

*“Uncontrolled combustion such as burning of household waste is expected to become the largest quantified source of dioxin emissions to the environment.”*

U.S. Environmental Protection Agency  
“Dioxin: Scientific Highlights from Draft Reassessment (2000).”  
[www.epa.gov/ncea/dioxin.htm](http://www.epa.gov/ncea/dioxin.htm) (25 May 2001).

For more information:

U.S. Environmental Protection Agency

[www.epa.gov](http://www.epa.gov)

Great Lakes Trash and Open Burning

[www.openburning.org](http://www.openburning.org)

Illinois Environmental Protection Agency

[www.epa.state.il.us](http://www.epa.state.il.us)

Questions about disposal issues

217/785-8604

Questions about burning

217/782-7027

Illinois Dept. of Public Health

[www.idph.state.il.us](http://www.idph.state.il.us)

Division of Environmental Health

217/782-5830

Your Local Fire Marshal

or fire department can also answer questions about risks from open burning.

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Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

## Burn Barrels — Your Questions Answered



*Illinois  
Environmental  
Protection Agency*

IEPA/OCR

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Rod R. Blagojevich, Governor  
Renee Cipriano, Director

# Backyard Burning— Is it safe?

## Why should I be concerned about the open burning of household waste?

The nature of household trash has changed over the past fifty years. Today, bleached paper, synthetics, plastic packaging or plastic products and printed materials with toxic chemicals make up a large portion of society's waste. These items contain chemical dyes, coatings, pigments and chlorine that can form even more toxic chemicals when burned. Chlorine is present in most household waste, including paper products.

## What pollutants are released by burn barrels?

Particulates, sulfur dioxide and carbon monoxide represent the largest portion of pollutants (of an estimated 5,000 tons annually) emitted from open burning of household waste. Because burn barrels receive little oxygen, they create low-temperature fires that generate other toxic pollutants as well, such as benzene, styrene oxide, formaldehyde, dioxins and furans. Dioxins are produced in burn barrels at levels more than two times greater (per ton of refuse) than from municipal incinerators.

Some metals (e.g., lead, cadmium and chromium) are also released.

## Can these chemical emissions harm my family's health?

Yes. These pollutants are released into the air where they can be inhaled by those closest to

or downwind from the source. They also deposit on leafy plants that are eaten by livestock. Dioxin accumulates in animal fat and is passed through meat and dairy products to humans.

Depending on how long and how often you are exposed, certain pollutants can harm the lungs, kidneys, the nervous system and the liver. Short-term exposure can aggravate asthma and affect other respiratory conditions. Long-term exposure can lead to an increased risk of cancer, heart disease, and respiratory, reproductive and developmental problems.

## When is burning allowed?

Cooking and camp fires are allowed either on private property or in public areas where specified. **Open burning of garbage is prohibited in Illinois.** Burning of household waste (except garbage) is permitted only on the premises where it is generated and outside any "restricted area" (defined as any city, village, or incorporated township plus a zone extending one mile beyond the boundaries when there is a population of 1,000 or more). To burn safely, do not overload the burn barrel, so more oxygen can reach the fire.

**Note: State Law is applicable unless there is a more restrictive local prohibition or limitation on open burning.**

**Household Waste** is defined as waste generated from a single home, but does not include landscape waste, garbage (food waste, food packaging and diapers), trade waste (construction debris, roofing materials), used furniture, appliances or automobile parts.



## What can I do to help?

Contact a local garbage hauler about disposal options.

**REDUCE**—extra packaging by buying in bulk. Avoid buying disposable items; buy durable, repairable items.

**REUSE**—donate unwanted clothing, furniture, toys and electronics to friends or charities. Give old magazines and books to hospitals or nursing homes. Repair rather than discard or replace.



**RECYCLE**—junk mail, magazines, newspapers, office paper, cardboard, aluminum, tin, metal and acceptable plastics. Return plastic bags to stores that recycle them.

**COMPOST**—Food and lawn and garden waste.

## Why should I stop burning?

- ◆ Burn barrels are the most significant remaining source of dioxin in the U.S. and produce a variety of other toxins.
- ◆ Your individual choices impact the quality of everyone's food supply.
- ◆ Your health and the health of your family and neighbors may depend on it.
- ◆ There is a risk of forest fires in some areas from uncontrolled open burning.
- ◆ You may be breaking the law.