#### Government of Jammu & Kashmir Department of Disaster Management, Relief, Rehabilitation & Reconstruction (DMRRR) Civil Secretariat- J&K, Srinagar/Jammu E-mail: <u>dmrrr-sec@ik.gov.in</u>; <u>jk-sdma19@ik.gov.in</u>

Website: https://dmrrr.jk.gov.in

## JKDMA Cold Wave Advisory

#### Before

- Listen to the radio, watch TV, read newspapers for local weather forecast to know if a cold wave is round the corner.
- Stock adequate winter clothing. Multiple layers of clothing are more helpful.
- Keep emergency supplies ready.
- An increased likelihood of various illnesses like flu, running/stuffy nose or nosebleed, which usually set in or get aggravated due to prolonged exposure to cold. Consult the doctor for symptoms like these.

#### During

- Follow weather information and emergency procedure information closely and act as advised.
- Stay indoors as much as possible and minimize travel to prevent exposure to cold wind.
- Wear multiple layers of loose-fitting, lightweight, windproof warm woolen clothing rather than one layer of heavy clothing. Tight clothing reduces blood circulation.
- Keep yourself dry. If wet, then cover your head, neck, hands, and toes adequately as the majority of heat loss occurs through these body parts.
- Prefer mittens over gloves. Mittens provide more warmth and insulation from cold, as fingers share their warmth and expose less surface area to the cold.
- Use hats and mufflers to prevent heat loss, wear insulated/waterproof shoes.
- Eat healthy food to maintain the equilibrium of body temperature.
- Eat fruits and vegetables rich in Vitamin C to maintain adequate immunity.
- Drink hot fluids regularly, as this will maintain body heat to fight cold.
- Moisture your skin regularly with oil, petroleum jelly, or body cream.
- Take care of elderly people and children and check on neighbors who live alone, especially the elderly, about their well-being.
- Store essential supply as per requirement. Store adequate water as pipes may freeze.
- Follow the guide on heat insulation for non-industrial buildings and take necessary preparedness measures.
- Watch out for symptoms of frostbite like numbress, white or pale appearance on fingers, toes, ear lobes, and the tip of the nose, while exposed to cold waves.

- Prolonged exposure to cold can turn skin pale, hard, and numb, and black blisters on exposed body parts such as fingers, toes, nose, and/or earlobes. Immediately consult the doctor.
- Treat the areas affected by frostbite in warm (not hot) water (the temperature should be comfortable to touch for unaffected parts of the body).
- Do not ignore shivering. It is an important first sign that the body is losing heat and is a signal to quickly return indoors.
- Seek medical attention as soon as possible for someone suffering from frostbite/hypothermia.
- Move pet animals indoors. Likewise, protect livestock or domestic animals from cold weather by moving them inside.
- Severe exposure to cold wave can lead to hypothermia a decrease in body temperature which can cause shivering, difficulty in speaking, sleepiness, stiff muscles, heavy breathing, weakness, and/or loss of consciousness. Hypothermia is a medical emergency that needs immediate medical attention.
- Consult a doctor for symptoms like various illnesses, running/stuffy nose, particularly during the period of COVID-19.

#### **IN THE CASE OF HYPOTHERMIA:**

#### Do's

- Get the person into a warm place and change clothes.
- Warm the person's body with skin-to-skin contact, dry layers of blankets, clothes, towels, or sheets.
- Give warm drinks to help increase body temperature. Do not give alcohol.
- Seek medical attention if the condition worsens.

#### Don'ts

- Avoid prolonged exposure to cold.
- Don't drink alcohol. It reduces your body temperature; it actually narrows your blood vessels, particularly those in the hands, which can increase the risk of hypothermia.
- Do not massage the frostbitten area. This can cause more damage.
- Do not ignore shivering. It is the first sign that the body is losing heat get indoors.
- Do not give the affected person any fluids unless fully alert.

## **AGRICULTURE**

Cold wave and frost damages crops by causing illnesses including diseases of black rust, white rust, late blight, etc. Cold wave also causes a variety of physiological disruptions in germination, growth, flowering, yield, and storage life.

### Do's

- Undertake curative measures for cold illness/injury like spray with Bordeaux mixture or Copper Oxi-chloride, phosphorus (P), and potassium (K) to activate better root growth.
- Do light and frequent surface irrigations (high specific heat of water) during the cold wave wherever possible.
- Sprinkler irrigation (condensation-release heat into the surrounding).
- Cultivate cold/frost-resistant plants/crops/varieties.
- Use intercropping farming in horticulture and orchards.
- Mixed cropping of vegetables, viz., tomato, brinjal with a tall crop like mustard/pigeon pea will provide necessary shelter against cold winds (shelter against cold).
- Increase radiation absorption and provide a warmer thermal regime through covering of nursery and young fruit plants during winter by plastic or by making thatches (jhuggies) of straw or sarkanda grass, etc.
- Organic mulching (for thermal insulation).
- Planting of windbreaks/shelter belts (to reduce wind speed).

