

Health Bulletin

Heatstroke

It's been so hot lately.
Can you tell me about "heat stroke"?



① Causes and Conditions Prone to Occurrence

① Humid and Hot Environment

- High temperature, high humidity, and no wind
- No air conditioning
- Dense concentration of machines, etc.
- Under the blazing sun, with heat reflection



② Physical Burden

- Using full body strength
- Long working hours
- Unable to take breaks at will
- Difficulty in staying hydrated



③ Poor Health Condition

- Hangover
- Lack of sleep
- Diarrhea (dehydration)
- Chronic illnesses (diabetes, heart disease, etc.)



Heatstroke

When the balance of water and salt in the body is disrupted, the body's ability to regulate temperature is lost, leading to impaired bodily functions.

② Symptoms and Severity Classification

Severity Levels

Symptoms

I	Heat Syncope Heat Cramps	<ul style="list-style-type: none"> • Pale face • Dehydration • Nausea • Dizziness, fainting • Acute muscle pain, cramping 	First Aid, Call 119 *First aid methods are described below
II	Heat Exhaustion	<ul style="list-style-type: none"> • Dry mouth, dizziness • Headache • Irritability • Fatigue 	Medical treatment is necessary
III	Heatstroke	<ul style="list-style-type: none"> • Unconsciousness • Seizures • Hot body 	Hospitalization is required



The human body is 60% water, and losing 5% of this water can lead to dehydration and difficulty breathing.

From the Ministry of Health, Labour and Welfare, "Heatstroke Guide for Workers: Immediate Use"

③ If You Suspect Someone Has Heatstroke (Main First Aid Steps)

① Move to a Cool Place
Example: Indoors with air conditioning or a well-ventilated shady area



② Loosen Clothing and Cool the Body
→ Around the neck, under the arms, groin, etc.



Crucial

③ Supplement with water, salt and oral rehydration fluid

- If they cannot drink water by themselves
- If they respond oddly → In these cases, call 119 immediately



④ Heat Stroke Prevention

① Frequently adjust the temperature using fans or air conditioning.



② Utilize blackout curtains, bamboo blinds, and water sprinkling.



Heat Stroke and Food Poisoning

③ Wear sun umbrellas or hats when going out.



I don't sweat and I don't go outside much, so I don't drink that much water. Is that okay?

"Because I'm indoors"
"Because I'm not thirsty"

These judgments are **dangerous!** By the time you feel thirsty, you may have already lost about 1-2% of your body water. While there are individual differences, dehydration has already begun.



Ways to Avoid the Heat

④ On sunny days, use the shade and take frequent breaks.



⑤ Wear clothes with good ventilation, moisture absorption, and quick-drying properties.



⑥ Cool the body with cooling packs, ice, or cold towels.



※ Hydration Tips ※

Aim for 1.2 liters per day

1 cup every hour

Also, hydrate before and after bathing, as well as after waking up. 500ml each

2.5 bottles of 500ml each

6 cups

When you sweat a lot, don't forget to also replenish your salt intake.

From the Ministry of Health, Labour and Welfare, 2022 "Heat Stroke Prevention Action Leaflet"

Did You Know?

Utilize the WGBT Index!

The WGBT (Wet Bulb Globe Temperature) value, also known as the "heat index," allows you to assess the risk of heat stroke. This index takes into account not just the air temperature, but also humidity and heat reflected from the sun.

WGBT Risk Categories (Example)

Caution	Alert	Extreme Caution	Danger
Less than 25°C	25~28°C	29~31°C	Over 31°C

The WGBT values can be checked on the "Ministry of the Environment Heat Stroke Prevention Information Site."
https://www.wbgt.env.go.jp/wbgt_data.php



Check!

① The perception of heat varies from person to person.

Point Physical condition and acclimatization to heat also affect it.

② Heat stroke prevention indoors.

③ Special caution is needed **for the elderly, children,** and those with disabilities!

Point

- Approximately half of heat stroke patients are over the age of 65.
- The elderly have reduced sensitivity to heat and dehydration, and diminished temperature regulation abilities.
- Children's ability to regulate body temperature is not fully developed.

Food
Poisoning

As it gets hotter, it's important to be cautious not only about heatstroke but also about **food poisoning**.
Let's learn the preventive measures together!



① Representative Types

Norovirus



Main Habitats

- ① **Bivalves**
(e.g., oysters, clams)
② Contamination of food during cooking

Onset

Approximately 1 to 2 days

Symptoms

Nausea, vomiting, diarrhea, abdominal pain, mild fever lasting 1 to 2 days, headache

Campylobacter



Main Habitats

Bacteria found in the intestines of chickens and cattle → Commonly contracted from **raw or undercooked chicken**

Onset

Approximately 1 to 7 days or more

Symptoms

Diarrhea, abdominal pain, fever, muscle pain

Enterohemorrhagic
Escherichia coli O157

Main Habitats

Beef and vegetables, etc.
→ Often contracted through **oral infection**

Onset

Approximately 3 to 5 days

Symptoms

Abdominal pain, diarrhea, bloody stools

Salmonella



Main Habitats

Eggs and meat, etc.
→ Widely found in the intestines of chickens, pigs, cattle, as well as in rivers, lakes, and sewers!

