

Without a doubt, the seasons are changing. As temperatures fall across much of the USA, we tend to remain inside in the warmth. No, this is not a discussion of the price of heating fuel, although there are always two sides to every coin.

The primary issue here is what heat does to our indoor air, meaning removes humidity. Like it or not, our respiratory system is covered with a mucous lining that serves as a catch all for everything from dust and pollution to pathogens, bacteria and virus.

Without proper hydration, our mucous lining can weaken or offer potential pathways for any of the pathogens already there into our bodies.

As always, weather , even indoor weather, plays a role in or health. Stay hydrated.

Posted by [Albert Peterlin](#) [November 12, 2021](#) Posted in [Uncategorized](#)

Two day head hurt East half USA.

Oct 30 2021; Very difficult day for #weather related #Health risk (#Migraine, #Headache, #Pain, #Mood) today & tomorrow. 30th: MOD to ELEVATED All states E of Rockies, OUCH! 31st: all states E of Mississippi River. Big hurt New England and SE Canada. Today's risk map <https://thepatientandweather.com>

Posted by [Albert Peterlin](#) [October 30, 2021](#) Posted in [Uncategorized](#)

Oct 26 2021 #Patient and #weather #Vitality Index for weather related #heath (#Mood, #Migraine, #Pain) is quite significant today. Risk tomorrow (Oct 27) is MOD Washington state; ELEVATED Plains: TX-LA to ND, GA to Ohio Valley, E seaboard DC to New England. Today's risk graphic & 3 day forecast of risk for those registered with us <https://thepatientandweather.com>

Posted by [Albert Peterlin](#) [October 26, 2021](#) Posted in [Uncategorized](#)

There are fashions in life and in medicine as in many other aspects of life, and we frequently become immeshed in methods of thinking or approaches in how we face problems that confront us. Since the discovery of pathogens as a cause of disease, the focus of healthcare has been to look for the pathogen and apply the correct medicine, antibiotic or surgery. One thing not generally considered is weather. And, weather can and does play a role even if not recognized. The body already subject to the stress of disease or fracture might find an additional weather stress cumulatively overwhelming. And, weather can also play a role in many chronic and none pathogen triggered health difficulties.

Wellness can be defined as a body able to respond and fully balance each of the many outside influences that could interfere with the correct functioning of the body, in whole or in part. Wellness then is the state of balance when the many complex organs and processes in the body are responding optimally in spite of the stresses. Disease then might be any demonstration of the inability of the body to adapt or adjust to the environmental situation.

Almost all animal life (humans included) on earth depends to a great degree on the atmosphere (environment) especially on one of the primary ingredients, oxygen. Oxygen is one keystone of the many simple and complex organic chemical processes that occur in the body, well beyond the simple respiratory function. Other processes and interactions include the eyes (transmission of light), the ears (sound), particulates (dust, pollen, odors, etc.), moisture, electric charges (ions), pressure, wind speed, other organisms (virus, bacteria, fungus) and more. And, the human body, in whole or in part, must adjust to each of these thru time.

The initial contact each person has with the environment is at its surface, the skin, eyes, ears, nose, throat and bronchi. The entire body is always primed for a response by this constant and always changing barrage of atmospheric actions. The body itself is connected by a very complex pathway of blood, chemical, neurological and endocrine driven pathways. It's said, "No man is an island." No body part is either.

One way or another, each and every part of the body is impacted by the environment (weather) in one way or another and could trigger a response. Of all the things that might trigger a bodily response, weather is the one that can be measured and is predictable. By keeping a weather/health diary, it is possible to determine if and when the weather triggers a bodily response.

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Weather and Resistance to Disease

An interest in the air (atmosphere) in which we all live and breath seems especially appropriate for all those interested in our body's organs of respiration. When we are well (healthy) we are almost completely oblivious and unaware of any association with weather. But, when we are ill, some organ, tissue, or any other part of the body is not up to optimal performance, we recognize or feel weather's impact or effect. The more significant the disease, trauma, emotion or condition, the greater the effect is felt.

We could start this discussion about any of the weather variables or parameters as they are all capable of having an effect, but one of the easiest to understand is temperature. To simplify even more, we will focus on our most frequently recognized impact on our body, warming or cooling. Warming or cooling triggers our reaction at least in part by constricting or dilating some of the small blood vessels about the surface of our body, what we might call the organic receptors in the skin, mucous membranes, or lungs, etc.

