



Coal ash is waste that results from coal-burning power plants. It contains toxic metals like arsenic, lead, mercury, cadmium, selenium, aluminum, beryllium, chlorine, manganese, nickel, and zinc. Some coal ash is disposed in landfills or ponds. Other coal ash is mixed with water, and recycled and reused in construction applications, like mixing in concrete or asphalt. In Puerto Rico, 300 thousand tons (a car weighs 1-2 tons) of coal ash are generated and 36 locations are affected by these wastes. A 70% of coal ash dumps are located in low-income communities.

Children are more vulnerable to toxic environmental exposures because of their small size in still developing bodies. They breathe, eat, touch the coal ash dust or be exposed while still *in utero*.

Potential Health Effects from Coal Ash

Many of the metals found in coal ash can irritate skin and have systemic effects if absorbed into the body. Some of the toxic components of coal ash can increase the risk of some cancers, allergies, gastrointestinal and respiratory problems, nervous system impacts such as developmental and behavioral problems, birth defects.

Steps to Reduce Exposure to Coal Ash

Home and School



- Reduce dust in your home by using damp cloth or mop for cleaning and HEPA filter vacuums
- Wash hands, toys, sheets, and clothes regularly.
- Cover all stored food to prevent contamination with dust.
- Remove shoes at the door before entering the home and take off all exposed clothing and shower before interacting with children
- Check local advisories about fish consumption and air quality (www.airnow.gov)
- Monitor well water per American Academy of Pediatrics guidelines (<https://bit.ly/2Wd4HLV>)
- Remove indoor carpeted floor. Bare floors are easier to clean.
- Close windows and fresh air intake on air conditioner if outdoor air is visibly polluted. Consider an indoor portable air filter.

Community



- Strike up a conversation with your community leader and local representatives and build awareness in your community.
- Create a local coal ash education initiative about environmental health effects and what the community can do as a group to reduce exposures.
- Be proactive and get involved!

This fact sheet was created by PEHSU Region 2 team and Frances Morales-Ramos referencing Gottlieb B, Gilbert S, Gollin L. (2019). Coal Ash: The toxic threat to our health and environment (<https://www.psr.org/wp-content/uploads/2018/05/coal-ash.pdf>). This material was supported by the American Academy of Pediatrics (AAP) and funded (in part) by the cooperative agreement award number 5 NU61TS000237-05 from the Agency for Toxic Substances and Disease Registry (ATSDR). The U.S. Environmental Protection Agency (EPA) supports the PEHSU by providing partial funding to ATSDR under Inter-Agency Agreement number DW-75-95877701. Neither EPA nor ATSDR endorse the purchase of any commercial products or services mentioned in PEHSU publications.