



# Cancer Evaluation

Ambler Area, Montgomery County

## *Summary*

An excess of cases of mesothelioma has been found in the Ambler PA ZIP code (19002). These cases of mesothelioma are due to past exposure to asbestos when the asbestos manufacturing facilities were operating in the community and exposed many workers. The Pennsylvania Department of Health (PADOH) and the federal Agency for Toxic Substances and Disease Registry (ATSDR) conclude that, based on available data, residents are not currently being exposed to asbestos at a level of health concern from the BoRit Asbestos site.

## *Why Was The Review Conducted?*

In response to ongoing community concerns, PADOH conducted an updated review of the Pennsylvania Cancer Registry to determine the incidence of cancer for ZIP code 19002, which contains communities near the BoRit Asbestos site, and near the former manufacturing buildings. The review particularly focused on the rate of mesothelioma, because there is a strong relationship between asbestos exposure and this form of cancer.

## *What Was Done?*

For this review, cancer incidence (number of newly diagnosed cases) in ZIP code 19002 was compared with the cancer incidence for Pennsylvania overall. Also, the incidence in the two adjacent ZIP codes, Blue Bell (19422) and Fort Washington (19034), was compared with the cancer incidence for Pennsylvania overall.

Since 1981, all cancer cases in Pennsylvania residents must be reported to the state cancer registry, including those diagnosed in other states. The address recorded is the residential address of the patient with cancer at the time of diagnosis. This allows an analysis to be conducted of cancer rates by geographic location.

This updated review differed from previous reviews in that it used cancer diagnoses from 1992 to 2008, a longer period than the previous reviews. The previous asbestos manufacturing operations and the BoRit site are within ZIP code 19002.

## What Was Found?

The **overall cancer incidence rate\*** (total number of all cancers per population) in ZIP code 19002 was lower than the overall rate for Pennsylvania. This lower incidence was statistically significant (unlikely to have occurred by normal variation or chance).

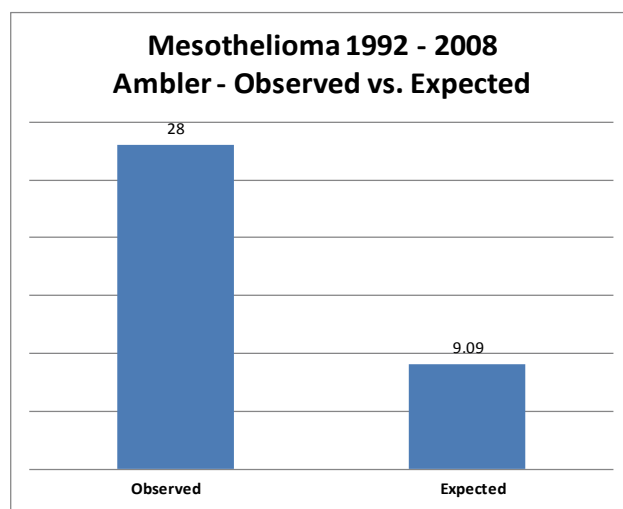
The rate of **mesothelioma** in ZIP code 19002 was 3.1 times higher than expected, based on statewide rates for this cancer type. Men had 2.7 times the expected rate, and women had 4.5 times the expected rate. These differences were all statistically significant. The mesothelioma rates for Blue Bell (19422) and Fort Washington (19034) were not elevated.

The rate of **cancer of the lung and bronchus** (the airways leading to the lungs), which has also been linked to asbestos exposure but is more strongly related to tobacco use, was less than expected in all three ZIP codes. The low incidence rates were statistically significant compared with the rate for Pennsylvania as a whole.

\* includes all types of cancer

## Conclusion

Mesothelioma, a cancer of the lining of the lungs and the cancer most closely associated with asbestos exposure, was seen at an increased rate in the 19002 ZIP code.



Number of cases

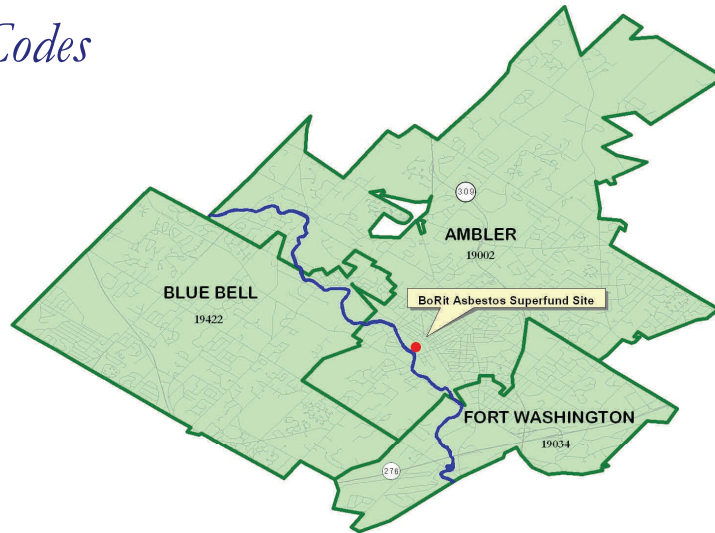
## What Does It Mean?

