











Key Weather Conditions During Winter

Cold Waves: Sudden, intense temperature drops that can cause health crises, especially among vulnerable populations (elderly, children, and those with chronic illnesses).

Cold wave is considered when:



- Celsius (C) or less.
- * Minimum temperature in the hills is 0°Celsius (C) or less.
- * If the temperature is 4.5° Celsius (C) below average for two consecutive days in a row

Stay updated on local weather forecasts and government alerts by listening to the radio, watching TV, and reading newspapers. The government issues three types of alerts during cold waves: yellow (mild), orange (moderate), and red (severe):

Color Code	What does it mean?
Yellow alert (<i>mild</i>)	The temperature has fallen for a minimum of two days consecutively in your region.
Orange alert (moderate)	The temperature has fallen for a minimum of four days consecutively in your region.
Red alert (severe)	The temperature has fallen for a minimum of six days or more in your region.

Smog: Smog, a harmful combination of smoke and fog, can significantly impact respiratory health, especially in areas with high pollution levels.

Pregnant women exposed to smog may face risks such as premature birth and low birth weight in their babies. Additionally, smog can contribute to diabetes and impair brain development in children.*



You can protect yourself against the harmful effects of smoa by:

Staying informed:

Regularly check air quality updates and limit outdoor activities on days with high pollution levels.

Wearing protective gear: When going out, use a mask to cover your nose and mouth.

Choosing the right time: Opt for early morning or evening outings, when pollution levels tend to be lower.

By taking these precautions, you can significantly reduce your exposure to smog and protect your lungs and overall health.

Snowfall: Heavy snowfall occurs at or below freezing (0°C), disrupting transportation, damaging infrastructure, and increasing avalanche and flood risks.

Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Sikkim and Arunachal Pradesh experience snowfall in winter.*

Frost: Frost occurs when temperatures drop below freezing, creating a layer of ice on surfaces, often confused with snow.

Prolonged exposure can cause frostbite in humans and animals, while also damaging crops and affecting farmers' livelihoods.*



^{*}Sources: WHO

Who is most affected?

- ★ Elderly
- ※ Infants
- ₩ Migrants

vendors)

- * Outdoor Workers (labourer, farmers, street
- * Residents of High-altitude and Remote Areas
- * Homeless and Economically Disadvantaged **Populations**
- ★ Persons with Disabilities
- * Persons with chronic health conditions (asthma or cardiovascular condition etc.)
- * People with immunocompromised or persons more prone to getting an infection (HIV, Tuberculosis, Hepatitis B and C, Cancer, Arthritis, Diabetes, Malnutrition, transplant patients, Multiple Sclerosis, persons smoking and drinking on a regular basis)*











Cold-Related Illnesses

Shivering is the first sign that the body is losing heat.

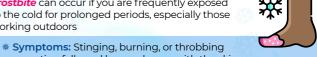
- * Symptoms: Tremors, teeth chattering, and a feeling of cold
- * Prevention: Dress warmly in layers, stay dry, and avoid prolonged exposure to cold temperatures



Hypothermia is a medical emergency where the body loses heat faster than it can produce, leading to dangerously low body temperature.

- * Symptoms: Confusion, sleepiness, exhaustion, shivering, stiff muscles, and heavy breathing in adults, while babies may develop red skin and lethargy.
- * Prevention: Keep the person warm and dry (focusing on the head, neck, chest, hands, and feet), provide warm. sugary drinks if they are conscious (avoid if unconscious). change wet clothing immediately and use a blanket to dry and cover them, offer warm drinks (avoiding alcohol, carbonated drinks, and caffeine)
- Please contact a healthcare provider immediately for severe

Frostbite can occur if you are frequently exposed to the cold for prolonged periods, especially those working outdoors



- sensation followed by numbness, with the skin possibly appearing reddish, greyish, or yellowish. Texture, not colour, is a key indicator of frostbite in darker skin. Hard, waxy, or numb skin can signal tissue freezing, even if there's no visible colour change.
- * Prevention: Warm the affected area slowly with lukewarm water or a warm body part. Avoid rubbing, breaking blisters, or applying creams, do not use hot water or uneven heat sources. Keep the person from walking if toes are affected, loosely bandage with dry, sterile dressings, elevate the area to reduce swelling.
- Please note that, if untreated, the condition can worsen. leading to hardened skin, numbness, and eventually black blisters on exposed areas like fingers, toes, nose, and earlobes. Medical consultation is a must for severe cases.