To simplify the weather side for better understanding, we'll focus on the large weather changes. We are all made well aware every night on the nightly news, high pressure, low pressure or the transition area between we call fronts. We purposely label them warm or cold.

The cold air masses (polar) are truly cold in the winter season but more akin to cool or cooler in the warmer months. Whatever the season, the cold (cool) air mass is typically categorized as a heavy, dense air mass to which our bodies react by increasing insulation. The peripheral (outer)

blood vessels near the skin contract conserving heat loss. Our blood pressure rises, and our venal blood itself tends to become more alkaline as our tissue become more acidic (less alkaline).

Then, as the air mass moves, temperatures start warming and this entire process rebounds or pendulates back toward usual levels. Blood vessels dilate and the blood itself becomes more acidic as it picks up CO₂ and lactic acid from the tissues they serve.

Future low-cost optical techniques can be used to detect blood volume changes in the microvascular bed of tissue at the skin surface. The physiological wave may be attributed to cardiac changes in the blood, and with each heart beat could provide indications of respiration, sympathetic nervous system activity and thermoregulation; potentially valuable information about the cardiovascular system. Add weather, and it adds a level of predictability beyond observation.

As you probably guessed, pendulation of this type is both ongoing and constant. The body changes constantly and is a different entity every day. Not to be outdone, so does the weather. While weather induced changes can be subtle and on most occasions too slight to matter, for a body struggling with other stresses, it could be just enough to trigger consequences. Blood PH reflects on all of the body's systems. Sometimes even a slight deviation from normal can affect the arteries, the heart, muscles, the brain and many other organs. It can contribute to overwhelming the body leading to serious consequences, even death.

THIS IS A METEOROLOGICAL HEALTH RISK WEBSITE. IT IS NOT A MEDICAL WEB SITE. ALWAYS TALK TO YOUR PHYSICIAN,

Posted by [Albert Peterlin](#) August 16, 2021 Posted in [Uncategorized](#)

Meteorology (weather) plays an amazing role in human health in multiple small but substantive ways. In the coming days, heat will be building across much of the country. As will humidity. Yes, it's summer, and high heat and high humidity can be difficult for people with underlying health concerns. But this year is a bit different with stalking pathogens about.

Whatever the need, many of us will be spending time indoors away from the heat and humidity. We will be cooling in needed air conditioning. One of the downsides of air conditioning is the removal of water from the air we breathe. Therein lies the rub.

One of the safeguards of our health is a lining or mucous membrane about our respiratory system. In plain language, our nose is lined to protect us from the many pathogens in the air we breathe. The mucous keeps our bodies lining soft and moist keeping the pathogens out.

Dry air dries out the mucous, possibly leaving us vulnerable to the pathogens (bacteria, virus, etc.) that are frequently already there. So, if you retreat to air conditioning in this heat, hydrate as much as possible. And, not just by drinking. Think about your nose. It's right in front of you.

Posted by [Albert Peterlin](#) August 7, 2021 Posted in [Uncategorized](#)

ERREx, Inc. and The Patient and The Weather

ERREx, Inc. is a weather company with a primary focus on the patient and the weather. ERREX Inc. is not a medical company, and its web site is not a medical site. The primary goal is to develop a product to inform users of the potential (risk) that weather might play in either triggering a reaction or modifying the intensity of the reaction of an individual who is sensitive to one or more weather parameters. We do that by sharing our Vitality Index for the USA and Canada. We could address many additional geographic areas when there is an interest.

ERREX has both a patent on using weather as a predictor for wellness importance and a series of proprietary algorithms generally attuned to migraine, headache, mood and pain. However, the patent also covers weather impact on stroke, circulatory system including heart attack, pulmonary issues including COPD, diabetes, arthritis, allergy and other physical and mental conditions.

TPATW

The public pages of the patient and weather web site, <https://thepatientandweather.com> offers some introductory remarks and a current day graphic of the Vitality Index for the continental USA and Canada. The measure of risk ranges from minimal to mild, moderate, and elevated. There is an explanatory color-coded scale to explain the geographic distribution of the risk.

Those who register as a user have access to a three (3) day planning prediction using the same graphic methodology. IN addition, there is a point and click option allowing for a more precise geographic definition of the risk along with a more interpretive description of which current weather parameter is involved both in time and direction. In addition, users have access to a very simple diary to help keep track of their individual response to the weather. This is highly useful for self-understanding and might even be of use in sharing with a healthcare professional.

