

Preparation for emergency

11 Do you know first-aid for injuries caused by chemicals?

Treatment for the skin

Quickly rinse the affected area with a large amount of clean, cold water for more than 15 minutes. For affected areas that generate heat when water is used due to such chemical substances as concentrated sulfuric acid, first use something dry towel, filter paper, or tissue paper to quickly wipe away the majority of the chemical substance. Then rinse the affected area with a large amount of water all at once.

Acids and alkalis will often remain in the crevices of the skin or between hairs in the skin, so you should neutralize acids by using weak alkali water solution and neutralize alkalis by using a 2~3% acetic acid solution or lemon juice.

In the case of carbolic acid, you should neutralize the affected area with a weak alkali, after having rinsed it with alcohol. Then consult a skin doctor for treatments to prevent skin ulcers.

Treatment for the eyes

Rinse the affected area with a large amount of water as soon as possible. Especially alkali can erode your eyeballs, so you should consult a doctor after having rinsed the affected area well.

Eyewash fountain is effective for eye washing. But if you do not have it, you should repeatedly stick your head in a lavatory sink that is overflowing with clean water. At first you should close your eyes, then after a little while you should open and close your eyes during you stick your head in the water. You can use gentle water flow from a water tap that is connected to a rubber tube. However, be careful of a fast water flow that can put pressure on things such as acid on your face and also cause the surface of eroded skin to peel off.

Do not apply neutralizer agent to your eyes. After rinsing out your eyes, you should apply thick gauzes to them, keep them in place using eye patches, and then get a doctor treatment as soon as possible.

Treatment for respiratory organs

Remove the person to a clean air place quickly. Remove contaminated clothes, wash skin, and keep the person warm and inactive. You need to provide oxygen inhalation or rescue breathing in a critical condition. Concentrated exposure to acid mist and chlorine gas can cause damage to not only the mucous membranes of organs but also the alveoli, and cause bronchitis, pneumonia, and accumulation of fluid in the lungs (by blood plasma penetrating the lungs), which cause difficulty in breathing in turn in turn. It is necessary to get medical treatment by a doctor since these chemicals can also cause shock.

Treatment for accidental ingestion

There is a method to induce vomiting with a large amount of water or milk. However, in case of accidental ingestion of strong acid, strong alkali, organic solvents, petroleum products, and volatile substance do not try to force the person to vomit. Drinking milk and raw egg to normalized pH balance of the digestive tract is effective for acid and alkali. Since there is a chance of death in only a few minutes time due to damage done to your stomach or esophagus, getting treatment is a race against time. If the person is unconscious, you need to call an ambulance right away. Be sure to keep the person warm and inactive and to look out for shock or respiratory paralysis.