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by

Co gas

F100



**T**his is the story of a "killer"—Carbon Monoxide Gas. (CO to you from now on.)

You can't see it—it has no vapor or color. You can't smell it—it has no odor. But when coal, gasoline, wood, illuminating gas and many other fuels containing carbon are incompletely burned, CO gas is released into the air. It sneaks into closed rooms, cars, garages, workshops and strikes its victims silently.

If you work near a furnace, an engine, or other fuel-operated machines, watch out for CO gas. It may be escaping. The



amount may be too small to kill—but enough to make a strong man sick, knock him out, and steal a lot of his **pay**.

When there is plenty of pure oxygen and the air is in motion, CO mixes with it and can't hurt you. Released in closed places, CO is a deadly poisoner—ready to strike any oxygen-breathing creature in reach.

CO enters the body through the lungs—the only route it can travel. Then it mixes with the red coloring matter of the blood—the stuff which absorbs oxygen and carries it through your body. CO stops the blood from absorbing oxygen—suffocates its victims.

### **Watch for These Danger Signals** in yourself and fellow workers!

If a worker has been breathing even small amounts of carbon monoxide for a long time, he gets a tight feeling across the forehead. Soon he has a throbbing headache. He gets nervous, depressed, dizzy. His face may be flushed, his eyeballs bright red. He

may feel sick in the stomach and vomit. Finally, he passes out.

**First Aid for CO Poisoning.** Carry the victim to the fresh air at once. **Call a doctor.**

If the victim has stopped breathing or is gasping, give artificial respiration. Use the Schafer method. It is explained in all up-to-date first aid books. If your shop does not have a first aid squad, why not organize one?

A CO victim should be given extra oxygen. Plants where there is a CO hazard should have apparatus and trained crews for giving oxygen.

Loosen your patient's clothes. Rub his hands and feet. Keep his body warm with blankets and hot water bottles.  
(Don't let the bottles burn him.) Keep him at rest.



Never let a CO victim get up and walk about until the doctor says he is entirely recovered! Many lives have been lost because people thought a man could walk off the effects right after he came to. Exercise simply speeds up the attack of CO on the heart. When this happens, the patient may collapse and die before help can reach him.

Sometimes it takes a man quite a while to get over CO poisoning. For several days he may be very uncomfortable, dizzy, nauseated. He is restless and irritable. He worries without knowing why. But these troubles will pass. They come from the effects of the gas. CO poisoning seldom leaves permanent ill effects. Of course, it is very hard on people who have heart trouble or nervous disorders. They should never work where they may be exposed to CO.

**Prevention is Safer and Cheaper.** First aid and prompt treatment by a doctor can save a CO victim's life. But why take a

chance? It is safer and cheaper to stop CO gas before it stops you.

The best protection against carbon monoxide is good ventilation in the workshop. The amount of CO in the air should be kept down to the safe limits set by the American Standards Association. Samples of the air you breathe should be tested regularly. If there is too much CO, engineers can find out where it is coming from and get rid of it. They can improve ventilation in your shop.

If a worker enters a closed place where CO gas may be present, he should wear an air-line respirator and a safety line. A crew of men who know the signs of CO poisoning should watch him while he is in there.

Good ventilation means more than getting rid of carbon monoxide. It means supplying plenty of oxygen, keeping the air reasonably dry and in motion.

Too much dampness, too little oxygen, overcrowding in workrooms, and strenuous

work can all gang up and make usually safe amounts of carbon monoxide dangerous.

Workers and employers can gang up on CO gas and prevent accidents. Remember—carbon monoxide is a stealthy killer. Obey all the safety rules. And this includes wearing your CO gas mask when it is required. Be on the watch for headache, dizziness, flushed faces—in yourself and others on the job. Your plant can see that carbon monoxide is kept to safe limits and that workrooms are well ventilated. You can help by being always wise to CO gas and its sneaky, death-dealing ways.

**CO gas is a smart killer  
—but it can't outsmart  
a smart worker.**



# **Jobs where CO may be a hazard**

**GARAGE WORKERS AND MOTOR VEHICLE DRIVERS.** Most CO accidents occur on these jobs.

**CHEMICAL INDUSTRY.** Illuminating gas plants, coke-oven workers, tar distillers. Ammonia gas plants. Methane and methyl alcohol manufacture. Soda plants. Charcoal burners. Carbide makers.

**METAL INDUSTRY.** Blast-furnace workers, Bessemer furnace men, welders. Chargers, cleaners, coremakers, cupola men—in copper, lead, silver, zinc smelters and brass foundries.

**MINING INDUSTRY.** Blasters, because some explosives release CO. Other workers if fire damp explosions occur.

**GARMENT INDUSTRY.** Felt blockers and flangers, calico printers, cloth singers, ironers, pressers.

**GLASS AND POTTERY INDUSTRY.** Kiln workers, brick burners, teasers, temperers, moldmakers, enamel makers, enameler.

**PRINTING INDUSTRY.** Linotypists, monotypists, from the melting pots.

**OTHER JOBS.** Blacksmiths, plumbers, solderers, chimney masons, chimney sweepers, furnace tenders, firemen, boiler cleaners, cooks, bakers, cable splicers.

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