

# Winter Guide to Wellbeing

Winters can be a time of relief from the harsh sun for many people but this is not without its downsides either. We need to ensure that we are protected against cold waves and respiratory infections and that we lessen the harmful impacts of smog on our health and well-being.

***Read this guide to know how to avoid risks to your health and well-being in the winter:***

### **I. COLD WAVE:**

A cold wave is defined as a temperature drop that occurs quickly—within 24 hours—to the point where agriculture, industry, commerce, and social activities need to be significantly protected.

**It occurs when the minimum temperature in the plains is 10° Celsius or below and is 4.5° Celsius (C) below average for two days in a row.**

When the highest temperature falls by at least 6.5° below average, the day is considered a "severe" cold.

Even when the 10° Celsius requirement is not attained, like for coastal stations, the wind chill factor, which lowers the minimum temperature by a few degrees depending on the wind speed, causes discomfort for the locals.

**Who are the most affected during winters:**

Elderly (>60 years)	All these 4 categories of people are at high risk of developing hypothermia, frostbite, and other cold-related illnesses like flu. In addition to the above-mentioned tips, they should take care of their and their loved one's medical needs and keep emergency supplies and medicines ready.  Try to check on your neighbors, especially those who live alone.
Infants (< 5 years)	
Pregnant People	
Outdoor workers (farmers, street vendors, etc)	
Individuals with comorbidities	

### **Priority geographies**

(India) Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Delhi, Haryana, Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Punjab and Uttar Pradesh.

## What to look out for and what to do:

**Shivering:** It is the first sign that the body is losing heat.

- If possible, limit outdoor activities and get indoors.
- Do ensure that you are wearing separate layers of warm clothing, especially covering your head, neck, chest, hands, and feet. See below for more on clothing.

**Frostbite:** If you are frequently exposed to the cold for prolonged periods, you are at greater risk of frostbite. Early signs include a stinging, burning, or throbbing sensation followed by numbness. The skin may become reddish, grayish, or yellowish but color may be difficult to detect in people with darker skin so focus on skin texture and the sensations they are feeling. If you don't attend to this, it may get worse. The skin will become hard and numb and eventually black blisters will appear on exposed body parts such as fingers, toes, nose, and or earlobes.

- Notice the signs early, and warm the affected area of the body slowly with lukewarm water. If water is not available, warm the area with a warm body part like armpits.
- Do not rub the skin vigorously, break any blisters, or apply any creams or ointments to the frostbite area.
- Do not use hot water, fire, or any other uneven heating source when the skin has gone numb.
- Do not make the person walk if the toes are affected.
- Loosely bandage the affected area with dry, sterile dressings. If the fingers or toes are frostbitten, place dry, sterile gauze between them to keep them separated and prevent rubbing.
- Elevate the affected area to reduce swelling and pain.
- If it is a bad case of frostbite, contact your nearest health center or worker immediately.

**Hypothermia:** When there is a decrease in body temperature such that the person cannot speak as they regularly do, appear confused, sleepy, or exhausted, shiver, have stiff muscles, and breathe heavily, they are experiencing hypothermia. Babies develop red skin and become listless.

- Notice the signs early, and try to ensure that the person is in a warm and dry place, especially focusing on the head, neck, chest, hands, and feet as stated earlier.
- If they are conscious, get them to drink warm, sugary water, but do not do this if they are not.
- If they are conscious, get them to eat carbohydrates (rice, lentils, roti, banana, potato, corn, beetroot, etc)
- If they are wearing wet clothing, change this immediately and dry the person using layers of blankets, towels, or sheets.
- Give warm drinks to help increase body temperature. Do not give alcohol.
- If it is a bad case of frostbite, contact your nearest health center or worker immediately.

## II. RESPIRATORY CONDITIONS

This is a season for bacteria and viruses to cause a range of respiratory illnesses. We have covered the major risks below.

**Cold and Flu:** There is an increased chance of catching common respiratory illnesses like the cold and flu in winter. Please refer to this guide to keep colds and flu away.

### Cold and Flu

What is the most common illness you and your family members, especially children face?

