Inhalation Exposure to Hazardous Air Pollutants (HAPs)

Durham County - North Carolina

Hazard Index (HI) for Non-Cancer Health Effects on the Respiratory System by Pollutant Source

Additional Cancer Risk per Million by Pollutant Source

HAPs significantly contributing to non-cancer risk
- Acrolein
- Acetaldehyde
- Formaldehyde
- Diesel Engine Emissions
- Naphthalene

HAPs significantly contributing to cancer risk
- Formaldehyde
- Benzene (incl. Gasoline)
- Acetaldehyde
- Carbon Tetrachloride
- 1,3-Butadiene

Durham County
Out of 3140 counties in the US, there are
- 2765 counties that have lower cancer risk and
- 2561 counties that have lower non-cancer risk.

Definitions:
- **Point Source**: Facilities that produce air pollution in large amounts. Examples are chemical plants, power plants, and pulp and paper mills.
- **Nonpoint Source**: Facilities that produce air pollution in amounts less than a point source and are typically numerous in an area. Examples are Autobody shops, gasoline filling stations and some electroplating operations.
- **Onroad Source**: Mobile sources such as cars, motorcycles and trucks.
- **Nonroad Source**: Mobile sources such as airplanes, trains, boats and any other off-road vehicles.
- **Background Source**: Air pollution attributable to long-range transport, unidentified emission sources, and natural emission sources (e.g. swamps, volcanoes, rock formations).
- **Secondary Pollutant Source**: Pollutants that are formed from other pollutants and emitted into the air. Examples are formaldehyde which is formed by combining sunlight, oxygen and methane.
- **Respiratory system**: The airways, the lungs, and the muscles that are used for breathing.
- **Cancer Risk**: The additional likelihood of developing malignancy, due to inhalation exposure to air pollutants, beyond the combined results of lifestyle and family history of cancer.
- **Hazard Index**: A value less than 1.0 means no significant risk of adverse health effects.