^{*}Sources: Yale Medicine, Science Direct, National Cancer Institute

Immersion (Trench) Foot is caused by prolonged exposure to cold, wet conditions, which can be a concern, especially in areas prone to heavy rain or snow.



- *** Symptoms:** Numbness, tingling, redness, swelling, and blisters.
- * Prevention: Regularly check that your feet are dry, change wet socks or shoes immediately, keep spare footwear handy. Wear waterproof and insulated shoes, limit time in cold and wet conditions, and consult a healthcare provider if you notice symptoms like numbness, swelling, or discoloration.

Chilblains (Pernio) are painful, itchy swellings caused by exposure to cold weather.



- * Symptoms: Red or blue patches, swelling, and itching on the hands, feet, or face.
- * Prevention: Gently warm the affected areas with warm water, dress in layers to stay warm, avoid rapid temperature changes, and seek medical advice if symptoms persist or are severe.

Key Health Concerns during Winters

Asthma is when you have difficulty breathing, your chest and throat make harsh noises.



- * Symptoms: Shortness of breath, wheezing, chest tightness, and coughing
- * Prevention: Avoid triggers like smoke, allergens, and pollution; use prescribed medications regularly.
- Please note that Asthma can become severe during certain months of the year, in places with high pollution or maybe because of something that you are exposed to at work. Please consult a doctor if you experience any of the symptoms.

Pneumonia is a respiratory infection that causes inflammation in the air sacs in one or both lungs, which may fill with fluid or pus.



- * Symptoms: Cough, fever, chills, difficulty breathing, and chest pain while breathing or coughing.
- * Prevention: Consult a doctor immediately, follow prescribed medications, maintain good hygiene, drink plenty of water and inhale steam from a bowl of hot water

Strep Throat is a throat infection caused by bacteria (Streptococcal spp.) that is generally transmitted through coughing, sneezing, or direct contact with an infected person.



- * Symptoms: Throat pain and pain while swallowing; in young children, it could also cause nausea and vomiting.
- * Prevention: Wash your hands regularly, avoid smoking (including secondhand smoke), rest and stay hydrated if infected. Gargle with saltwater, add honey to your diet for soothing sore throats.
- Please consult a doctor if symptoms persist for more than 4-5 days.

Acute Bronchitis occurs due to inflammation in the bronchi (tubes leading to your lungs) and results in too much mucus



- * Symptoms: Viral bronchitis mucus secretion, sore throat, low fever, and fatigue.
 - Bacterial bronchitis may present with high fever, intense coughing, chest pain, and sore throat.
- Please contact your doctor immediately for further help.



Winter can worsen symptoms and increase complications for individuals with pre-existing health conditions like cardiovascular diseases, respiratory issues, cancer, diabetes, anaemia, HIV, Tuberculosis and disabilities. These individuals, already on medication affecting their immune systems, face additional challenges during colder months. Proper management is crucial to prevent worsening of conditions.

Taking precautionary steps before winter and seeking medical opinion incase of unusual behaviour or symptoms is crucial.



Emotional Well-Being

Winter can bring mental health challenges like sadness, lethargy, and Seasonal Affective Disorder (SAD). It's important to adopt strategies to support emotional well-being during these months:



Meditation or breathing exercises can calm your mind

Yellow lights at home can help elevate the mood. Applicable for all.

Hobbies, arts, music, dance and participating in activities can improve people's spirits

Connect with others to combat loneliness, try online or video calls if physical meetups are not possible.

