

Treasure Valley Air Monitoring Project

Background: Secondhand smoke is a proven carcinogen containing more than 4,000 chemicals, including formaldehyde, cyanide, arsenic and carbon monoxide. According to the U.S. Surgeon General, secondhand smoke is proven to cause lung cancer, heart disease and serious respiratory illnesses.

Twenty-seven states (including Washington, Oregon, Utah and Montana) have strong laws prohibiting smoking in nearly all workplaces, including restaurants and bars. Idaho's current law prohibits smoking in restaurants, but does not include workplaces such as bars.

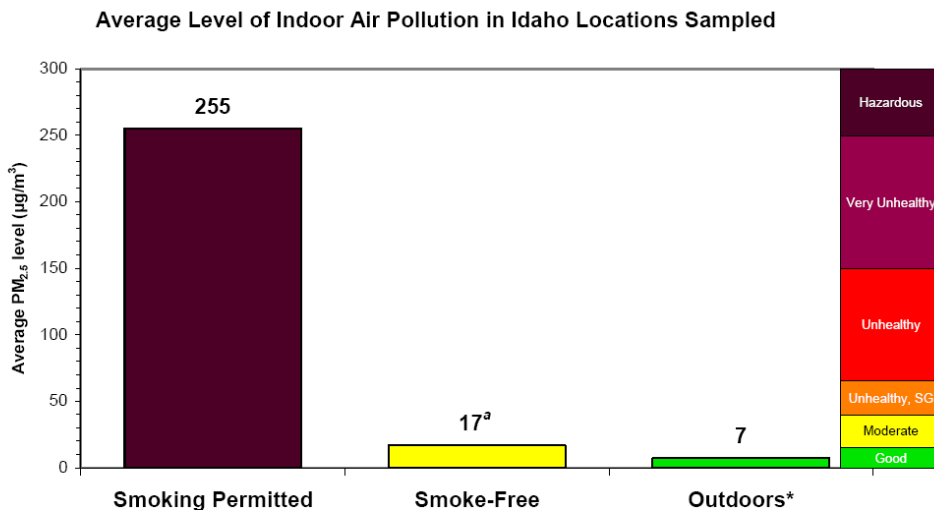
Coalition for a Healthy Idaho tested indoor air quality in a sample of Treasure Valley bars and restaurants in May and June 2009. Volunteers used a small aerosol monitor that tests for concentrations of particulate matter in the air smaller than 2.5 microns in diameter (PM_{2.5}). These tiny particles are released in significant amounts from burning cigarettes and are easily inhaled deeply into the lungs.

Methods: Coalition for a Healthy Idaho volunteers tested the indoor air quality in 19 bars and restaurants in Treasure Valley. These establishments included bars that allow smoking (14) as well as 4 restaurants required to be smoke-free by law and one smoke-free bar. Volunteers were trained to use the aerosol monitor, TSI SidePak Personal Aerosol Monitor, by the Roswell Park Cancer Institute. The TSI Side-Pak has been used in numerous air quality studies worldwide. Volunteers tested air quality during evening hours, spending a minimum of 30 minutes in each establishment.

Analysis: Scientists at Roswell Park Cancer Institute, the national leader in the effects of secondhand smoke on indoor air quality, analyzed Treasure Valley data gathered by Coalition for a Healthy Idaho volunteers. Scientists calculated the levels of PM 2.5 in each establishment taking into account the room volume.

Key Findings:

- **The level of indoor air pollution was hazardous in the bars permitting smoking. In fact, pollution levels were 15 times higher in bars that allow smoking than in establishments where smoking was prohibited.**
- Employees and patrons in Treasure Valley bars are still exposed to harmful levels of air pollution resulting from indoor smoking. A law prohibiting smoking in all indoor workplaces, including bars, is the only proven means to eliminate this exposure to secondhand smoke and protect everyone's right to breathe clean air.



^a p<0.001 for comparison of smoke-free to smoking-permitted (Independent samples t test of log-transformed values)

* Used for comparison purposes. Based on the 2008 average PM_{2.5} level from the 2 EPA monitoring sites in Ada County, Idaho (<http://www.epa.gov/air/data/>). The color-coded EPA Air Quality Index is also shown to demonstrate the magnitude of the measured particle concentrations.