



Executive Summary

of the Oregon Air Monitoring Project Report



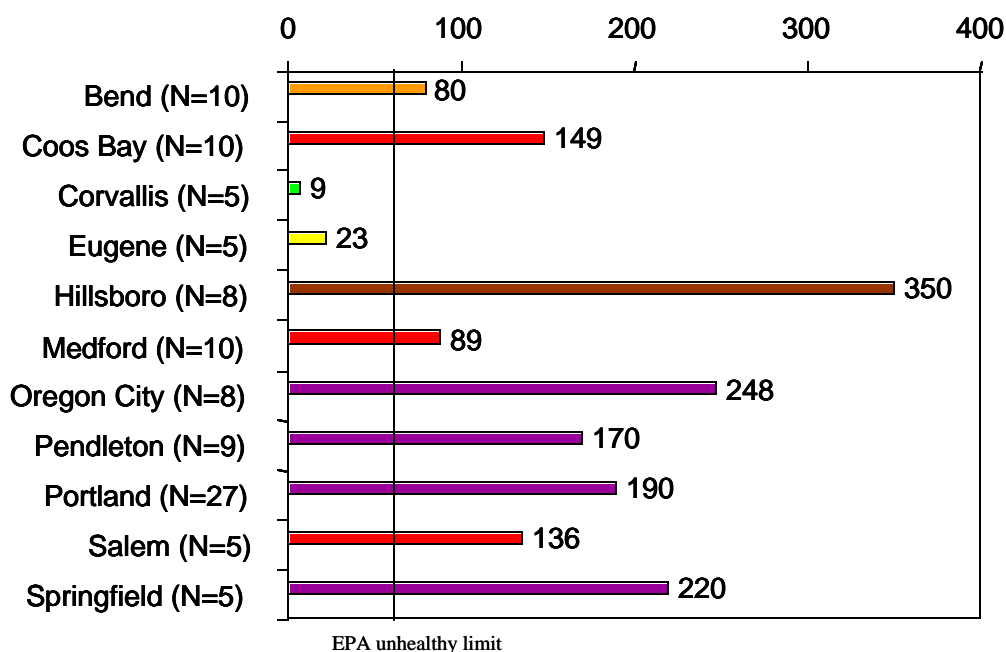
Secondhand smoke is the third leading preventable cause of death in the United States and is classified as a Group A, or known human, carcinogen, as are asbestos and benzene. Breathing secondhand smoke increases a person's risk of heart attack and stroke and causes asthma attacks and upper respiratory illness. Secondhand smoke increases the risk of contracting lung cancer. In fact, food service workers have a 50% greater risk of dying from lung cancer than the general population, with much of the increased risk attributable to secondhand smoke in their workplaces.

In response to the dangers of exposure to secondhand smoke, the American Cancer Society tested indoor air quality in bars and restaurants with bars on two weekends in March 2006. Volunteers used a small aerosol monitor that tests for concentrations of particulate matter in the air smaller than 2.5 microns in diameter (PM_{2.5}). These tiny particles are released in significant amounts from burning cigarettes and are easily inhaled deeply into the lungs. The Environmental Protection Agency (EPA) has established guidelines for safe levels of PM_{2.5} microns per cubic meter.

US EPA Air Quality Index

Air Quality	PM _{2.5} (mg/m ³)	Health Advisory
Good	<15	None.
Moderate	16-40	Unusually sensitive people should consider reducing prolonged or heavy exertion.
Unhealthy for Sensitive Groups	41-65	People with heart or lung disease, older adults, or children should reduce prolonged or heavy exertion.
Unhealthy	66-150	People with heart or lung disease, older adults, or children should avoid prolonged or heavy exertion. Everyone should reduce prolonged or heavy exertion.
Very Unhealthy	151-250	People with heart or lung disease, older adults, or children should avoid all physical activity outdoors. Everyone else should avoid prolonged or heavy exertion.
Hazardous	>251	People with heart or lung disease, older adults, and children should remain indoors and keep activity levels low. Everyone else should avoid all physical activity outdoors.

Average Level of Indoor Air Pollution in Tested Oregon Establishments by City



Secondhand smoke, a known human carcinogen, is responsible for an estimated 3,000 lung cancer deaths in the US annually in people who never smoked, as well as over 35,000 deaths from coronary heart disease. Secondhand smoke causes respiratory infections, asthma and Sudden Infant Death Syndrome in children. Exposure to secondhand smoke causes an estimated 800 deaths annually in Oregon alone.

Methods

American Cancer Society volunteers tested the indoor air quality in 47 bars and 60 restaurants with bars in twelve cities throughout Oregon. These establishments included bars that allow smoking as well as bars that are smokefree. Volunteers were trained to use the aerosol monitor, TSI SidePak Personal Aerosol Monitor, by the Tobacco Prevention and Education Program of the Department of Human Services. The TSI SidePak has been used in numerous air quality studies worldwide. Volunteers tested air quality during evening hours, spending approximately 1/2 hour in each establishment.

Air testing was conducted in twelve cities across Oregon. Analysts with TPEP and the Environmental and Occupational Epidemiology section of DHS used Geographic Information System (GIS) software to randomly select bars within each city in which to conduct air testing.

