Health Risks in North Dakota from Oil and Gas Air Pollution

In the United States the oil and gas industry dumps millions of tons of air pollutants into our air each year. This mix of pollutants includes methane, a very potent climate pollutant and enormous amounts of toxic air pollutants and pollutants that lead to harmful ground level ozone smog pollution. Toxic air pollutants cause cancer and other diseases, while ozone smog can cause a variety of health problems, such as asthma attacks and worsening the effects of bronchitis and emphysema.

With equipment to produce over 12% of the nation’s oil located in the State, North Dakotans bear much of the health risks caused by oil and natural gas industry air pollution.

According to EPA’s data for 2011, over 2,200 tons of hazardous toxic air pollution—benzene, formaldehyde, and acetaldehyde—were emitted by oil and gas companies in North Dakota. Furthermore, because the state’s oil and gas production increased by 282 percent and 372 percent, respectively, between 2011 and 2015, pollution has likely increased as well. The Bakken region of western North Dakota is most directly affected by these toxic gases:

- Over 11 thousand people in North Dakota live within a half-mile of active oil and gas operations. Toxic air pollution emissions can directly affect the health of individuals living adjacent to sources.
- Over 80,000 people live in 12 North Dakota counties where the average cancer risk exceeds EPA’s level of concern due to exposure to toxic gases spewed by the oil and gas industry (see Figure 1).
- Children are especially vulnerable to air pollution exposure and 63 schools in North Dakota are located within a half-mile of oil and gas operations.
- North Dakota’s children will suffer over nine hundred asthma attacks every summer induced by ozone from this industry. They will miss hundreds of days of school.
- Adults are also harmed by ozone exposure, with up to 1,650 person-days of restricted activity in North Dakota due to breathing higher levels of pollution from this industry.

The bottom line: air pollution from the oil and gas industry affects young and old and those living near and far from industry activities. Reasonable standards, such as those put in place over the past year by the US EPA and BLM, are essential to protecting the health of North Dakotans.

Figure 1: Cancer Risk in North Dakota from Oil and Gas Toxic Air Emissions

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