**'Cold and Flu'**

Eating an icecream or playing in the rain do not cause cold and flu. It is passed from sick people to healthy people through saliva or mucus. Open sneezes and coughs are often the reasons for it.

Cold with high fever, nausea and chills indicates flu.

Not medicines nor antibiotics, but plenty of water, citrus fruits and rest are the answers to cold and flu. Gargling warm water also helps.

Consult a doctor if you feel very sick or if fever lasts for more than 3-5 days.




All of you know the symptoms of cold and flu

1. Runny nose and cough
2. Sore throat
3. Sneezing
4. Headache
5. Mild joint pain

Shoo away cold and flu by following these simple measures:

1. Get enough sleep and eat nutritious food
2. Wash hands regularly with soap and clean water
3. When you are sick, eat and sleep away from others. Do not allow the virus to spread.
4. Always sneeze or cough into your arm and not into your hands
5. Keep your handkerchief clean and do not let it touch other people.

Flu vaccine will protect children below 6 months from cold and flu. Don't forget to vaccinate your child.

## Allergies:

### Allergies

Sometimes certain food items, dust or animal hair can cause discomfort, sneezing, breathing problems, itching etc. This is an allergy.


How do you know if you are allergic to something? When you suddenly develop the following symptoms try to identify the unusual thing you ate or were exposed to. You are probably allergic to that substance.

**Symptoms:**

1. Sneezing
2. Coughing
3. Runny nose
4. Itchy eyes
5. Itching
6. Rash
7. Swelling

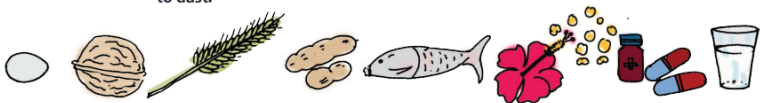
Here are some other preventive measures:

1. Be aware of allergy symptoms and note down causes
2. Do not breathe, touch or consume a known allergen
3. Keep home clean and free of dust
4. Air bedding in the sun often
5. If animal allergy, keep them away from home
6. Wear shoes when outside
7. Be careful while eating unknown food items



If you think you have an allergy, rush to a doctor immediately as some allergies can be very dangerous, causing death.

It is best to prevent allergies. For example, if you are allergic to dust and animal hair, try to stay away from animals and close your nose and mouth when exposed to dust.



**Strep throat:** This is a throat infection caused by bacteria that is generally transmitted through coughing, sneezing, or direct contact with an infected person. Symptoms include throat pain, pain while swallowing, and in young children, nausea and vomiting.

- Wash your hands regularly.
- Avoid smoking, even secondhand smoke.
- If you get infected, take plenty of rest, drink enough fluids, do salt water gargle, and add honey to your diet as it soothes sore throats.

**Acute bronchitis:** There are big tubes that bring air to your lungs. When these are inflamed due to infection, this results in too much mucus. You may experience a dry cough that turns mucus-filled. You may also have aches and pains, chills, headache, runny nose, sore throat, shortness of breath, watery eyes, and wheezing.

- Take cough medicine and pain relievers if required.
- Contact your nearest health center or worker if it does not clear up in 2 weeks.

*\*Bronchitis is not contagious after the initial phase of the illness ( first few days).*

## Asthma:

### Asthma

If you regularly have difficulty in breathing and your chest and throat make harsh noises, you may have asthma.

These could be possible causes for asthma:


1. Factory smoke
2. Cigarette smoking
3. Vehicle exhaust
4. Cooking in a closed room, anxiety
5. Your parents have Asthma

