HANDBOOK OF FIRST AID

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FIRST STEPS IN FIRST AID

1. When someone is seriously injured, think firstly of the letters ABC:

A is for air Passage. Make sure the victim's throat and mouth are clear of obstruction by the tongue, secretions or some foreign body.

B is for Breathing. Is the person breathing? If not, carry out Artificial Respiration *(see page 6).*

C is for Circulation. Check the patient's wrist pulse if no pulse is felt, carry out External Heart Compression – EHC *(see page 8).* While doing so look for bleeding.

2. Act fast if the person is bleeding severely (*see page 11*), or if he/she has swallowed poison (*see page 32*) or if their heart or breathing has stopped. Every second counts.

3. Remember that it is vitally important not to move someone with suspected serious injuries of the neck or back, unless it is necessary to save him/her from further danger (see page 14).

4. Because "Life-and-Death" emergencies are rare, you can usually start first-aid by keeping the patient lying down and quiet. If he/she has vomited – and if there is no danger that his/her neck is broken (see page 14) – turn the head to one side to prevent choking. Make sure he/she is kept warm, but don't overheat them or apply external heat.

5. Examine the victim gently. Cut clothing, if necessary, to avoid abrupt movement or added pain. Don't pull clothing away from burns (see major burns on page 16).

6. Get someone to call an ambulance to the scene while you apply first-aid. The doctor should be told the nature of the emergency and asked what should be done pending his arrival, or the arrival of the ambulance.

7. Reassure the victim, and try to remain calm yourself. Your calmness can allay his/her fear and panic, and convince them that everything is under control.

8. Never try to force drinks on an unconscious or semiconscious person; liquids may enter his/her windpipe and cause suffocation. Don't try to arouse an unconscious person by slapping or shaking.

ARTIFICIAL RESPIRATION AND EXTERNAL HEART COMPRESSION (EHC)

If breathing appears to have stopped, first quickly look into the mouth and throat and remove any obstructing substance, solid or liquid. Watch the patient's chest, and test the air in the front of his nose and mouth with your fingers for any signs of breath. Feel the wrist for a pulse, to find out whether the heart is still beating. If you can feel a pulse, and breathing has stopped as a result of drowning, electric shock, fumes or other cause, apply artificial respiration 'mouth-to-mouth breathing' without delay. In electric shock, make sure contact with current is broken before you touch the patient (see page 25). If gas or smoke is present, move the victim to fresh air. If you cannot feel a pulse, assume that the heart has stopped. You and a helper – or you alone, if necessary – must now apply External Heart Compression (EHC). This entails intermittent mouth-to-mouth breathing plus closed heart massage. EHC is most useful after heart attack, less so after an accident.

ARTIFICIAL RESPIRATION

1. Lay the victim on their back. Wipe away any foreign matter out of his/her mouth with your fingers. Place one hand under the neck to arch it upwards, and with the other hand partially tilt the head back.

2. Pull the chin upwards and open the mouth.

3. Place your mouth firmly over the victim's open mouth, pinch the nostrils shut, and blow hard enough to make the chest rise. If the victim is a small child, place your mouth over the nose and mouth when blowing.

4. Remove your mouth and listen for the sound of exhaled air. Repeat the blowing effect. If there is no air exchange, check the victim's head and jaw position and see if the tongue or something else is blocking the air passage. Clean the mouth and try again.



5. If you still get no air exchange, turn the victim on his side and slap him sharply several times between the shoulder blades in order to dislodge any foreign matter from the throat. If the victim is a child, hang him/her head downwards over your arm or lap *(see page 20)* and slap sharply between the shoulder blades. Wipe the mouth clear.

6. Resume mouth-to-mouth breathing. For adults, blow one vigorous breath every five seconds. For small children, blow shallow breaths every three seconds. (If you prefer, place a handkerchief over the victim's mouth or nose and blow through it.) Don't give up until the victim begins to breath. Many people have been revived after hours of artificial respiration.

7. Call a doctor or ambulance as soon as possible. Place blankets or coats over and, if possible, under the victim for warmth. When he/she revives, don't let them get on their feet for at least an hour.

EXTERNAL HEART COMPRESSION (EHC)

If the patient is not breathing, and you can feel no pulse, make certain his/her air passage is not obstructed (see pages 6-7) and then apply EHC.

