

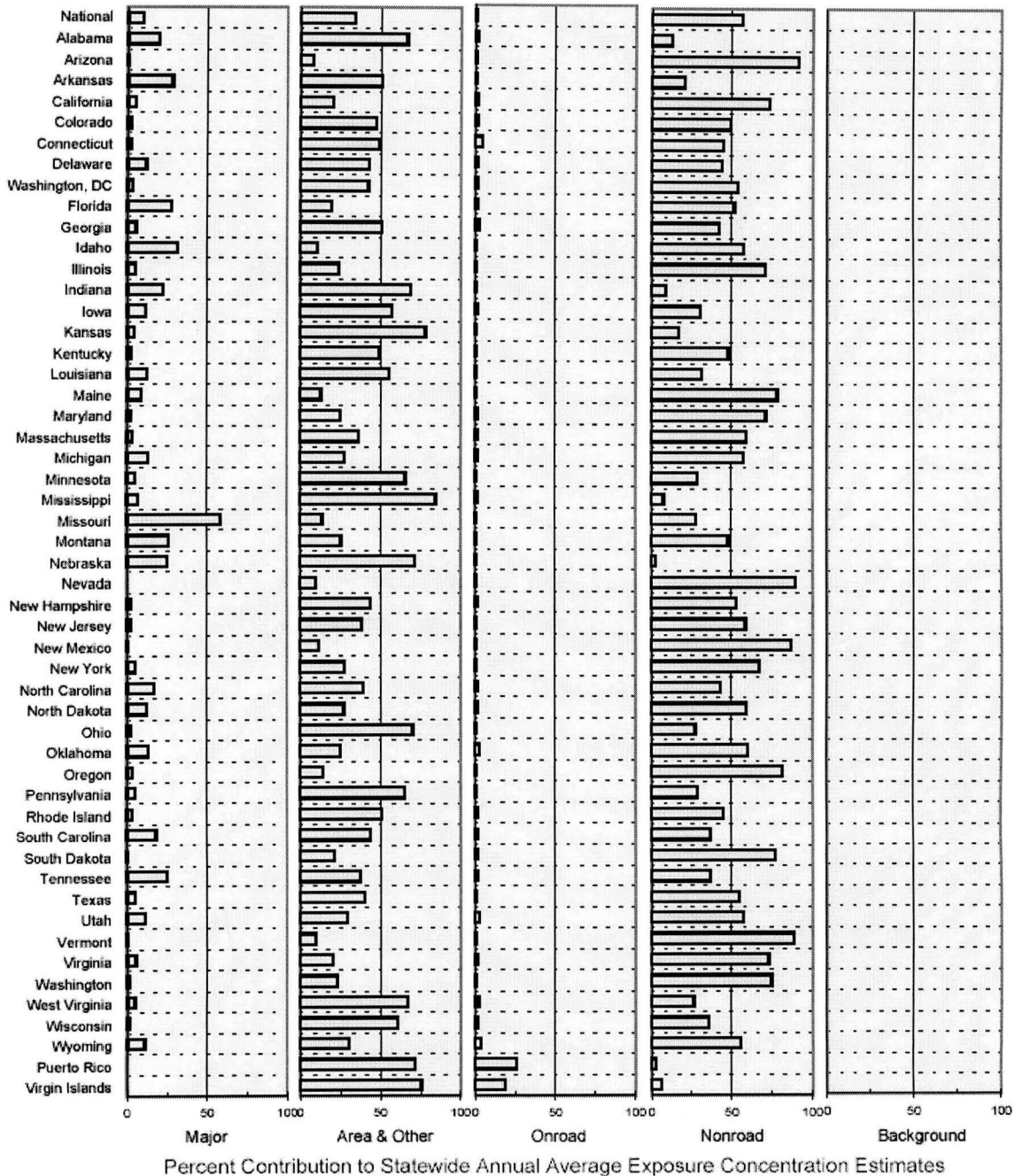
For Washington,



**Lower**  
(Learn more)

### 1996 Modeled Exposure Concentrations Lead - Statewide Source Sector Contribution Estimates

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



For

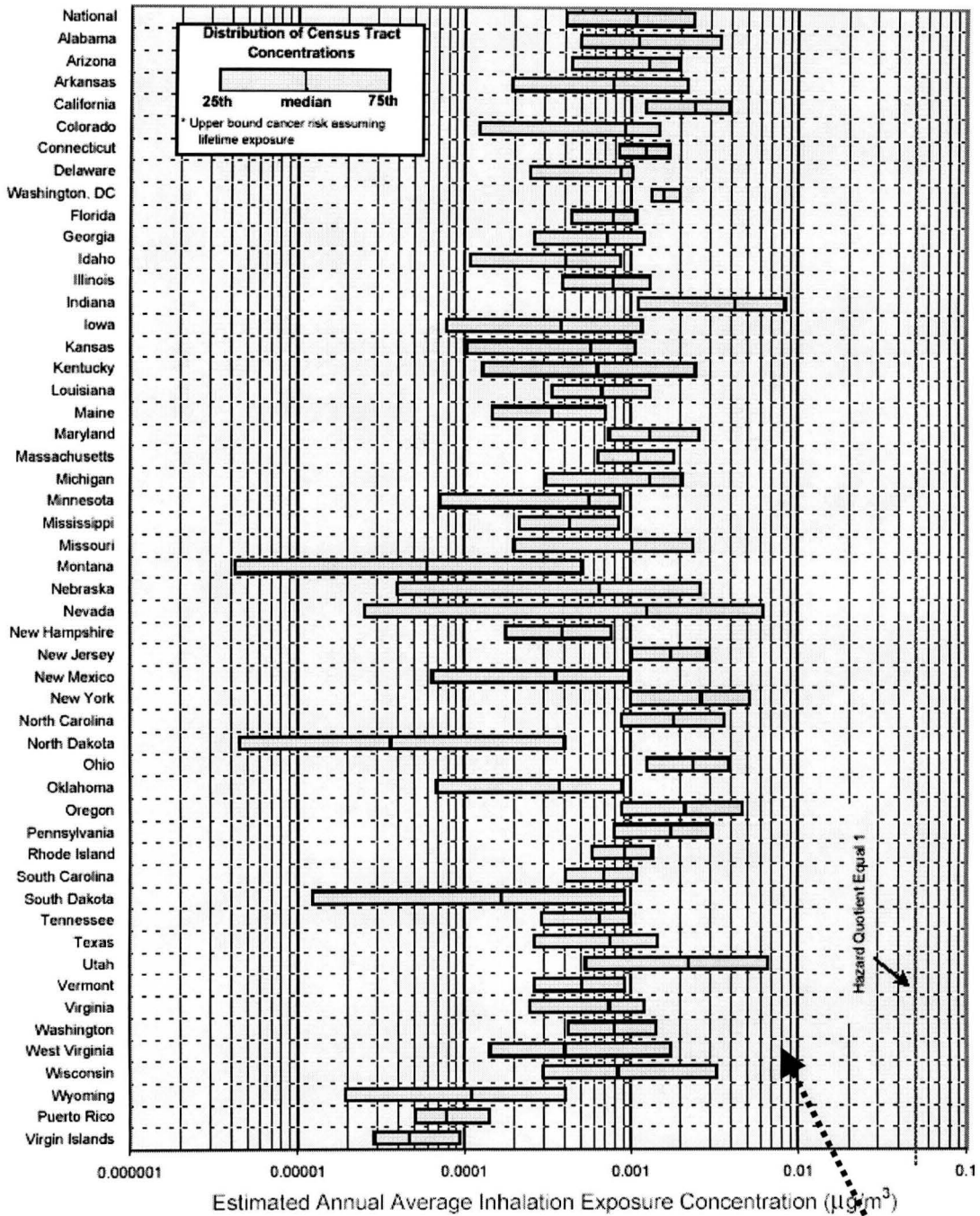
Washington, nonroad is the largest contributor for lead



# 1996 Modeled Exposure Concentrations

## Manganese - Statewide Concentration Distribution Estimates

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



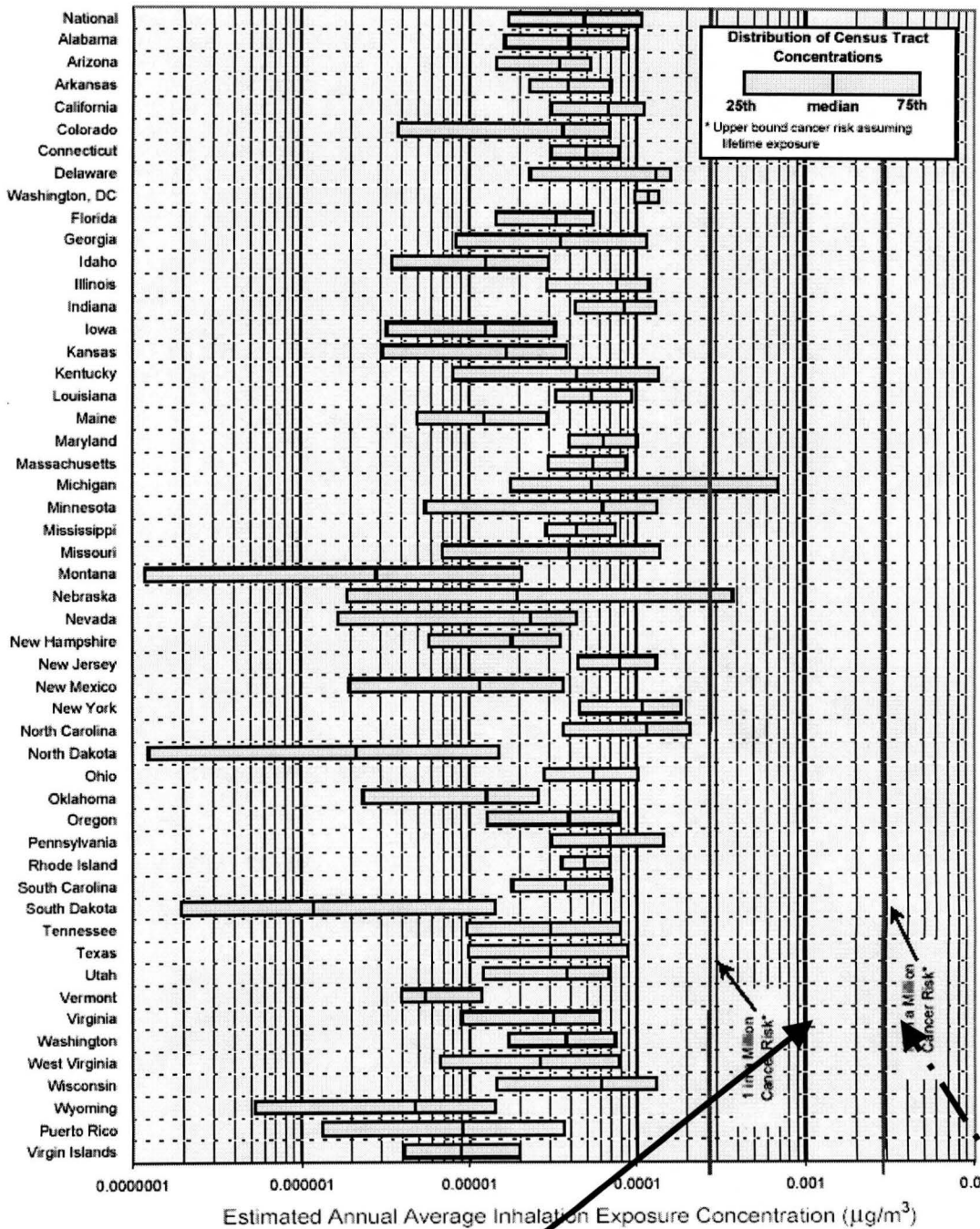
2001 Sea-Tac Airport TSP Manganese Data: 7.55 plus/minus 1.70  $\text{ng}/\text{m}^3$  avg  
 Sea-Tac was the highest of the 6 Seattle monitoring. Its single highest measurement exceeded 36  $\text{ng}/\text{m}^3$



