

Stages of Hypothermia

Hypothermia occurs when the body cannot produce enough heat to make up for the heat being lost to the environment. Signs and symptoms develop as hypothermia causes systemic slowing of cellular metabolism. Mild hypothermia is classified as a core temperature between 90 and 95°F (32-35°C). In this stage, the patient will shiver in an attempt to warm themselves. Moderate hypothermia is classified as a core temperature between 82 and 90°F (28-32°C). In this stage, the patient will demonstrate obvious motor impairment and slowed cognition. Finally, severe hypothermia is classified as a core temperature less than 82°F (< 28°C). Patients with a core temperature this low may experience lack of shivering, paradoxical undressing, and cardiac arrhythmias.



PLAY PICMONIC

Mild

32 to 35°C (90 to 95°F)

Cold (32) Tutu to (35) Hand

Patients with mild hypothermia will have a core temperature between 90 and 95°F (32-35°C).

Shivering

Shivering

In this stage of hypothermia, patients will shiver in an attempt to warm themselves. Patients may also be lethargic or confused.

Moderate

28 to 32°C (82 to 90°F)

Cold (28) Snowman to (32) Tutu

Patients who are moderately hypothermic will have a core temperature between 82 and 90°F (28-32°C).

Obvious Motor Impairment

Motor Impaired

Patients at this stage will have an obvious motor impairment, related to increased muscle rigidity.

Slowed Thinking

Gummed-mental-gears

Hypothermia can cause manifestations similar to those related to cerebral complications. Patients in a state of moderate hypothermia may present with altered mental status, particularly slowed cognition.

Severe

28°C (82°F)

Less-than Cold (28) Snowman

Patients who are severely hypothermic will have a core temperature less than 82°F (< 28°C).



Shivering Stops

Shivering Stop-sign

At this stage, reflexes will be absent, and the patient will no longer shiver.

Paradoxical Undressing

Undressing for Parrot-ox

Paradoxical undressing is a phenomenon in which severely hypothermic patients remove all of their clothing shortly before death. It is suggested that hypothermia-induced paralysis of the nerves in blood vessel walls leads to vasodilation, causing a feeling of extreme warmth.

Arrhythmias

Broken Arrhythmia-drum

The muscle of the heart becomes very irritable when it is cold. This can lead to cardiac arrhythmias such as bradycardia and atrial or ventricular fibrillation.