First stretch the victim flat on his/her back on the ground or floor. Kneel at their side and with your fist strike the breastbone sharply. This may start the heart beating. If it does not, feel the victim's chest to locate the lower tip of the breastbone. Put one finger of your left hand on the cartilage. Move the heel of the right hand (never use the palm) against the finger. Place the left hand on top of the right.

Now, with a quick firm thrust, push down. Use sufficient force to press the lower one third of the breastbone down one and a half inches, letting your back and body do the work.



Now lift your weight. Repeat this rhythmic compression once per second: press... release...press...release. Each time you bear down, you squeeze the victim's heart, forcing blood out to the body, literally substituting for the heartbeat.

If you are alone with the victim, stop after each 15 compressions and give two deep breaths mouth-to-mouth, continuing this 15-to-2 rhythm until help comes. If someone can assist you, get them to kneel at the victim's head and give mouth-to-mouth respiration at the rate of 12 times a minute – one breath for each five compressions of the heart that you perform. Continue until the victim revives – pupils constrict, colour improves, breathing begins, pulse returns. A person can be kept alive this way for at least an hour.

CAUTION

EHC requires skill, training and practice. Even when done correctly, it may break ribs. When done incorrectly, a broken breastbone or rib can puncture the liver or a lung. To prepare for emergency, at least one member of the family should seek proper training.

Instruction can be obtained at the local branch of your first-aid association. Ask your doctor or hospital where to go in your area. But in a crisis, even if you aren't trained, give EHC; without it, anyone whose heart has stopped will die.

BITES – ANIMAL

Wash the wound immediately with clean water to flush out the animal's saliva. Cover with a dressing or clean cloth. Consult a doctor immediately. He will treat the wound more effectively and decide what measures are necessary to guard against tetanus (lock-jaw) and other infections.

If you are in a country where rabies is present, it is absolutely vital to seek prompt medical attention.

BITES - ANT, FLEA, MOSQUITO, GNAT

Wash the affected parts soap and water. To relieve itching, use calamine lotion antihistamine cream. If there is swelling, apply in a cloth saturated with cold water. Consult a doctor if complications develop. This is particularly important if you are in tropical or sub-tropical countries where blood-sucking insects like mosquitoes and gnats carry diseases. **Stings:** (see page 35).

BITES – SNAKE

Britain's only poisonous snake is the adder or viper – recognisable by the V-shaped mark on it's head and diamond shapes along it's back. A bite from one is usually only dangerous for the very young, the old or ailing, and panic and shock are often more of a problem than the venom.

Make every effort to get the victim to stay calm, to lie

down and keep still. This should slow circulation and the possible spread of venom. Do not suck the bite; cover it with a dry dressing, and support and immobilise the affected part. Get medical help as soon as possible, as tetanus is a far greater risk than poisoning by venom, doctors often give anti-tetanus injections after snake bites.

BLEEDING – SEVERE

1. Make sure the victim is lying down, to prevent fainting. To stop bleeding, press a bulky sterile gauze dressing (or the cleanest cloth item at



hand) firmly over the wound. If the dressing becomes saturated with blood, lay a fresh dressing directly over it and continue pressure. If direct pressure doesn't work, often pressure both above and below a limb wound will stop the bleeding. In the rare event of bleeding from the brain, or apparently from the eyeball, apply no direct pressure, but bind a bulky pad in place.

2. If bleeding from an arm or leg cannot be stopped by direct pressure over the wound, try shutting of circulation in the artery supplying the blood by pressing firmly against it with your hand or fingers. There are four points (see the illustration on page 12) where arterial pressure is practicable for first-aiders. But don't try arterial pressure for wounds of the head, neck or trunk.

3. When the bleeding stops, bandage the dressings firmly in place – but not so tightly that you can't feel the

pulse below or beyond the wound. Call the doctor and leave the cleaning and the treatment of the wound to him. Watch carefully for signs of shock (see page 34).

To prevent infection, avoid, if possible, touching any wound with an unsterilized covering or your unscrubbed hands. But in an emergency you



may have to. The average adult has ten to twelve pints of blood; loss of more than two or three pints can be serious. So you may have to act fast and use whatever dressing is available to you.

If you can estimate how much blood has been lost, it may help the doctor in treating the patient. Remember, however that even an ounce of blood can discolour large numbers of bandages.

BLISTERS

The unbroken skin covering a blister affords the best protection against infection. Do not interfere with it. If a blister has broken, wash round it gently with soap and water, and cover with a sterile dressing.