# 1996 Modeled Exposure Concentrations

## Arsenic - Statewide Concentration Distribution Estimates

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

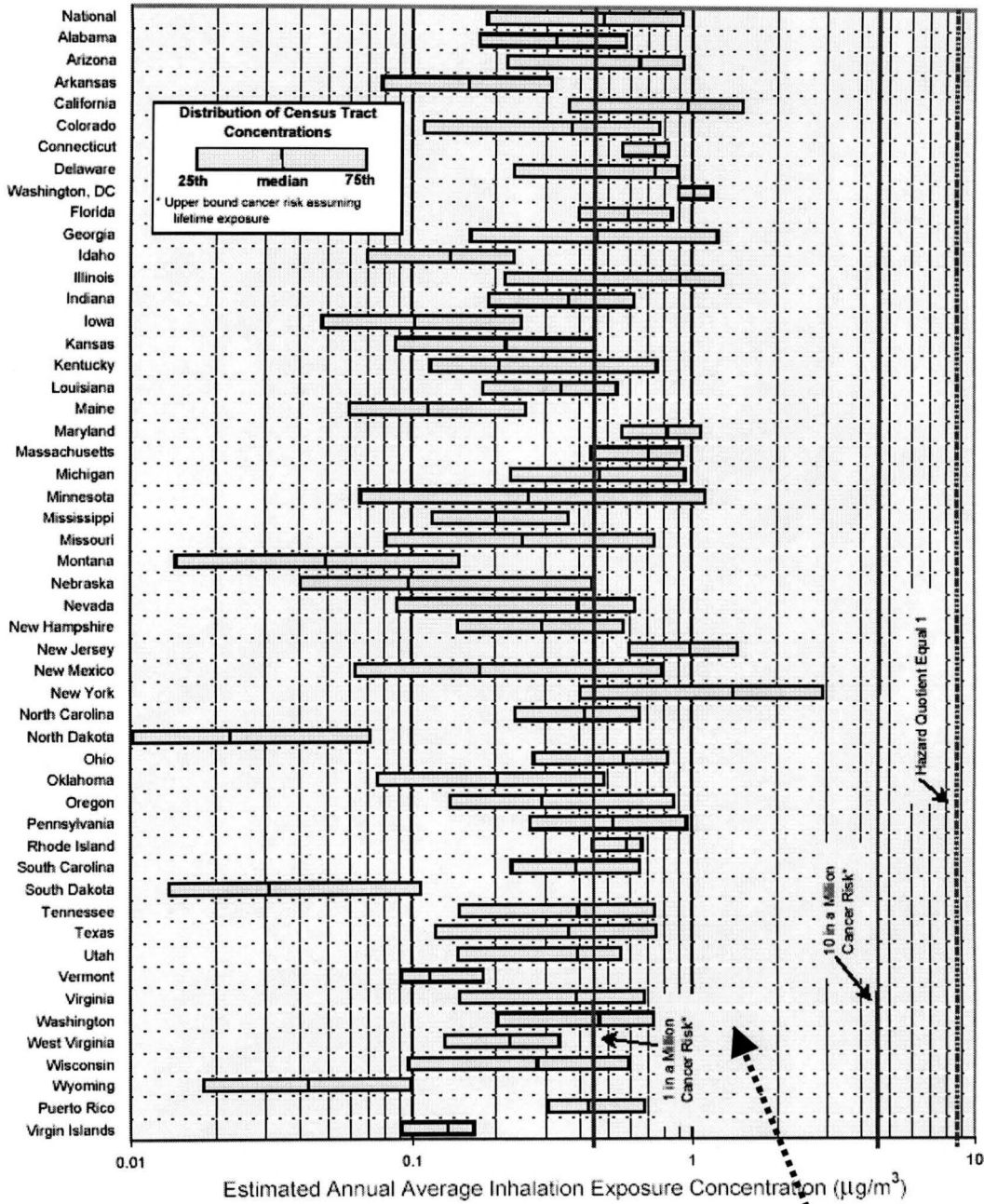


2001 Sea-Tac Airport TSP Arsenic Data: 0.96 plus/minus 0.18  $\text{ng}/\text{m}^3$  avg, max approx 3  $\text{ng}/\text{m}^3$   
 Lake Forest Park (LFP) was higher than Sea-Tac: 1.62 plus/minus 0.40  $\text{ng}/\text{m}^3$  avg. One LFP measurement exceeded 12  $\text{ng}/\text{m}^3$  or .012  $\mu\text{g}/\text{m}^3$ .



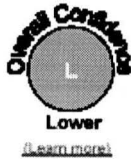
# 1996 Modeled Exposure Concentrations Acetaldehyde - Statewide Concentration Distribution Estimates

