Freeways are a Public Health Hazard

1. Studies show that the zone of increased pollution along a freeway corridor (compared to community wide concentrations) is approximately two miles wide.

2. People who live, work or travel within 165 feet downwind of a major freeway are exposed to the most dangerous part of air pollution, ultrafine particulate matter, at concentrations 25-30 times higher than the rest of the community.

3. For people who live near a freeway, the concentration of freeway generated pollution inside their homes is about 70% as high as outdoor air along the freeway corridor. For an average home, the indoor air exchanges completely with outdoor air every two hours. People living near a freeway are unquestionably breathing more pollution.

4. Wasatch Front air pollution is already a serious public health hazard. Our air pollution is sometimes the worst in the nation and typically we rank in the top ten worst cities in the country for acute spikes in air pollution. All of the health consequences of air pollution are found at even higher rates among people who live near freeways or other high traffic locations, including heart and lung diseases, strokes, shortened life spans, higher mortality rates, poor pregnancy outcomes, multiple types of cancer and even autism. Freeways are literally cancer and autism corridors.

Thousands of studies confirm the health threat of freeway pollution.
Below is a small sampling of those studies.

The rate of progression of hardening of the arteries, the cause of strokes, heart attacks and generalized aging, is double for those living within 100 meters of a freeway.


Children who live within 500 meters of a major highway are not only more likely to develop asthma and other respiratory diseases, but their lung development may also be stunted permanently.


Living within 1,000 ft of a freeway doubles the risk of a child being born with autism.


Children growing up with more traffic pollution have significantly lower IQs and
impaired memory.


Pregnant mothers exposed to more air pollution, give birth to children with lower intelligence, and behavioral and attention deficit disorders, even if the children breathe clean air themselves.


Pregnant women who lived close to high-traffic roadways during pregnancy were more likely to give birth prematurely or have a low-weight baby, putting the child at risk for multiple, life long chronic diseases


Living within 100 meters of a freeway increases the risk of childhood leukemia 370%, living within 300 meters increases the risk 100%.


Pregnant mothers breathing higher rates of air pollution give birth to children who have higher rates of several types of rare childhood cancers.


Women exposed to more traffic-related air pollution have higher rates of breast cancer and decreased survival if they get breast cancer. Background Wasatch Front levels correlate with an increase of about 125%, living near a freeway increases that much more.


Chronic exposure to traffic air pollution increases the risk of lung cancer.

High traffic air pollution exposure more than doubles the rate of cervical and brain cancer, and increases the risk of prostate cancer and stomach cancer.


People exposed to more traffic related air pollution have more DNA damage, a trigger for multiple chronic diseases including cancer.


Traffic related air pollution shortens telomeres (a critical part of chromosomes). Shortened telomeres are highly correlated with reduced life expectancy.


Residential proximity to major roadways is associated with decreased kidney function.

Lue S, Wellenius G, Wilker E, Mostofsky E, Mittleman M. Residential proximity to major roadways and renal function. J Epidemiol Community Health Published Online First: 13 May 2013 doi:10.1136/jech-2012-202307

Long term exposure to traffic-related air pollution is associated with insulin resistance in children and type II diabetes in adults.


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