

# **Borit Asbestos Site Update on Public Health Activities**

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Presentation to the Community Action Group

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# Background

The Department of Health has had a federal grant from the Agency for Toxic Substances and Disease Registry (ATSDR) for the Health Assessment Program.

- ▀ Prevent or reduce potential exposures, and illnesses resulting from exposure, to contaminants from hazardous waste sites in the Commonwealth
- ▀ Determine the potential human public health effects associated with any such exposures
- ▀ Produce health assessment and consultation documents (e.g. TA, LHC, HC, PHA) on such sites
- ▀ Provide health education to residents, health care professionals, and elected officials in impacted communities (community fact sheets, public meetings, grand rounds)

# Borit Asbestos Site

Site includes two historical asbestos disposal areas and a water reservoir.

- The facility involved manufacture and processing of asbestos containing material (ACM), operated from 1897 to 1980s.
- The site pile and the reservoir encompass an area of approximately 30 acres.
- ACM is present in surface soils throughout the site.



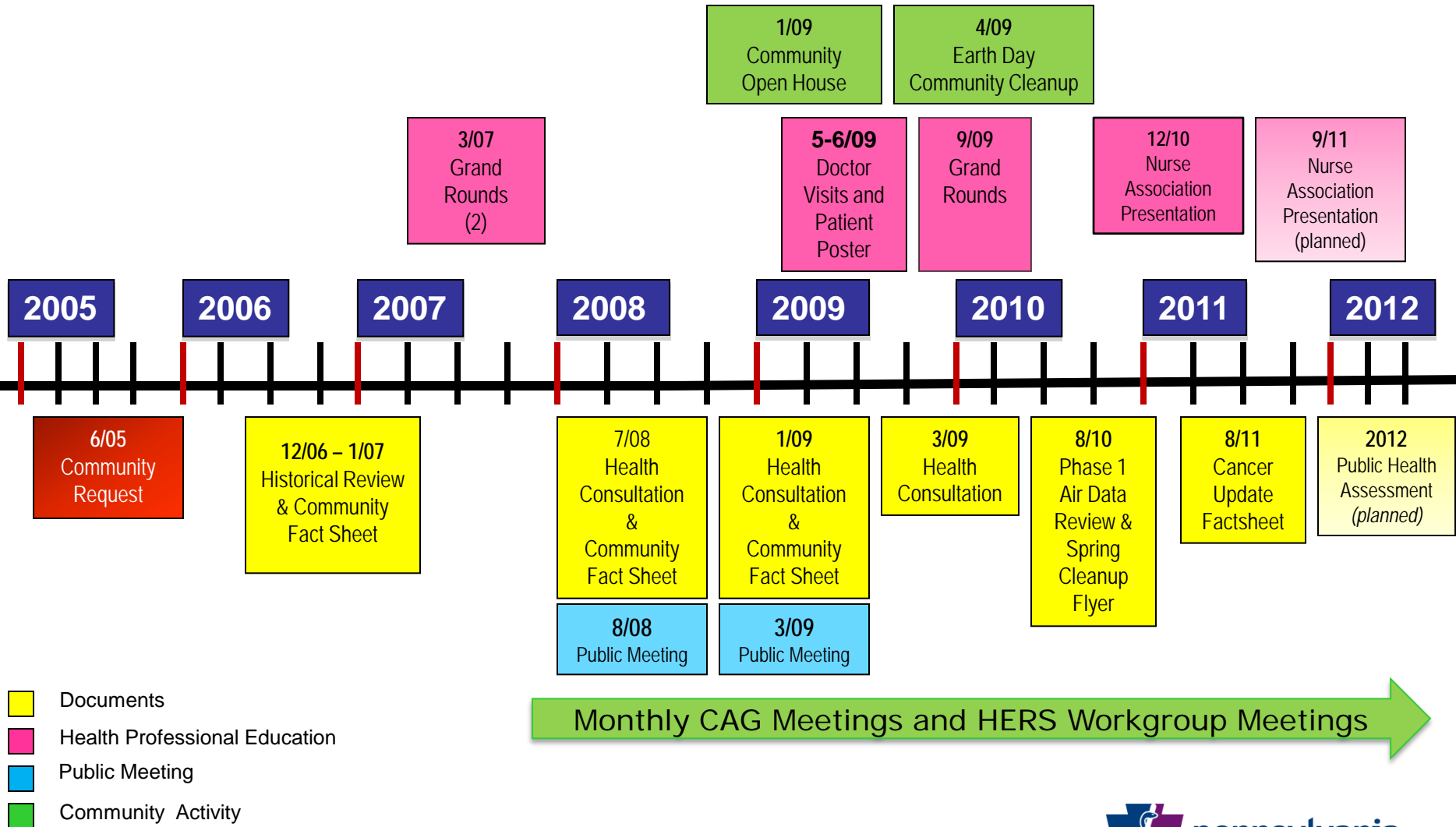
# Site Conditions in 2008



# Current Conditions



# Public Health Activities Timeline



# Public Health Consultations

Prepared two health consultation documents in 2009:

- 1) Environmental sampling data and concluded:
  - ▀ Residents in the Ambler community were not currently being exposed to asbestos at a level of health concern.
  - ▀ However, there was a potential public health hazard, and past exposures were unknown.
- 2) Cancer review found that none of the types of cancer associated with asbestos was significantly higher than expected.

