



Methodology

Multnomah County respiratory risk and woodsmoke exposure national ranking using EPA NATA data

How did Portland Clean Air determine Portland is the worst US city for respiratory distress and the second worst for woodsmoke exposure?

Download: 2011 NATA natl respiratory risk by tract pollutant(63 MB)

at:

https://www.epa.gov/sites/production/files/2015-12/2011nata_national_resp_by_tract_poll.xlsx

This 2011 data set released December 2015 is the most current EPA NATA and is located at the page:

<https://www.epa.gov/national-air-toxics-assessment/2011-nata-assessment-results>

For more information on the EPA NATA go to:
<https://www.epa.gov/national-air-toxics-assessment>

Sort the dataset in Excel by "Tract" (A to Z) and second by "Total Respiratory HI" (largest to smallest)

The result of first sorting by tract is that "00000000000" tracts will be sorted to the top. 00000000000 is the code for county.

This sort reports Multnomah County is worst city nationwide for the cause of respiratory distress from air pollution, and King County (Seattle) is second worst, according to the EPA. Multnomah ranks third nationwide behind only Glenn and Colusa Counties.

Sort the dataset in Excel by "Tract" (A to Z) and second by "Fires (ag, prescribed, and wild) Respiratory HI" (largest to smallest)

This sort reports Glenn and Colusa counties are the worst two counties in the US for exposure to forest fires. These two rural California counties are adjacent to Mendocino National Forest with a combined population of 49,541 people. Glenn and Colusa counties are ranked as the worst counties in the US for respiratory risk due to forest fires. In contrast, Portland's respiratory risk is caused by residential fireplaces and industrial air pollution and so is preventable through regulation.

Sort the dataset in Excel by "Tract" (A to Z) and second by "ResidentialWoodCombustion (RWC) Respiratory HI" (largest to smallest)

This sort reports Multnomah County is second worst nationwide for residential woodsmoke exposure and King County (Seattle) is worst according to the EPA.

Sort the dataset in Excel by "Tract" (A to Z) and second by "Point (includes railyards) Respiratory HI" (largest to smallest)

This sort reports Multnomah County is ranked 1,940 out of 3,279 counties for point source (industrial) air pollution while King county (Seattle) is ranked 3,166. The addition of industrial solvents and other point source air pollution being worse in Portland compared to Seattle makes Portland rank worse overall for respiratory risk.

Note that the EPA and DEQ currently only have data on about 5% of industrial emissions. This fact was reported by Portland Clean Air in November 2016 and the report can be downloaded at:

<http://portlandcleanair.org/files/ACDP%20HSIS%20Study%20by%20PCA.pdf>