Impacts of Coal on Human Health and the Environment

From Start to Finish, Coal is a Dirty Business.

A new study from Physicians for Social Responsibility reveals how damaging coal is from cradle to grave

***"Coal combustion emissions damage the respiratory, cardiovascular, and nervous systems and contribute to four of the five leading causes of death in the U.S."* - Physicians for Social Responsibility**

How does coal affect human health?

Human health and the environment are closely interconnected. Pollution of our air and water increases risk to human health. Exposure to the coal mining process **increases risk of heart disease, cancer, stoke, heart attacks, and asthma.**

Mining

- Coal mining is responsible for **more than 30% of U.S. CO2 pollution.(1)** Release of CO2 into atmosphere increases global warming pollution and adverse affects on health worldwide.
- Mountain-top removal mining buries streams and pollutes waterways leaking **iron, aluminum, cadmium, copper, and other metal sulfide minerals into surrounding water system** and contaminating drinking water.

Transportation

- Railroad engines and trucks together release over **600,000 tons of nitrogen oxide and 50,000 tons of particulate matter into the air every year** in the process of hauling coal.(2)
- Coal trains and trucks release coal dust into the air, exposing nearby communities to dust inhalation.(3)

Washing

- Slurry is the liquid sludge waste from washing the coal. Slurry is stored in container ponds that can leak or break. A slurry pond break can cause death, environmental disaster, and poisoned drinking water.

Combustion

- Coal combustion releases sulfur dioxide, particulate matter, nitrogen oxides, mercury, many other substances hazardous to human health.

Disposing of Post-Combustion Waste

- There are 584 coal ash dump sites in the U.S., and toxic residues have migrated into water supplies and threatened human health at dozens of these sites.(4)

1. Energy Information Administration. Emissions of greenhouse gases report. 2008: Doe/eIa-0573(2007).
2. Lashof Da, Delano D, Devine J et al. Coal in a changing climate. 2007: natural Resources Defense Council. available from: http://www.nrdc.org/globalwarming/coal/coalclimate.pdf.
3. Aneja VP. Characterization of particulate matter (Pm10) in Roda, Virginia. unpublished report to the Virginia air Pollution Control Board. undated. available from: http://www.eenews. net/public/25/10670/features/documents/2009/04/23/ document_pm_01.pdf.
4. EPA, Human and ecological risk assessment of coal combus- tion wastes: draft, august 6, 2007. available from: http://www. earthjustice.org/library/reports/epa-coal-combustion-waste- risk-assessment.pdf.

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