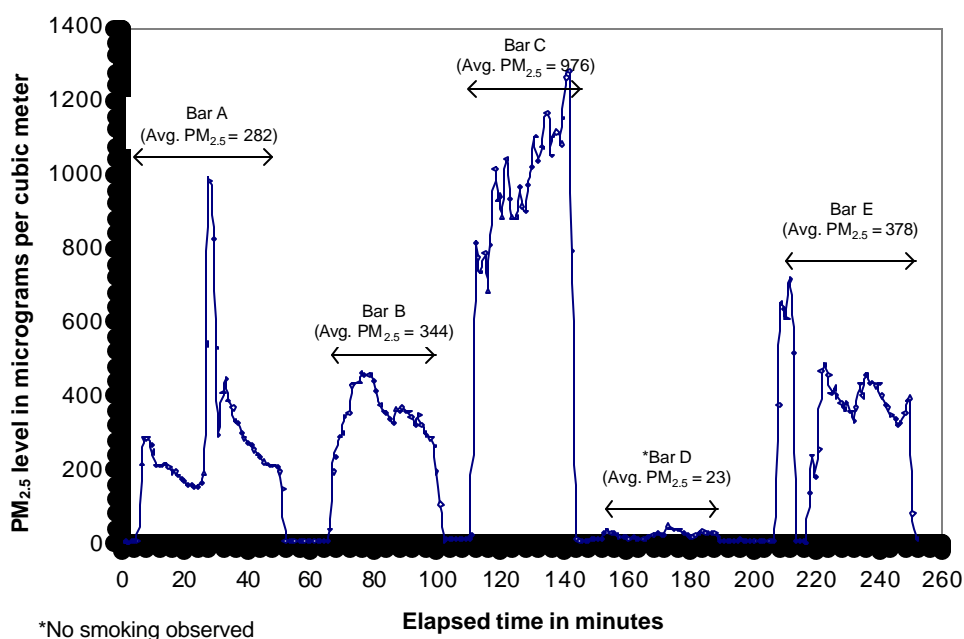


TSI Sidepak Personal Aerosol Monitor

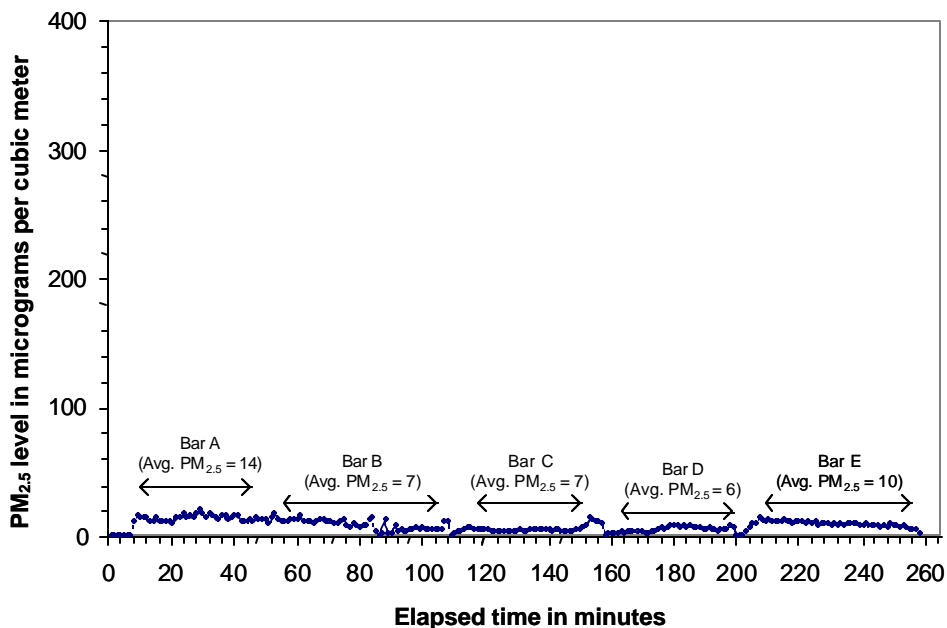
Analysis

Scientists at Roswell Park Cancer Institute, the national leader in the effects of secondhand smoke on indoor air quality, analyzed Oregon data gathered by ACS volunteers. Scientists calculated the levels of PM_{2.5} in each establishment taking into account the room volume. Data from individual bars with all identifiers removed as well as local data from tested counties are available in the full report. Examples of data gathered during one night of testing by two groups of volunteers are below.

Hillsboro, OR – smoking permitted in all bars surveyed



Corvallis, OR - all bars are smokefree



Key Findings

- In the Oregon Air Monitoring Project, the level of indoor air pollution measured was 622% higher in venues that allow smoking than in those where smoking was prohibited. That is more than 3 times greater than what the EPA considers "unhealthy" for outdoor air.
- Cities with policies prohibiting smoking in all indoor workplaces such as Corvallis and Eugene are protecting all workers, bar and restaurant personnel included, from the dangers of secondhand smoke.

Summary

Laws requiring all workplaces, including bars, to be smokefree, effectively reduce PM_{2.5} to levels judged by the EPA to be safe for human health. Reducing exposure to secondhand smoke will mean healthier work sites, healthier workers, and a healthier Oregon. Many other states and other countries have passed comprehensive smokefree workplace laws, including California, Montana, New York, Washington, Ireland and Italy. Oregon should act now for the health and safety of workers and consumers and make all indoor workplaces smokefree.

The American Cancer Society greatly appreciates the expertise and guidance of its partners on this project. Partners include: American Heart Association, American Lung Association of Oregon, Department of Human Services' Tobacco Prevention and Education Program, Roswell Park Cancer Institute and the Tobacco-Free Coalition of Oregon.

For a full copy of the Oregon Air Monitoring Project report, please contact the American Cancer Society at
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(503) 295-6424

General facts about the health effects of secondhand smoke in this Executive Summary were accessed on April 27, 2006 at <http://www.cdc.gov/tobacco/factsheets>.

Oregon specific facts about smoking and secondhand smoke can be found in *Oregon Tobacco Facts, 2004*, Department of Human Services Tobacco Prevention and Education Program.