

## November 2021 Health Notes by Evelyn Ames **Blame It on the Weather: Yes? No? Maybe?**

Feeling under the weather? Being “right as rain.” The temperatures are falling, and rain/snow is here. Do you sometimes feel like a human barometer? Atmospheric changes are reported to cause reactions in our bodies. Many people with arthritis and other musculoskeletal conditions report being sensitive to the weather. When the temperature goes up or down or the barometric pressure shifts, they say their symptoms get worse. This phenomenon is common but not well understood.

There is no consensus in scientific studies verifying that pain and aches occur when the weather changes. What is reported is that people are sensitive to changes. Figuring out what or which specific weather events affect the body is an imprecise science, particularly when it comes to aches and pain and emotional health.

When **the temperature rises or falls**, what happens in the body? Blood pressure generally is higher in the winter and lower in the summer. Low temperatures cause blood vessels to narrow. This increases blood pressure. More pressure is needed to force blood through the narrowed veins (venioles) and arteries (arterioles). Conversely, when the weather is warmer the body needs to keep blood moving. This can lead to drastic changes in blood pressure, and occasional blood vessel breakage. Blood pressure may also be affected by a sudden change in weather patterns, such as a weather front or a storm. Blood vessels “may react to abrupt changes in humidity, atmospheric pressure, cloud cover or wind in much the same way it reacts to cold. These weather-related variations in blood pressure are more common in people age 65 and older.”

**Barometric pressure and humidity and their effects on joints!** Changes in pressure or humidity affect the mobility of the body. “Both of these things are a qualitative measurement of the air: they tell us what the air surrounding us is like. While doctors haven’t been able to find the exact link between joint pain and changes in the air, it’s hard to deny its existence. One leading theory is that a change in air quality also leads to a change in what our joints need to do. If they are putting in too much work, it causes pain. If they’re putting into little work, it causes strain, and, then pain.”

Do you get a headache or suffer a migraine when the weather changes? Headaches are reported to affect 1 in 8 Americans and occur more so in the spring and summer. One reason relates to exposure to sunlight. More sunlight occurs in the spring and summer. This can put a strain on the optic nerve, potentially causing a headache. Sudden change in outdoor pressure may lead to a migraine headache as the blood begins to pump faster, causing the brain to expand beyond its capabilities.

Why do joints hurt? “Normally a great connector between two bones, cartilage, ligaments, and everything holding a joint together may not do their job the right way as barometric pressure changes.” Muscles go through expansion and contraction every day. Raise your foot, the calf muscle contracts. Sit down and thigh muscles contract. Expansion and contraction caused by a change in weather can irritate nerves, especially those in areas of past injury. **“But it’s worth remembering that humans have a remarkable tendency to remember when two things occur or change together (such as wet, gloomy weather and joint pain), but remember less when things do *not* occur together.”** (Harvard Health Blog (2019) Does Weather Affect Arthritis Pain

Sources: For very detailed review (various types of pain and results of studies: [Pain and Weather—A Cloudy Issue \(practicalpainmanagement.com\)](https://practicalpainmanagement.com)

<https://orthopedicassociates.org/changing-weather-and-the-pain-it-can-cause/>

[13 Ways Weather Affects Your Health — Without You Knowing | The Weather Channel - Articles from The Weather Channel | weather.com](https://www.weather.com)

Cold weather effects on blood pressure from Mayo Clinic”