In aviation and in many of the military services you hear talk of situational awareness. In effect, an interest and knowledge of the items and issues around us. Healthcare situational awareness is becoming more and more self-administered in this world of self-monitoring, mobile medical devices, performance tracking algorithms and more. While not yet recognized, weather is the most pervasive and most readily measured aspect of wellness situational awareness. Knowing how it impacts health, physical and mental, could provide an immensely useful option to those interested in how weather triggers specific health issues or how weather can add to or impede athletic or on the job performance.

Weather is one of the most underused aspects of the philosophical universe, KNOW THYSELF!

Study how weather impacts your life with us.

ThePatientAndWeather.com

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We all intuitively know and understand the body reacts to temperature, cold and heat. We also understand that other weather parameters (humidity) can and frequently play a role to diminish or magnify the effect or feeling on the body. You've heard the statement, "It's not the heat, it's the humidity!" That statement gets us all nodding our head in agreement, but, at the same time, we all know it IS the heat and the humidity.

Much the same can be said for all (every) aspect of the environment (weather), including temperature, dewpoint, pressure, wind, precipitation (rain, snow, fog etc.), pollution, sunshine, ions, and even electromagnetic waves (solar input), and more. And, they all can have, either alone or in concert with others, an effect on our body.

No one knew this more than the father of medicine, Hippocrates. He felt no physician should practice the art and science of medicine without knowing meteorology (the study of weather). You hear about "Do no harm," but you never really hear about how he felt weather had an amazing impact on the human body and all its parts. In his work, "Airs, Waters, Places," Hippocrates states "If you want to study medicine, you must first study meteorology."

Pathogen caused Disease as a focus of the practice of medicine

Since the discovery of the disease theory of health, healers have been looking for the organism(s) that trigger our health issues, and that practice has been revolutionary and wonderful. Bugs, fungus, bacteria, virus and more, have been and will continue to plague us. But, it might be prudent to look at how weather makes us vulnerable to these pathogens and even how weather impacts the pathogens themselves; how they respond, replicate, and even the degree to which they make us ill. It might also be time to look at how weather impacts the way our bodies absorb the drugs and drinks we take to overcome the attacks upon us.

There is so much more to health than Disease

That said, weather impacts go far beyond the array of pathogens and pollutants that bother us. In the 1930s and 1940s, an amazing and imaginative physician at the Chicago School of Medicine, Dr. William F. Petersen, researched and published a large number of books and articles laying out a more encompassing theory of weather and human health. Dr. Petersen felt that weather plays a role in all aspects of the individual's life, from the moment of conception to the moment of death. In effect, humans are born with a genetic pre-disposition or sensitivity to the environment about them. Some more sensitive than others, some less. But, interestingly, he also believed that the body itself is in constant motion and renewal, never exactly the same as before and that sensitivity could also change with time and circumstance. That is what makes the study of weather and human health so difficult and intriguing at the same time.

Weather, too, is constantly changing from minute to minute, day to day, month to month, season to season, year to year. Like Hippocrates, Dr. Petersen, believed the body works hard to remain in a delicate equilibrium, constantly adjusting to the stresses and strains, internally and externally about it. These demands include everything from work, the digestive process, the respiratory and cardiac systems, the endocrine rhythms, the chemical balance of blood, infection by pathogens, trauma, emotions, etc., physical or mental and **weather**. Weather is measurable and available in

real time and forensically for research, and its predictably can suggest its impact on every one of these bodily functions, acutely or chronically.

Migraine, headache, pain and mood can be acute but are more commonly chronic conditions to which thousands, nay millions, suffer. While the cause of these afflictions differs widely, and have to be addressed for understanding and treatment led by a qualified provider, ask anyone who suffers from them and you will hear they believe that weather, day to day, season to season, plays some role either in triggering, accentuating, or diminishing their impact of the pain or the emotion.

Weather reports are available for almost every point of the globe, in real time and for years past. And, with improved weather models, day to day predictions (3 to 10 days) can be useful in alerting those who are vulnerable to the risk weather could play in their lives. The complexity of the body's response and the complexities of the weather are finally nearing a point of better understanding thanks to smaller computers with bigger and better computational power and real time monitoring of weather and human health.