BOILS AND STYES

Don't squeeze or attempt to puncture boils; this may only drive the infection deeper. When the boil breaks, don't squeeze it. Wipe the pus away with a sterile pad, wet with saline solution and cover with a sterile dressing. Styes are small boils that form on the eyelids. They respond to the same procedure. If styes or boils are numerous or painful, see your doctor. Always consult him about boils on or near the nose.

Breathing Stopped: See Artificial Respiration (page 6) EHC (page 8)

BROKEN BONES

Keep the patient warm and immobile, and treat for shock (see page 34) if necessary. Apply a cold compress (cloth soaked in water and wrung out) to the painful area, and support it as comfortably as possible. If a broken bone protrudes through the skin and there is severe bleeding, stop the bleeding (see page 11), but do not attempt to push the bone back into place. Make no attempt to clean the wound. Call an ambulance, or get a doctor.

Every effort should be made to avoid moving an accident victim until skilled help arrives. If it is essential to move the person, to prevent further injury, keep the broken bones immobile. Emergency splints can be made from newspapers, magazines, broomsticks or boards, but they are difficult to apply comfortably or effectively. A better way is for one person to take the injured part in a firm but steady grasp and to see that it moves in one piece with the rest of the victim.

When an accident victim must be moved from a car, immobilize a fractured leg first, if possible. Using bandages, belts, ties, or strips of clothing, tie the injured leg to the uninjured leg above and below the fracture site, and keep it as immobile as possible while moving the victim (see pages 17-18).

BROKEN NECK OR BACK

If the victim cannot move his/her head, hands and arms readily, or if there is pain, tingling or numbness round his/her shoulders and neck, the neck may be broken.

If he/she can move the arms and hands but not the feet or toes, or has tingling or numbress in his/her toes, or has tingling or numbress in the legs, or pain when he/she tries to move their back, the back maybe broken.

Loosen clothing round the victim's neck and waist. Cover them and summon a doctor or ambulance. Don't move the victim or allow them to try to move. Don't lift the head to give the victim water. The spinal cord extends down through bones of the neck and back, any movement may cause paralysis.

An unconscious person, particularly an accident victim, may have a broken neck or back. Move the patient only to save their life and take care of the breathing.

BRUISES – INCLUDING BLACK EYE

Place a cold compress (a small towel or large handkerchief soaked in cold water and wrung out) over the bruise. This should reduce both the pain and swelling. If more than a dull ache persists, take the patient to a doctor.

BURNS – CHEMICAL

Rinse the burned area copiously with cold water to dilute and remove the chemical. Then treat as you would a comparable heat burn *(see below).*

If an eye is burned by a chemical, especially an alkali such as caustic soda, rinse it gently but thoroughly with warm water. Cover with a gauze dressing or a clean cloth and consult a doctor at once.

BURNS – ELECTRICAL

No burn caused by contact with an electric current can be regarded lightly. However small, it may be very deep and should be treated as a major burn.

BURNS AND SCALDS – MAJOR

1. If clothing is on fire, smother the flames with a coat, blanket or rug.

2. Keep the victim lying down to lessen shock.

3. Cut clothing away from the burned area. If any cloth adheres to the burn don't pull it loose; leave it and cut gently round it.

4. If possible, scrub your hands to prevent contamination, cover the burn completely with a dressing or clean cloth. This helps to reduce pain and contamination. If dressings are not available, use freshly laundered sheets or towels. Don't apply burn ointments, oil or antiseptic of any sort, and don't attempt to change the dressings.

5. Summon a doctor or ambulance, or take the patient to the nearest hospital accident & emergency department.

6. If a large area of the body is burned, administer first-aid for shock (see page 34).

BURNS AND SCALDS – MINOR

Submerge the burned skin immediately in cold water or place it under a cold tap. On burns that cannot be immersed, apply ice wrapped in cloth; or apply cloths soaked in cold water, and change them constantly. Continue treatment until pain has gone. If there is no water available, apply a dressing, but no form of ointment, paste or powder, especially to burns severe enough to require medical treatment. Doctors have to scrape off such applications; this delays treatment and can be extremely painful. If the skin is blistered, cover the burn with sterile dressings. Don't break or drain blisters.

Caution: Even superficial burns or scolds may be dangerous if large areas are involved. Consult a doctor.

