Report: Industry Pollution Almost as Deadly as Disease in Developing Countries

October 25th, 2012 | Author: Beth Goodbaum

The health of over 125 million people living in developing countries is at risk from industrial pollution and emissions, a problem that grows as manufacturing shifts to Third World nations, says a new report. “The World’s Worst Pollution Problems 2012: Assessing Health Risks at Hazardous Waste Sites,” by the Blacksmith Institute, in partnership with Green Cross Switzerland, also reveals the industries contributing the most to this burden.

The report, which tabulated toxic effects on 49 countries, points to some alarming data — the health impact of industrial pollutants is almost equal to or higher than some of the worst global diseases, including malaria and tuberculosis. Using a metric called Disability Adjusted Life Years (DALY), which is the sum of two other calculations, Years of Life Lost (YLL) and Years Lost to Disability (YLD), researchers determined that the health impact of industrial pollutants totaled over 17 million years — more than the roughly 14 million years of healthy lives lost to malaria, and comparable to the 25 million year figure for tuberculosis.

Perhaps the most alarming observation by the report is that while there is a large focus on researching cures and medicines for major diseases, there is far less attention given to industrial pollution and hazardous waste in countries suffering the most. “The striking fact is that international and local government action on these disease burdens greatly outpaces the attention given to toxic sites, which... contribute greatly to the global burden of disease,” the report notes.

The worst industrial offenders, according to DALY data, in descending order, are:

1. Lead-Acid battery recycling
2. Lead smelting
3. Mining and ore processing
4. Tannery operations
5. Industrial/municipal dump sites
6. Industrial estates
7. Artisanal gold mining
8. Product manufacturing
9. Chemical manufacturing
10. Dye industry

These industries are tied to major chemical emissions — including lead, mercury, chromium and asbestos — and as expanding production of high-volume chemicals shifts to developing countries, health issues in those nations grow. The report points to the Organization for Economic Cooperation and Development (OECD), which has estimated that by 2020, the global output of chemicals will be 85 percent higher than in 1995, and that almost one-third of such production will take place in Third World countries — a jump from one-fifth in 1995.

Yet Third World countries do not have the means to reduce the mounting health risks. Unlike in developed nations, where hazardous sites are a focus of national health agencies and governments, developing nations do not have the funding, research, infrastructure or best practices to minimize risks.

“To further exacerbate the health risk, poor communities often have low overall standards of health, due to poor nutrition and other causes, which increase health risks and impacts from toxic substance exposure, particularly for children,” the report notes.

The report cites potential viable solutions and examples of initiatives in place. Blacksmith Institute notes that when it surveyed a polluted district in Zambia, it resulted in the government stepping in to monitor pollution streams from the site.

With chemical manufacturing attributed to a DALY of 750,000 years, standards for the management of emissions could greatly lower health risks. Educational training, in addition to stricter government regulation, could also lower risks, in addition to the development of advanced waste treatment systems.

To view the full Blacksmith Institute study, click here.