

FEATURES

What is weather change sickness?

If you've ever felt under the weather when the seasons change - or when temperatures have significantly soared or plummeted - then you're not alone. Weather change sickness describes the effects of dramatic changes in weather on our physical health. While these changes alone can't directly make us ill, they are linked to several factors that can make us feel run-down at different points of the year.



Authored by Amberley Davis • Reviewed by Dr Sarah Jarvis MBE 07-Jun-22 • 8 mins read

Unpredictable British weather

If there's one thing we can rely on with British weather, it's the unreliability. Rising temperatures over spring and summer can be suddenly interrupted by rain, storms, and colder spells.

While many of us learn to tut and roll our eyes at these unpredictable ebbs and flows, our bodies can sometimes find it harder to adapt. This effect has come to be described as 'weather change sickness', but can changes in temperature really make us ill?

Can you get a cold from a change in weather?

"Interesting question," remarks Dr Aimee Brame, a consultant physician at London Bridge Hospital, part of HCA Healthcare UK. "A sudden change in weather doesn't directly make us ill, but it can most definitely affect health in a number of ways.

"Weather change sickness is an interesting concept. It's important to understand that it isn't the weather itself that can cause the illness, rather the changes in temperature, humidity, and exposure."

Our bodies can interpret a significant change in weather as stress, and when our bodies are stressed, our immune systems are weakened. This means that our ability to fight off infections is compromised. At the same time, a big shift in temperature and humidity can create the perfect environment for infections to start and then to spread.

In other words, a significant change in weather can't actually make you sick - you need to be exposed to the actual viruses, such as the ones that cause the common cold or flu virus. However, it can influence factors - in both your body and the surrounding environment - that make you more vulnerable to becoming ill.

It's not just about winter viruses

When the UK summer turns to autumn and temperatures drop, many of us brace ourselves for the start of cold and flu season. However, we may experience weather change sickness throughout the year - especially when the seasons change.

Although we talk about it less in the warmer seasons, it's also possible to feel run-down due to a sudden weather change in the spring and summer. One potential reason is that specific viruses peak at different times of the year, and are not only influenced by decreases but also increases in temperature and humidity.

Yet, viruses are just one factor linked to weather change sickness. Dr Brame lists several others that might explain why you find yourself feeling under the weather at different times of the year.

Weather change sickness factors

Seasonal change of weather: heat and pollen

Seasonal allergies can also cause many people to feel under the weather when spring and summer arrive. Those with hay fever experience symptoms when pollen levels rise between March and August. **Hay fever symptoms** can feel similar to cold symptoms.

"As the weather warms up, flowers, trees, and grasses start to produce pollens which exacerbate nasal drip, stuffiness, and asthma. Leaf mould and sensitivity can push these symptoms into the late autumn," says Dr Brame.

"Heat can also trigger **asthma symptoms**. Summer thunderstorms can be particularly problematic even without changes in pollen count, especially for those with conditions like **sinusitis** (swelling of the sinuses). This can result in a "summer cold"."

Seasonal change of weather: cold air and viruses

"There is some evidence that we are generally more susceptible to getting sick in colder temperatures," says Dr Brame. Common viruses such as human rhinovirus (which causes up to 40% of all colds) and influenza virus (which leads to flu) spread more quickly when temperatures drop.

"Exposure to cold temperatures can also trigger seasonal asthma and hyper-reactive airways. People who have these triggers should use an **inhaler** and a face covering, particularly when exercising in the cold, to minimise the effects of the cold air on the lungs.

"Even patients without lung problems suffer runny noses, blocked noses, and sneezing with changes in temperature as they move outdoors. This also makes symptoms feel worse when you do develop a cold," Dr Brame warns.

Lower barometric pressure (BMP)

BMP is the measurement of atmospheric pressure in the air. According to Dr Brame, people with rheumatological disorders (autoimmune diseases that cause an immune response that attacks your muscles, joints, bones, and organs) can often feel worse when BMP changes.