CAR ACCIDENTS

Nothing is likely to test your knowledge of first-aid more than accidents suffered on the road. Injuries may be severe; you may be a great distance from professional help. Keep a copy of this handbook of first-aid in your car, with adequate emergency equipment. You are recommended to carry the following:

1. At least six bandages and a supply of 10×10 cm (sterile dressings).

2. A blanket to keep the injured person covered and to move him/her (see pages 30-31).

3. A good torch, with fresh batteries.

4. Warning lights or a triangle to be placed in the road to warn other traffic.

In giving first-aid, note that moving the victim, making a hasty attempt to get him out of the car, may do untold harm, particularly if spinal injuries or leg fractures are involved.



Switch off the ignition in the victim's vehicle.

Give first-aid at once, inside the vehicle when possible, before attempting to move the injured person. Exceptions: (a) when the vehicle is on fire or about to burst into flames; (b) when petrol has been spilt and the fire hazard appears to be great; (c) when you are in a congested high-speed area (motorway) where there is danger of further accidents. Follow these rules when examining the patient:

1. Ensure that the victim is breathing and has a pulse (see pages 4-8).

- 2. Look for haemorrhage (see pages 11-12).
- 3. Examine the victim for injuries, particularly fractures.
- 4. Apply appropriate first-aid measures.

5. In case of fractures, wait for medical help. If the patient must be moved to get help, follow the suggested procedures for moving injured people (see pages 13 and 30).

CARBON-MONOXIDE POISONING

Carbon Monoxide is a colourless, odourless gas that kills without warning. A car engine left running in a closed garage can swiftly produce a lethal dose. The gas is also generated by wood, coal and charcoal fires and faulty oil burners. In poorly ventilated rooms, the hazard of poisoning is present.

Symptoms of carbon-monoxide poisoning are: headache, dizziness, weakness, difficult breathing, possible vomiting, followed by collapse and unconsciousness. Finger-nails, skin, lips may be pink or cherry red.

Get the victim into fresh air immediately, or open all windows and doors. Begin artificial respiration promptly (see *page 6*) if he/she is not breathing or breathing irregularly, and External Heart Compression (see page 8) if the heart has stopped. Keep the person lying quietly to minimize the oxygen consumption. Cover for warmth. Summon a doctor or ambulance. Be sure to state the nature of the trouble and specify the need for oxygen.

CHOKING

If violent coughing does not clear the blockage, a slap between the shoulder blades may help. If the victim is an infant, hold him/her by the ankles, letting the head hang straight down. Open the mouth, pull the tongue forward, let obstruction fall out. If the victim is an older child, hold him head-down over your arm or leg. Clear the throat quickly with your fingers and pull the tongue forward. (Use a handkerchief to get a grip). Place an adult on their side so that the head is lower than the trunk, or make the person lean over the back of a chair, head lower than trunk. Clear the throat with your fingers and pull the tongue forward. In all cases, infants or adults, begin artificial respiration if the victim has difficulty breathing after the obstruction is expelled.

If the object is not expelled from the throat, consult a doctor even though the symptoms subside. A foreign substance entering the lungs may cause serious infection.

CHOKING – WHILE EATING

If someone collapses while eating, they may be having a heart attack – or may be choking on a large piece of food (usually meat).

Ask if they can talk. If unable to talk, this means something is plugging the windpipe. They will not remain conscious for long. Act fast.

Place the victim on their side and give them several quick whacks between the shoulder blades. Open the mouth, stick your middle and index fingers down the throat and pull out the food obstructing the air passage. (Use a spoon to hold the tongue out of the way).

COLD – EXPOSURE, FROSTBITE

Exposure: Symptoms are: numbness, drowsiness, staggering, failing vision, slurred speech, confusion, unconsciousness. At the first sign of trouble, place the patient in the most sheltered place possible, and see that see that they are dry. Wrap them in blankets or a sleeping bag. Give them warm non-alcoholic drinks if they are conscious. Watch for stoppage of breathing; apply artificial respiration if necessary **(see page 6).** Summon a doctor or ambulance.

Frostbite: Just before frostbite occurs, the victim's skin may be flushed; but, as freezing progresses, the skin turns white or grey-yellow. There may or may not be pain. Do not rub the frozen part or apply snow. Cover the frozen area with a warm hand, clothing or blanket. Do not apply hotwater bottles or heating pads or expose the injured part to a fire; excessive heat increases tissue damage. The rest of the body, however, should be warmed, if possible by immersion in a warm bath. When the victim is warm, encourage them to exercise the affected parts.