Mesothelioma usually occurs many years after asbestos exposure, often 30 or more years later. ATSDR and PADOH believe the cases of mesothelioma in ZIP code 19002 are most likely due to *exposures that occurred in the past*, when the asbestos manufacturing facilities were operating in the community and many workers (and in some cases their household contacts) were exposed to asbestos.

Air sampling results collected at and near the Borit Asbestos site (through 2010) indicate that *residents in the community are not currently being exposed to asbestos at a level of health concern.*

- An evaluation of historical air monitoring data is included in a July 9, 2008 Health Consultation that is available on the internet at: [www.atsdr.cdc.gov/HAC/pba/BoritAsbestosAirSamplingResults/BoritAsbestosAirSamplingResultsHC3-17-2009.pdf](http://www.atsdr.cdc.gov/HAC/pba/BoritAsbestosAirSamplingResults/BoritAsbestosAirSamplingResultsHC3-17-2009.pdf).

## *Map of Zip Codes*



## *What Additional Studies Are Planned?*

PADOH and ATSDR will continue to work together and with the community to address the public health issues relating to the site.

The health agencies will:

- Share information with the community and local health care providers.
- Prepare a public health assessment on EPA environmental sampling data currently being collected under the Superfund program. This is expected in 2012.
- Remain available to answer your questions.

In order to more precisely determine the cause of asbestos-related disease in the community, the University of Pennsylvania is conducting a study to determine the effects of community and occupational exposures and of household exposures in families of asbestos workers. PADOH and ATSDR are working with the investigators doing this study.

## *What Should Residents of the Area Do?*

Residents should avoid further exposure to asbestos. Cleanup operations at the Superfund site will be supervised and monitored by the environmental agencies and will use effective methods to minimize and eliminate asbestos exposure to workers and the general public. However, it is very important to cooperate with safety recommendations, such as not to trespass on restricted sites.

Asbestos and cigarette smoking work in concert to substantially increase this risk of lung cancer (although not mesothelioma). Anyone exposed to asbestos in the past should strongly consider a smoking cessation program.

There is no effective screening test available for the early detection of mesothelioma. You should consult your health care provider about any respiratory illness or other problem, but there are no specific actions we can recommend beyond not smoking.

Community members who are concerned are welcome to speak with one of the health agencies listed on the last page of this fact sheet.

# Comments and Suggestions

## Contact Information

### Agency for Toxic Substances and Disease Registry

Region 3 Office  
Lora Siegmann-Werner  
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[www.atsdr.cdc.gov](http://www.atsdr.cdc.gov)

### Pennsylvania Department of Health

Dr Greg Bogdan or  
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### Health Consultations:

Air Monitoring  
[www.atsdr.cdc.gov/HAC/pha/BoritAsbestosAirSamplingResults/BoritAsbestosAirSamplingResultsHC3-17-2009.pdf](http://www.atsdr.cdc.gov/HAC/pha/BoritAsbestosAirSamplingResults/BoritAsbestosAirSamplingResultsHC3-17-2009.pdf)

Cancer Analysis  
<http://www.atsdr.cdc.gov/HAC/pha/BoritSite/BoritHODHC01-28-2009.pdf>

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### Pennsylvania Department of Environmental Protection

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| Your comments are important to us. Please check the most appropriate response.  | Very satisfied | Satisfied | Neutral | Less than satisfied | Very dissatisfied |
|---|----------------|-----------|---------|---------------------|-------------------|
| Do you feel you have a good understanding of the environmental health issues related to the Borit Asbestos Superfund site?  |                |           |         |                     |                   |
| How satisfied are you that you have the resources to assist you in answering your environmental health questions about the Borit Asbestos site?   |                |           |         |                     |                   |
| What would you recommend for future activities, if any?   |                |           |         |                     |                   |
| <p><b>Please attach any comments and the best way to contact you, if desired.</b><br/>Thank you! Please return the following page to:</p> <p style="text-align: center;">Barbara Allerton, MPH, RN<br/>PA Department of Health<br/>625 Forster Street<br/>Harrisburg, PA 17120<br/>E-mail: <a href="mailto:ballerton@state.pa.us">ballerton@state.pa.us</a><br/>Fax: 717-346-3286</p> |                |           |         |                     |                   |