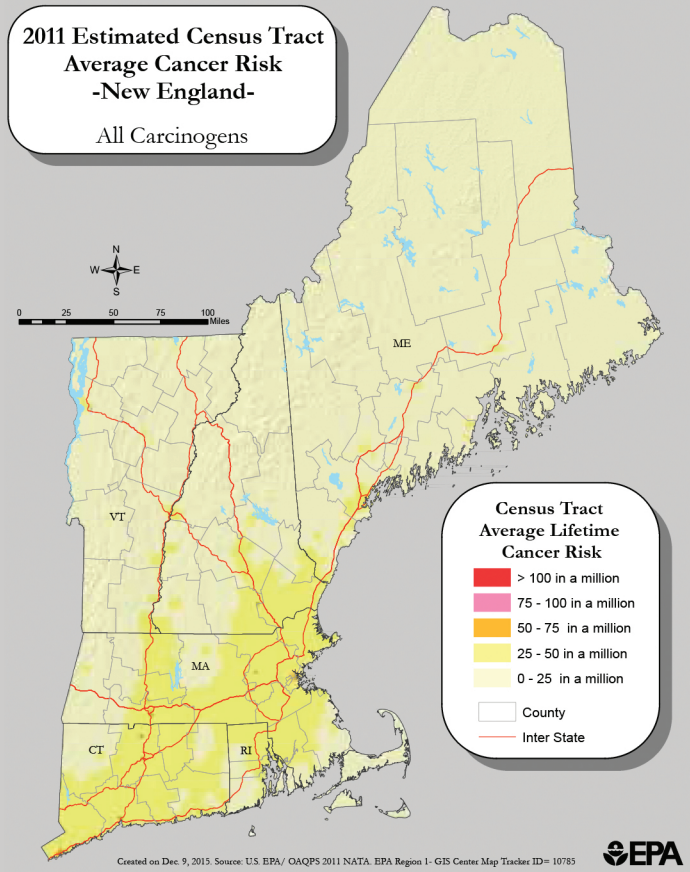
United States Environmental Protection Agency

2011 National Air Toxics Assessment

(NATA) NEW ENGLAND



- The cancer risk map represents the summation of outdoor air inhalation risks of carcinogens. It does not include all pollutants or exposure estimates from other pathways.
- EPA also implements actions to address public health risks for other health effects, such as asthma, that may result from exposure to these hazardous air pollutants.
- New England continues to be a region impacted by air toxic emissions generated by mobile sources, local area sources, as well as industrial and natural sources.

Air Toxics of Greatest Concern in New England

- State average risk values of four air toxics: acetaldehyde, benzene, carbon tetrachloride, and formaldehyde exceeded health benchmarks in every state in New England, and state average risk values of three air toxics: 1,3-butadiene, acrolein, and naphthalene exceeded health benchmarks in at least one state in New England.
- Although there is no established cancer health benchmark for diesel exhaust, people are exposed to high concentrations of diesel emissions so it is also an air toxic of concern.
- Mobile sources represent a significant emission category for benzene, 1,3-butadiene, acrolein, diesel and naphthalene.
- Residential wood combustion sources represent a significant emission category for 1,3-butadiene, acrolein, benzene, and naphthalene.
- Background sources, including natural sources, emissions of persistent air toxics that occurred in prior years, and long-range transport, account for the majority of ambient air concentration estimates for carbon tetrachloride, a persistent, globally ubiquitous pollutant.
- Atmospheric transformation accounts for the majority of the risk estimates for acetaldehyde and formaldehyde, although mobile sources and residential wood combustion represent significant emission categories of anthropogenic emissions for these pollutants.

New and Continuing Actions to Reduce Risks

- Encouraging voluntary and regulatory efforts to address wood smoke emissions, including efforts to implement the new source performance standards for residential wood heaters
- Requiring cleaner gasoline and tightening tail pipe standards
- Expanding and implementing diesel reduction initiatives
- Promoting energy efficiency
- Improving monitoring and emission inventories
- Implementing stationary source air toxics standards
- Funding and implementing projects in communities to reduce air toxics risks
- Providing pollution prevention assistance to sources

For more information: www3.epa.gov/region1/eco/airtox