CONVULSIONS

In convulsive attacks, the victim's body is jerked by uncontrollable spasms. The lips may turn blue, the eyes may roll upwards, the head thrown back. Assistance may be impracticable; often the best you can do is to try and prevent the victim injuring themselves or others. Don't try to restrain convulsive movement. Place the victim on the floor if possible, and turn the head to one side to allow saliva to drain. Move furniture so that they can't injure themselves. It may be possible to put a rolled handkerchief between the teeth, to avoid the victim biting their tongue. If they have fever, place cool, wet cloths on the forehead and sponge the body with cool water.

Convulsions usually only last a short time; when they subside, make the victim as comfortable as possible. If they are not used to convulsions, advise them to seek medical attention.

CUTS, SCRATCHES, ABRASIONS

1. To minimize the possibility of infection, wash your hands thoroughly before treating any wound. Clean the skin around the wound with soap and water. To avoid contamination, wash away from the wound, not towards it.

2. Remove obvious debris with fingers. If you need to use tweezers, boil them first for ten minutes, or sterilize them in the flame of several matches and wipe the carbon away with sterile gauze.

3. Cover the wound with a sterile dressing, or the cleanest cloth available, held in place by bandage or adhesive tape. If there is bleeding, use a bulky dressing.

4. Even for a small wound, seek medical advice about the need for immunization against tetanus.

5. Suspect infection, and seek medical advice at once if you notice: (a) a reddish hot painful area surrounding the wound; (b) red streaks radiating from the wound up the arm or leg; (c) tenderness in the groin or armpit.



DIABETIC COMA AND INSULIN REACTION

If someone becomes confused, incoherent or unconscious for no apparent reason, they may be a diabetic either having an insulin reaction or developing a diabetic coma. These conditions are treated differently.

Insulin Reaction: The result of too rapid a drop in the diabetic's blood sugar. Symptoms come on rapidly. The diabetic sweats profusely and is nervous; the pulse is rapid, the breathing shallow. The person may be hazy and faltering. If the person is conscious and can swallow, give them some

form of sugar – sweets, sugar, fruit juice or any sweet soft drink. If they cannot swallow, or if recovery is not prompt, summon a doctor or an ambulance. Meanwhile, keep the air passages clear.

Diabetic Coma: The symptoms come on gradually. The diabetic's skin becomes flushed and dry, the tongue is also dry, their behaviour drowsy, the breathing laboured; the breath develops a fruity odour like nail polish remover. *Diabetic Coma requires prompt medical attention and emergency hospital care* if life is to be saved. In this condition never give sugar; the system is already overloaded with it.

DISLOCATED JOINTS

Do not attempt to move the joint or to put it back in place. Provide comfortable support. If the dislocation is in a hand, arm, shoulder or jaw, and the patient can be moved safely, get them to hospital. If the patient has dislocated a lower limb joint, send for an ambulance or move them on a stretcher to an accident and emergency centre at a hospital.

DROWNING

Do not waste time trying to get water out of the victim's lungs. Start artificial respiration at once *(see page 6).* This can be done in shallow water or in a boat to save the time it would take to get the victim back to the shore.

Beware of the danger that the victim may vomit and draw this matter into the lungs. If the heart has stopped carry out EHC **(see page 8)**, on as firm a surface as is available.

EAR-ACHE

Proper treatment requires diagnosis of the underlying cause. Consult a doctor. A hot-water bottle or heating pad placed over the ear and the side of the head may be comforting, but nothing should be placed in the ear hole except on doctor's orders.

ELECTRIC SHOCK

Every second of contact with the source of electricity lessons the victim's chances of survival. Break the victim's contact with the source of current in the quickest safe way possible. Indoors, disconnect the plug of the offending appliance, or turn off the switch at the fuse box.



If you can't turn the current

off, remove the body from contact using dry non-conductive material – a dry, non-metallic pole, a dry rope or dry clothing

to push or pull the wire off the victim or the victim off the wire. Stand on a dry surface, and touch only dry, nonconductive materials. Don't touch the victim until contact with current has been broken. Then check if the victim is breathing and has a pulse.

If necessary, apply artificial respiration (see page 6) or EHC (see page 8). Send for medical assistance at once. If it is necessary to move the victim again, be sure the accident has not caused fractures or internal injuries. (See "Moving an Injured Person" on pages 30-31).

