



# First Aid Manual



现场急救手册

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兰州大学出版社  
LANZHOU UNIVERSITY PRESS

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# Preface

## HOW TO USE THE *FIRST AID MANUAL*

It is important to complete this information as soon as you receive the binder as you will need to have this information ready in an emergency situation.

There are three parts in the manual, the first part is preface, the second part is the basic knowledge and skills of the first aid, the last part is the first aid guidelines for schools.

A flow chart format is used to guide you easily through all symptoms and management steps from beginning to ending.

Take some time to familiarize yourself with the Emergency Procedures for an Injury or Illness section. These procedures give a general overview of the recommended steps in an emergency situation and the safeguards that should be taken.

Have someone contact the 120 system as soon as possible after it is known that assistance is needed. Delay in accessing the Emergency Medical (120) System can result in worsening of a person's condition and may lead to additional injury.

## FIRST AID PROCEDURES FOR INJURY AND ILLNESS

1. Remain calm and assess the situation. Be sure the situation is safe for you to approach. The following dangers will require caution: live electrical wires, gas leaks, chemical exposure, building damage, unstable structures, fire or smoke, traffic or violence.

2. A responsible adult should stay at the scene and give help until the person designated to handle emergencies arrives. Under life and death circumstances, 120 should be called without delay regardless if the designated emergency person is present or not. If there has been a crime, attempt to minimize disturbance of the scene to preserve evidence.

3. Notify the responsible nurse or administrator designated to handle emergencies. This

person will take charge of the emergency.

4. Do NOT give medications unless there has been prior written approval by the person's parent or legal guardian and doctor.

5. Do NOT move a severely injured or ill person unless absolutely necessary for immediate safety. If moving is necessary to prevent further injury, follow the "NECK AND BACK PAIN" guideline.

6. Call Emergency Medical Services (EMS 120), if appropriate, or arrange for transportation of the ill or injured person, if necessary. Provide EMS personnel with copies of physician/parents' signed record of medical instructions for emergencies.

7. The responsible school nurse, administrator, or a designated employee should notify the parent/legal guardian of the emergency as soon as possible to determine the appropriate course of action.

8. If the parent/legal guardian cannot be reached, notify a parent/legal guardian substitute and call either the physician or the hospital designated on the Emergency Information Card, so they will know to expect the injured or ill person.

9. Each person should have an emergency information record (i.e., emergency card) on file that provides essential contact information, medical conditions, medications and an emergency care plan if appropriate.

10. Fill out a report for all injuries and illnesses requiring above procedures if indicated by school policy.

## **WHEN TO CALL EMERGENCY MEDICAL SERVICES SYSTEM(EMS 120)**

Further help is available from a range of sources. If a casualty's condition is serious, use your mobile phone to call for help, and give much details as much as possible, use the hands-free facility if you need to attend to the casualty at the same time. Stay with the casualty once the call has been made.

### **Call EMS if:**

- 1.The person is not breathing.
- 2.The person is having difficulty breathing, shortness of breath or is choking.
- 3.The person has no pulse.
- 4.The person is unconscious, semi-conscious or unusually confused.
- 5.The person has bleeding that won't stop.
- 6.The person is coughing up or vomiting blood.
- 7.The person has chest pain or pressure persisting more than 3-5 minutes, or has chest

pain that goes away and comes back.

8.The person has been poisoned or taken an overdose.

9.The person has a seizure for the first time, a seizure that lasts more than 5 minutes, multiple seizures, or has a seizure and is diabetic.

10.The person has injuries to the head, neck or back.

11.The person has sudden, severe pain anywhere in the body.

12.The person has an open wound over a suspected fracture or where bone or muscle is exposed.

13.The person's condition is limb - threatening [for example: lack of pulse, feeling, or normal color on injured limb (arm or leg); amputation; severe eye injury; or other injuries that may leave the person permanently disabled unless he/she receives immediate care].

14.Moving the person could cause further injury.

15. The person needs the skills or equipment of paramedics or emergency medical technicians.

16.Distance or traffic conditions would cause a delay in getting the person to the hospital.

If any of the above conditions exist, or if you are not sure, it is best to call EMS. Stay on the telephone until the emergency services clear the line. Maybe you will be asked a number of questions and be given information about what to do for the casualty while you wait.

