

In a cold wave How to Prevent Cold-related Illness



A cold wave is a phenomenon of temperature falling sharply in winter season which may cause cold-related illness such as frostbite and hypothermia.

Cold wave alert criteria



※ [Attached Table 6] Criteria for Announcement of Alert in 'Weather Forecast Rule' of KMA

Cold Wave Watch	<ul style="list-style-type: none"> When it is expected that morning lows will be -12°C or under for two or more days When it is expected that morning lows will be lower than the previous day by 10°C or more, 3°C or under, and lower than normal by over 3°C If a serious damage is expected due to sharp cold temperatures
Cold Wave Warning	<ul style="list-style-type: none"> When it is expected that morning lows will be -15°C or under for two or more days When it is expected that morning lows will be lower than the previous day by 15°C or more, 3°C or under, and lower than normal by over 3°C If a serious damage is expected in a vast area due to sharp cold temperatures

Emergency measures for occurrence of cold-related illness.



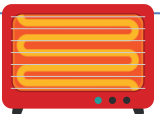
- Exposure to cold wave for a long time may lead to cold-related illness such as hypothermia, frostbite and chilblain and it is necessary to take **swift action**.

※ A worker belonging to a group sensitive to cold-related illness or performing hard work with a high intensity of labor needs to check the physical condition before and after work.

Appearance of main symptoms	Measures and monitoring condition	End
Hypothermia Chill, fatigue, impaired consciousness, memory impairment, speech disorder, etc.	<ul style="list-style-type: none"> Move to a warm place. Take off wet clothes and wrap the person with a blanket, etc. Put a warm towel on the frozen area (face, ear, hand, foot, etc.) and change the towel frequently. If you are conscious, take warm beverage (except an alcoholic beverage) and sweet food such as chocolate. 	<ul style="list-style-type: none"> Check health condition frequently. Go home if possible. (Check improvement of symptoms.)
Frostbite Sharp pain, itching, skin turning dark and red and getting blisters, and losing dermal sensation	<p>▼ If unconscious or no improvement of symptoms</p> <p>Call 119 for help. </p>	

※ For more details, refer to 'Kinds of Cold-related Illness and Emergency Measures' of Korea Disease Control and Prevention Agency(KDCA).

The basic rule for prevention of cold-related illness is **warm clothes, warm water and a warm place!**

Warm clothes (equipment)	<ul style="list-style-type: none"> Put on several layers of clothes. (3 and more layers of clothes increase thermokeeping effect.) <ul style="list-style-type: none"> Outer layer Breathable clothing which can shut out wind or water Middle layer Thermokeeping clothing even in wet condition Inner layer Clothing which can remove sweat easily Put on a hat or do-rag to reduce loss of body heat. If necessary, use a mask to cover face and mouth. Wear thermal gloves and thermal and waterproof shoes. <ul style="list-style-type: none"> When doing a work which can make you get wet easily, wear waterproof gloves. When working at a temperature below -7°C, do not hold the surface of a metal with your bare hands. Be sure to wear gloves. If possible, prepare some spare clothes in case you get wet with water or sweat. 	
Warm water	<ul style="list-style-type: none"> Take enough warm water frequently. 	
Warm place	<ul style="list-style-type: none"> Provide a warm place for workers to take a rest away from cold. <ul style="list-style-type: none"> Provide the rest area at a location close to the place of work if circumstances allow. The heating apparatus such as a heater should be free from a danger of fire or poisoning with harmful gases, etc. 	

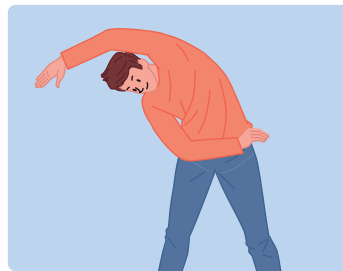
Establish additional preventive measures to protect the health of workers!



Check weather condition (cold wave alert, forecast of impact, etc.)



Advance checking and frequent management of the sensitive group* vulnerable to a cold wave



Do stretching for blood circulation and maintaining body temperature.



Mutual observation among workers during working

* Sensitive group: Persons with hypertension, diabetes, cardiovascular disease, hypothyroidism or a feeble constitution; aged persons, newcomers, etc.

How to cope in each stage of cold wave

※ The stage of cold wave in each region is available in the Website of (Korea Meteorological Administration (www.weather.go.kr))

Weather → Special weather report → Impact forecast → 'Industry' or Weather Forecast (App).

 Common (Concern, Caution, Warning, Danger)	<ul style="list-style-type: none"> Conduct education for prevention of cold-related illness including the kinds of cold-related illness, prevention methods, symptoms, how to take emergency measures, etc. Check the group sensitive to cold-related illness (persons with hypertension and diabetes, aged persons, etc.) in advance. Prepare work plan to minimize working outdoors during a cold time slot. Prepare a network of emergency contacts to spread a special report on a cold wave, report the persons with health disorders. Provide warm clothes (equipment), warm water and a warm place. Co-workers are to observe the health condition of one another and stop working and take the emergency measures below if a symptom of cold-related illness appears.
 Caution (Cold wave watch)	<ul style="list-style-type: none"> Provide warm clothes (equipment), warm water and a warm place. If possible, minimize working outdoors during a cold time slot. <p>▶ Adjust the time of working outdoors and rest during a cold time slot, etc.</p>
 Warning (Cold wave warning)	<ul style="list-style-type: none"> Provide warm clothes (equipment), warm water and a warm place. Minimize working outdoors during a cold time slot. <p>▶ Preferred consideration of the group sensitive to cold-related illness and the workers performing heavy duty work</p>
 Danger	<ul style="list-style-type: none"> Provide warm clothes (equipment), warm water and a warm place. Minimize working outdoors during a cold time slot and, if necessary, work after considering safety and health measures. <p>▶ The group sensitive to cold-related illness and the workers performing heavy duty work are prohibited to work outdoors except for emergency measures for a disaster or safety.</p>

* A 'heavy duty work' is a work which burns many calories: using a shovel, hammer, saw, pickax or axe; using the whole body for formwork setting, bending iron bars or concreting at a construction site; or taking heavy items up and down or handling them repeatedly by hand.

Cases of serious accidents due to a cold wave

