Health Risks in Colorado from Oil and Gas Air Pollution

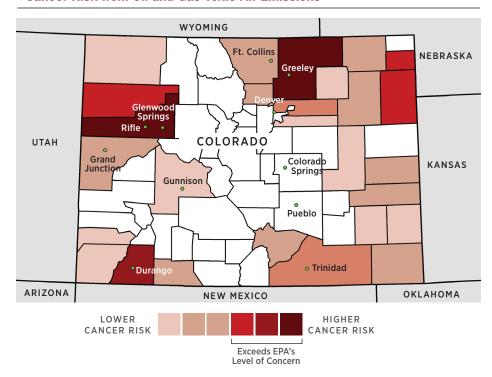
olorado has struggled with ozone smog problems for years. The oil and gas industry is one important source of the pollution responsible for this smog, and the state has responded to the problem by issuing and implementing leading regulations to cut pollution from the industry, with feasible, practical measures to reduce pollution. The industry has continued to grow in the state with these measures in place—they don't hamper development, principally because they don't cost much (most measures help keep natural gas "in the pipe" instead of leaking into the atmosphere, so they actually increase revenue for operators). And the measures work to reduce pollution.

But state measures cannot protect the health of Coloradans from pollution originating in other states. In western Colorado, ozone levels have been high in an area close to oil and gas development in Utah, where the Colorado standards do not apply. In southwestern Colorado, a similar problem can be seen close to oil and gas fields in New Mexico.

Across the state, Coloradans bear health risks as a result of oil and gas air pollution. According to EPA's data for 2011, over *3,300 tons* of hazardous toxic air pollution—benzene, formaldehyde, and acetaldehyde and other compounds—were emitted by oil and gas companies in Colorado. Meanwhile, oil and gas operations in neighboring counties in Utah and New Mexico emit over two thousand additional tons of these compounds.

As a result, many Coloradans face excess risks to their health from these compounds.

FIGURE 1
Cancer Risk from Oil and Gas Toxic Air Emissions



- Residents of six counties (see Figure 1) face cancer risk that exceeds EPA's level of concern due to exposure to toxic gases spewed by the oil and gas industry. Over 380,000 people live in those counties.
- Children are especially vulnerable to air pollution exposure and 83 schools in Colorado are located within a half-mile of oil and gas operations.

Citizens across Colorado are exposed to harmful ozone smog resulting from oil and gas industry air pollution:

- More than 32,000 Colorado children per year will suffer asthma attacks due to ozone from this industry.
- Over 60% of those children live in the Denver area/Northern Front Range (see Figure 2, page 2), where oil and gas pollution contribute

- significantly to the unhealthy levels of ozone that the area experiences.
- Kids in western Colorado are also harmed—together, there are over 2,200 childhood asthma attacks per year in Eagle, Garfield, and Mesa counties attributable to oil and gas emissions, including emissions from out of state. Kids in La Plata county in southern Colorado suffer another 660 attacks per year.
- Unfortunately, no county in the state escapes from the ozone pollution produced by the oil and gas industry.
- Adults are also harmed by ozone exposure, with more than 69,000 person-days of restricted activity in Colorado linked 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. Coloradans need strong standards in place to reduce this pollution. State standards alone cannot solve this problem, however. They don't address polluting industry facilities in neighboring states, and they also don't cover tribal lands in Colorado. Strong, protective federal pollution standards, such as those put in place over the past year by the US EPA and BLM, are essential to protecting the health of Coloradans.

FIGURE 2
Ozone-induced Childhood Asthma Attacks Attributed to Oil and Gas Emissions in Colorado Counties

