
Your

GAS MASK

Some day this mask may be the means of saving your life.

Examine it, wear it, put it on and take it off until you can do so quickly.

- Read this booklet until you know by heart what it contains.
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U. S. I N S P E C T E D

Your mask has been tested in every way. The face covering is tight. The straps are tightly sewn and elastic. The chemicals in the canister are fresh and active.

One test remains for you—*the fit*. The head straps must be adjusted so there is no leakage around the edges.

Be sure

YOUR MASK *fits* YOU

Then keep it in the carrier in a convenient place.

This mask was manufactured according to specifications prepared by the Chemical Warfare Service, U. S. Army

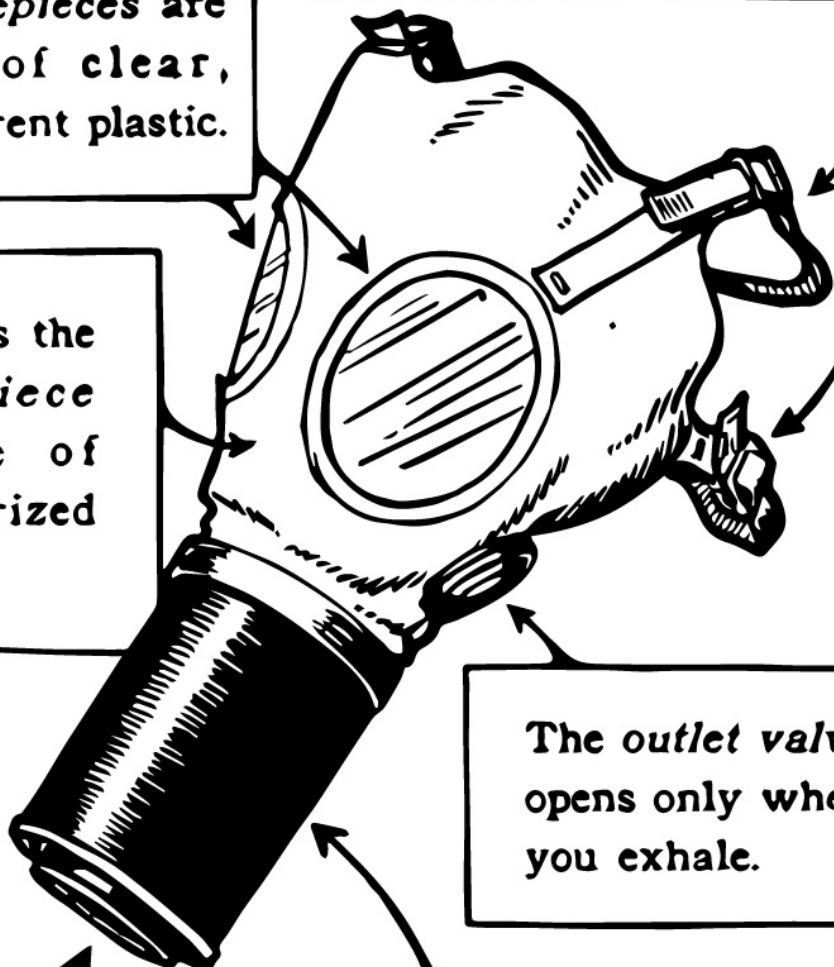


NAMES TO KNOW

The *eyepieces* are made of clear, transparent plastic.

This is the *facepiece* made of rubberized fabric.

These are the *head straps*. Each is adjustable. They make the mask fit tightly when adjusted.



