SUNSHINE AGRICULTURE
e-Newsletter

ISSN (E): 2583 – 0821

Sun. Agri.:e- Newsletter, (2026) *6*(9), 41-43

Article ID: 661

Winter Stress in Companion Animals in India

Amit Kumar[1], M B Kharadi[2]
Sudhanshu Kumar[3]
Sankalp Sahu[4]
Shivani Durvey[5], Eshani Dixit[6]

[1]Assistant professor, Department of Veterinary Physiology and Biochemistry, Mahala Veterinary College, Reengus, Sikar Rajasthan- 332404
[2]M.V.Sc. Scholar, Department of Animal Nutrition, College of Veterinary Science and Animal Husbandry Kamdhenu University, Sk Nagar Gujarat- 385506
[3]Assistant professor, Department of Veterinary Medicine, Mahala Veterinary College, Reengus Sikar, Rajasthan- 332404
[4]M.V.Sc. Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandry Jabalpur, M.P.-482001
[5]M.V.Sc. Department of Livestock Products Technology, College of Veterinary Science and Animal Husbandry, Jabalpur, M.P.-482001
[6] Department of Veterinary Microbiology, College of Veterinary Science and Animal Husbandry Jabalpur, M.P.-482001

Open Access

*Corresponding Author
Amit Kumar*

Available online at
www.sunshineagriculture.vitalbiotech.org

Article History
Received: 08.09.2026
Revised: 13.09.2026
Accepted: 18.09.2026

This article is published under the terms of the Creative Commons Attribution License 4.0.

INTRODUCTION

Winter in India, though milder than in temperate countries, can still cause significant stress in companion animals. Sudden drops in temperature, cold winds, fog and reduced daylight hours can adversely affect the health and behaviour of pets such as dogs and cats. This condition deserves attention from pet owners and veterinary professionals alike.



What is Winter Stress?

Winter stress occurs when an animal's homeostatic mechanisms struggle to maintain optimal body temperature in cold environmental conditions. Short-coated breeds, neonates, geriatric pets and animals suffering from chronic ailments (such as renal disease, cardiovascular disorders or osteoarthritis) are particularly vulnerable.

Clinical Indicators

Common signs include shivering, lethargy, reluctance to move, dry skin, cracked paw pads and behavioural changes such as irritability or reduced appetite. This Cold stress suppresses systemic immune function, increasing susceptibility to canine infectious respiratory disease complex (kennel cough) and viral infections. Low temperatures also exacerbate joint stiffness in arthritic animals.

Winter Management Strategies

Proper winter management plays a crucial role in minimizing stress. Ensure pet bedding is elevated off cold tile/marble floors using mats, blankets or orthopaedic pet beds. Keep sleeping areas away from drafty doors and windows especially during cold nights. Sweaters and jackets are beneficial for puppies, aged dogs and short-haired breeds during early morning and late evening walks. Ensure garments are dry, well-fitted and washed regularly to prevent contact dermatitis. Ensure fresh, lukewarm drinking water is readily available, as pets frequently reduce water intake in winter, risking dehydration and urinary issues.

Hypothermia: A Serious Consequence of Cold Exposure

Hypothermia occurs when an animal's core body temperature falls below the normal physiological range. It can develop after prolonged exposure to cold particularly when an animal is wet, weak or unable to seek shelter. Early signs may include shivering, lethargy and cold extremities. As the condition progresses, shivering may decrease or stop and the animal may develop weakness, impaired coordination, reduced consciousness, and cardiovascular or respiratory abnormalities.

Stages and Clinical Signs of Hypothermia

1. **Mild Hypothermia:** In the early stages, the body attempts to generate and conserve heat by constricting peripheral blood vessels and triggering muscle activity.
    - **Intense Shivering:** The body's primary automatic mechanism to produce heat.
    - **Lethargy & Weakness:** The animal may appear sluggish, slow to respond, or reluctant to move.
    - **Cold Extremities:** Ears, paws, nose and tail feel noticeably cold to the touch due to reduced peripheral blood flow.
    - **Seeking Warmth:** Desperate attempts to curl up tightly or find sheltered, warm spots.
2. **Moderate Hypothermia:** As core temperature continues to drop, metabolic processes slow down significantly and the nervous system begins to suffer.
    - **Muscle Stiffness & Ataxia:** Movements become uncoordinated, clumsy or stiff. The animal may struggle to stand or walk.
    - **Mental Dullness / Confusion:** Stupor, apathy or lack of response to external stimuli or commands.
    - **Pale or Cyanotic Mucous Membranes:** Gums may look pale, gray or bluish due to poor peripheral perfusion.
    - **Decreased Heart and Respiratory Rates:** Vital signs begin to depress as the cardiovascular system cools.
3. **Severe Hypothermia :** This is a critical, life-threatening medical emergency where cellular energy stores are completely depleted.
    - **Cessation of Shivering: Crucial Warning Sign:** Shivering stops because the body no longer has the energy to produce muscle contractions.
    - **Collapse and Unconsciousness:** The animal lapses into a deep stupor, coma, or unresponsiveness.
    - **Fixed and Dilated Pupils:** The eyes fail to respond properly to light changes.
    - **Bradycardia and Hypoventilation:** Heart rate, pulse, and breathing become dangerously slow, erratic, or shallow.
    - **Cardiorespiratory Arrest:** Without immediate, aggressive veterinary intervention, multi-organ failure and death follow

Immediate First-Aid:

- Wrap the animal in warm blankets or towels.
- Use warm water bottles wrapped in cloth (never use direct hot surfaces to avoid burns).
- Avoid rapid external heating or vigorous rubbing.
- Transport the pet immediately to a veterinary facility for controlled rewarming and supportive care

CONCLUSION

Winter stress occurs when an animal's homeostatic mechanisms struggle to maintain optimal body temperature in cold environmental conditions. Awareness and timely preventive care can significantly reduce the risks associated with winter stress in companion animals. Simple interventions adequate bedding, proper grooming, balanced nutrition and safety around indoor heating ensure that companion animals across India stay healthy, comfortable, and active throughout the winter months.