

# Lead-Acid Batteries Generated from the Home

## What are lead-acid batteries?

Lead-acid batteries, also known as storage or wet cell batteries, are used primarily in cars and other motor vehicles. Homeowners doing repair work on their cars, boats or other vehicles generate dead or “spent” lead-acid batteries when they no longer hold a charge.

Lead-acid batteries contain predominantly lead and acid. The typical battery weighs 36 pounds, contains about 21 pounds of lead, three pounds of plastic and one gallon of sulfuric acid, a corrosive liquid. Other components include rubber separators, lead oxides and sulfates. The battery components are contained in a corrosion and heat-resistant housing usually composed of plastic (polycarbonate, polypropylene or polystyrene).



## Why should I be concerned about disposing of batteries?

If lead acid batteries are improperly disposed of or illegally dumped, over time they can corrode and release sulfuric acid, lead and other heavy metals, polluting soil and water resources such as lakes, rivers, streams and ground water. If lead-acid batteries are burned, lead can be released into the air and remain in the ash. Workers who collect curb-side trash containing lead-acid batteries or who handle batteries at transfer stations and landfills may be harmed from the leaking



acid. To help protect the environment and recover valuable components that can be reused, every effort should be made to send your lead-acid batteries to a recycler.

## Lead-Acid Battery Law

Ohio law prohibits the disposal of some lead-acid batteries in solid or hazardous waste landfills. The law requires that these used lead-acid batteries are recycled in Ohio.

Batteries covered by the law include those batteries used in cars, motorcycles, boats and other forms of motive power. The law exempts batteries used in products such as computers, electronic games, telephones, radios and similar household electronics.

For questions and information about this law, please contact Ohio EPA's Division of Hazardous Waste Management at (614) 644-2917 or view their fact sheet at [www.epa.ohio.gov/portals/32/pdf/LeadAcidBatteryGuidance.pdf](http://www.epa.ohio.gov/portals/32/pdf/LeadAcidBatteryGuidance.pdf).

## Did you know...?

1. Used vehicle batteries need to be handled carefully because they contain highly corrosive sulfuric acid, lead and other toxic metals.
2. Many of the components of a lead-acid battery can be recovered by battery recyclers and reused to make new batteries.
3. Sixty-five percent of lead in the municipal solid waste stream comes from batteries.

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## Tips for Safely Handling Lead Acid Batteries

**DO** minimize contact by wearing heavy rubber gloves, clothing that covers exposed skin, boots, and eye protection.

**DO** take the battery to a recycling center as soon as possible after removing it from your vehicle.

If you must store the battery, **DO** keep it dry and do not expose it to freezing temperatures.

**DO** store the battery in a leak-proof container away from children and pets.

**NEVER** try to crack open lead-acid batteries yourself.

**NEVER** burn lead-acid batteries.

**NEVER** dump your batteries directly on the ground, in a ditch or bury them.

## To locate lead-acid battery recyclers in your area

- Look in the yellow pages under auto parts. Most auto parts dealers recycle batteries.
- Call your local solid waste management district listed under the county government section of the yellow pages.
- You can get a list of solid waste management districts on Ohio EPA's website at [www.epa.ohio.gov/dsiwm/pages/recycpro.aspx](http://www.epa.ohio.gov/dsiwm/pages/recycpro.aspx).
- Homeowners can also search the Earth911 website to find local recyclers in their area by ZIP code. Visit [www.earth911.com](http://www.earth911.com).



## Other Helpful Links

### American Automobile Association, Great Battery Roundup

Held every year in conjunction with Earth Day, the AAA Great Battery Roundup is designed to encourage motorists to take old automotive or marine lead-acid batteries to a local collection point where they can be safely recycled and formed into new batteries. To help with the recycling effort, local AAA offices establish battery collection points and offer free vehicle battery checks. Visit [www.aaaexchange.com](http://www.aaaexchange.com) under *For the environment* for more information.

### Ohio Department of Natural Resources, Division of Recycling and Litter Prevention

[www.ohiodnr.com/tabid/9394/Default.aspx](http://www.ohiodnr.com/tabid/9394/Default.aspx)

## How do I safely handle and store lead-acid batteries at my home?

If you do remove lead-acid batteries from vehicles, it is very important that you handle and store these carefully to protect yourself, your family and the environment. There are harmful health effects if you are exposed to lead through ingestion, inhalation or direct contact with skin. Lead absorbed into the blood can cause high blood pressure in adults and neurological damage in children. Direct contact with sulfuric acid can cause severe burns, and the fumes can damage lung tissue and cause blindness.

## Why should I have my lead-acid batteries recycled?

Almost all elements of a spent lead-acid battery can be reclaimed and reused to make new batteries. The lead is nearly 100 percent recyclable and usually finds its way back into new batteries many times. Plastic components can be reclaimed. The sulfuric acid can also be recycled. Many automotive stores, scrap-metal dealers, service stations and lead smelters will accept spent lead-acid batteries for recycling.