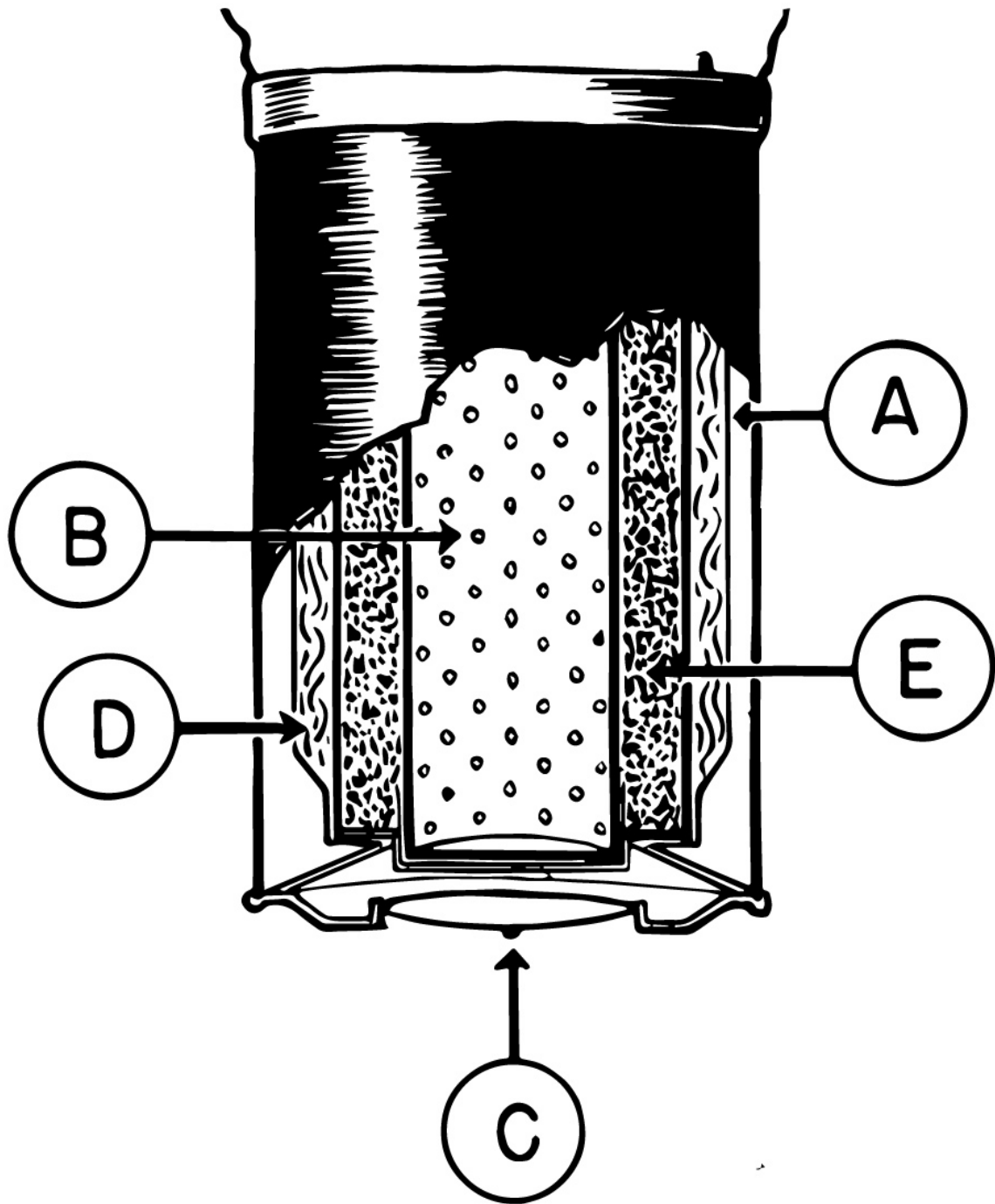
The *outlet valve* opens only when you exhale.

The *canister* contains the chemicals that purify the air you breathe.

The *intake valve* opens only when you inhale.

Put your name on both mask and carrier

INSIDE THE CANISTER



A. Air space completely around the canister.

B. Hollow tube, lined with felt, runs to bottom of canister. This insures that contaminated air flows through chemicals and filter, which purify it.