## **PROTECTION FROM INFECTION**

When you give first aid, it is important to protect yourself and the casualty from infection as well as injury. To reduce the spread of infectious diseases (diseases that can be spread from one person to another), it is important to follow Universal Precautions.

Universal precautions are a set of Manual that assume that all blood and certain other body fluids are potentially infectious. It is important to follow universal precautions when providing care to any person, whether or not the person is known to be infections.

### **1.The list describes universal precautions**

(1) Wash hands thoroughly with warm running water and a mild, preferably liquid, soap for at least 15 seconds (be sure to scrub between fingers, under fingernails, and around the tops and palms of hands):

- ①before and after physical contact with any person (even if gloves have been worn);
- ②before and after eating or handling food;
- ③after contact with a cleaning agent;
- ④after using the restroom;

⑤after providing any first-aid.

(2)Wear disposable gloves when in contact with blood and other body fluids.

(3) Wear protective eyewear when body fluids may come in contact with eyes (e. g., squirting blood).

(4)Wipe -up any blood or body fluid spills as soon as possible (wear disposable gloves). Double-bag the trash in plastic bags , or place in a Ziploc bag and dispose of immediately. Clean the area with an approved disinfectant or a bleach solution (one part liquid bleach to 10 parts water).

(5) Send all soiled clothing (i. e., clothing with blood, feces or vomit) home with the person in a double-bagged plastic bag.

(6)Do not eat, or touch your mouth or eyes, while giving any first aid.

(7)Do not breathe, cough or sneeze over a wound.

## **2.Manual**

(1)Remind people to wash hands thoroughly after coming in contact with any blood or body fluids.

(2)Remind people to avoid contact with another person 's blood or body fluid.

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# Part 1

## **The Basic Knowledge and Skills of the First Aid**



# THE FIRST AID

The first aid is the initial emergency care or treatment given to an ill or injured person before regular medical aid can be obtained. The person who provides this help is a first aider. At any time, you may find yourself in situation where someone has had an accident or is suffering from a sudden illness and needs help until a qualified health care professional, such as a doctor, registered nurse or ambulance officer arrives.

## 1. What are the aims of first aid?

First aid refers to the action taken in response to someone who is injured or taken ill.

The aims of first aid are:

- ① promote a safe environment;
- ② preserve life;
- ③ prevent injury or illness from becoming worse;
- ④ help promote recovery;
- ⑤ provide comfort to the ill or injured.

## 2. What should a first aider do?

A first aider is a person who takes this action while taking care to keep everyone involved safe and to cause no further harm while doing so.

A first aider should:

- ① assess the situation quickly and calmly;
- ② protect yourself and any casualties from danger, never put yourself at risk;
- ③ prevent cross infection between yourself and the casualty as far as possible;
- ④ assess the casualty: identify the injury or nature of illness affecting a casualty as far as possible;
- ⑤ manage the casualty promptly and appropriately: give early treatment, and treat the casualties with the most serious (life-threatening) conditions first;
- ⑥ give further help if necessary, call 120 for emergency help;
- ⑦ stay with the casualty and provide comfort until able to hand over to a health care professional.

### 3. Other first aiders

The first aider who arrives first at the scene of an incident takes charge and stays in charge until handing over control. Any other first aider who arrives should offer to help the original first aider, without trying to take over control. If you feel another first aider at the scene is more qualified to handle the situation, ask that person to take control. However, the most qualified person does not need to be in control, especially if another first aider already has matters well in hand.

### 4. Medical aid

Medical aid is treatment by a health care professional — doctor, registered nurse or ambulance officer. Medical aid takes over from first aid when the health professional arrives at the scene of an incident. The first aider may be required to remain and assist if requested by the health care professional.

### 5. Getting medical help for an unconscious casualty

It is vital to get help as quickly as possible. If you are the first aider, you have to decide whether to start resuscitation or go for help first through assess the casualty (See table 1).