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



1 Sea-Tac Airport Acetaldehyde Data: 0.77 ppb ( 1.4 in above units).

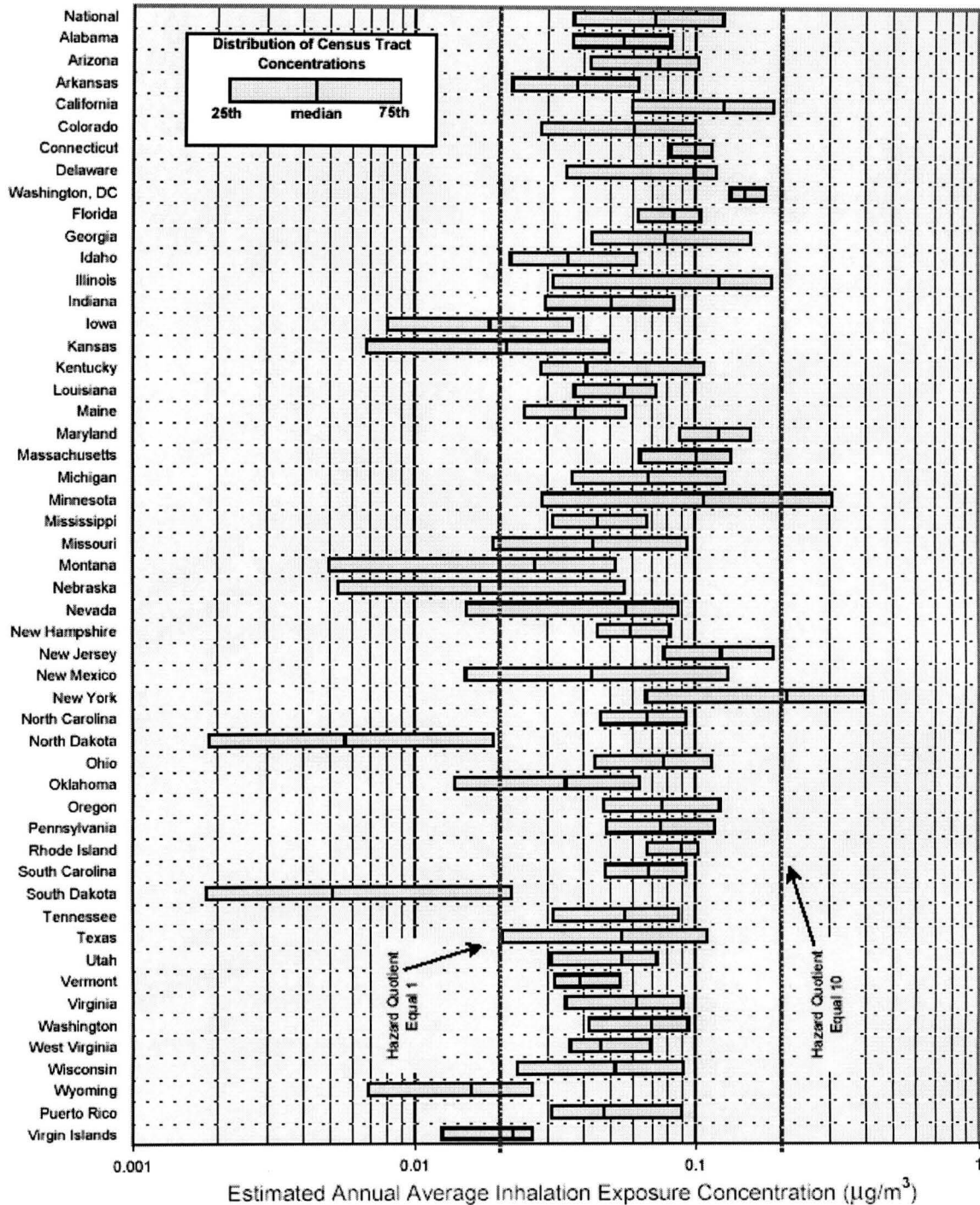




# 1996 Modeled Exposure Concentrations

## Acrolein - Statewide Concentration Distribution Estimates

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

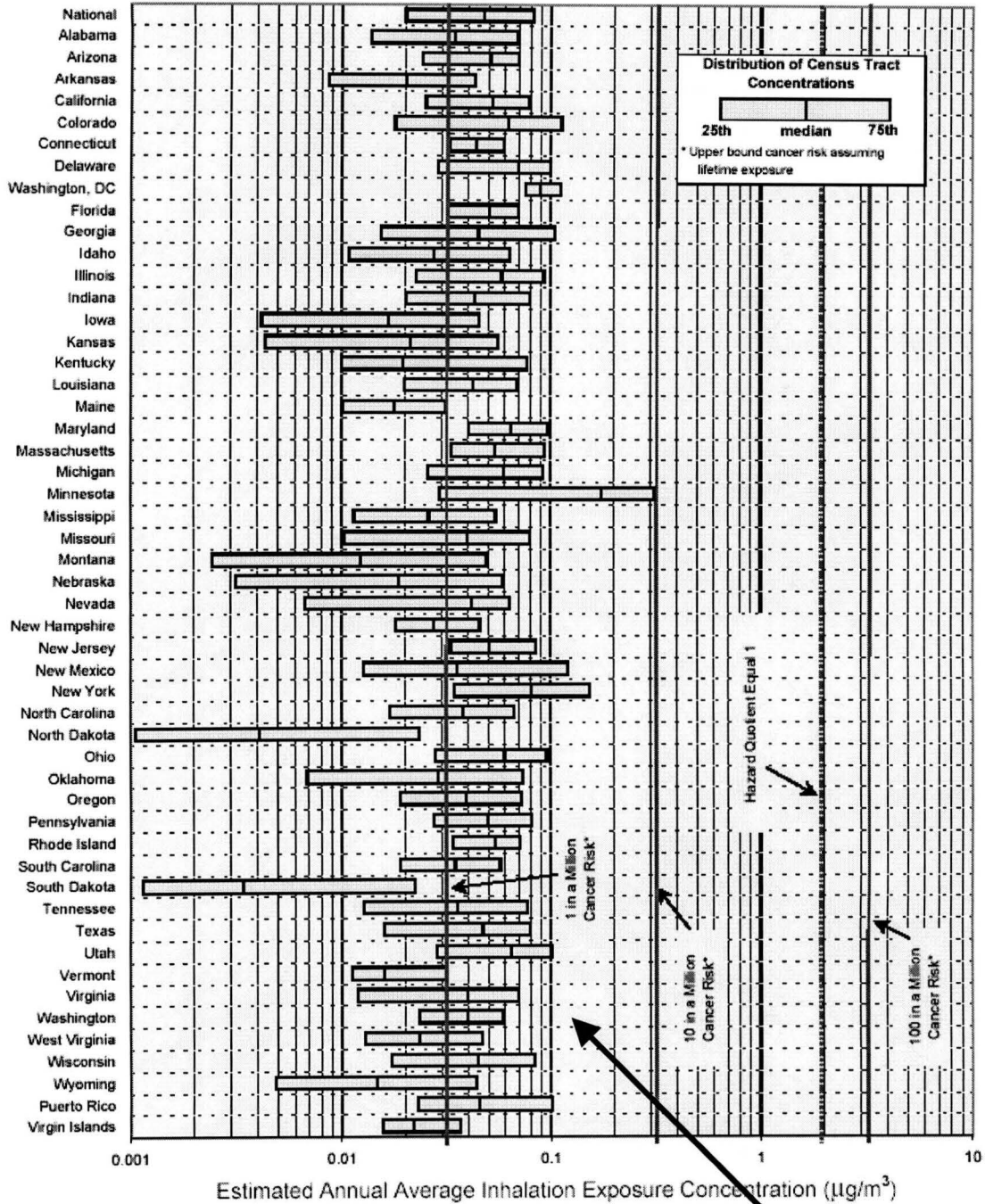


The reliable way to test for this is typically not done since it only measures acrolein. Acrolein respiratory impacts may be larger than its cancer impacts.



# 1996 Modeled Exposure Concentrations 1,3-Butadiene - Statewide Concentration Distribution Estimates

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



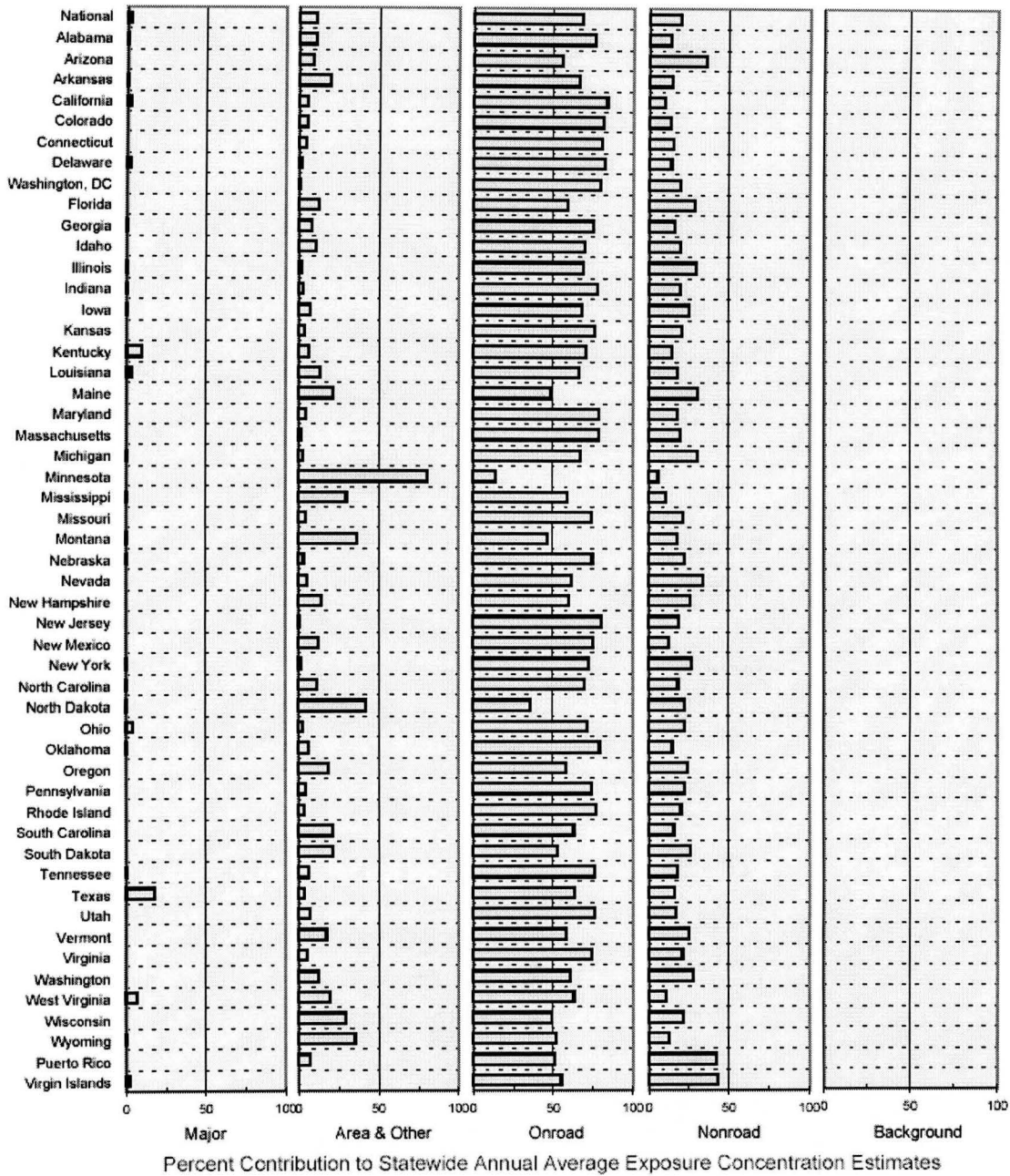
s

2001 Sea-Tac Airport 1-3 Butadiene Data: 51 ppt ( 0.11 in above units).  
Beacon Hill was highest: 71 plus/minus 26 ppt (0.16 in chart units)



1996 Modeled Exposure Concentrations  
 1,3-Butadiene - Statewide Source Sector Contribution Estimates

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

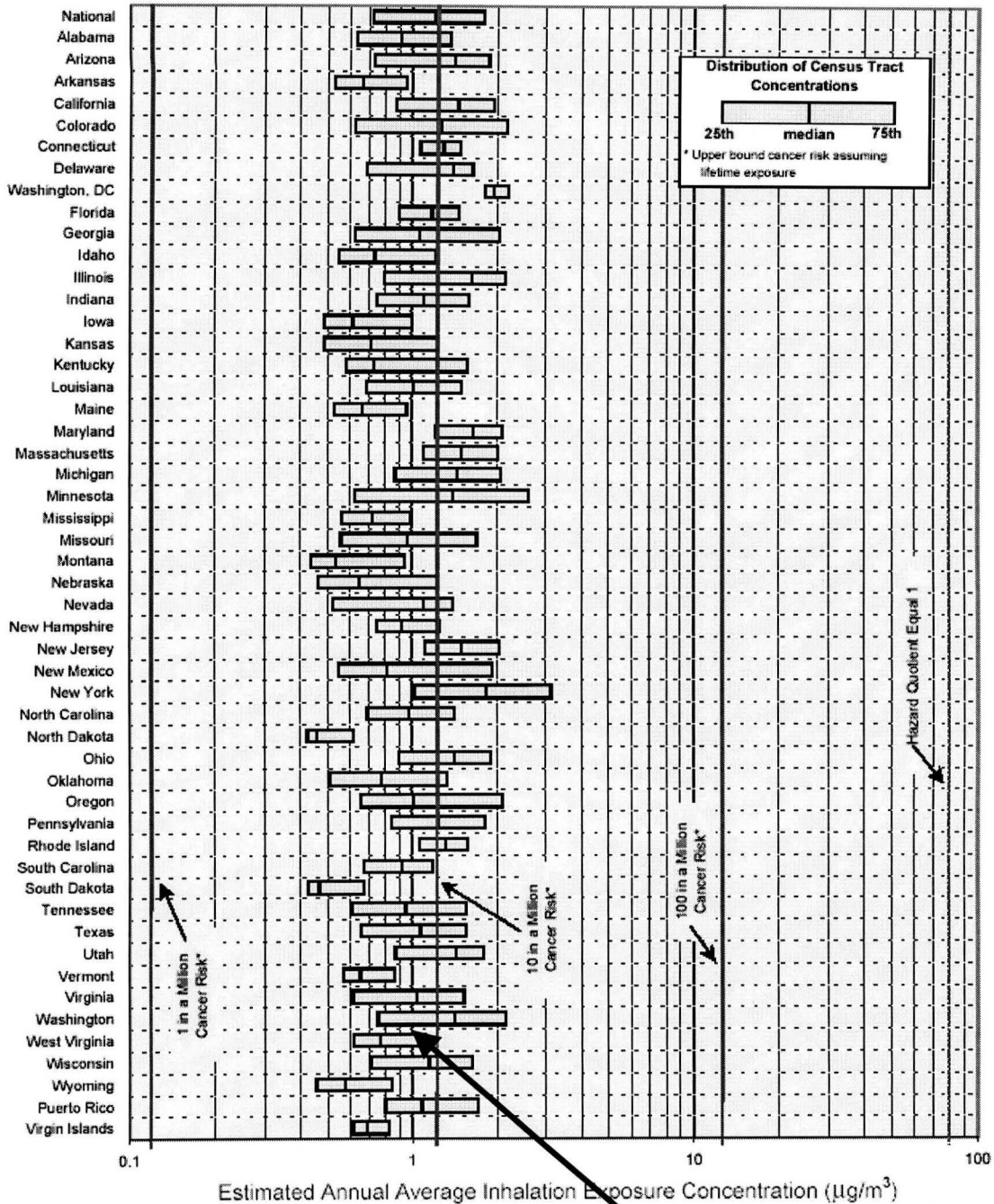


For Washington, "Area and Other" is the major contributor for 1,3-butadiene followed by "Nonroad"



# 1996 Modeled Exposure Concentrations Benzene - Statewide Concentration Distribution Estimates

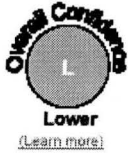
(For limitations on the use of these data see page 2)



2001 Sea-Tac Airport Benzene Data: 334 plus/minus 47 ppt ( 1.1 in above units)  
 Georgetown was highest: 581 plus/minus 127 ppt (1.89 in chart above units)  
 Note, jet fuel only contains a small percent of benzene.

2001 Sea-Tac Airport TSP Arsenic Data: 0.96 plus/minus 0.18 ng/m<sup>3</sup> avg  
 Lake Forest Park (LFP) was higher than Sea-Tac: 1.62 plus/minus 0.40 ng/m<sup>3</sup> avg. One LFP measurement exceeded 12 ng/m<sup>3</sup> or .012 ug/m<sup>3</sup>.

