Dear Friends,

During these cold winter months we often forget the toll the weather takes on our health. Living in Chicago means snow, wind, and below freezing temperatures. While parts of winter are enjoyable, dangerous conditions outside can be harmful to your health.

Winter storms, shorter days, and dropping temperatures can put us at risk for influenza, hypothermia, frostbite, Seasonal Affective Disorder, and Coronary Heart Disease. It is important to take preventative measures to protect your health this winter. Read below to learn tips on how to stay warm and healthy despite the blustery cold!

Sincerely,

The Institute Staff

Staying Healthy this Winter Season

As Illinois residents, winter should come as no surprise. Weather in this area can be hazardous, unpredictable, and downright unbearable. Colder months increase
risks including hypothermia, frostbite, influenza, mood disorders, and even an increased risk of coronary heart disease. However, planning ahead, knowing the symptoms, and remaining alert can better protect you and your family's health this winter season.

**Protecting Yourself from Influenza**

When people prepare for winter, they likely consider getting their flu shot. But how does your flu shot protect you, and what other preventative measures can you take? Whenever outside temperatures fluctuate, there are shifts in the pollutants and viruses in the air, making people more susceptible to infection and viruses. Flu-like symptoms include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. Every year brings new strains of influenza and it is important to take preventative measures to keep yourself healthy this season. The Centers for Disease Control and Prevention (CDC) announced this season's influenza vaccine is only 23% effective against the current predominate A strain (H3N2). Still, since the flu vaccine can protect against the three or four viruses that research suggests will be most common, the CDC does recommend a vaccination for everyone over 6 months old. A flu vaccination can reduce flu illness, doctors' visits, and missed work and school. People at high risk of serious flu complications include children, pregnant women, people over 65, and those with chronic health conditions. If you are a health care worker, it is especially important to get the flu vaccine to keep from spreading flu to high risk people.

Beyond the vaccination, people can take everyday precautions to decrease their risk of spreading or contracting the flu. Avoid contact with sick people, and if you are experiencing symptoms, try to limit your contact with others and seek care immediately. Cover your mouth and nose when coughing and sneezing and wash your hands regularly with soap and water. Lastly, the CDC recommends taking flu antiviral drugs if your doctor prescribes them. Antiviral drugs are different than antibiotics and they are not available over the counter. If you do catch the flu, antiviral drugs can treat your illness or make your illness milder. Generally, antiviral drugs are most effective if started within 2 days of getting sick, so be vigilant for flu symptoms and consult your doctor as soon as possible.

**Keeping Your Body Warm Outside**

It is essential to learn the proper way to stay warm outside in order to avoid one's risk of hypothermia and frostbite. Hypothermia occurs when one's body temperature falls below 95 degrees Fahrenheit and the body is unable to produce enough energy to keep the internal temperature warm enough. Symptoms include
lack of coordination, mental confusion, slowed reactions, shivering, and fatigue. If the body temperature does not regulate, then hypothermia can cause permanent damage or even death. Prolonged exposure to cold air may also cause the blood vessels in the skin to contract, thereby reducing blood and oxygen flow and causing frostbite—a phenomenon where the skin actually freezes. Frostbite can lead to sensitivity to cold, prolonged numbness, gangrene, and decay and death of tissue. It is essential to protect your skin during these cold days and establish preventative barriers between your body and the outside.

Being mindful of your body temperature in the cold may help protect yourself from hypothermia and frostbite. In addition to colder temperatures, Chicago's wind is particular dangerous because it removes the layer of heated air around your body. Proper protective gear must be worn during these winter months to keep your body temperature regulated. Wearing several light, comfortably fitted layers are better than wearing a single heavy layer. Layers trap air and form a protective insulation. You may consider wearing an under layer of two-ply long johns and undershirts, and two pairs of socks as a baseline to your layering. Heat can be lost through your head, so it is important to wear a hat or head scarf. Furthermore, ears are particularly prone to frostbite, so keep them covered! Your outermost layer should adequately protect your body against the wind, rain, and snow. Generally, a parka that covers the hips and has a hood with a full-length zipper is best. Consider clothing items made of wool, because wool retains its warmth, even when wet. While potentially expensive, double boots with a felt inner liner and high-top outer boot prove to be a good investment for these winter months.

