

ALASKA TOP HAZARDOUS AIR POLLUTANTS

ASBESTOS

Class A Carcinogen

The inventory method and available data do not indicate emissions occurring in the three inventoried communities. However, this does not mean there are no emissions of this pollutant in the state.

Inhalation Unit Risk Estimate for Cancer

- Asbestos - 2.3 (fibers/cm³)⁻¹ for lung cancer and cancer of the membranes lining the abdominal cavity and surrounding internal organs - humans

Inventory Estimates

Community	Ranking by Mass	Total Emitted (tons per year)	Top Sources
Anchorage*	n/a	---	n/a
Fairbanks*	n/a	---	n/a
Juneau*	n/a	---	n/a
Total of 3 Communities		---	

* No data to indicate emissions

Asbestos Sources Expected* in Alaska

* No data to indicate emissions

Potential Occupational Exposure to Asbestos

asbestos mining and milling	asbestos fireproofing materials	dumping asbestos wastes
brake repair and maintenance	ship building and maintenance	inspection and maintenance of asbestos containing structures

textile production	cement production	gold mining
cigarette filter manufacture		

Asbestos Emission Inventory* Improvements

* No data to indicate emissions

Asbestos Health Effects

There is not enough data to ascertain specific effects from specific exposure concentrations. Studies indicate the following: Data from occupational exposures outline the following symptomology of asbestosis. Onset of asbestosis starts slowly, beginning with increased difficulty catching one's breath. There may be a general decrease in lung function. This may progress to an aching chest. Later in the process, there may be the presence of "crackles" or crepitations when fully inhaling. Inflammatory changes eventually lead to lung cancer.

Cancer ranking: The EPA classifies asbestos as a Group A carcinogen for lung cancer. Group A carcinogens are considered known human carcinogens, like cigarette smoke. There is a 0.23 (approximately a 1 in 5) increase in lifetime risk of lung cancer for lifetime exposure to a concentration of one fiber/cm³ of asbestos.