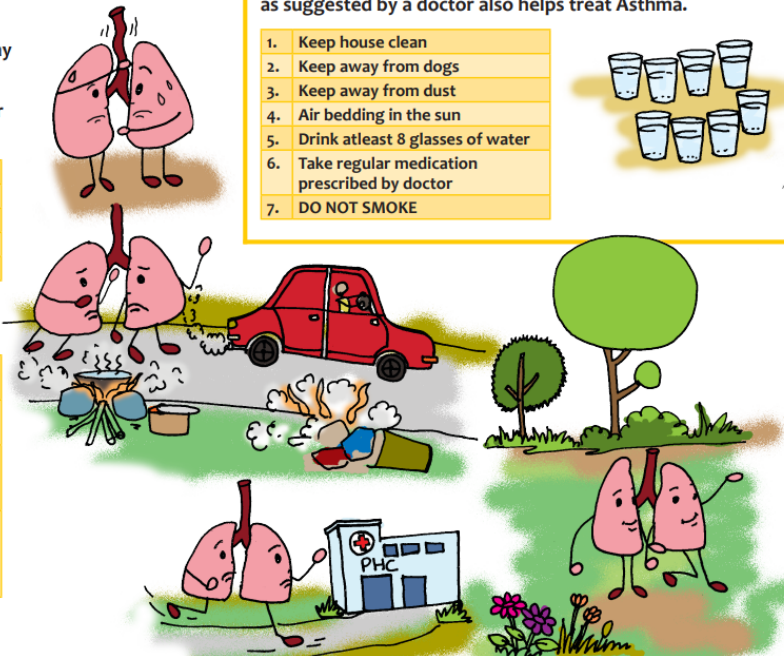
Certain symptoms will help you identify asthma fast:

1. A hissing wheezing sound especially while breathing out.
2. When breathing in, skin around ribs and collar tightens
3. Finger nails and lips may turn blue and veins in the neck may swell
4. Asthma may be severe during certain months of the year, at night and in places where pollution is high.

Please consult a doctor to manage asthma as it can differ from person to person. Also drink lots of water and juices and get fresh air. A rescue inhaler as suggested by a doctor also helps treat Asthma.

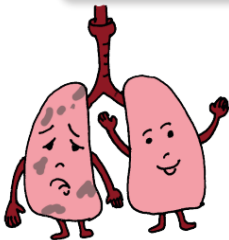
1. Keep house clean
2. Keep away from dogs
3. Keep away from dust
4. Air bedding in the sun
5. Drink atleast 8 glasses of water
6. Take regular medication prescribed by doctor
7. DO NOT SMOKE





## Pneumonia:




### Pneumonia



Lungs, an important body part, helps us breathe. Pneumonia is sickness of the lungs. This can be very dangerous. Pneumonia can also follow flu and chronic cough.

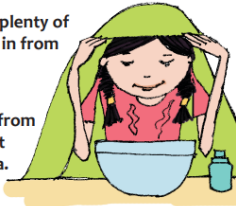
If you notice the following symptoms in anyone, please rush the person to a doctor immediately.

1. Shallow fast breathing sometimes with grunting and wheezing
2. Nostrils spread or flare with each breathing
3. Chills with high fever
4. Cough - yellow greenish mucus with blood stains sometimes
5. Inability to eat or drink
6. Chest pain and weakness
7. Sores on face, lips and throat.



Meera should see a doctor immediately and strictly follow the medicine schedule suggested by the doctor.

Meera should also drink plenty of clean water and breathe in from a pot of boiling water.



She should wash hands regularly and stay away from other children to prevent the spread of Pneumonia.

## REMEMBER, PREVENTION IS BETTER THAN CURE

### CLOTHING

- **Focus on layering.** Try to wear different layers of lightweight clothing rather than one heavy one. Multiple layers will help you trap air and maintain your body heat reducing the risk of hypothermia.
- **Do not wear clothing that is too tight** to maintain blood circulation.
- **Try to wear closed shoes** that are insulated or waterproof.
- **Try to keep your hands covered** with mittens or gloves.

### BODY, SKIN & HOMECARE

- Try to **moisturize your skin** regularly with oil, petroleum jelly, or body cream to keep your skin hydrated
- **Eat healthy fruits and vegetables rich in vitamin C** (like tomato, cabbage, lemon, orange, etc) to maintain adequate immunity.
- Spices like **ginger, garlic, and cinnamon** can help increase circulation and body warmth. Add them to your dishes for flavor and health benefits.
- Try to **store essential supplies** as per the requirement
- Try to **store adequate water** as water pipes may freeze.
- **Drink warm beverages** but try to **avoid too much coffee or tea**, because it will dehydrate you.
- **Avoid or limit outdoor activities.**

