

## Preparation for emergency

### 15 Do you know how to do lifesaving first-aid treatment?

- 1 Everyone should receive effective training in lifesaving first-aid treatment.

If we encounter an accident suddenly right in front of us, how should we do?

If we do not provide appropriate first-aid treatment, the victim will lose the chance to survive.

For example, in the case of cardio-respiratory arrest, the more cardiopulmonary resuscitation is delay, the more lifesaving rate of the victim goes down.

- 2 Triage when there are many victims.

Triage means "To screen injured people".

When there are many victims at the same time, it is impossible for a limited number of rescuers to treat all of them at once.

Therefore, it is important to "Save as many victims as possible, not all of them" in case of disaster.

When there are many victims, the first priority is to help victims who can be saved if first-aid is started within 30 minutes (such as asphyxiation and in shock).

- 3 Check victim's consciousness.

Vital signs are the evidence of life.

If the victim's vital sign is abnormal, it is essential to provide first-aid treatment to him/her.

The most important vital signs are consciousness, breathing, and a pulse.

It's very difficult for ordinary people to check whether the person is breathing or not, only medical experts can judge for a pulse.

Thus, if the victim has no conscious and his/her breathe cannot be confirmed within 10 seconds, you diagnose as cardiopulmonary arrest and need to provide cardiopulmonary resuscitation instantly.

- 4 Lifesaving first-aid treatment

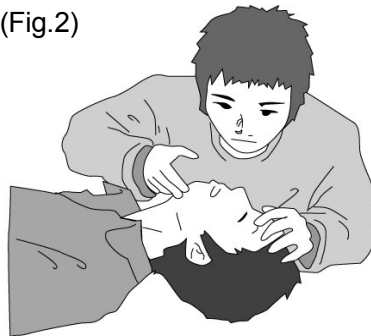
When an accident occurs, lifesaving first-aid treatment proceeds in the following order: understand the situation at the accident site and to secure safety, check the vital signs of a person, to ask for help and call rescue (dial 119), provide cardiopulmonary resuscitation, and stop the bleeding in the case of massive bleeding.

Cardiopulmonary resuscitation is often provided by just one person.

Therefore, we must train ourselves to be able to provide cardiopulmonary resuscitation by ourselves.

## How to provide cardiopulmonary resuscitation alone

- (1) When you find collapsed person (injured person), talk to the person.
- (2) If the person is not conscious, dial 119 to report and call for help.  
Ask others to bring an AED. (If there is nobody, do it yourself.) to bring an AED.
- (3) Perform chest compressions.
  - ① The location of performing chest compression is above the breast bone, right between the nipples (the middle of the chest), which is only as a guide.  
Place one hand on the part of the person.  
Place your other hand on it.  
Compress with your fingers away from chest wall of the person.  
Position: Lock your elbows, straighten your forearm and upper arm, and compress with your weight on the one side.
  - ② Compress speed: at least 100 times per minute.
  - ③ Compress strength: press down to the chest with enough force to move the breastbone down at least 5 cm. Allow the chest to completely recoil after each compression.
  - ④ After 30 chest compressions, provide two rescue breathings. (If it is difficult to provide a rescue breathing, it is allowed to keep performing chest compressions.)
  - ⑤ Continue the cycles of 30 chest compressions and two rescue breathings until an AED or rescuers arrive.
- (4) Rescue breathings are done as follows:
  - ① Open the airway by lifting the person's chin upwards. (Fig.1)
  - ② Give two rescue breathings. (Fig.2)



Lightly press the forehead with one hand and lift the end of the person's chin with the forefinger and middle finger of the other hand.

Fig. 1 Chin-lift method



Hold the person's nose with your thumb and forefinger of the hand placed on the forehead, often inhale deeply, and cover the patient's mouth with your own.

Then breathe twice into the person with checking if the patient's chest has expanded.

Fig. 2 Mouth-to mouth respiration method