

ALASKA TOP HAZARDOUS AIR POLLUTANTS

BENZIDINE

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

- Benzidine - $0.067 (\mu\text{g}/\text{m}^3)^{-1}$ for bladder cancer - people

Inventory Estimates of Benzidine

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

Benzidine Sources Expected* in Alaska

* No data to indicate emissions

Potential Occupational Exposure to Benzidine

benzidine production (no longer produced in U.S. - banned 1973)	pharmaceutical production	rubber production
dye production		

Benzidine Emission Inventory* Improvements

* No data to indicate emissions

Benzidine Health Effects

No information is available on the short term effects of benzidine in humans via inhalation exposure. Long term exposure to benzidine in humans may result in bladder injury.

Cancer ranking: The EPA classifies benzidine as a Group A carcinogen for lung cancer. Group A carcinogens are considered known human carcinogens, like cigarette smoke. There is a 0.067 (approximately 7 in 100) increase in lifetime risk of bladder cancer for every one $\mu\text{g}/\text{m}^3$ of continuous benzidine exposure over a lifetime.