**Table 1 Assess the casualty**

One first aider		More than one first aider
Unconscious and breathing	Unconscious and not breathing (see note)	Start resuscitation if required
Place in recovery position	Give resuscitation for 1 minute	
Call 120 for an ambulance	Place in recovery position	Second first aider call 120 for an ambulance
	Call 120 for an ambulance	
<p><b>Note:</b> If a non-breathing casualty is an adult, go for help immediately unless the casualty is obviously injured, or it is a drowning incident; if the casualty is an infant or child, give one minute of resuscitation and take them with you when you go for help; continue resuscitation on the way.</p>		

## THE EMERGENCY SITUATION

In an emergency, your involvement as a trained first aider may be crucial. Sometimes, bystanders are reluctant to act at an emergency because they may be unsure of what to do. Therefore, the attitude of the first aider is very important in ensuring that time is not lost in getting emergency care to the casualty and in administering the necessary first aid (See table2).

**Table 2 Do something to help**

Ensure safety of yourself, bystanders and the casualty	Organize bystanders to
Be alert to possible dangers call 120 for an ambulance	Call 120 for an ambulance
Communicate effectively to calm and reassure the casualty	Ensure the safety of the accident scene
Gather information from the casualty, bystanders and anyone else who can help	Redirect traffic or warn oncoming traffic if a road accident has occurred
Provide necessary information to emergency personnel	Comfort the casualty
Help obtain necessary supplies	
<b>Note:</b> If using a mobile phone, use the number 120 to call for help.	

The calm, controlled manner of a confident first aider may be all it takes to give confidence to others to ensure that the emergency is handled effectively, efficiently and speedily.

Having an emergency action plan will mean that any initial confusion you may feel can be overcome. It will help ensure that you:

- ① remain calm and don't panic;
- ② are aware of and can respond to the safety needs of the emergency scene;
- ③ are able to assess which the casualty's needs take first aid priority;
- ④ deal with any injuries in order of severity and how life-threatening they are;
- ⑤ know when and how to move a casualty;
- ⑥ gather the information which will be needed by emergency services.

### 1. Safety at the scene

The emergency scene must be made safe for everyone — yourself, bystanders and the casualty. You will need to determine if:

- ①there is any continuing danger(e.g. a fallen powerline) ;
- ②anyone's life is in immediate danger (e.g. from a fire or flammable materials) ;
- ③leave dangerous situations for emergency personnel to deal with as they have the training and equipment to do so.

However, after assessing the situation, remove the danger or prevent new dangers whenever possible. For example, if a child has received an electric shock at home, it should be possible to turn off the electricity immediately at the power point or at the main switchboard.

At the scene of a car accident, you can position other cars with their hazard lights flashing to warn oncoming traffic of the danger. At night it is also recommended that headlights are switched on to illuminate the scene.

If at any time you suspect the scene is unsafe, it is better to wait and watch until emergency personnel arrive than to lace yourself and others in danger.

## **2. The casualty**

You may feel uncertain about touching someone who is a stranger, who is of a different age group, race, or sex, or is from your workplace.

Your ability to deal with the emergency and perhaps save the person's life will depend on your ability to put aside these concerns and deal with the emergency in the best way you can.

### **(1)Casualty behavior**

A casualty's behavior may also cause you to be hesitant about giving first aid. The casualty may be acting strangely or be uncooperative. Sometimes a casualty may act in an offensive manner as a result of the injury or illness, or because of stress or the influence of alcohol or other drugs. Attempt to establish a rapport with the casualty by introducing yourself and asking the casualty's name.

If the casualty's behavior prevents you from giving help, there are still things you can do:

- ①make sure someone has called the appropriate emergency services ;
- ②manage bystanders ;
- ③try to reassure and calm the casualty.

If at any time the casualty's behavior poses a threat to you, withdraw from the scene. If necessary, monitor from a safe distance and make sure other bystanders are safe.

### **(2)Disease transmission**

An awareness of disease transmission is extremely important, especially in relation to hepatitis and HIV/AIDS. The actual risk of transmission in first aid is extremely low. Nevertheless, the safety procedures in any emergency situation involve taking general steps to protect against infection and reduce the risk.

By taking precautions — such as wearing disposable gloves — to prevent direct contact with bodily fluids while giving first aid, and by washing thoroughly straight after giving first aid, you are observing “best practice” health care. If you do come into contact with a casualty's