US EPA ARCHIVE DOCUMENT

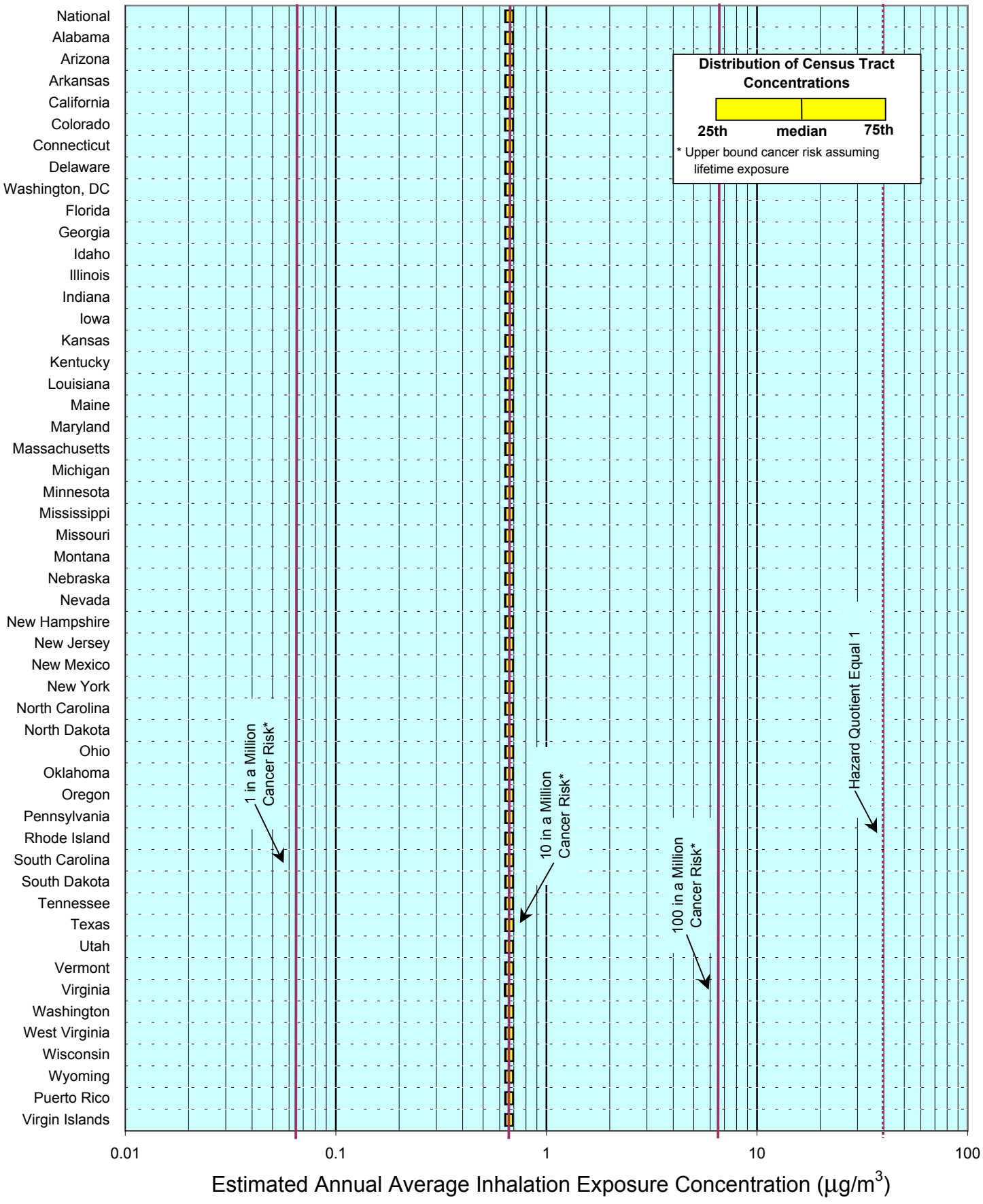
US EPA ARCHIVE DOCUMENT

Overall Confidence: H
Higher
(Learn more)

1996 Modeled Exposure Concentrations

Carbon Tetrachloride - Statewide Concentration Distribution Estimates

(For limitations on the use of these data see page 2)



US EPA ARCHIVE DOCUMENT

Limitations of the Exposure Assessment

EPA strongly cautions that these results should not be used to draw conclusions about local exposure concentrations or risks. The results are most meaningful when viewed at the state or national level; for smaller areas the modeling becomes less certain. In addition, these results represent conditions in 1996 rather than current conditions and only include exposures from outdoor sources of air toxics. Because of these limitations, and others described below, EPA recommends that the results be used only for their intended purposes.

- The information presented on this chart represents modeled exposure estimates rather than measured exposures. These estimates are surrounded by substantial uncertainties that arise from a variety of sources, and they should not be confused with measured exposure data.
- The exposure estimates are based on 1996 emissions of air toxics. Significant emission reductions have occurred since 1996 and more are expected in the future. EPA did not account for these reductions in developing the lifetime exposure estimates shown here.
- The methods used to estimate emissions and the assumptions used in modeling dispersion may introduce significant uncertainties into the exposure estimates. Please see the discussion of limitations in the emissions inventory and dispersion modeling for more details.
- The exposure estimates are limited to inhalation. EPA did not consider oral exposures. In some cases, people may receive substantial additional oral exposures to substances such as mercury and PCBs that bioaccumulate in foods.
- The exposure estimates do not include indoor emission sources because appropriate data are not yet available. In some cases, people may receive substantial additional inhalation exposures to common indoor air pollutants such as formaldehyde and perchloroethylene.
- All exposure estimates are for the median individual within each census tract, which EPA considers to be a "typical" exposure. Some individuals may have substantially higher or lower exposures based on where they spend their time. The model is not designed to quantify these individual extremes.
- EPA provides cancer risk estimates for carcinogens at various exposure levels (e.g., 1 in a million) to assist readers in placing the exposure levels in context. These risk estimates represent a plausible upper limit of lifetime cancer risk to a person with a typical exposure. These risk estimates are conservative, but not worst-case. Please see Table 1 in the health effects information for more information.
- EPA provides Hazard Quotient values for non-carcinogens at various exposure levels (e.g., Hazard Quotient = 1). While a Hazard Quotient of 1 is considered safe, higher Hazard Quotients are not necessarily harmful. Nevertheless, as the Hazard Quotient increases above 1, the potential for adverse effects also increases. Please see Table 2 in the health effects information for more information.
- EPA has assigned an overall confidence level for each pollutant based on consideration of the combined uncertainties from emissions estimation, ambient concentration modeling, and exposure modeling.