

- Home
- Text Version
- Página principal
- Neighborhoods ▾
- Locations ▾
- Chemicals ▴
 - ▶ Acetone
 - ▶ Ammonia
 - ▶ Arsenic
 - ▶ Asbestos
 - ▶ Benzene
 - ▶ Bisphenol A
 - ▶ Cadmium
 - ▶ Carbon Dioxide
 - ▶ Carbon Monoxide
 - ▶ Chlorine
 - ▶ Chlorofluorocarbons
 - ▶ Chromium
 - ▶ Crude Oil
 - ▶ Diesel
 - ▶ Dioxins
 - ▶ Endocrine Disruptors
 - ▶ Ethylene Glycol
 - ▶ Ethylene Oxide
 - ▶ Formaldehyde
 - ▶ Gasoline
 - ▶ Lead
 - ▶ Mercury
 - ▶ Nanoparticles
 - ▶ Natural Gas
 - ▶ Nitrogen Oxides
 - ▶ Ozone
 - ▶ Particulate Matter
 - ▶ Perchloroethylene
 - ▶ Pesticides
 - ▶ Phthalates
 - ▶ Polychlorinated Biphenyls
 - ▶ Propane
 - ▶ Radon
 - ▶ Solvents
 - ▶ Sulfur Dioxide
 - ▶ Toluene
 - ▶ Volatile Organic Compounds
- A - Z Index
- A - Z Disasters & Health
- For Teachers ▾
- What's New
- Site Map

Ammonia

[en español](#)

[Interactive Graphic Neighborhoods](#)

Ammonia has a sharp odor and is used in fertilizers, refrigeration, and cleaning products.

What is ammonia?

Ammonia is a colorless gas with a sharp, pungent odor. It is both manufactured, and also produced naturally by bacteria, decaying plants and animals, and [animal waste](#). In its natural form, ammonia is found in water, soil, and air, and is a source of nitrogen for plants and animals. It is commonly sold in liquid form, and is a corrosive chemical. The chemical formula for ammonia is NH_3 .

When ammonia is manufactured, it is primarily used to make fertilizer. It is used to manufacture synthetic fibers, textiles, pulp and paper, [pesticides](#), explosives, smelling salts, cleaning products, rocket fuel, fuel cells, and some foods and beverages. Ammonia is also used to make other chemicals, including nitric acid and cyanide.

Industries that use ammonia include metal treating and [chlorine](#) water treatment. Ammonia is also used in the rubber industry to stabilize raw latex, and in the petroleum industry to protect equipment. It is used on grapefruit, lemons, and oranges to control fungal growth during warehousing.

Ammonia is used as a refrigerant in industrial facilities, including meat, poultry, and fish processing facilities; dairy and ice cream plants; wineries and breweries; juice and soft drink processing facilities; cold storage warehouses; and food processing facilities.

How might I be exposed to ammonia?

Everyone is regularly exposed to low levels of ammonia in air, soil, water, and food. You can be exposed to higher levels of ammonia by breathing it or having skin contact with it.

At home, you can be exposed if you use products that contain ammonia, including window cleaners, floor waxes, and smelling salts.

If you work on or live near a farm, you can breathe ammonia in the air if the farm uses ammonia fertilizers. Farmers, cattle ranchers, and people who raise chickens can be exposed to ammonia from decaying manure.

At work, you can be exposed to ammonia if you deal with chemical manufacturing, coal tar, compressed gas, dye manufacturing, explosive manufacturing, fertilizer, glass cleaner, organic chemical manufacturing, refrigeration, rocket fuel, and hide or leather tanning. You can be exposed if you work in a chemical laboratory, maintenance facility, petroleum refinery, or sewer.

How can ammonia affect my health?

Exposure to extremely high levels of ammonia can cause death, coma, blindness, lung damage, collapse, and seizures.

Breathing high concentrations of ammonia can cause fluid in the lungs to build up, and possible lung damage. Exposure to high levels of ammonia can burn the eyes, skin, throat, and lungs. Breathing lower concentrations of ammonia can cause coughing, wheezing, shortness of breath, laryngitis, headaches, fever, nausea, vomiting, pink frothy phlegm, chest pain, asthma, rapid pulse, and increased blood pressure.

If you swallow ammonia, it can burn your mouth, throat, and stomach, and cause severe abdominal pain. If concentrated ammonia spills on your skin, it can blister or severely burn your skin, or cause dermatitis. Eye exposure may cause conjunctivitis, corneal irritation or damage, and temporary or permanent blindness.

You may suffer increased risks from ammonia if you have corneal disease, glaucoma, or chronic respiratory diseases.

If you think your health has been affected by exposure to ammonia, contact your health care professional.

For poisoning emergencies or questions about possible poisons, please contact your local poison control center at 1-800-222-1222.

More Links

- [Ammonia Poisoning](#) (National Library of Medicine)
- [Ammonia Refrigeration](#) (Occupational Safety and Health Administration)
- [Ammonia Haz-Map](#) (National Library of Medicine)
- [Ammonia Hazardous Substances Data Bank](#) (National Library of Medicine)
- [Ammonia Household Products Database](#) (National Library of Medicine)
- [Ammonia ToxFAQs](#) (Agency for Toxic Substances and Disease Registry)
- [Anhydrous Ammonia Theft](#) (Environmental Protection Agency)
- [Map of Releases of Ammonia in the United States](#) (National Library of Medicine)
- [Using Anhydrous Ammonia Safely on the Farm](#) (University of Minnesota Extension Service)



Locations where Ammonia may be found				
City	Farm	Town	U.S.-Mexico Border	Port
Brownfield	Agricultural Runoff	Drinking Water	Crop Fields	Beach