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The following was written and published by TJ Wolf. Attribution below

[TJ Wolf](#)

The Weather And Having Lupus

As someone with Lupus and Osteo-arthritis, I'm a huge believer in the impact that the weather has on my illness.

Historically, I flare almost every Spring and Fall when temperature shifts are drastic in the Southern United States where I live. In the summers, my knees scream pain all day and night when massive thunderstorm systems approach. In the winter, my Raynaud's flares and joints stiffen and ache in extreme cold temperatures. Very cold and damp times exacerbate all my joint and muscle issues. And of course all these factor together in my moods during those times.

About This Article

Please note this is not a paid endorsement.

Albert simply asked me if I knew of others who might be interested in his work and the website, and if so could I put the word out. I follow his website forecasts daily so I was happy to oblige.

About The Author

I have the deadly disease known as Lupus. The version of Lupus I have is the most common, Systemic Lupus Erythematosus (SLE). True to its name, SLE is a systemic condition throughout

the body. In addition, I have Lupus Anti-Coagulant and Lupus Anti-Phospholipid which causes my Lupus to impact my blood.

So What Exactly Is Lupus?

In short and perhaps unscientific terms, SLE is my own immune system betraying me and deciding to wage war upon various systems in my body. My immune system incorrectly targets these systems as enemies and marks them as invaders. Then it targets my cells, tissues, and organs in those systems for destruction. This destruction begins with inflammation and its other biochemical weapons and agents to kill cells and shutdown organs. My Lupus likes to focus on vanquishing its own perceived axis of evil in the form of my circulatory, nervous, digestive, and musculoskeletal systems.

The Wolf Within Me

Lupus is currently not curable. My Rheumatologist uses the analogy that my immune system is a wild animal that we attempt to keep caged in remission with powerful and yet toxic medications. So of course given its “Lupus”, I associate a wolf as the wild animal within me. Frequently the caged wolf is still able to take a swipe at me from within the bars of cage. And many times the wolf breaks free to wreak havoc on me until medications are increased or added to suppress it again. These events occur despite me taking all my medications daily as instructed. My wolf has its own plans for me it seems. And surprisingly enough, those plans may include me becoming a better person.

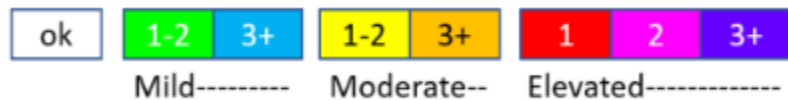
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[TJ Wolf](#)

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The Patient and the Weather’s Vitality Index has been developed to provide a general, regional, overview of the weather-related risk to human health. Each of us is born with a unique predisposition to weather’s Variability. While many have little or minimal discomfort to weathers variability, others are sensitive to changes in one or a combination of weather parameters. Some are sensitive to atmospheric pressure, the highs or lows we see move across the weather report. Others are sensitive to humidity, that stifling feeling in the summer, or even the showers or thundershowers that precede or occur with a frontal passage. Temperature is a factor in its extremes, its shifting diurnal or day to day variability, especially in the transitional months of Spring and Fall, as well as frigid winter readings or those hot and humid summer days and nights.

Taking in several of the most potent weather variables and with some known triggers considered by humans, we’ve prepared an algorithm codifying the potential for weather triggering a health concern, such as arthritis pain, other pains even muscle tightness, mood, headache, and migraine. We’ve broken the scale into 8 color coded levels of risk based upon what our data shows.



Where we can anticipate little or no known weather-health risk, we code white of no color at all. On the darkened geographic map is shows through as earth tone.

We should the mildest risk as Green or blue. While seemingly minimal, there are some individuals with a deep sensitivity to types of weather. Interesting, sensitivity level can change with age, or even day to day. Our program allows the individual to track their symptoms on a day-by-day basis and to learn at what Level of risk they should be aware. After a few weeks review, the individual will have a better understanding of what risk levels mean the most to them.

Moderate risk is where we place a bit more interest and we color it either yellow or Orange as the risk levels increases. We are more descriptive as risk becomes more intense. Red is a first level of elevated risk. Intensity rises into a more vibrant brightness before shadowing almost into a purple at the most intense level.

Once the user is fully comfortable with the risk levels and where their proclivity lies, we offer the ability to localize the user information base by helping learn what weather variable(s) is/are the most troublesome. Armed with this understanding, the user can plan for weather's impact as much as 3 days in advance.

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