Seasonal Affective Disorder and Women's Health

Seasonal Affective Disorder (SAD) is a type of depression related to changes in the seasons. Typically, symptoms start in the fall and continue into the winter months. Research indicates SAD affects between 10-20% of Americans. Although the exact cause of SAD is unknown, experts believe changes in melatonin and serotonin levels, or a disruption in the body’s internal clock may be to blame.

Data reveal women may suffer more from seasonal alterations in health and behavior than men. Such seasonal changes may surface issues in mood changes, decreases in fertility, changes in biomarkers, and behaviors linked to cardiovascular risk. Sex differences in SAD begin at puberty and by adulthood, women are roughly four times more likely to suffer from SAD symptoms than men, with the greatest sex differences around reproductive years. Seasonal changes in fertility can be attributed to neuroendocrine signals’ (signals that convey information about the short days and long nights) interaction with female hormones that
Treatment for SAD includes psychotherapy, meditation, and therapeutic light therapy. Light therapy is the most common treatment and it works by mimicking the sunlight and creating a biochemical change in the brain. If you believe you are at risk of SAD, it is important to sleep well, expose yourself to as much sunlight as possible, eat a balanced diet, exercise regularly, and manage your stress—these are preemptive measures to protecting your mental health.

However, if you believe you are suffering from SAD, see your doctor about possible treatments.

**Seasonal Spike in Coronary Heart Disease**

Some research indicates that coronary heart disease peaks during the winter months in incidence and mortality. Indeed, women are more likely than men to show clinically-significant decreases in Vitamin D during the winter months. Vitamin D deficiencies put people at risk for heart attacks, strokes, and other conditions associated with heart disease. Other reasons for the uptick of coronary heart disease in winter could be attributed to seasonal variations such as physical activity and diet. Obesity is more common in the winter months, with some research pointing to increased fat intake and decreased physical activity during winter. To better protect yourself against coronary heart disease this winter, make sure your lifestyle (in relation to diet, regular exercise, and smoking) is as healthy in the winter as it is in the summer.

People with coronary heart disease often suffer angina pectoris (chest pain or discomfort) when they are exposed to cold weather. If you are at risk for cardiovascular disease, it is important to avoid sudden exertion, like lifting a heavy shovel of snow. Take frequent rests during shoveling so no extra strain is but on your heart. Do not drink alcoholic beverages before or immediately after shoveling, as this can increase a person’s sensation of warmth and may cause them to underestimate the extra strain on their body in the cold. Consult your doctor about other ways to keep your heart healthy this winter.

**Winterizing Your Home**
Often the indoors are seen as a safe refuge from the cold outside, yet without properly winterizing your home, you could be putting yourself at risk. Make sure you install weather stripping and insulation around your windows and water lines that run along exterior walls. Ensure your heating system works and is being properly ventilated to the outside. Inspecting your fireplaces, chimneys, smoke detectors, and carbon monoxide detectors can help you avoid disastrous accidents within your home.

Make sure your home is stoked with food and adequate supplies, in case of emergency. This includes food that doesn't require cooking or refrigeration. Keep an emergency kit with battery-operated devices and first aid kits. It is also wise to keep similar emergency-related items in your car, just in case.

Sources:

- U.S. Department of Health and Human Services
- Medscape
- Quarterly Journal of Medicine
- The Huffington Post
- The Centers for Disease Control and Prevention
- The American Heart Association

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Institute Happenings

Wednesday, February 4th at 12:00--**The Silent Dangers of High Blood Pressure in Women** featuring Marla Mendelson, MD. This event will take place in Prentice Women's Hospital, 3rd floor Canning Auditorium. [Click here to learn more.]

Tuesday, February 10th at 12:00--**Monthly Research Forum** featuring Amy Paller, MD, Murad Alam, MD, and Maria Colavincenzo, MD presenting **New Advances in the Repair of Skin and Hair Disorders**. This event will take place in Prentice Women's Hospital, 3rd Floor Conference Room L South. [Click here to RSVP today!]

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Wednesday, February 11th at 12:00---**Making New Year's Resolutions that Stick**, part of the winter Heat Matters lecture series featuring Robert Kushner, MD. This event will take place in Prentice Women’s Hospital, 2nd Floor, Room N. [Click here to learn more.](#)