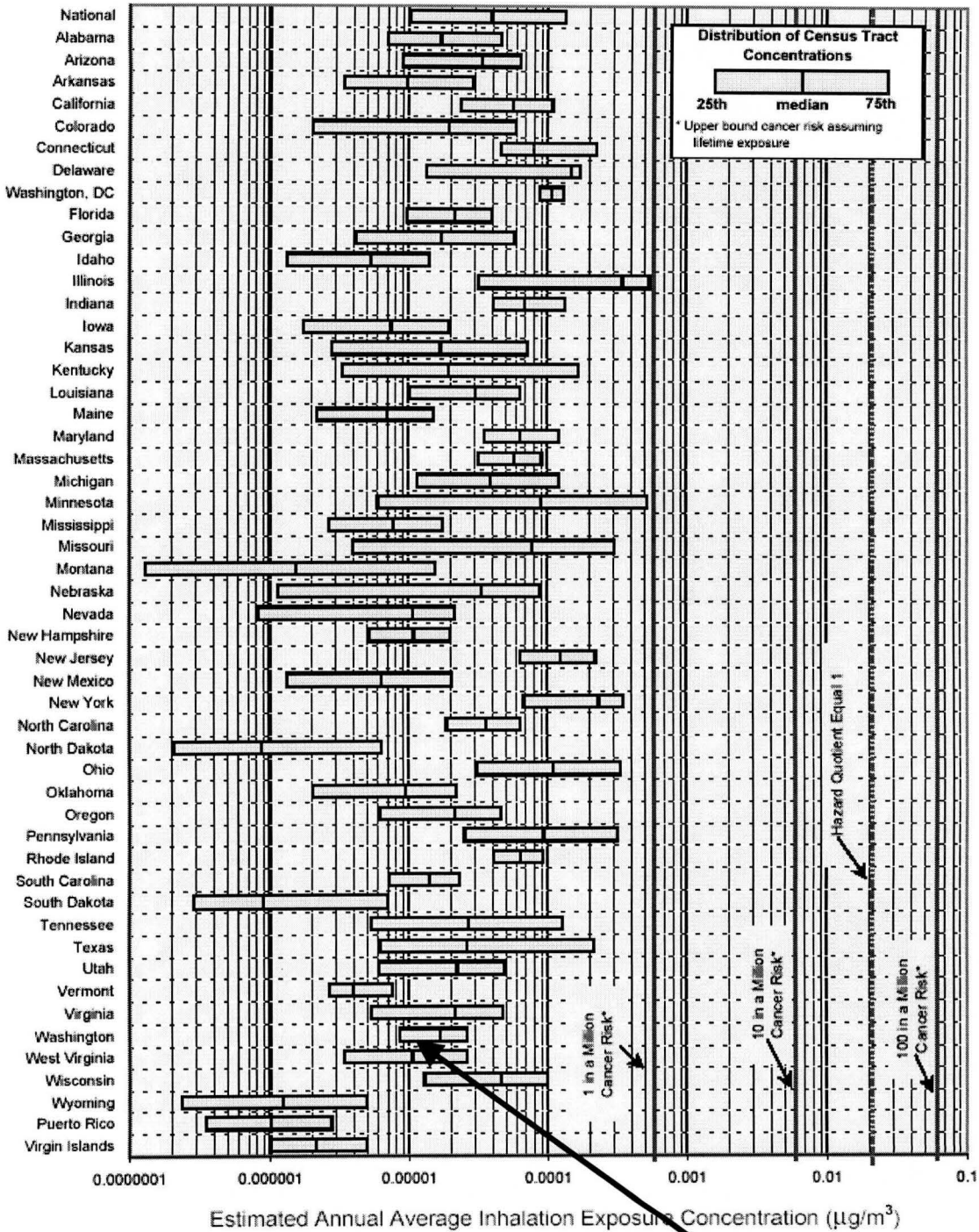




# 1996 Modeled Exposure Concentrations

## Cadmium - Statewide Concentration Distribution Estimates

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

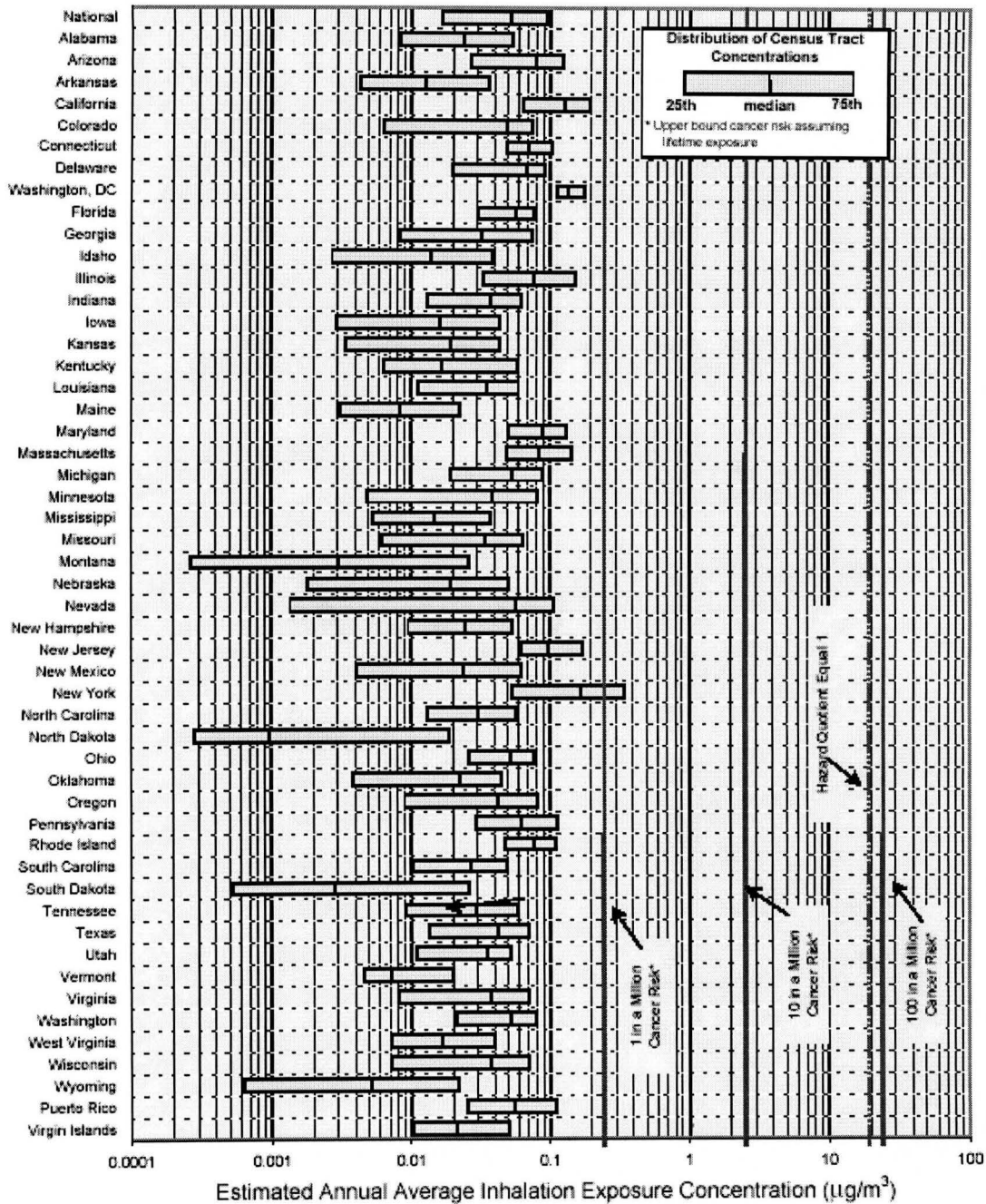


2001 Sea-Tac Airport TSP Cadmium Data:  $0.12 \pm 0.02 \text{ ng}/\text{m}^3$  avg  
 Lake Forest Park (LFP) was slightly higher than Sea-Tac:  $0.17 \pm 0.05 \text{ ng}/\text{m}^3$  avg.  
 One LFP measurement was approx.  $1.3 \text{ ng}/\text{m}^3$  or  $0.013 \text{ ug}/\text{m}^3$ .



# 1996 Modeled Exposure Concentrations

## 1,3-Dichloropropene - Statewide Concentration Distribution Estimates (For limitations on the use of these data see page 2)