# Public Health Recommendations (2009)

- Because of the potential for exposure to the surrounding community and the level of asbestos in surface soil across the site, PADOH and ATSDR recommend immediate and sufficient containment (covering exposed areas) of asbestos containing materials on the site to prevent possible off-site migration of asbestos.
- EPA and PADEP should continue to work with property owners to restrict access to the site.
  - DO NOT TRESPASS ON THE SITE!
  - Visitors to the site should avoid disturbing the soil.

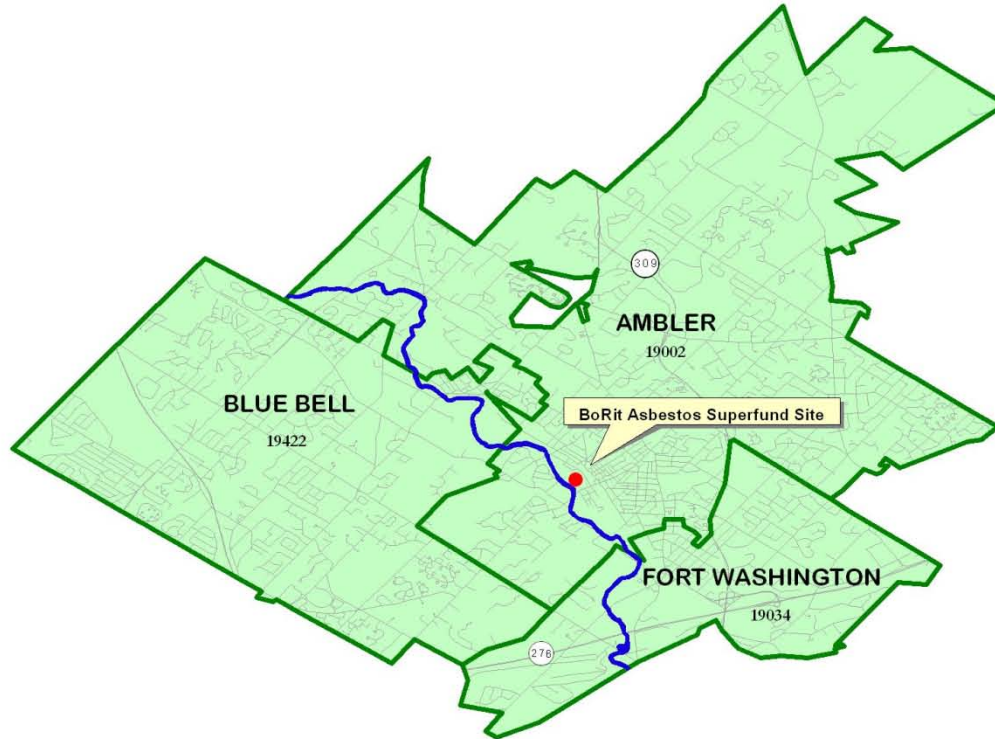


# ▶ Health Outcome Data Reviews

PADOH recently updated the 2009 cancer data review that evaluates cancer incidence in the community.

- Both reviews are especially interested in asbestos-related cancers:
  - mesothelioma
  - lung and bronchus cancers
- The 2009 cancer review evaluated information reported to the Pennsylvania Cancer Registry from 1996-2005.
- The 2011 cancer review includes information reported to the registry from 1992-2008.

# Area of Review



# Findings of the 2011 Cancer Update

- 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.
- 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** 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.

# Conclusions of the 2011 Cancer Update

PADOH and ATSDR believe the cases of mesothelioma are most likely due to exposures that occurred in the past when the asbestos facilities were operating and exposing workers and possibly household contacts of these workers.

- Most cases of mesothelioma are diagnosed 30 years or more after the first exposure to asbestos.
- Air sampling results reviewed (through 2010) indicate that residents in the community are not currently being exposed to asbestos at a level of health concern.
- Despite our efforts, we have been unable to confirm anecdotal reports of asbestos-related disease occurring in residents who did not work with asbestos in the past, or were not a close contact to an asbestos worker.

# Limitations of Health Outcome Data Reviews

- This cancer data review can only determine whether there is an abnormal rate of cancer in the study area. Cause and effect relationships cannot be established because other factors may contribute to the observation.
  - e.g. heredity, lifestyle, exposures from other sources, and occupational exposures.
- The cancer registry uses only the residence of the individual at the time he or she was diagnosed with the disease. Information on previous residence and length of residency are not included in the cancer registry.
  - Population mobility and changes in population could affect the results of this analysis.
- Since mesothelioma and lung cancer can take decades to develop, the current health outcome data reflect past exposures.

# Future Steps

PADOH and ATSDR will:

- continue to share information with local health care providers.
- evaluate recent and future environmental sampling data collected by EPA and publish our finding in a public health assessment. This document is expected in early 2012.
- remain interested in learning of individuals with non-work related asbestos disease who live 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.

# Questions?