects on the heart. Patients with heart failure are at higher risk for more serious symptoms when infected with COVID-19. It is very important that you stay informed and take the necessary steps to protect yourself from the virus. This includes wearing a mask, social distancing, washing your hands, and getting the COVID-19 vaccination when available.

**How do the vaccines work?**
As of February 1, 2021, the Food and Drug Administration (FDA) have authorized vaccines by Pfizer and Moderna. Both of these vaccines require two doses and neither of them can give you COVID-19 nor do they affect your DNA. Instead, these vaccines teach your immune system to produce antibodies that latch onto the spike protein found in coronaviruses. This allows the immune system to quickly recognize the actual coronaviruses and interfere with their ability to multiply. The idea is to stop SARS-CoV-2, the virus that causes COVID-19, from getting into cells, replicating itself, and making a person sick.

**Are these vaccines safe? Are they safe for me as a person with heart failure?**
Yes, and yes! These vaccines are being held to the same standards as all other vaccines and only receive approval from the FDA after they demonstrate safety and meet at least the minimum standard of effectiveness. Both vaccines were rigorously tested on thousands of subjects before FDA approval and continue to be monitored. While the manufacturing was sped up, the process did not cut any corners on safety. We know these vaccines are safe for people with high risk conditions, such as heart failure, and for people over 65 because these groups were included in the studied population. And while these are the first mRNA vaccines to be authorized by the FDA, mRNA vaccines are not new. They have been studied for more than a decade for other diseases such as the flu, Zika, and rabies.

The most common side effects are pain/redness at the injection site, headache, fatigue, muscle/joint aches, and low-grade fever. If you experience discomfort at the injection site, try applying a cool, wet washcloth to the area and move your arm frequently. If you experience a low-grade fever, drink plenty of fluids and dress lightly when indoors. Most side effects last less than 24 hours and those ages 55 and older reported fewer side effects.

Talk to your doctor before getting the vaccine if you are pregnant or breastfeeding, are immunocompromised, have a history of anaphylaxis, or have had COVID-19 in the last 90 days. You should not receive the COVID-19 vaccine if you have a severe allergic reaction after the first dose of an mRNA vaccine, are allergic to polysorbate (ex. PEG, Miralax), or have received convalescent plasma or monoclonal antibodies in the last 90 days for treatment of COVID-19. People who are currently in isolation or quarantine for COVID-19 should get the vaccine after your isolation or quarantine period ends. And if you have received a vaccine for another disease, it’s recommended that you wait 14 days before also receiving the COVID-19 vaccine.

If you are age 65 or older, you are now eligible to receive the vaccine according to county and state health department guidelines. However, supply remains limited. Medical Associates is reaching out to patients directly to schedule vaccine appointments. Until then, please wear your mask, limit indoor gatherings, practice social distancing, wash your hands for at least 20 seconds, and stay home when you’re sick.

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**TASTY TACO RICE SALAD**

**Ingredients:**
- 1 pound lean ground beef
- 1 ½ cups instant brown rice, uncooked
- 2 cups water
- 1 cup onion, chopped (about 1 medium)
- 1 tbsp. chili powder
- 3 cups tomatoes, chopped
- 1 seeded jalapeno (chopped finely)
- 2 cups spinach or romaine lettuce
- 1 cup low fat cheese, shredded

**Instructions:**
1. Cook ground meat in a large skillet until brown (160°F). Drain off fat. Rinse meat with warm water to remove the grease.
2. Add rice, water, onion, and chili powder to meat in skillet.
3. Cover. Simmer over low heat for about 15 minutes to cook rice.
5. Place layers of spinach or romaine lettuce, rice mixture, and cheese on plates. Serve.

**Nutritional Information:** Serves 8
- Calories: 230
- Cholesterol: 45mg
- Total Carbohydrates: 19g
- Total Fat: 10g
- Sodium: 210mg
- Protein: 17g