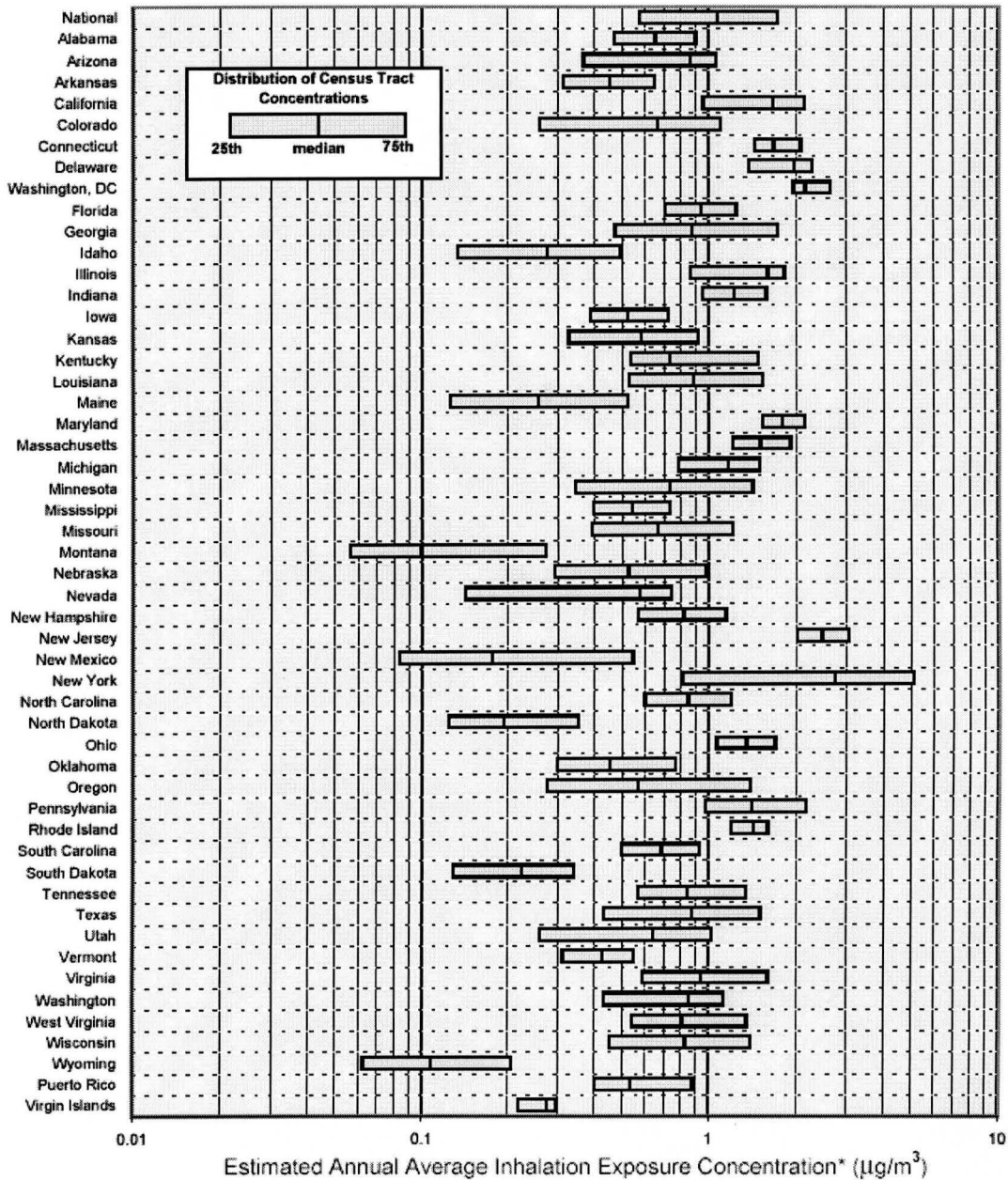




1996 Modeled Exposure Concentrations

Diesel Particulate Matter - Statewide Concentration Distribution Estimates

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



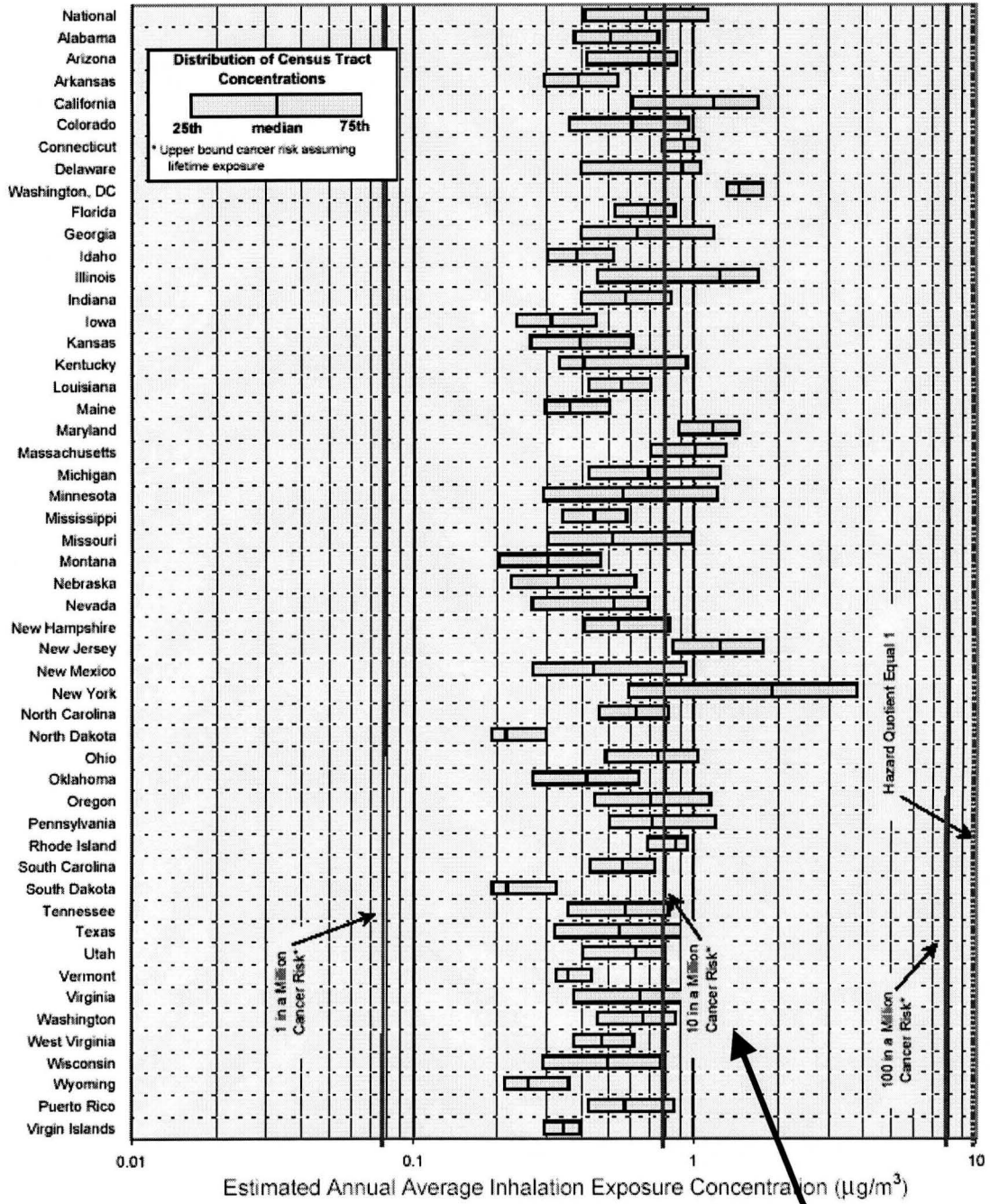
\* onroad and nonroad concentrations include a model-estimated background concentration



# 1996 Modeled Exposure Concentrations

## Formaldehyde - Statewide Concentration Distribution Estimates

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



2001 Sea-Tac Airport Formaldehyde Data: 1.2 ppb ( 1.5 in above units)

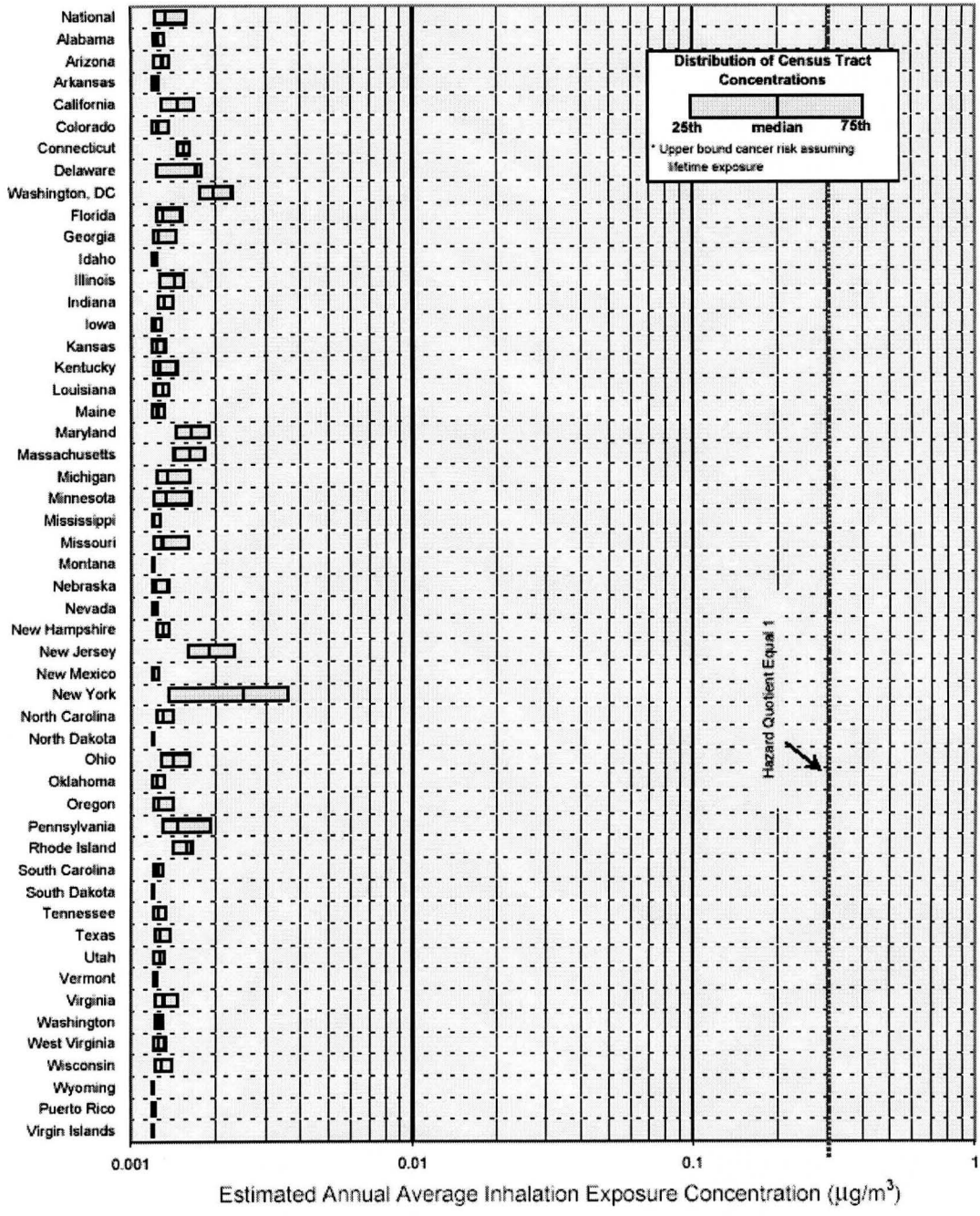




# 1996 Modeled Exposure

## Mercury - Statewide Concentration Distribution Estimates

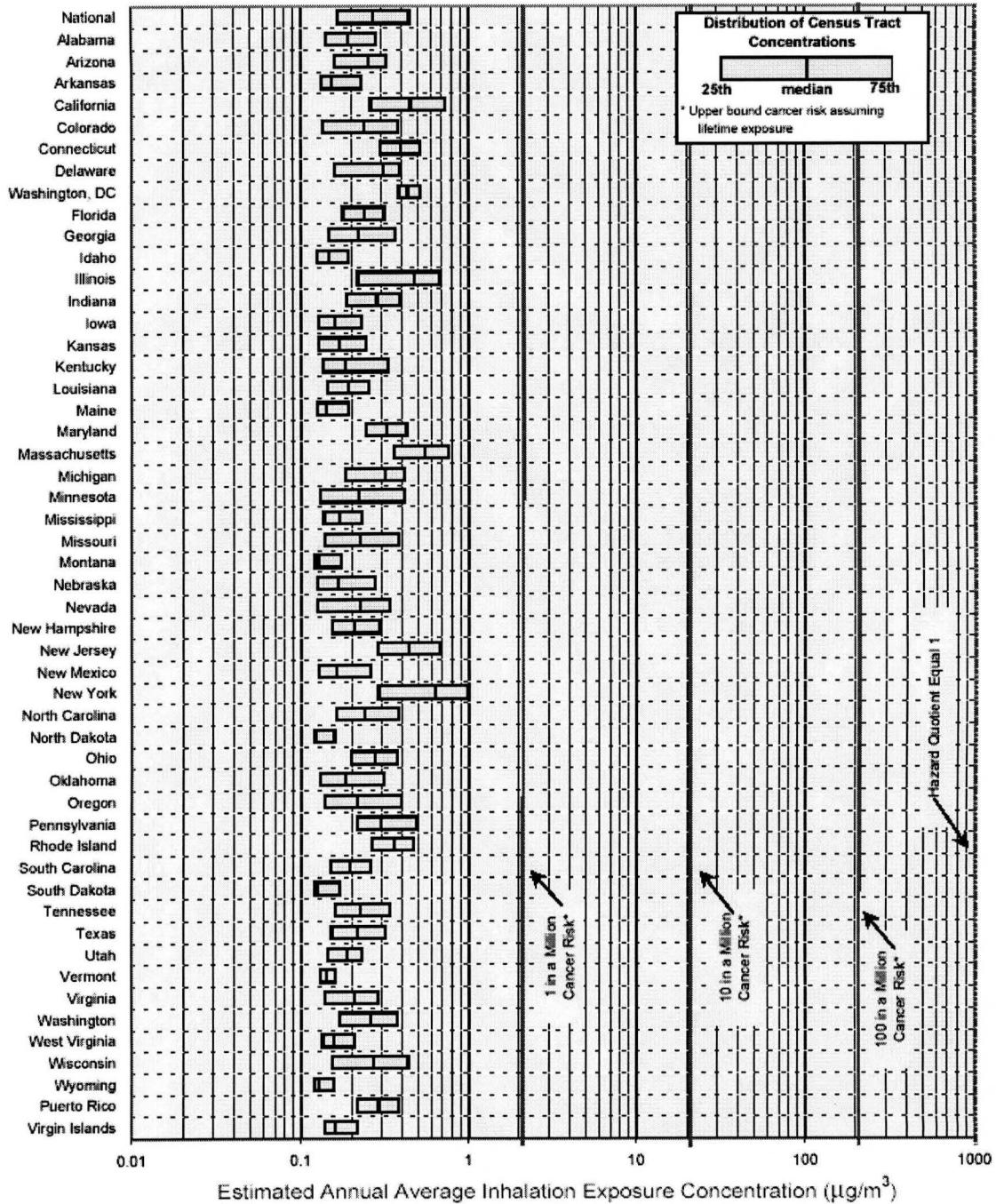
(For limitations on the use of these data see page 2)