- **Avoid drinking alcohol.** It dehydrates you and reduces your body temperature.
- **Maintain ventilation** in your house if you use heaters to avoid inhaling toxic fumes.
- **Take safety measures while using electrical and gas heating devices.**

## KEEP YOURSELF INFORMED

Listen to the radio, watch TV, and read newspapers for local weather forecasts and government alerts to keep yourself updated. This will help you to take the necessary actions in time. The government makes three kinds of alerts during cold waves- yellow being the mildest alert, followed by orange, and red being the highest alert:

Color Code	What does it mean?
Yellow alert	<ul style="list-style-type: none"> <li>● The temperature has fallen for a minimum of two days consecutively in your region.</li> </ul>
Orange alert	<ul style="list-style-type: none"> <li>● The temperature has fallen for a minimum of four days consecutively in your region.</li> </ul>
Red Alert	<ul style="list-style-type: none"> <li>● The temperature has fallen for a minimum of six days or more in your region.</li> </ul>

You can follow their alerts on their website: <https://mausam.imd.gov.in/> and on social media platforms such as [Facebook](#), [Instagram](#), and [YouTube](#).

Inquire about nearby government shelters for emergency purposes, and keep emergency contact numbers like ambulance ready.

## TAKING CARE OF YOUR LIVESTOCK

During cold waves, animals require more food for sustenance as the energy requirement goes up. Extreme variations in temperature may affect the fertility rate in animals during the optimum breeding season for buffaloes /cattle.

- Try to move your pet animals indoors to protect them from the cold weather.
- Try to cover the animal shelter from all sides during the night to avoid direct exposure to cold winds.
- Enhance feeding practices with dietary additives, high-quality forage, and fat supplements.
- Avoid animal fares (*pashu mela*) during cold waves to avoid getting cold-related illnesses from other animals.
- Avoid giving cold feed and cold water to the animals.
- Avoid dampness and smoke in the animal shelter to reduce the chances of animals contracting pneumonia.

## TAKING CARE OF YOUR FIELDS/FARMS

Cold waves and frost damage crops by causing illnesses such as black rust, white rust, late blight, etc. They also cause a variety of physiological disruptions in germination, growth, flowering, yield, and storage life.

- Make sure you have irrigated and fertilized your field before cold waves arrive, and every time there is a cold wave alert. Water releases heat as it freezes, which can warm up the soil and the crops. Water also acts as a thermal mass that can store heat during the day and release it at night.
- Create airflow and ventilation around your crops to prevent frost formation. This can be done by planting crops in between rows of trees or large shrubs. This will reduce the wind speed and increase the temperature near your crops.
- Try to advance the sowing time of your crops since frost mostly sets in during the flowering phase.
- Cover your vulnerable crops with protective materials such as polythene sheets, gunny bags, straws, or blankets at night, while making sure they can still get sunlight during the day. This will insulate the crops from cold and retain heat.
- Plant winter-hardy vegetables that can tolerate low temperatures and frost. Some examples are spinach, cabbage, broccoli, carrots, beets, garlic, and onions.
- Consult an agriculture expert to determine the best course of action if your crops are showing signs of frost damage.

### III. SMOG

Smog is an amalgamation of smoke, fog, and diverse atmospheric pollutants during winter months. Cold and still weather conditions lead to a stable near-surface air layer, trapping emissions from sources like vehicles, industries, crop burning, and fireworks. Apart from diminishing visibility, it poses many environmental and health hazards.

#### **Who are the most affected:**

Children, the elderly, street vendors, the urban poor, and individuals with chronic respiratory and cardiovascular diseases

#### **Priority geographies:**

Northern India, especially Delhi and its neighboring states, such as Haryana, Punjab, Uttar Pradesh, and Rajasthan along with metropolitan cities such as Mumbai and Kolkata.



## What to look out for and what to do:

*Refer to the section on respiratory conditions above.*

Smog also increases the risks of different kinds of cardiovascular disease and cancers. Therefore, it is best to limit exposure to particulate matter, sulfur dioxide, nitrous dioxide, and other pollutants that smog brings.

### Ensure:

- You are masked when you have to be outside. Try to avoid being outside during midday when smog is at its thickest.
- You refer to the rest of the preventive recommendations mentioned in this guide.