C. Valve. Soft rubber flap, lifts around edges to admit air on inhaling.

D. Filter. It filters out smoke—any kind of smoke. Some war gases are really smokes. But this canister protects you. Even smoke from fires or explosives, which might make you cough and want to remove your mask, is filtered out.

E. THIS IS A special treated charcoal. It has been made to absorb or filter out all war gases. It will *not* protect you from illuminating gas. It will *not* protect against the fumes of automobile exhaust. It will *not* protect against the fumes of a leak from your automatic refrigerator or ammonia fumes. These substances, being very light and easily dispersed, are not used as war gases. But from any war gas -- it *will protect* your eyes, nose, throat, and lungs.

THE CONTENTS OF THIS CANISTER ARE PRACTICALLY THE SAME AS THAT USED BY SOLDIERS IN THE FIELD, EXCEPT IN AMOUNT. THIS CANISTER WILL PROTECT FOR FOUR HOURS.

HOW YOUR GAS MASK WORKS

INHALE

1. Air, mixed with gas and smoke, enters here through a rubber flap valve.
2. The filter removes the smoke.
3. The charcoal removes the gas.
4. Purified air enters the lungs.

EXHALE

5. Exhausted air leaves the lungs, fills the face-piece, and passes out the exhaust valve.
6. Being moist and warm, it tends to cloud the eyepieces.

This effect can be prevented by rubbing a light film of moist soap on the inside of the eyepieces.

WHEN TO WEAR IT

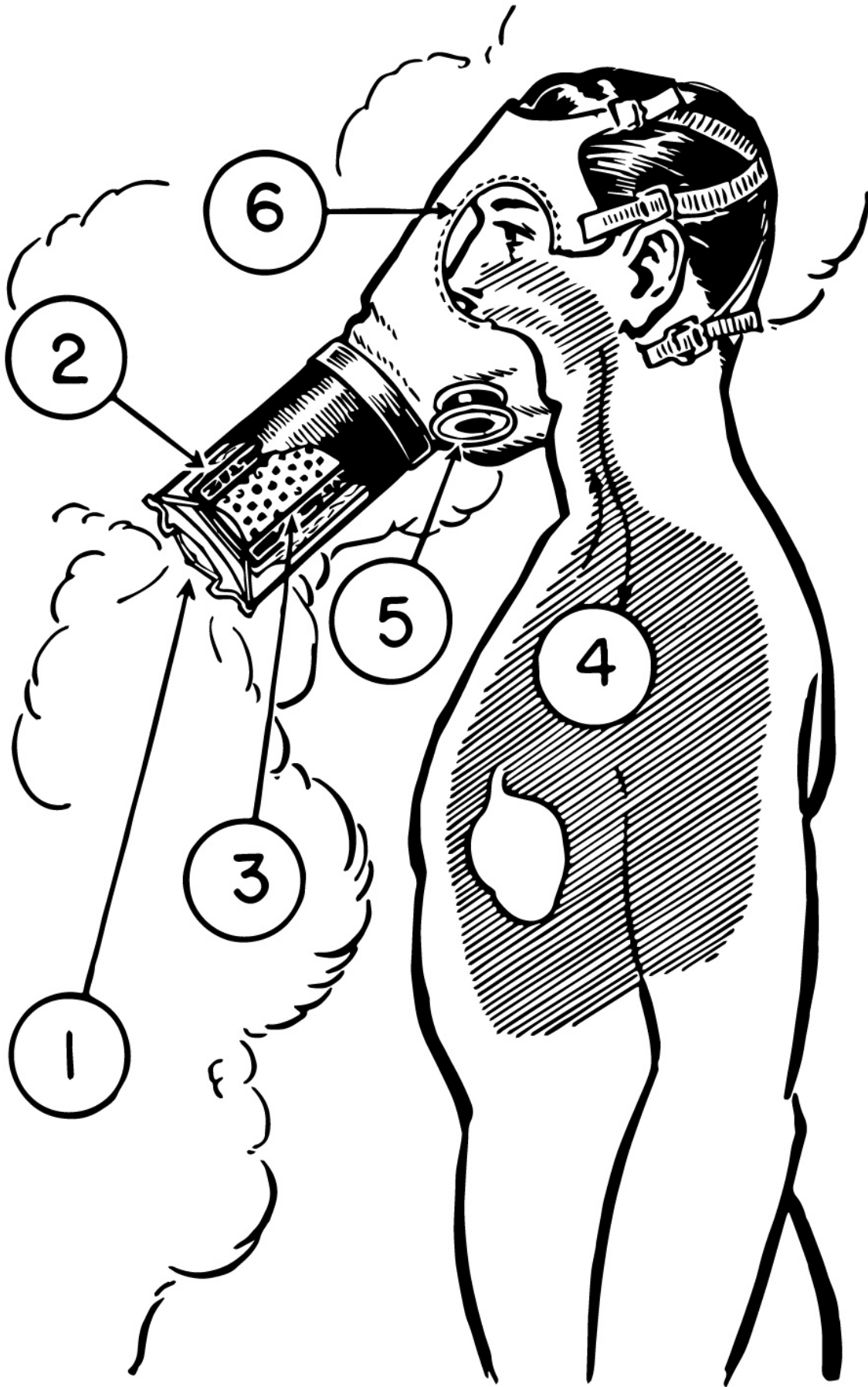
Use the mask as little as possible except when needed.