# 1996 Modeled Exposure Concentrations Methylene Chloride - Statewide Concentration Distribution Estimates

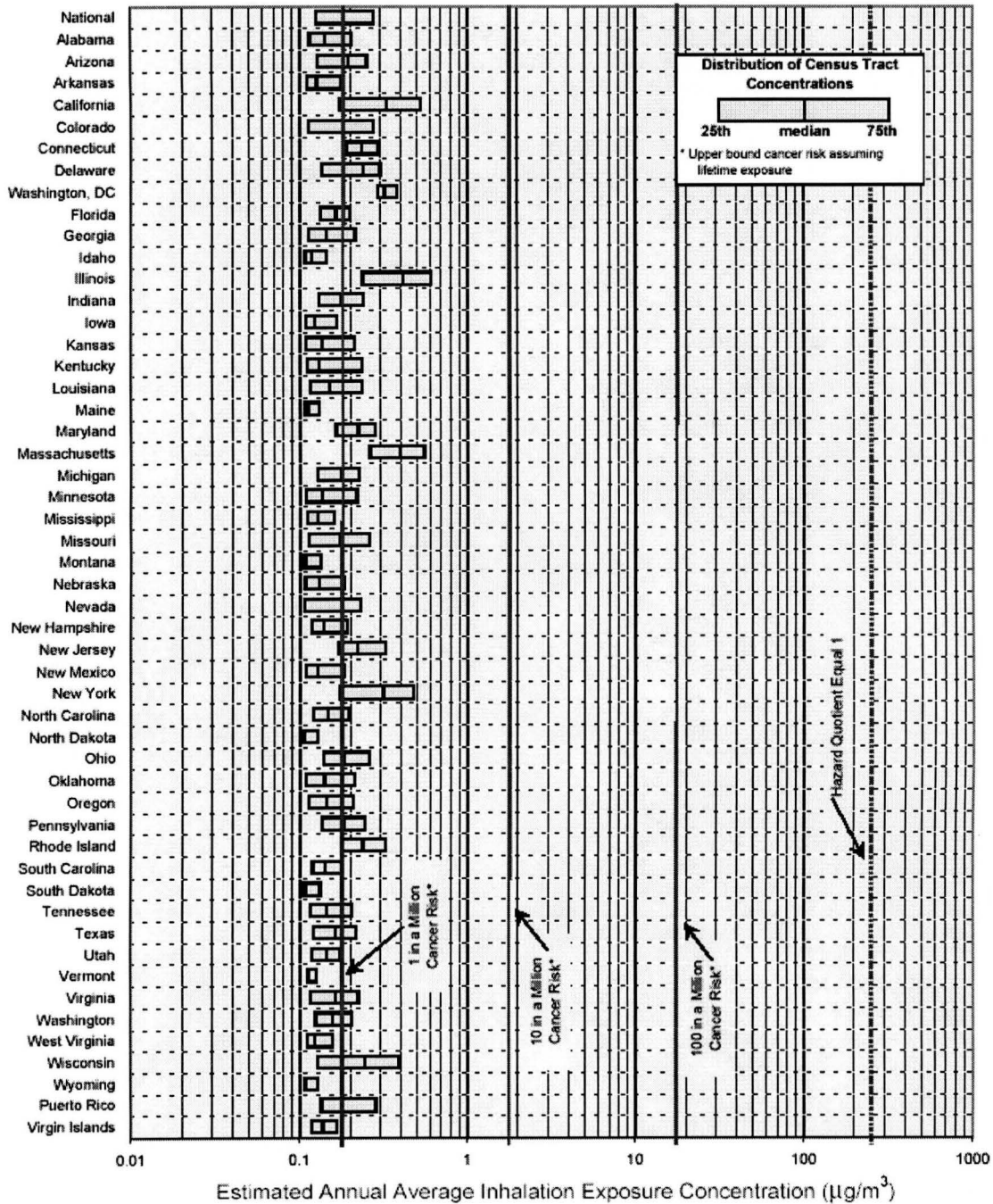
(For limitations on the use of these data see page 2)