Warm showers can help you feel relaxed and calm down your anxieties

A simple and regular routine can reduce anxiety and improve mental health.

Physical activity with minimum movement will also be helpful (yoga- 30 mins, walk- 30 mins, household chores- 30 mins, play with your kids, pets)

Maintain a consistent sleep schedule and aim for 6-8 hours of quality sleep per night. Avoid screens before bed to improve sleep quality and emotional regulation.

Agriculture and Livestock: Adapting to Winter Conditions

Agriculture:

Cold waves and frost can damage crops by causing diseases like black rust and late blight, disrupting germination, growth, flowering, yield, and storage life.



Prevention: Irrigate and fertilise beforehand, create airflow by planting between rows of trees, advance sowing times, and cover vulnerable crops at night with protective materials.

Additionally, plant winter-hardy vegetables like spinach and garlic, and consult your local agriculture expert if you notice signs of frost damage.

Livestock:

During cold waves, animals require more food for energy, and extreme temperature variations can affect fertility rates in buffaloes and cattle.



Prevention: Move the animals indoors, cover shelters at night to block winds, enhance feeding with dietary additives and high-quality forage, avoid livestock fairs to prevent illness, and refrain from giving cold feed or water while minimising dampness and smoke in shelters to reduce pneumonia risk.

General Care in the Winters:



Eating a healthy diet

Incorporate seasonal produce like carrot, radish, guava, oranges, beans, and locally available winter vegetables to strengthen your immune system.

Enhance your meals with warming spices and herbs such as ginger, garlic, cinnamon, tulsi, and turmeric.

Drink lukewarm water and warm beverages regularly. Limit coffee, tea, alcohol and other substances. Always carry a water bottle when you're out.

Prepare wholesome meals using lentils, whole grains, and root vegetables to support overall well-being.

Include foods like amla and winter greens like spinach, peas, fenugreek, mustard leaves, etc in your diet for additional nutritional benefits

Clothing and Outdoor Care

Wear multiple light weight clothing layers to trap heat and ensure good circulation.

Choose closed, insulated, and waterproof shoes to keep feet warm and prevent injuries.

Use mittens or gloves to retain hand warmth and improve circulation.

Watch for ice and wet areas to avoid slips; wear shoes with good traction.

Limit time outdoors in very cold weather to reduce frostbite and hypothermia risk.

Prepare your vehicle for winter with antifreeze, a working heater, and by occasionally starting it to keep the battery charged.



Body, Skin & Homecare



Moisturise your skin regularly with oil (coconut, sesame, almond), or body cream, and use lip balm for hydration

Apply sunscreen to protect your skin from UV rays, even in winter.

Store essential supplies including non-perishable food and water, first aid kit and power back up to reduce the need to go out in dangerous weather conditions.

Keep adequate water stored, as pipes may freeze. To prevent pipes from bursting, let a trickle of water run through them during extreme cold weather. This will help keep the pipes warm and prevent them from freezing.

Ensure proper ventilation when using heaters to avoid inhaling toxic furnes. Take safety precautions when using electrical and gas heating devices.

Keep your surroundings clean and hygienic to avoid allergens and discomfort

Keep your home well-ventilated by opening windows when the air is cleaner; avoid smoking indoors.

Grow air-purifying plants like neem or tulsi at home during winters.

Take steam with eucalyptus oil or alternatives to clear your airways.

Equip yourself and your family by having an emergency plan ready to fight extreme situations during winter.



If you are worried about illnesses, have doubts about your health and are unsure about visiting a doctor. Reach out to the nearest available:

ANM

ASHA workers Anganwadi centre

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In case of an Emergency reach out to your nearest:

ESI (Employees State Insurance)

Primary Healthcare Centre/ Community Healthcare Centres. If you don't have these in your community, reach out to the nearby district hospital.

For medicines prescribed by a doctor, reach out to the nearest Janaushadhi Kendra.



Stay Safe and Prepared during the Winter Season!

REMEMBER, PREPAREDNESS IS KEY

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