Used in a fairly heavy concentration of gas, the contents of the canister will protect you for 4 hours.

Used (for practice) in ordinary air, they will be used up about one-third as fast—or, in other words, will last for about 12 hours.

Save the “life” of the mask for need.

Always keep your mask in a cool, dry place, readily at hand in case you need it.



When you have used up two-thirds the "life" of the mask, turn it in at the same place you obtained it and get a new one.

Keep a record of the minutes you have worn the mask here:

RECORD OF USE OF MASK

Name of Owner

Address

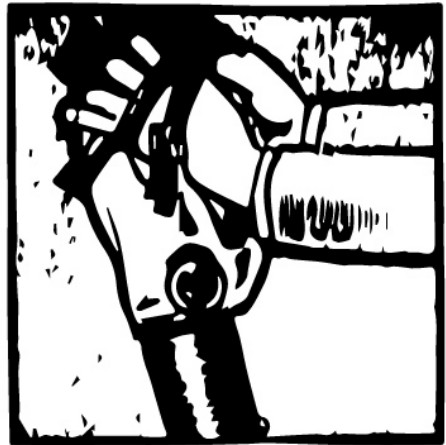
DATE	Minutes Used in Practice	Minutes Worn in Gas	Life Minutes Used*	Life Minutes Remaining
(Date received).....	0	0	0	240
.....				
.....				
.....				
.....				
.....				
.....				

*Give full value to minutes worn in gas; divide minutes used in practice by three. Total of these items is life minutes used. Deduct this from next previous "Life Minutes Remaining" and enter result in last column.

PUTTING ON THE MASK

1

Open up and spread the head straps. Take out the cork.



2

Put your thumbs just under the rear straps and grasp the sides of the mask firmly between the palm and fingers.

Work the mask back and forth and spread it until well opened.



3

Thrust the chin well forward into the lower part of the mask.

Slide the thumbs along the head straps until they reach the joint and use them to lift it back over the head by stretching the straps.



4

Feel the head straps with the fingers to make sure each lies flat and that they are well spread out.

Tighten all the straps in turn until the mask is pulled tight against the forehead, cheeks, and under the chin.



TESTING THE FACEPIECE

1. Remove gas from mask by covering air outlet valve with left hand and blowing as strongly as possible.

2. Place the flat of the palm against the bottom of the canister, closing the opening there

3. Draw in the breath.

4. Can you feel air leaking in at any point? If so, adjust the straps on either side of that point.

5. Test again until no air leakage is felt. If the facepiece is tight, it should collapse on the face. Do not test for air tightness by holding exhaust valve and blowing out. Air can always be blown out that way.