EYE – SOMETHING IN

Firstly, examine the eye by pulling down the lower lid and raising the upper lid. If the speck is visible on the lid, or the white of the eye, try to remove it by touching it lightly



with the moistened corner of a clean cloth. If the speck is on the coloured part of the eye, don't attempt to remove it. Place a bandage over the eye and see a doctor.

FAINTING

Fainting may be caused by fatigue, hunger, sudden emotional upset, or a poorly ventilated room. The patient's

breathing is usually weak, pulse feeble, face pale and the forehead covered in beads of perspiration. If the patient merely feels faint, get them to lie down, or sit them down with legs apart and push the head down between the knees to restore blood supply to the brain. If the patient is unconscious, place them in recovery position (below), with the head low.



Make certain that the air passage is clear and that they are breathing. Loosen tight clothing; apply cold cloths to the face; administer smelling salts. When revived, offer them a drink such as hot coffee or tea.

If the fainting lasts more than a minute or two, keep them covered warmly, call an ambulance or take them to hospital.

HEAD INJURY - FRACTURE; CONCUSSION

There is the possibility of head injury in any traffic accident, fall or violent incident.

Symptoms may include: victim dazed or unconscious;

bleeding from the mouth, nose or ears; pulse rapid but weak; pupils of eyes unequal in size; paralysis or stiffness of one or more extremities; headache or dizziness; double vision; vomiting; pallor. Or the victim may appear quite normal and have a momentary loss of consciousness or a lack of memory of the event causing the injury – only to lapse into unconsciousness later, or to develop other symptoms.

Even though the blow may not have brought unconsciousness, there is always danger that bleeding will occur and damage the brain. Lying quietly lessens the chance of this. If the patient is unconscious or suffocating, turn the head gently to the side so that blood or mucus can drain from the corner of the mouth. If the scalp is bleeding, place a dressing over the wound and bandage it into place. Keep the patient lying down until you get medical assistance.

HEART ATTACK

Common symptoms of heart attack are extreme shortness of breath, pain in the centre of the chest, sometimes radiating into the neck or arms, or occasionally pain in the upper abdomen. The patient is pale, may sweat and lose consciousness.

Call an ambulance and notify the patient's doctor. If the patient is having trouble breathing, do not force them to lie down, but help them to take the position most comfortable for them. Loosen tight clothing like belt or collar. Don't attempt to lift or carry them. Don't give them anything to drink. Remain calm, and try to reassure them. Rehearse in your mind the steps in EHC *(see page 8),* in case the patient loses his pulse and stops breathing.

HEATSTROKE – SUNSTROKE

Heatstroke: The victim is weak, irritable, dazed, nauseated. They stop sweating; the skin becomes hot and dry. Their temperature soars – perhaps to 41 degrees C. (105F) or more. The person may be unconscious. Cool them off as quickly as possible. Place them in a shaded place and pour cool water



over them – buckets of it. Or wrap the head in cold, wet towels the body in a cold wet sheet. Massage the legs upwards towards the heart. If conscious, give them cool drinks but no stimulants. Call an ambulance or get them to a hospital. **Sunstroke:** Mild symptoms (headache, extreme fatigue, dizziness, cold and clammy skin, perhaps fainting) can be treated by rest in a shaded area (or cool room) with cold towels on the patient's head. Three or four glasses of cold water, each containing half a teaspoonful of salt may be given, one every 15 minutes. Orange juice is also helpful.

HYPERVENTILATION

Hyperventilation is an expression of emotional upset and most often affects anxious, highly-strung people who unknowingly breathe too rapidly, while actually complaining that they cannot breathe properly. The symptoms – tingling and spasms of the fingers and toes and a peculiar numbness around the mouth – make the victim still more anxious, and cause still more hyperventilation results. The patient's colour and pulse remain good.

Not a dangerous condition, hyperventilation can usually be helped by reassurance and this simple measure: get the person to breathe slowly for several minutes into a paper bag held tightly over the mouth and nose. If this doesn't work, take the patient to a hospital.

Mouth-to-mouth Breathing: (See Artificial Respiration on page 6)

MOVING AN INJURED PERSON

Don't attempt to move an injured person before assessing the nature of their injuries. If they involve neck or back, severe damage can be done by moving them. Get a doctor or ambulance as soon as possible; meanwhile, cover the patient with blankets or coats where he lies. If however he must be pulled to safety, move the body lengthways, not sideways. If possible, slip a blanket or long coat under them to transport them on that. If they must be lifted, support each part of the body so that you lift it in a straight line.



