

## ALASKA TOP TEN HAZARDOUS AIR POLLUTANTS

#6	HYDROCHLORIC ACID	H—Cl
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## Inventory Estimates

Community	Total Emitted (tons per year)	Top Sources
Anchorage	54	Incineration
Fairbanks	161	University and Military
Juneau	29	Incineration
Total of 3 Communities	244	

## Hydrochloric Acid Source

structural fires	military bases	consumer products like automotive care and sealant products
incinerators	airports	

## Hydrochloric Acid Emission Inventory Improvements

- Better emission factor and activity data to increase accuracy for point source emission

## Hydrochloric Acid Health Effects

**Low level (< 5 ppm):** Alteration of nerve activity in eyes and blood vessels. Possible odor recognition,

**Medium level (5 - 50 ppm):** Long term exposure causes tooth damage. Obvious odor recognition at 10 ppm. 35 ppm irritates throat.

**High level (50->100):** Tolerable up to an hour. Eye irritation, sneezing, laryngitis, chest pain, hoarseness, and a feeling of suffocation. Fluid in lungs and throat spasms occur for longer exposures.

**Very high level (>1000 ppm):** Immediate fluid in lungs and throat spasms.

**NOTE:** HCl very reactive and enacts toxicity in nose and upper airways. To reach the lungs, HCl must be carried on a particle of less than 3 micrograms in diameter

**Cancer ranking:** EPA does not classify HCl as a human carcinogen.