Onset

Approximately 6 hours to 3 days (varies by strain)

Symptoms

Abdominal pain, diarrhea, vomiting, nausea, fever

Clostridium perfringens



Main Habitats

Stewed dishes
→ **Commonly found in stewed dishes like curry on the second day!**

Onset

Approximately 8 to 12 hours

Symptoms

Abdominal pain, diarrhea, bloody stools

Staphylococcus aureus



Main Habitats

Inside the human nose, throat, skin (**especially wounds**), etc. → **Commonly found in hand-rolled rice balls and bento packed with bare hands!**

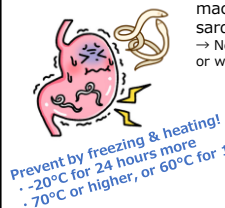
Onset

Approximately 1 to 5 hours after consumption

Symptoms

Vomiting, nausea, abdominal pain, diarrhea

Anisakis



Main Habitats

Seafood (mackerel, horse mackerel, saury, bonito, sardine, salmon, squid, etc.)
→ Not killed by soy sauce, vinegar, or wasabi!

Onset

Several hours to several days

Symptoms

Pain in the pit of the stomach, vomiting, nausea, hives

Histamine



Main Habitats

Red-fleshed fish and their processed products (tuna, marlin, bonito, mackerel, sardine, saury, yellowtail, horse mackerel, etc.) → **Beware of fish that have lost freshness!**

Onset

Immediately after eating to about 1 hour

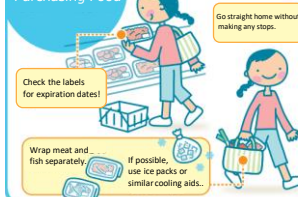
Symptoms

Facial flushing, hives, headache, fever, diarrhea

③ Home Edition: Food Poisoning Prevention

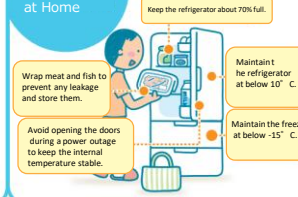
point 1

Purchasing Food



point 2

Storing Food at Home



point 3

Preparation



point 4

Cooking



point 5

Meals



point 6

Leftover Food



Bacteria that cause food poisoning thrive **most between 20° C and 40° C**, so it is dangerous to leave food at room temperature.

For lunch :

- ① **Homemade bento**
- ② **People who buy lunch and leave it in their bag need to be careful!**

- Use a refrigerator or ice packs.
- **Make sure to eat it soon or find other ways to keep it safe!**



④ Workplace Edition: Preventing Food Poisoning

Reference: Government Public Relations Online Useful Information for Daily Life "Three Principles and Six Points for Preventing Food Poisoning"

① Encourage hand washing

- Post the correct handwashing method on the wall for everyone to see.
- Ensure hand soap is always available.
- Provide tissues at the handwashing station.



② Enforce Thorough Disinfection

- Prepare alcohol and disinfectant wipes for each floor.
- Disinfect shared items such as PC keyboards, desks, and smartphones before and after use.
- Assign someone to wipe down frequently touched surfaces, such as doorknobs, upon arriving and leaving the office.

③ Proper Handling of vomituous material

<When cleaning up vomit or other contaminants on the floor, etc.>

① Wear disposable aprons, masks, and gloves.

② Gently wipe up the mess with paper towels to avoid spreading.

③ After wiping, use paper towels soaked in sodium hypochlorite (such as kitchen bleach) to clean the area. Note that sodium hypochlorite can corrode metal, causing rust. Ensure adequate ventilation when using it.

④ Place the used paper towels in a plastic bag, seal it tightly, and dispose of it properly.

Note ② Three Principles of Prevention

① **Do not contaminate :**

Wash hands, clean and disinfect cooking utensils

② **Do not allow bacteria to multiply :**

Store food at appropriate temperatures after cooking, eat promptly

③ **Eliminate bacteria :** Cook thoroughly, store by cooling

Food poisoning caused by the bacteria highlighted in pink frequently occurs during the summer months (June to August)!



⑤ If You Suspect Food Poisoning !

① Stay Hydrated!

※ **Avoid drinking large amounts** at once!
Drinking too much at once can worsen vomiting and lead to severe dehydration, so drink small amounts gradually.

② Do Not Take Anti-diarrheal, Pain Relievers, or Fever Reducers on Your Own!

※ Some medications can make it harder for your body to expel bacteria or viruses, potentially prolonging the illness.

③ Lie on Your Side

Lying on your back can cause vomit to enter your airway, leading to a risk of choking, which is dangerous.