For example, people with **fibromyalgia** (a condition causing pain all over the body and extreme tiredness) **may experience an increase in pain during low BMP**.

Likewise, those who experience **migraines** may find that **a drop in BMP makes them worse**. This is because a low air pressure in the atmosphere creates a difference between outside air pressure and the air inside our sinuses, resulting in pain. This is similar to the

pressure changes that take place when your flight takes off - the sudden altitude climb can lead to **headaches**, ear popping, and **ear pain**.

Central heating and air conditioning

How you adapt your indoor settings following changes in weather can also influence weather change sickness. "Heating and air conditioning can dehumidify air and recirculate the dust on your radiators. This can set off allergies, and nasal and sinus symptoms (like congested or runny noses), and can cause **sore throats**," cautions Dr Brame.

"In your attempt to stay warm or cool down, using these systems inadvertently helps to circulate germs that cause respiratory infections. Cold and dry air also causes the delicate skin inside the nose to dry and become inflamed or even cracked, allowing easier infection by virus germs."

Weather-influenced personal factors

Disrupted sleep due to loud storms or drastic temperature changes are common. Poor sleep can reduce your immunity and increase your risk of infections such as colds.

When temperatures suddenly soar and we fail to drink enough water, dehydration can pose a significant risk to our health. Being dehydrated can also compromise the immune system and make us more vulnerable to infectious diseases.

Weather change sickness symptoms

Any weather change sickness symptoms you experience will depend on which of the above weather change factors have affected you. Rather than experiencing specific weather change sickness symptoms, many people feel more generally under the weather if their immune systems are put under stress.

Any specific symptoms you do have as a result of these factors are likely to be caused by common viral infections like the common cold, or by hay fever.

Both conditions share many common symptoms:

- A blocked nose.
- A runny nose.
- An itchy throat.

- Itchy eyes.
- Watery eyes.
- Sneezing.
- Headaches.

Flare-ups of asthmatic symptoms such as breathlessness and wheezing are also common. This is because people with asthma may find that extremes of temperature (both extreme cold and heatt) and humidity, respiratory infections and allergies can all make asthma worse.

"If you find you are suffering, I suggest you make an appointment to discuss your symptoms with your doctor. There are plenty of things we can do to make you feel better," says Dr Brame.

Protecting yourself from weather change sickness

It's not always possible to avoid becoming run down, catching upper respiratory infections, or dodging your allergy triggers. This said, there are steps you can take to support your immune system and help guard yourself from some of the challenges that a big change in weather brings.

Practise good hygiene

Washing your hands regularly can help stop the spread of infections such as rhinoviruses (which cause colds, sore throats, and sinus infections). These germs can sometimes survive on touchable surfaces, such as workstations and door handles, for up to 48 hours.

Take your preventer medications

Use of preventer inhalers for asthma and hay fever medication started before the time you usually get your symptoms can ward off weather change symptoms.

Get your yearly flu jab in autumn/winter months

If you are eligible for the free flu jab on the NHS, this gives a good level of protection against seasonal flu in the colder months.

Keep physically active

Regular exercise can strengthen your immune system, which helps your body to fight viral infections like cold, flu, and COVID-19.

Get plenty of sleep

Establishing a habit of getting enough undisturbed sleep each night can give your immune system a significant boost.

Manage your stress levels

Feeling stressed can have a big impact on your immune system response to infections.

Drink plenty of water

Staying well hydrated plays a key role in keeping you healthy and your essential functions working properly.

Eat a well-balanced diet

This means consuming a wide range of nutrients and vitamins. For example, foods rich vitamin C, vitamin B12, and zinc are known for their immunity-boosting qualities.

Disclaimer: This article is for information only and should not be used for the diagnosis or treatment of medical conditions. Egton Medical Information Systems Limited has used all reasonable care in compiling the information but make no warranty as to its accuracy. Consult a doctor or other health care professional for diagnosis and treatment of medical conditions. For details see our **conditions**.