Zonolite/W.R. Grace Site

35 Industrial Drive, Hamilton Township, Mercer County Citizen's Guide to the Health Consultation: Analysis of Cancer Incidence March 2005

The New Jersey Department of Health and Senior Services (NJDHSS) has developed a Health Consultation on the Zonolite/W.R. Grace site in Hamilton Township, Mercer County, New Jersey. The purpose of this consultation is to evaluate cancer incidence in communities closest to the site. For a copy of the full Health Consultation please contact one of the agencies listed on the back of this Citizen's Guide.

How could the Zonolite site be related to cancer in the community?

The Zonolite Company, purchased by W.R. Grace & Company in 1963, mined vermiculite ore from Libby, Montana, for commercial purposes from the 1920's through 1990. Vermiculite from the Libby mine was contaminated with tremolite-actinolite, a particularly hazardous form of naturally occurring asbestos, up to 26% by weight. Exposure to asbestos is strongly associated with cancer and noncancerous respiratory diseases, including asbestosis, mesothelioma, and lung cancer, and to a lesser extent, with digestive cancers. The Zonolite/W.R. Grace facility located in Hamilton Township, Mercer County began processing vermiculite from Libby in 1948. The facility received and processed tens of thousands of tons of Libby vermiculite over several decades. In addition to the large volume of vermiculite received, the Hamilton facility also had the only vermiculite heat expansion (exfoliation) process in New Jersey. This process is considered to account for a large percentage of airborne asbestos released into the environment. Consequently, the population living near the facility may have been exposed to higher levels of asbestos and may be at greater risk of developing asbestos-related cancer.

How did the NJDHSS study cancer incidence in the area around the Zonolite site?

The NJDHSS used the state's Cancer Registry to determine how many people living within approximately one mile of the Zonolite site were diagnosed with certain cancers during the time period 1979 through 2000. Residents living in sections of Hamilton and Lawrence Townships and the city of Trenton were included. The specific asbestos-related cancers were cancers of the digestive organs, the respiratory system (including the lungs and bronchii), the chest, abdomen, and pleura; and mesothelioma. Also considered were certain cancers not related to asbestos exposure, including all malignant cancers, prostate cancer, and female breast cancer.



What were the results of the cancer analysis?

A total of 3,173 study area residents (1,625 males and 1,548 females) were diagnosed with a malignant cancer during the 22-year period. The age breakdown of the cases included 0.7% (23) under 20 years of age and 74.4% (2,361) 60 years and over. None of the asbestos-related or non asbestos-related cancer types evaluated were statistically significantly high or low. Mesothelioma was low (although not statistically significantly low) compared to both state and national rates.

What will the NJDHSS do next regarding this site?

This analysis of cancer incidence in a population living near the Zonolite/W.R. Grace facility provides no evidence that the rate of asbestos-related cancer has been affected by the potential exposure to asbestos from vermiculite processing. While no further cancer analyses for the population living near the Zonolite/W.R. Grace facility appear to be warranted, NJDHSS and the Agency for Toxic Substances and Disease Registry should work with community representatives to determine the most appropriate health education and outreach strategies to inform the general population about environmental issues in the community.

Where can I get a copy of the health consultation?

Copies of this report are available at the following locations:

in Hamilton Township:

Hamilton Township Library, White Horse Mercerville Road; Hamilton Twp. Health Department, Greenwood Avenue

in Lawrence Township:

Mercer County Library- Lawrence Twp. Branch, Darrah Lane; Lawrence Twp. Health Department, Municipal Bldg, Rt. 206;

in Trenton:

Trenton Library, Academy Street Trenton Health Department, City Hall, E. State St.

from the New Jersey Department of Health and Senior Services:

Consumer and Environmental Health Serivces (609) 584-5367 or on our web site at http://www.state.nj.us/health/eoh/cehsweb/index.html (see "What's New")