Until you are certain that there is no neck or back injury don't bundle a seriously injured person into a car and speed off to the nearest hospital. If a victim must be transported, move them in a reclining or semi-reclining position. Improvise a stretcher, if possible, from a door or wide board. Lacking either of these, make a stretcher out blankets and poles, or out of buttoned jackets with the sleeves turned inwards and the poles run through the sleeves. Use a chair (carried by two or more people) to bring an injured person down narrow or winding stairs. When reporting an accident, inform the medics of the nature of the accident and injuries.

NOSE BLEED

Make the patient sit down quietly with the head forward. Pinch the nostrils together for ten minutes. This may cause a clot to form over the ruptured blood vessels. Do not pack anything into the nostrils. See that the patient keeps the mouth open, but does not spit, sniff or swallow. If bleeding continues, consult a doctor.

NOSE – SOMETHING IN

If the object cannot be withdrawn easily, consult a doctor at once. Don't permit violent nose blowing. Don't probe the nose yourself, you may push the object deeper or injure the nostril.

POISONING, BY MOUTH

If a victim is conscious:

1. Ask what they have taken; look round for bottles, pills, berries, or for the smell of paraffin, petrol or cleaning fluids. Contact a doctor. Tell him what the suspected poison is and follow his instructions.

2. If you can't get medical advice at once, dilute the poison in the stomach, give the victim milk or water to drink.

3. If the mouth or lips are burned by a strong acid or alkali, do not try to make the victim sick. Instead, give them milk or water to drink.

4. If there is no sign of burning around the mouth, try to make the victim sick. Give them a tumbler of water containing 2 tablespoons of salt. If they are still not sick, stop the treatment. Do not repeat the dose.

5. Keep any suspect poison, and anything that is vomited, and label them clearly for the doctor.

6. If you cannot contact a doctor, get the victim to a hospital.

If the victim is unconscious:

1. Place the victim in the recovery position (see page 27).

2. Get an ambulance.

3. Do not try to make the victim drink.

4. Do not try to make the victim sick.

5. If breathing or heartbeat ceases, apply artificial respiration (see page 6) or External Heart Compression (see page 8).

PUNCTURE WOUNDS

1. Punctures caused by nails, wires or any other penetrating objects tend to "seal in" contamination. Gently squeeze or "milk" the wound, or place it under a warm tap, to encourage bleeding.

2. Wash your hands, then clean skin surrounding the wound with soap and water.

3. Cover the wound loosely with a sterile dressing.

4. Get the patient to a doctor; even a tiny prick can bring complications, especially on hands or fingers.

SHOCK - HOW TO TREAT IT

In any serious injury (such as large wound, fracture, major burn), always expect shock, and act to lessen it.

The symptoms: the skin is pale, cold and clammy; the pulse is rapid; breathing is shallow, rapid or irregular; the injured person is frightened, restless or apprehensive.

1. If the patient is conscious, make them comfortable. This will mean lying down, but if the patient has pain and difficulty with breathing, as in chest injury for instance, raise the head and shoulders.

2. If the patient is unconscious place them in the recovery position (see page 27).

3. Loosen the patient's clothing.

4. Summon a doctor or get the patient to hospital.

SPLINTERS

Wash your hands and the skin around the splinter with soap and water. Sterilize a needle and tweezers by boiling them for ten minutes in water or by heating them in the flame of a match and wiping off the carbon with sterile gauze. Loosen the skin round the splinter with the needle, and remove splinter with the tweezers. Encourage slight bleeding by squeezing the wound gently, or putting in a stream of warm water. Apply a dry dressing. If the splinter breaks or is lodged deeply, see a doctor.

SPRAINS

Elevate the injured joint to a comfortable position. Apply a cold compress or firm bandage over the sprain to reduce pain and swelling. Sprains should be examined by a doctor for possible fracture.

STINGS – BEE, WASP, HORNET

Remove the whole sting carefully with tweezers. Run cold water over and around the site to relieve pain and slow absorption of the venom, apply a cold compress or ice pack around it. Apply antihistamine cream or calamine lotion to relieve itching and pain. Some people react violently to stings and need skilled treatment urgently. Breathing difficulties can occur with swelling of the face, lips or mouth. Put the victim in the recovery position *(see page 27)* and rush them to hospital.