# 1996 Modeled Exposure Concentrations Perchloroethylene - Statewide Concentration Distribution Estimates

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

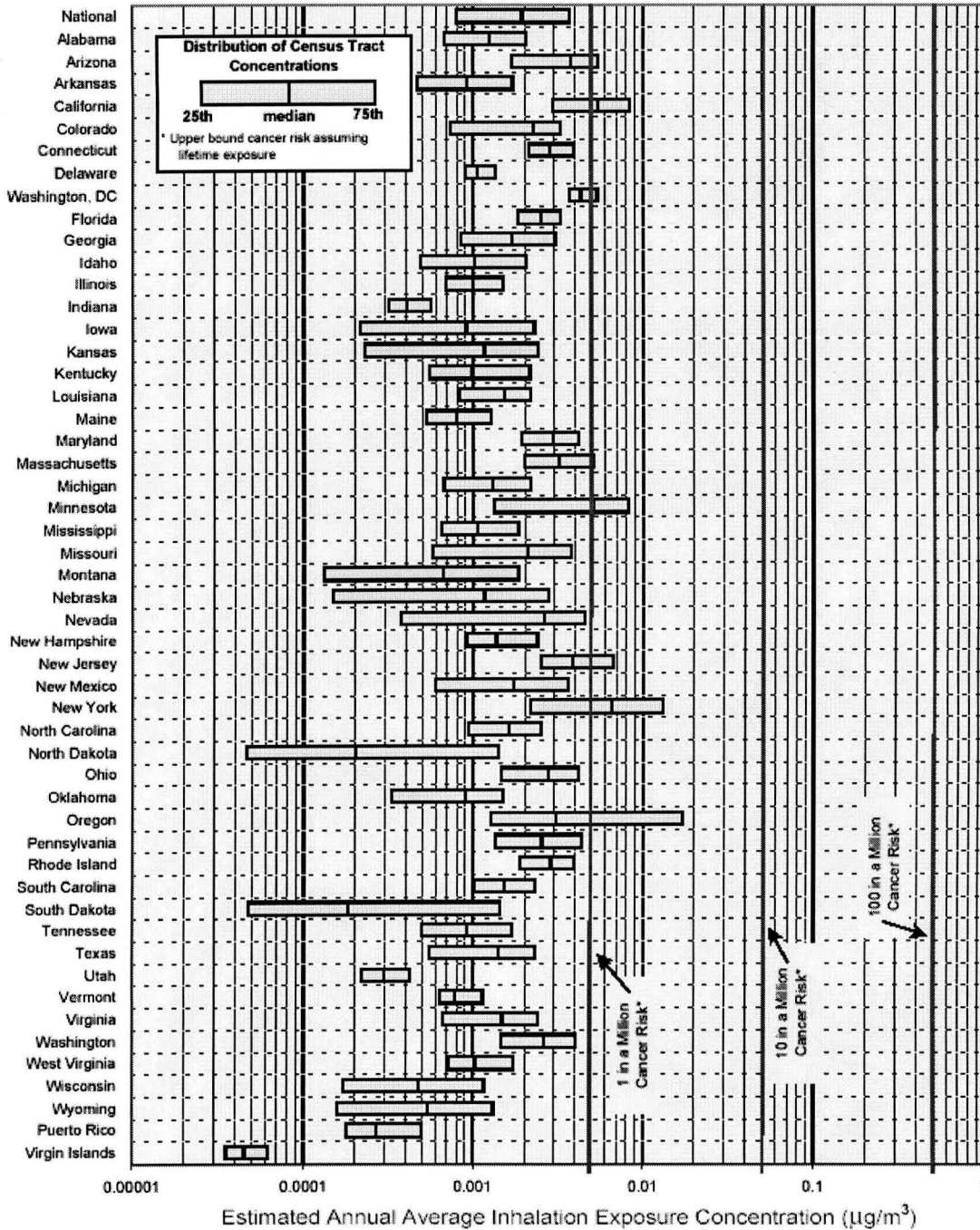




# 1996 Modeled Exposure Concentrations

## POM (7-PAH) - Statewide Concentration Distribution Estimates

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



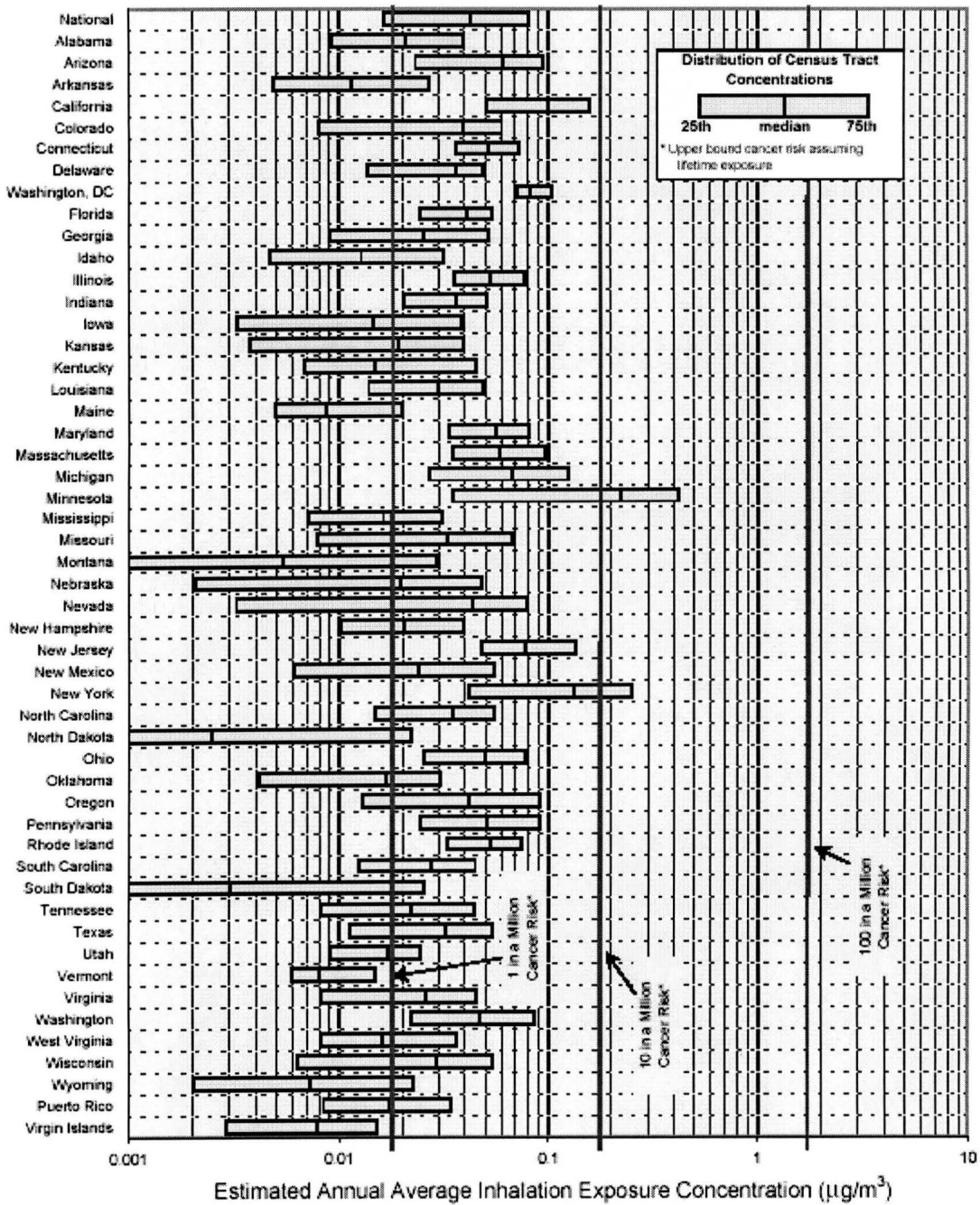




# 1996 Modeled Exposure Concentrations

## POM (total) - Statewide Concentration Distribution Estimates

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

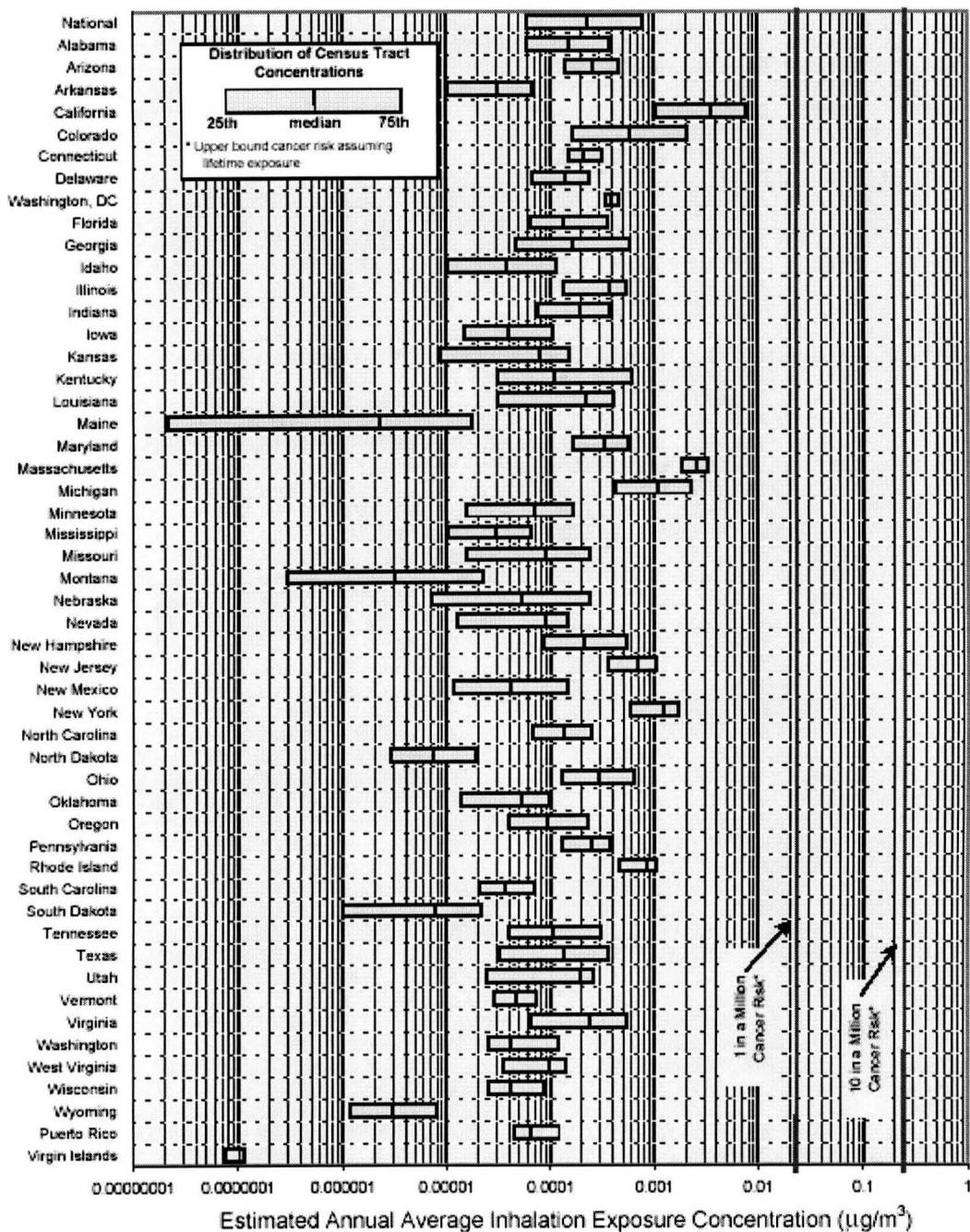




1996 Modeled Exposure Concentrations

1,1,2,2-Tetrachloroethane - Statewide Concentration Distribution Estimate

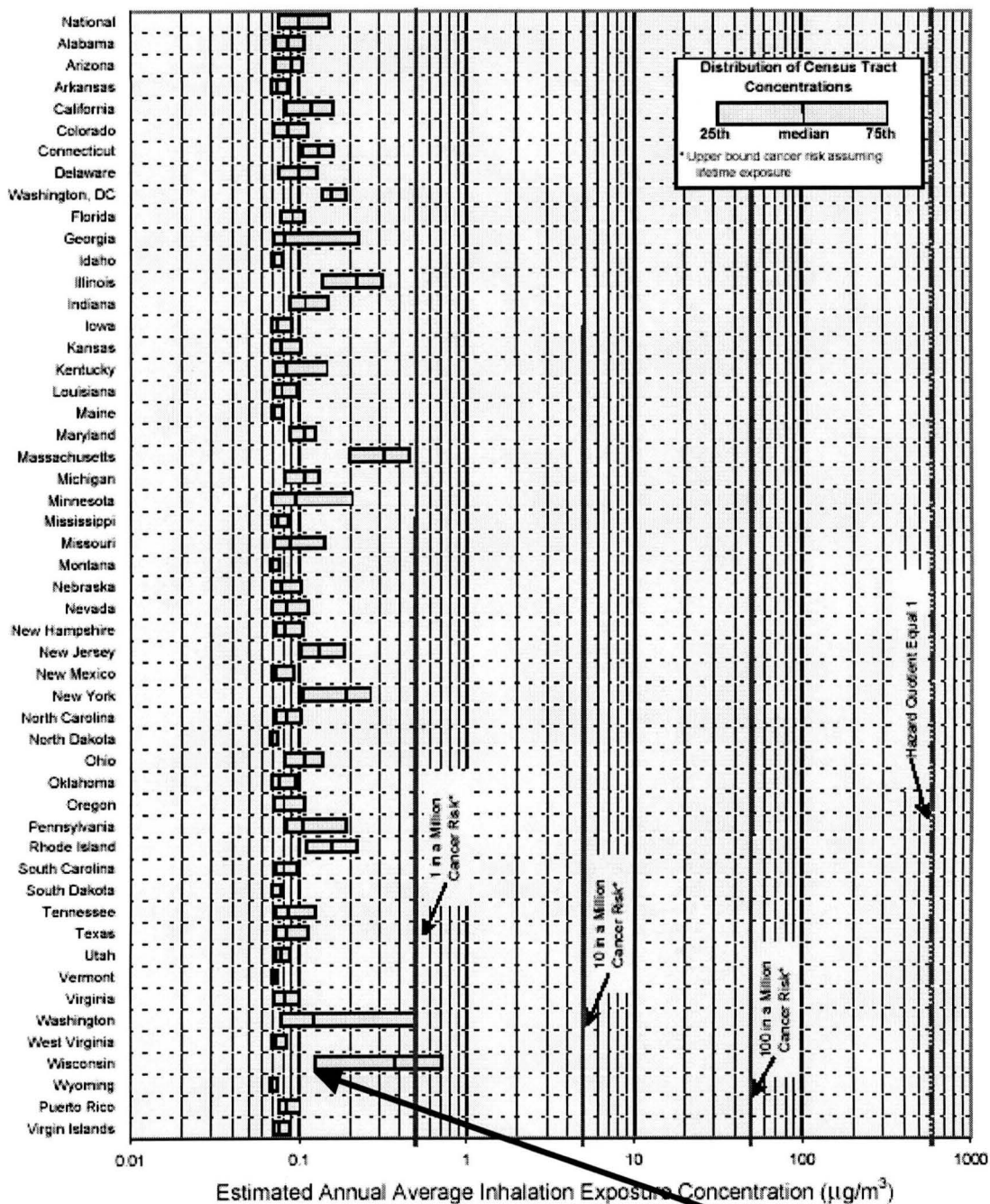
(For limitations on the use of these data see page 2)