6. Your mask is now adjusted to fit you. Take it off by slipping up the rear straps without changing any head strap adjustments if possible. If there has been a gas attack, always test for gas even though the "all clear" has been sounded. Take a deep breath, partly exhale, bend down, and with two fingers of the right hand slightly open facepiece. Sniff but do not inhale.



7. Put the cork back to keep the contents of the canister dry.

8. Fold the straps inside the facepiece and slip it, canister first, into the carrier.

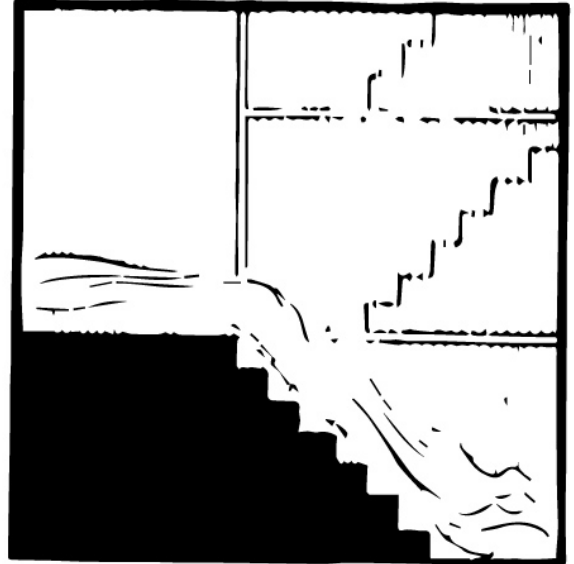
Put the carrier over your shoulder and adjust the strap so that it may be worn comfortably.

IN A GAS ATTACK

UNLESS ASSIGNED
SPECIAL DUTIES

Go Up →

All war gases are heavier than air. They tend to collect in depressions and to flow down cellar stairs. Underground shelters that give good shelter against explosive bombs are not good places to go unless gas-proofed.



Go up three or four floors above the street level if possible, where you will be above strong concentrations, but do not go to the top floor.



Of course, a gas attack may be accompanied by explosive bombs. But the chance of a nearby or direct hit is small. The chance that gas will spread to the cellars and low floors is great. *If gas is used, go up.*

TEAR GAS

(Chloracetophenone, Brombenzylcyanide.)

Tear gases affect only the eyes, which they cause to shut tightly, accompanied by excessive watering. The effect passes off in an hour or two with no bad results. Visible as a light fog at times.

Odors: Apple blossoms, sourish fruit odor.

First Aid: Do not rub the eyes, or bandage. Wash eyes with boric acid solution. Stand with eyes open toward wind.

Persistence: 10 to 20 minutes.

LUNG GASES

(Phosgene, Chlorpicrin.)

Attack the eyes, throat passages, and lungs, causing coughing, nausea, doped feeling. If gas is concentrated, and if there is a long exposure without a mask, death is caused by edema of lungs, accumulation of serum in lungs. If the person is removed from the gas in time, and properly treated, recovery usually will be complete. These gases are invisible.

Odor: Musty hay, green corn, fresh-cut ensilage, anise, fly paper.

First Aid: Keep warm and quiet. Carry on stretchers out of danger zone. Coffee for stimulant. Wash eyes with boric acid.

Persistence: 10 to 50 minutes.

Note: *Persistence is the length of time during which the concentration of a gas remains high enough to be dangerous.*

Your mask protects you completely

TOXIC SMOKES

(Adamite, Diphenylchlorarsine.)

Do not attack tissues of the body but cause sneezing or sick, depressed feeling and nausea. The smoke is a dense yellow or gray color when concentrated, but it may be invisible.

Odor: Coal smoke, shoe polish; may be odorless.

First Aid: **Keep** warm and quiet. Remove to pure air. **Wash** out eyes with boric acid as other gases may be mixed with smoke. At times sniffing chlorine from a bottle of bleaching powder helps.