STINGS – JELLYFISH, NETTLE

Apply antihistamine cream or calamine lotion to relieve burning sensation and swelling from simple jelly fish stings. If the victim faints or is short of breath, put them in the recovery position *(see page 27)* and get them to hospital as soon as possible. For nettle stings, which are not dangerous, relieve irritation with the same cream or lotion, or use a cold compress.

STOMACH PAIN

If pain is severe, and the patient looks or feels unwell, keep them warm and comfortable. Give them nothing to eat or drink. Keep anything they vomit or excrete. Get medical advice.

SUNBURN

If the skin is reddened but not blistered apply calamine lotion. Do not use butter or margarine; either may irritate or introduce infection. If the skin is blistered or extensively burned, cover it with a dressing wet with cold water to relieve pain. Do not re-expose burned skin until healing is complete. Unscented cold cream will help restore oil and moisture to the skin. Severe or extensive sunburn requires prompt medical aid.

SWALLOWED OBJECTS

Small, round objects (beads, buttons, coins, marbles) swallowed by children usually pass uneventfully through the intestines and are eliminated. Do not give laxatives or bulky foods – just normal diet. If there is pain, consult a doctor. For several days strain stool through muslin, to determine whether the object has bee eliminated.

Sharp or straight objects (hair pins, open safety-pins, bones) are dangerous, and special instruments may be required to locate and remove them. Consult a doctor.

THROAT – SOMETHING CAUGHT IN

If something is caught in the throat (pharynx), it may obstruct swallowing or breathing or both. If only swallowing is obstructed, the person should be advised to proceed as calmly as possible to the nearest hospital.

If the object obstructs breathing, it should be removed immediately (see pages 19-20).

UNCONSCIOUSNESS – CAUSE UNKNOWN

If you discover an unconscious person:

1. Get someone to call the police and an ambulance.

2. Apply artificial respiration (*see page 6*) if the victim is not breathing or breathing with great difficulty. If the pulse has stopped, apply External Heart Compression (*see page 8*).

3. Look to see if the victim is wearing a disk or tag stating that he/she is a diabetic *(see pages 23-24)* or an epileptic or has some other specific illness.

4. If the victim's face is pale, and pulse weak, lower his head slightly. Do not give stimulants.

5. If the lips are blue, check his breathing and pulse. Apply artificial respiration or carry out External Heart Compression (EHC) if necessary.

6. If an unconscious person vomits, turn the body and head to one side to prevent choking.

Do not move the victim unless absolutely necessary to prevent further harm. (See "Moving an Injured Person" on pages 30-31).

Do not disturb or remove an unconscious stranger's effects or anything that may be evidence of a crime or attempted suicide, unless essential to save the person's life.

WARNING

Discard Old Drugs and Keep Others Locked Up

Remember that drugs do not last indefinitely. They may lose their potency, or they may evaporate to concentrations that can be harmful.

To prevent deterioration, keep all bottles tightly sealed. Keep medicines in a cool, dry, preferably dark place. Don't keep any prescription medicines left over from a previous illness unless advised to do so by the doctor.

Discard as unsafe any preparation that has changed colour or consistency or become cloudy. Especially avoid the use of old iodine, eye drops, eye washes, nose drops, cough remedies, ointments.

Keep all medicines, including non-prescription drugs such as aspirin, out of reach of children.

First-Aid Kit

ASSEMBLE your first-aid supplies now, before you need them. Don't add these items to the jumble in the bathroom cabinet. Instead, assemble them in a suitably labelled box (such as a fishing-tackle box or small tool chest with hinged cover), so that everything will be handy when needed. Label everything in the kit clearly, and indicate what it is used for. Put in a copy of this guide, having filled in telephone numbers of your doctor and others.

Be sure not to lock the box – otherwise you may have to hunt for the key when seconds count. Place the box on a shelf beyond the reach of small children. Make sure you check it periodically to restock used items.

Checklist of Supplies

Sterile gauze dressings, 10x10 cm. (approx. four inches square) individually wrapped, for cleaning and covering wounds Roll of 6.25 cm. gauze bandage, for bandaging sterile dressings over wounds Box of assorted adhesive dressings Roll of cotton wool

Pint bottle of sterile saline solution (one level teaspoonful of salt to one pint of boiled water) Calamine lotion or antihistamine cream Small bottle of smelling salts Pair of scissors Pair of tweezers Packet of needles Safety pins Sharp knife or packet of singleedge razor blades Teaspoon Medicine (eye) dropper Box of safety matches Torch, plus spare batteries