# ANIMAL HUSBANDRY/LIVESTOCK

During cold waves, animals and livestock 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.

#### Do's

- Cover the animal habitat from all sides during the night to avoid direct exposure of animals to cold winds.
- Cover the animals, especially smaller ones, during cold days.
- Protect livestock and poultry from cold weather by keeping them inside.
- Improving livestock feeding practices and dietary additives.
- Use of high-quality forage or pastures.
- Provide fat supplements concentrate ratio on feed intake, feeding, and chewing behavior.

- Construction of climate-smart sheds which allow maximum sunlight during winters and low radiation during summers.
- Selecting animal breeds especially fit for these conditions.
- Apply some bedding materials such as dry straw under animals during winters.

For detailed guidelines and updates, scan the QR code below to visit the JKSDMA website or follow us on our official social media handles.



In case of emergencies or to seek immediate assistance, please dial 112, the 24x7 emergency helpline number, for prompt support and guidance.



## **Colour Code Early warning and Advisory**

Colour code	Alert	Warnings	Impact	Suggested Action
Green (No Action)	Normal day	Minimum temperatures are near normal	Comfortable temperature.	No precautionary action required.
Yellow Alert (Be Updated)	Cold Wave Alert	Cold wave conditions in isolated areas persist for two days.	<ul> <li>Moderate temperature. Chilly winds may aggravate cold at time.</li> <li>Cold is tolerable but mild health concern for vulnerable people. (Infants, pregnant women, elderly, people with chronic diseases etc.)</li> </ul>	<ul> <li>Avoid prolonged exposure to cold.</li> <li>Wear several layers of loose fitting, light weight; warm woolen clothing rather than one layer of heavy cloth.</li> <li>Cover your head, neck, hands and toes adequately as majority of heat loss occurs through these body parts.</li> </ul>
Orange Alert (Be Prepared)	Severe Cold Wave Alert	<ul> <li>(I) Severe cold wave conditions persist for two days.</li> <li>(II) Though not severe, cold wave conditions persist for four days or more.</li> </ul>	<ul> <li>An increased likelihood of various illnesses like flu, running/ stuffy nose or nosebleed, which usually set in or get aggravated due to prolonged exposure to cold.</li> <li>Do not ignore shivering. It is the first sign that the body is losing heat. Get indoors.</li> <li>Frostbite can occur due to prolonged exposure to cold. The skin turns pale, hard and numb and eventually black blisters appear on exposed body parts such as fingers, toes, nose and or earlobes.</li> <li>Severe frostbite</li> <li>needs immediate medical attention and treatment.</li> </ul>	<ul> <li>Listen to radio; watch TV, read newspaper for weather updates/ forecasts. Wear insulated/waterproof shoes.</li> <li>Moisturize your skin regularly with oil, petroleum jelly or body cream.</li> <li>Eat healthy fruits and vegetables rich in vitamin-C and drink lots of fluids to maintain adequate immunity.</li> <li>Avoid or limit outdoor activities.</li> <li>Keep dry, if wet, change clothes immediately to prevent loss of body heat.</li> <li>Warm the affected area of the body slowly with lukewarm water; do not rub the skin vigorously.</li> <li>If the affected skin area turns black, immediately consult a doctor.</li> <li>Maintain ventilation while using heaters to avoid inhaling toxic fumes.</li> <li>Take safety measures while using electrical and gas heating devices.</li> <li>Don't drink alcohol. It reduces your body temperature.</li> <li>Drink hot drinks regularly.</li> </ul>

Red Alert (Take Action)	<ul> <li>(I) Severe cold wave conditions</li> <li>persist for more than two days.</li> <li>(II) Total number of cold wave/severe cold wave/days exceeding six days.</li> </ul>	<ul> <li>Severe exposure to cold wave can lead to Hypothermia; a decrease in body temperature which causes confusion, shivering, difficulty in speaking, sleepiness, stiff muscles, heavy breathing, weakness and/or loss of conscious- ness. Hypothermia is a medical emergency that needs immediate medical attention.</li> <li>Frost and cold wave affect pulse crops and livestock.</li> </ul>	<ul> <li>Along with suggested action for orange alert, extreme care needed for vulnerable people.</li> <li>Regularly check on elderly neighbours, especially those who live alone. Stay indoors, if possible. Avoid unnecessary exertion.</li> <li>Locate designated public shelter nearby.</li> <li>In case of electricity or heating mechanism failure, take the affected person to such designated shelters. Seek medical attention as soon as possible for someone suffering from frostbite/ Hypothermia.</li> <li>Do not give the affected person any fluids unless fully alert.</li> <li>Store adequate water as pipes may freeze.</li> <li>Move pets indoors, Likewise, protect livestock or other big animals from cold weather by moving them to an enclosure.</li> </ul>
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