



Visit the Farm scene to learn more about the chemicals and environmental health risks from:

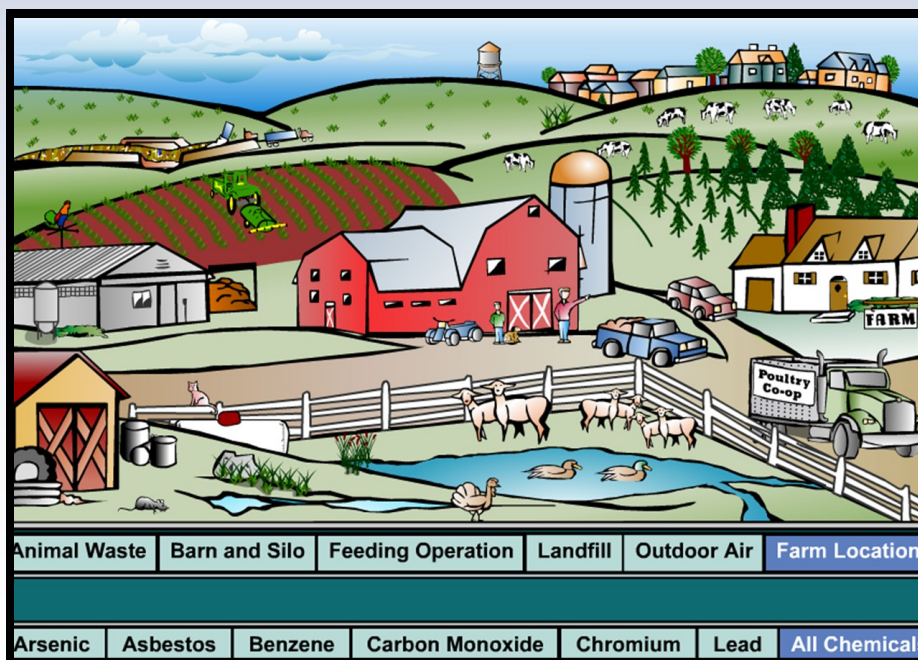
- Agricultural Runoff
- Animal Waste
- Barn and Silo
- Chemical Storage Tank
- Climate Change
- Crop Fields
- Drinking Water
- Farm Animals
- Farm Environmental Health
- Farm Pond
- Feeding Operation
- Homes
- Landfill
- Meat Processing
- Off-road Vehicles
- Outdoor Air
- Pests
- Pets
- Shed
- Tree Farm and Logging
- Urban Sprawl
- Vehicles

## Tox Town Explores... Environmental Health Risks on the Farm

If you live or work on or near a farm, you know that farming is a dangerous job. Families living and working on the farm are at risk for injuries. While some environmental health concerns on a farm are the same as in any neighborhood, there are many issues that are specific to farm and rural health, such as:

- Toxic manure gases**
- Agricultural chemicals**
- High levels of dust**
- Farm animals infected with diseases and parasites**
- Mold from damp hay stored in barns**

Tox Town lets you explore farm locations and learn about chemicals that you might encounter on the farm, such as ammonia, carbon dioxide, pesticides, nitrogen oxides, particulate matter, and more.



**For more information, contact:**

National Library of Medicine  
8600 Rockville Pike  
Bethesda, MD 20892  
1-888-FIND-NLM





# The Farm scene has answers if you have ever wondered...

## Why is it important to properly maintain and ventilate manure pits?

Improperly maintained manure pits can generate potential deadly gases – ammonia, carbon dioxide, hydrogen sulfide, and methane – that can cause toxic reactions, and even death, in people and animals.

## What is in agricultural runoff?

Feeding operations, animal waste, application of pesticides, fertilizer, irrigation water, grazing, plowing all contribute to agricultural runoff. Polluted agricultural runoff is the leading source of water pollution in rivers and lakes.

## Why are barns and silos a concern?

Barns and silos are used to store feed, manure, animal bedding, and hazardous chemicals. Mold can grow in damp hay stored in these structures and can then cause respiratory problems, allergies, asthma, and even “farmer’s lung”. Silo gases form with the natural fermentation of hay and other crops. These gases – nitrogen dioxide and carbon dioxide – are both odorless and colorless and farmers can be exposed without even knowing.

## Why do farm animals pose a risk to farmers’ health?

Animal injuries are the second most frequent type of injury on farms, second to machinery. Animals are also a source of parasites and diseases that can be passed on to people.

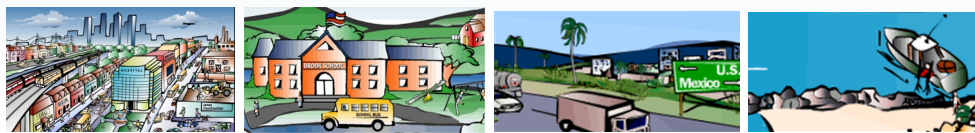
## What are animal feeding operations and why do they pose a health risk?

Concentrated animal feeding operations (CAFOs), sometimes called factory farms, are animal feeding operations that keep large numbers of animals. These CAFOs are sources of large amounts of animal waste that can threaten water supplies. They also can emit a variety of air pollutants, including ammonia, carbon dioxide, nitrous oxide, particulate matter, and volatile organic compounds.

**toxtown.nlm.nih.gov**

Also Available in Spanish

**[http://toxtown.nlm.nih.gov/flash/farm/flash\\_sp.php](http://toxtown.nlm.nih.gov/flash/farm/flash_sp.php)**



Tox Town introduces students, educators, and the general public to environmental health risks encountered in everyday life. Other scenes include the **City, Town, Port, and the US-Mexico Border**.

Tox Town is a project of the Specialized Information Services Division of the National Library of Medicine, National Institutes of Health.