Persistence: 5 to 10 minutes in open spaces.

BLISTER GASES

The substances most likely to be used in attacks on cities are mustard "gas," Lewisite, and possibly ethyldichlorarsine (ethyl-dye-clor-ar-seen). They may be sprayed from airplanes, dropped in bombs, even thrown over in small containers to splash their contents in many spots.

Mustard, Lewisite, and ethyldichlorarsine will contaminate the area near a burst for a day to a week, depending on temperature, rain, or other conditions of nature.

Mustard liquid (bis-beta-chlor-ethyl-sulfide) is an oily liquid that attacks any part of the body, producing large blisters, the same as a severe burn. It

will penetrate any ordinary clothing or shoe leather.

When found splashed on streets, buildings, etc., it evaporates slowly and must be neutralized as quickly as possible with chloride of lime mixture (bleaching powder)—a work to which specially trained and equipped “decontaminating” squads must be assigned. If not neutralized, mustard liquid continues to evaporate slowly, producing a vapor that will also affect all parts of the body. If exposed to it for some time, the skin will be affected as by a bad sunburn and there may be some injury to the lungs. The eyes will swell and redden.

Mustard gas has a sharp odor, similar to mustard, garlic, or horseradish, but it is faint and may be overborne by odors from explosives or fires. There may be no visible effect for several hours at which time an area of redness appears.

Lewisite (beta-chlor-vinyl-di-chlor-arsine) is closely parallel in its effects to mustard gas. It is more deadly in that the arsenic content causes poisoning if time is allowed for it to penetrate the skin. On the other hand, it is more easily neutralized, as it may be broken down and washed away with water. If simply neutralized with water, it leaves an oxide which is poisonous, does not evaporate, but contaminates the area.

Lewisite has a fairly strong odor like geraniums, and, if liquid reaches the skin, a tingling sensation is

noticed. Reddened patches appear in 30 minutes.

If prompt first-aid measures are taken, the seriousness of burn caused by these gases is greatly reduced.

A third possible war gas, ethyldichlorarsine, causes blisters and arsenic poisoning like Lewisite. It has no real odor but produces a stinging sensation in the nostrils. It is very persistent.

DECONTAMINATION

The job of neutralizing areas where the persistent blister gases, or vesicants, have spattered, is beyond the power of the individual. It requires the services of specially trained and equipped decontaminating squads.

After this has been done, all householders in the neighborhood of a burst should thoroughly air all rooms, clothing, bedclothes, etc., for 24 hours at least. Local authorities will advise.

All food not sealed in cans or bottles or protected in a tight compartment, such as a refrigerator, should be inspected by the health department before use. Contaminated food must be destroyed. Wipe off all cans and bottles and the refrigerator with a cloth moistened with a household bleach solution.

Thoroughly wash all dishes and utensils in warm sudsy water and rinse.

Wipe off all painted work, tile, and porcelain with bleach solution, as above.

FIRST AID

Since the first rule of any medical treatment is expert diagnosis—knowledge of what must be treated—it follows that some training is necessary to identify the effects of various gases and give proper treatment. Specific medical supplies are also needed.

The first thing to do in any gas case is to get the person affected out of the gassed area. Persons exposed to lung-irritant gases should be transported on a stretcher and sent to a hospital by ambulance. Improvise a stretcher or hand-carry, if you have help, and head for the nearest first-aid station.

If no help is immediately apparent, or a long line is waiting, lay the patient down and cover for warmth. If possible, wash out the eyes with a 2-percent solution of bicarbonate of soda. Give coffee for a stimulant.

If a patient has been exposed to a blister gas (mustard or Lewisite) or if there should be liquid on his clothing, he should bathe and put on fresh clothing after decontamination.

Do not attempt to carry or even touch a person contaminated with blister gas unless you have proper protection, otherwise you will also become a casualty.

First aid must be applied as soon as possible after being splashed with Lewisite or mustard gas.

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