### **EPA TOOLS YOU CAN USE**

You can find information on backyard burning and successful programs by using the following resources:

### **Backyard Burning Web Site** www.epa.gov/msw/backyard

This site provides facts and information; links to state, local, and other backyard burning Web sites; and brochures and presentations that can be customized and reproduced to discourage residents from burning household waste.

### Dioxin Web Site www.epa.gov/ncea/dioxin.htm

This site provides in-depth information on the Dioxin Reassessment report, the Dioxin Exposure Initiative, EPA analytical methods, and EPA regulations. The Web site also gives answers to frequently asked questions about dioxin and features a database of sources of environmental releases of dioxin-like compounds in the United States.

**Resource Conservation and Recovery Act** (RCRA) Call Center

800 424-9346 or 703 412-9810 in the Washington, DC area

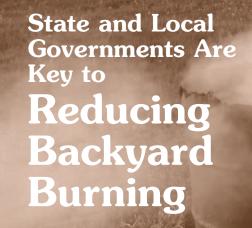
TDD: 800 553-7672 or 703 412-3323

Additional brochures and more information on backyard burning can be obtained by calling this toll-free number.

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ackyard burning of garbage is an outdated practice that should be discontinued. Burning household trash and garbage in burn barrels, open piles, or in indoor or outdoor stoves or furnaces is still practiced in many rural areas. This practice is a major source of dioxin and other toxic emissions, damaging both our health and our environment.



## BACKYARD BURNING IS A HEALTH HAZARD

Current evidence indicates that backyard burning is a more serious threat to public health and the environment than previously believed.

Burning household waste produces toxic chemicals, including dioxins. Dioxins are formed when products containing carbon and chlorine are

Since stringent controls have been placed on municipal, medical, and hazardous waste incinerators, backyard burning is now the largest quantified source of dioxin from the combustion of waste.

burned. Open burning

of household waste creates significant amounts of dioxins due to the low combustion temperatures, poor air distribution, and the presence of chlorine, which is found in almost all household waste components. Backyard burning of household waste is one of the largest known sources of dioxin in the nation.

Dioxins are highly toxic even at extremely low levels, and have been linked to serious health problems in humans. These include cancer and adverse developmental and reproductive effects.

Dioxins accumulate in the food chain. Airborne dioxins can settle onto feed crops, which are then eaten by domestic meat and dairy animals. These dioxins accumulate in the fats of animals, and then in humans when we consume meat, fish, and dairy products.

In addition to dioxins, smoke from the open burning of waste contains a variety of harmful pollutants, including particulate matter, sulfur dioxide, lead, mercury, and hexachlorobenzene. Breathing these pollutants can damage your lungs, nervous system, kidneys, and liver. Not only are the people who burn trash at an increased risk, but so are their families and neighbors.

Ash from backyard burning is also likely to contain toxic pollutants, which can contaminate vegetables if scattered in gardens. Children can accidentally swallow some toxic materials after dirt gets on their hands while playing near discarded ash.

# SUCCESSFULLY REDUCING BACKYARD BURNING

In response to growing health concerns, states are taking steps to curb backyard burning. Here are just a few examples. More information can be found on EPA's backyard burning Web site. <www.epa.gov/msw/backyard>.

- The northeastern states of Maine, New Hampshire, Vermont, Connecticut, Massachusetts, and New Jersey have statewide bans on backyard burning of household waste.
- California recently enacted strict backyard trash burning regulations.
- New York distributes brochures on the hazards of backyard burning at state and county fairs.
- Wisconsin uses its Web site and other educational materials to campaign against illegal burning of wastes.

Local governments are also taking action:

- In Chisago County, Minnesota, residents turning in burn barrels and signing up for waste collection receive six months of service at half-price.
- Forsyth County strictly enforces North Carolina's statewide ban against burning garbage, penalizing first-time offenders with fines ranging from \$100 to \$10,000.
- Webster City, Iowa, residents enlisted doctors to speak at city council meetings about their experiences treating patients affected by open burning. This helped council members enact a new local burning ban ordinance, even in the face of strong opposition by some residents.

## DIOXIN IN THE FOOD CHAIN



Work to provide residents with convenient, affordable alternatives to backyard burning. Many areas are successfully changing this practice using some of the following methods:

## Promote Alternatives to Backyard Burning

- Establish and promote free or low-cost drop-off centers for residents who want to self-haul or recycle.
- Create a burn barrel exchange program to provide disposal service discounts to participants while educating them regarding disposal alternatives.
- Distribute information on public or commercial collection, recycling, and disposal services.

#### **Educate Residents**

• Conduct outreach programs to change behavior, such as print or radio ads and brochures (available from EPA as templates for your own modifications).

#### Regulate and Enforce

- Establish and enforce effective regulations and ordinances.
- Train county police, fire marshalls, and health and environmental inspectors on local ordinances and authorize them to issue fines, as well as educate residents.

The benefits of taking action against backyard burning extend beyond reducing health problems. In addition to being a nuisance to neighbors, backyard burning is a major source of property fires. Wisconsin estimates that about one-third of its forest fires are caused by open burning. Moreover, backyard burning can hinder state and municipal efforts to meet air quality standards.

