HEALTH THREATS FROM FRACKING-RELATED AIR POLLUTION

GLOBAL EFFECTS

- Emissions of carbon dioxide and methane contribute to climate change. Methane warms the climate at least 80 times more than an equal amount of carbon dioxide over a 20-year period.

REGIONAL EFFECTS

- Nitrogen oxides and volatile organic compounds form ground-level ozone in the presence of sunlight, which can cause:
  - Respiratory problems, including coughs, shortness of breath, airway and lung inflammation, decreased lung function, worsening of asthma and other respiratory diseases, increased hospital admissions, and premature mortality
  - Cardiovascular effects, including cardiac arrhythmia, increased risk of heart disease, heart attacks, and stroke

LOCAL EFFECTS

- Exposure to diesel particulate matter, hydrogen sulfide, toxics, including benzene, toluene, ethylbenzene, and xylene, and other volatile hydrocarbons can lead to:
  - Eye, nose, and throat irritation
  - Respiratory problems, including cough, difficulty breathing, and worsening of asthma and other respiratory diseases
  - Cardiovascular problems, including high blood pressure, heart attacks, and worsening of cardiac diseases
  - Brain and nervous system problems, including headaches, light-headedness, and disorientation
  - Damage to the blood and bone marrow leading to anemia and immunological problems
  - Reproductive system effects
  - Effects on fetal and child development
  - Cancer and premature mortality

Sources:
- USEPA: http://www.epa.gov/airmarkets/health-effects.html
- NRDC: https://www.nrdc.org/stories/coal-and-fracking-air-pollution
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- USEPA: http://www.epa.gov/airmarkets/health-effects.html
- NRDC: https://www.nrdc.org/stories/coal-and-fracking-air-pollution