

The following are typical instances of its occurrence:—

- (1) In the interior of burning buildings.
- (2) When a coke brazier burns in a badly ventilated room.
- (3) When the engine of a motor-car is allowed to run in an ill-ventilated garage, or when, owing to a faulty joint, the exhaust gases gain entrance to the interior of a closed motor vehicle.
- (4) When the coal gas escapes into an occupied room. During war, gas mains or pipes may be fractured by bombs and the escaping gas may penetrate into an adjoining house.

N.B.—A mixture of coal gas and air is highly explosive. Never use a naked light when investigating a supposed leakage of gas.

- (5) When the fumes of a high explosive shell or bomb which has burst underground penetrates into a cellar or the interior of a building, or when a shell or bomb bursts within a building.

Carbon monoxide is non-irritant and is particularly dangerous because the onset of symptoms may not be recognised in time to allow of retreat to safety.

The respirator gives no protection against carbon monoxide gas.

Symptoms.—When air containing a small proportion of carbon monoxide is breathed, the first effect is giddiness and loss of power in the limbs. Continued exposure to the gas causes unconsciousness and death.

Treatment.—The poisoning effect of this gas is due to its being easily absorbed by the blood, where it seriously reduces the capacity of the blood to transport oxygen. The first essentials of treatment are therefore the removal from the poisonous atmosphere into pure air, and the avoidance of any exertion which would increase the requirements of oxygen. Oxygen (or air containing a small amount of carbon dioxide) may be administered under medical supervision. If the breathing threatens to fail, artificial respiration must be employed.

#### Nitrous Fumes.

These are produced in the course of various chemical processes, but more particularly through the burning of cordite.

Symptoms.—The first symptoms at the time of exposure are slight irritation of the nose and throat, together with an irritating cough, headache and possibly vomiting. These symptoms soon pass, and a latent period of some hours follows during which the patient feels quite well. In cases of serious poisoning acute symptoms of a similar type to those referred to under lung irritants or choking gases follow the latent period.

Treatment.—In these cases immediate removal to hospital for medical attention is essential.

#### Hydrocyanic Acid Gas.

This gas is used in various processes of fumigation, and is highly dangerous in even low concentrations.

Symptoms.—Giddiness is usually the first symptom, and if the concentration of gas has been high, headache, loss of vision, pain in the chest and unconsciousness will rapidly follow. The respirations become laboured, and convulsions and death may ensue.

Treatment.—The treatment must be immediate if it is to be effective. The person must be removed at once to fresh air, and if breathing is weak, artificial respiration should be applied. The face and chest should be splashed with cold water and the limbs rubbed. Hydrocyanic acid gas is destroyed in the body, and the object of the treatment is to tide the patient over the critical period.

#### Trinitrotoluene (T.N.T.).

Poisoning by this substance may occur in chemical works or munitions factories. The poison may be absorbed

by inhalation and also through the skin, and the ill-effects produced are as follows:—

- (a) Inflammation of the skin.
- (b) Digestive disturbance.
- (c) Jaundice.

The poisoning will be progressive and the only first aid treatment possible is removal from the source of contact with the T.N.T.; rest and medical attention are required.

#### Phosphorous Burns.

White phosphorus is used as a smoke producing material and may be scattered from shell, or bombs. The solid particles catch fire when exposed to air. If these particles land on clothing, or come into contact with the skin, they will cause severe burns. Clothing on which phosphorus is burning should be ripped off, and where phosphorus is burning on the skin, air must be excluded by immersion in water, or smothered with wrappings, or earth. Great care must be taken to remove all phosphorus from the burn. Phosphorus melts at 112° F., so that if the part is immersed in warm water the molten substance can be removed under water, or wiped off with a gauze sponge held in a forceps. Great care should be taken to remove every particle. Subsequent treatment is similar to that advocated for ordinary burns, but oils or fatty dressings should not be applied unless it is certain that all the phosphorus has been removed.

## BRITISH RED CROSS SOCIETY.

### FIRST AID IN CHEMICAL WARFARE.

We have received the following information from Mrs. Rome, Matron-in-Chief, British Red Cross Society:

Three Courses, open to Trained Nurses, in First Aid in Chemical Warfare, are to be given, beginning in November. Each Course consists of eight lectures and demonstrations followed by an examination.

The first Course is an intensive one and preference will be given to students who are members of the Territorial Army Nursing Service. It lasts from November 9th to 14th, 1936, and there will be two sessions daily. Filled in application forms to be received by October 5th. This Course will not be advertised as vacancies are kindly being granted in a Red Cross Officers' Course.

The Second Course begins on Wednesday, November 18th, and continues on Mondays and Wednesdays at 8 p.m. Forms to be received by November 5th.

The third Course begins on Tuesday, January 19th, 1937, continuing on Tuesdays and Fridays, at 8 p.m. Forms to be received by January 6th.

These two Courses will be for doctors and nurses and will not be advertised till the autumn, as applications need not come in before then. Only those who can take the full Course are eligible to attend. Application forms may be obtained from the Matron-in-Chief, 14, Grosvenor Crescent, S.W.1; the fee of 7/6 must be sent with the filled in form: those entering and failing to attend this Course are liable to a forfeit of 3/-.

### RED CROSS HOSPITALS FOR TERRITORIAL CAMPS.

At the present time when many Divisions and Brigades of the Territorial Army are in camp, it is usual to find a Field Hospital in connection with each camp. These hospitals are organised and staffed by the British Red Cross Society and are run on Field Service lines. The Units, consisting of a Commandant-in-Charge, one or more trained Sisters, and Voluntary Aid Detachment Members, are accommodated under canvas, and treat their patients in hospital marquees.

### RED CROSS CAMP FOR BLIND LONDON CHILDREN.

The County of London Branch of the British Red Cross Society recently organised a holiday camp for Blind London Children, at Northwood Park, near Winchester, from July 22nd to August 5th.

[previous page](#)

[next page](#)