# 1996 Modeled Exposure Concentrations Trichloroethylene - Statewide Concentration Distribution Estimates

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

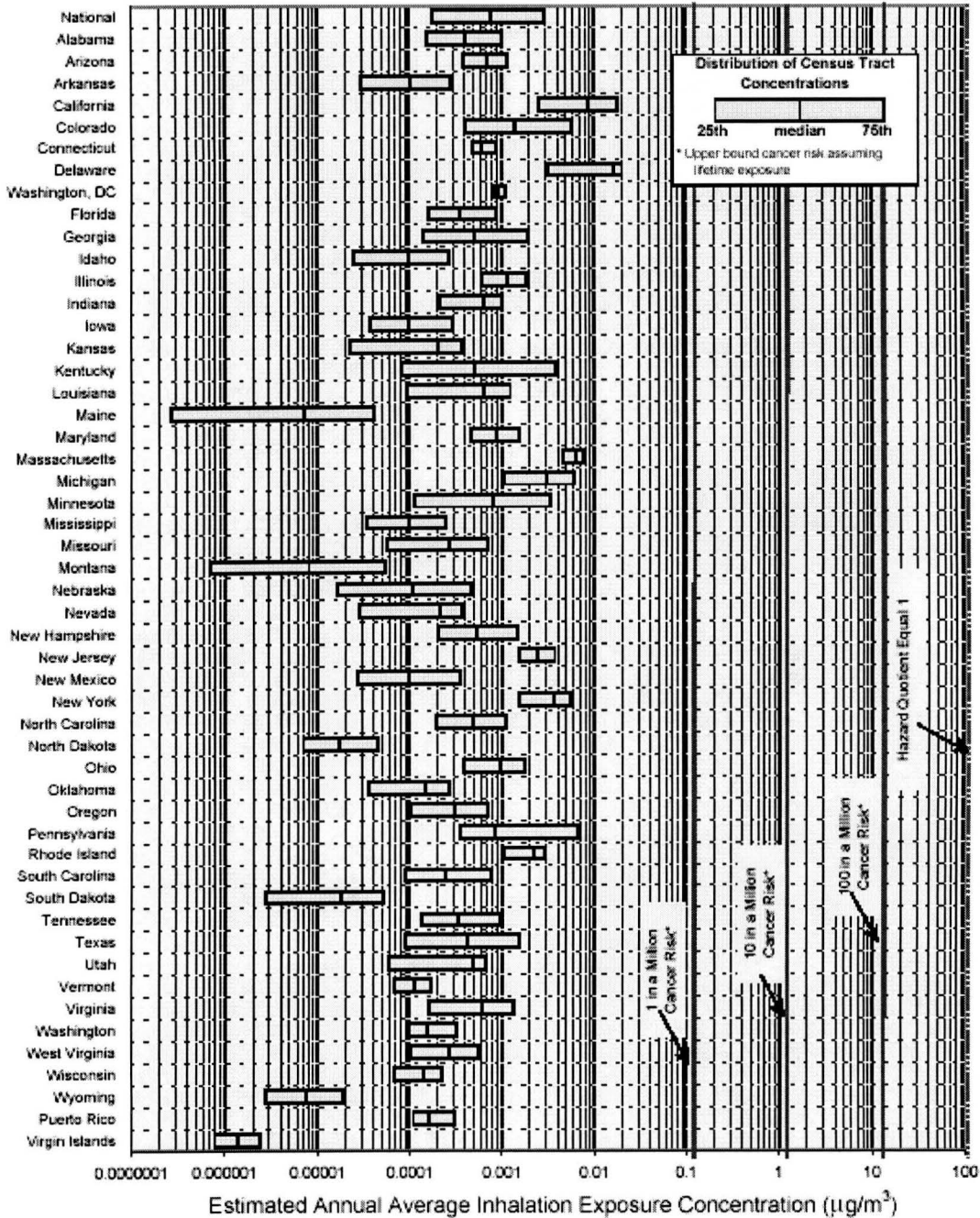


r  
 2001 Trichloroethylene Sea-Tac Airport Data: 31 plus/minus 13 ppt (0.17  $\mu\text{g}/\text{m}^3$  units)  
 Highest was Georgetown at 71 plus/minus 18 ppt (0.38 in chart units)



# 1996 Modeled Exposure Concentrations Vinyl Chloride - Statewide Concentration Distribution Estimates

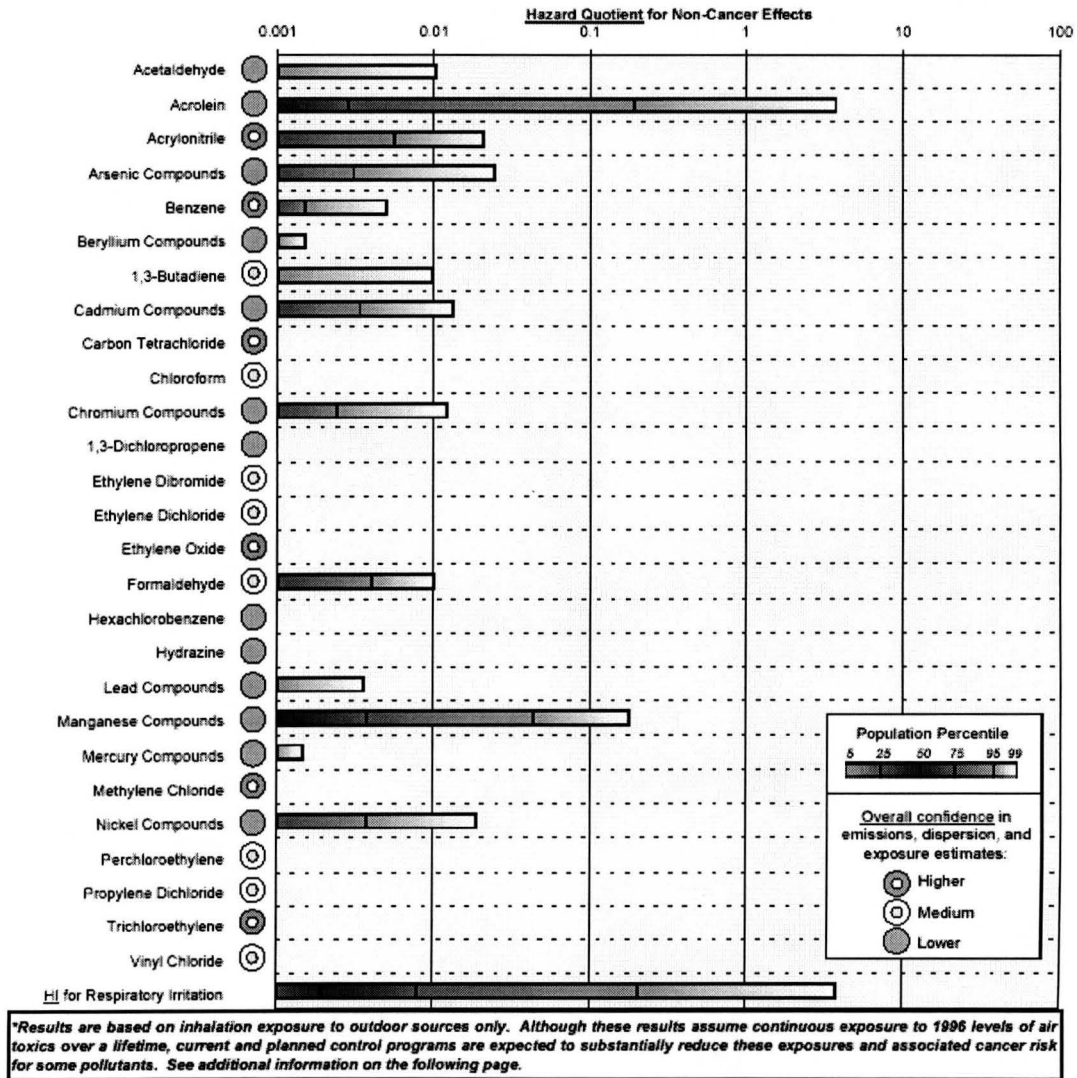
(For limitations on the use of these data see page 2)



Vinyl chloride not monitored for the 2001 Sea-Tac Airport study

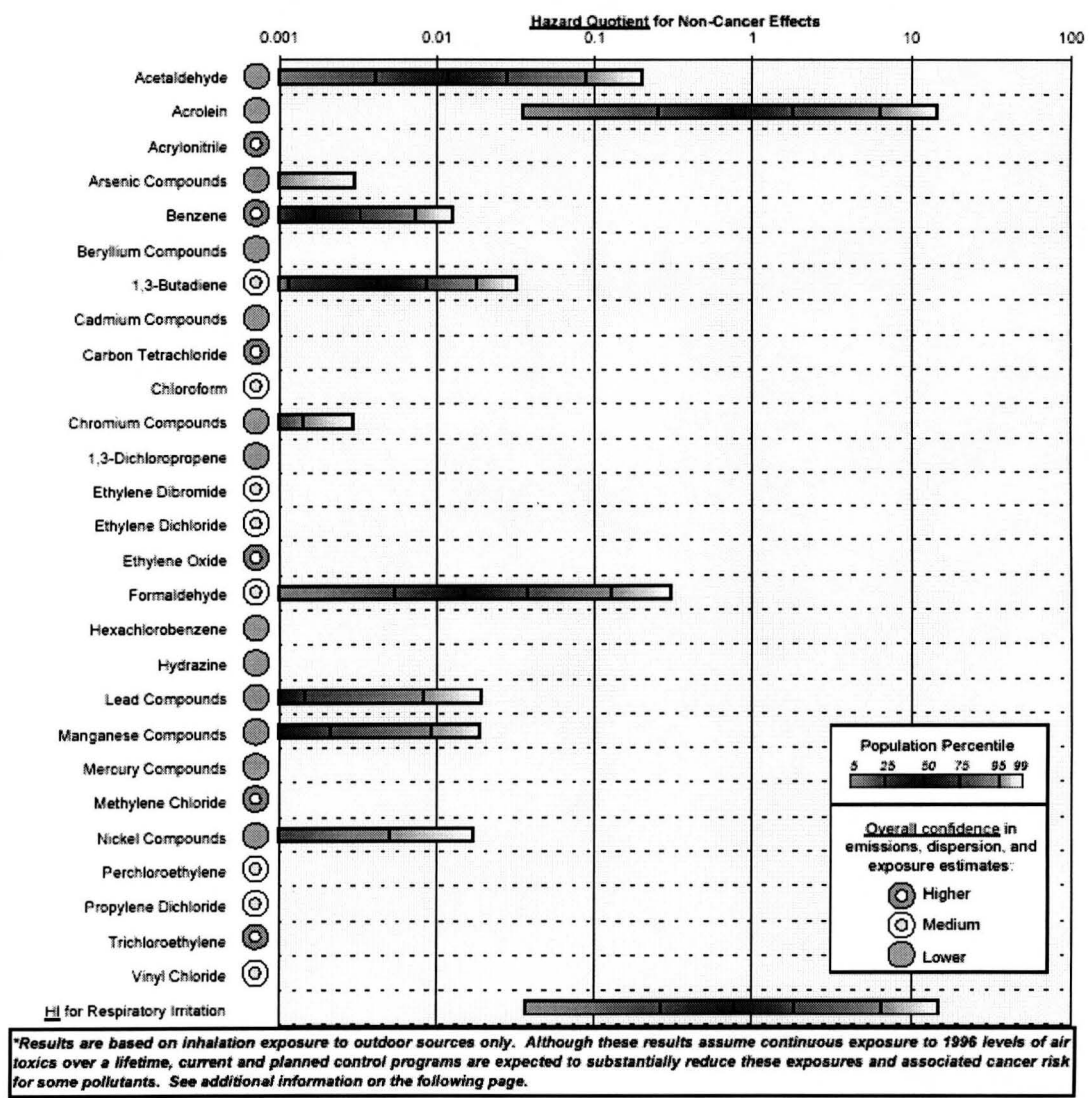


**1996 Risk Characterization**  
**Distribution of non-cancer hazard quotient for the US population, based on 1996 exposure\* to major sources.**



<http://www.epa.gov/ttn/atw/nata/rcharts/figure07.pdf>

**1996 Risk Characterization**  
**Distribution of non-cancer hazard quotient for the US population, based on 1996 exposure\* to nonroad mobile sources.**



above from <http://www.epa.gov/ttn/atw/nata/rcharts/figure10.pdf>

