

Twenty years of research suggests asbestos regulations need updating

By Pamela Kidron

Asbestos regulations were last updated in the mid-1980s, and more than 20 years of health research suggests it's time to update those regulations again, said NIEHS Senior Medical Advisor Aubrey Miller, M.D., during a March 23 keynote speech at the annual international [Asbestos Awareness Conference](http://www.asbestosdiseaseawareness.org/global-events/2013-adao-conference) (<http://www.asbestosdiseaseawareness.org/global-events/2013-adao-conference>) in Washington, D.C. New research shows that much lower exposures to asbestos can cause disease, Miller continued.

Linked Video

[Watch an EPA video about asbestos in Libby, Mont. \(02:36\)](#)

Exposure to asbestos is dangerous for mining and industry workers, and it is also a risk for communities exposed to it through the environment. Examples of asbestos in the environment include asbestos dust brought into households by workers, as well as asbestos-contaminated products and gravels used for road paving.

This issue attracted wide attention in 1999, when a newspaper article reported 192 people dead and 375 sick from asbestos-related diseases in Libby, Mont., even though the vermiculite mine there had closed a decade earlier. The vermiculite from the mine in Libby was contaminated with naturally-occurring asbestos.

At the conference, Miller used Libby as a case study, to show the assembled asbestos patients, caregivers, and medical experts how existing asbestos regulations could be improved to protect workers and communities. Miller said that asbestos health standards have not kept up with science, and that new realities such as the risks from environmental exposures now confront the public.

Remembering the worst public health incident in EPA history

The Libby disaster unearthed gaps in asbestos regulations, Miller explained. Laws were primarily aimed at protecting mine workers, not communities that had been put at risk by household contact with workers or their clothes, from living near a site where asbestos was mined, or from being exposed to asbestos-contaminated products, such as vermiculite insulation used in Libby and in millions of residences throughout the United States.

“How could a disaster like this [in Libby] have happened, when we already knew about the danger of asbestos for almost a hundred years?” asked Miller, who was with the U.S. Environmental Protection Agency (EPA) at the time, coordinating multi-agency emergency responses to public health problems. “These low-dose exposures [in the environment] weren't supposed to make people sick. Only those high-exposure workers were getting sick. Right? That's what our laws were meant to do — to keep those high-risk workers safe.”

Miller and the EPA team screened the town for health problems, and found that 18-20 percent of the adult population had asbestos-related disease, and that most of these cases were not related to mining exposures.

Researchers also found that the current methods being used to identify hazardous products, materials, or soils contaminated with asbestos, were not effective in protecting workers or the public from dangerous asbestos exposures. Current law permits the use of up to one percent of asbestos in materials that readily release asbestos fibers when disturbed. Yet materials containing asbestos, well below one percent, can be very dangerous.

Additionally, current standards do not regulate other dangerous, asbestos-like mineral fibers, such as erionite, a potent carcinogen. “Erionite-contaminated gravels were used in Dunn [County], N.D., to pave more than 300 miles of roads, including 32 miles of school-bus routes. EPA testing of school buses driving on the gravel roads found elevated air levels of erionite, similar to towns in Turkey with high rates of mesothelioma,” noted Miller.

Challenging perceptions about asbestos

People do not understand the seriousness of exposure to asbestos, and many mistakenly think that asbestos has been banned and is no longer a problem, said Miller. Yet asbestos continues to be used in home and transportation products. It is still being imported, there is no ban on exporting it, and deaths from malignant mesothelioma, a cancer primarily associated



According to Miller, Libby, Mont. raised awareness of the potential harm from non-occupational exposure to asbestos. (Photo courtesy of Steve McCaw)

with asbestos exposure, are still on the rise.

Miller stressed the need to update asbestos regulations, as soon as possible. “We need to push for lower exposure levels, to fund fundamental research to identify what is toxic about these materials, and to address materials, such as erionite, currently not regulated as asbestos,” he told the attendees. “We also need to push for modernizing techniques for sampling and analysis, and to test consumer products potentially contaminated with asbestos.”

(Pamela Kidron is a contract writer with the NIEHS office in Bethesda, Md.)

U.S. surgeon general warns about dangers of asbestos

U.S. Surgeon General Regina Benjamin, M.D., has urged Americans to learn about the dangers of asbestos exposure. The warning came in an April 1 [statement](http://www.surgeongeneral.gov/news/2013/04/pr20130401.html). (<http://www.surgeongeneral.gov/news/2013/04/pr20130401.html>) she issued in support of National Asbestos Awareness Week.

The Asbestos Disease Awareness Organization (ADAO) applauded the surgeon general’s statement, and took the opportunity, once again, to urge Congress to ban asbestos and stop asbestos imports.

Benjamin stressed that preventing the damage caused by asbestos was key to keeping Americans healthy and safe in their homes. “Together, we can prevent the dangers associated with asbestos,” she said in her statement.

ADAO has been working with Congress and the White House since 2004, to prevent asbestos exposure. Responding to the surgeon general’s statement, ADAO co-founder and president Linda Reinstein noted that there is consensus among the EPA, National Institute for Occupational Safety and Health, National Toxicology Program, World Health Organization, International Labour Organization, and International Agency for Research on Cancer that asbestos is a carcinogen and that there is no safe level of exposure.

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