

## Study shows pollution levels of Treasure Valley bars

BOISE—A new study by the Coalition for a Healthy Idaho (CHI) finds that Treasure Valley bars are, on average, 15 times more polluted than restaurants covered by Idaho's smokefree law that protects many workers from the dangers of secondhand smoke. These same bars reach pollution levels that are 36 times more than outdoor pollution levels in the Valley.

This project is the first scientifically based study of its type to measure the impact of smoking on the indoor air quality in local area workplaces, and the effects of secondhand smoke on workers.

Volunteer researchers in the Treasure Valley conducted the study, supervised by researchers at the Roswell Park Cancer Institute ([www.roswellpark.org](http://www.roswellpark.org))

in Buffalo, New York — the national leader in studying effects of secondhand smoke on indoor air quality. Researchers used state-of-the-art air monitors in bars in Boise, Meridian and Garden City to measure the levels of fine particle air pollution, of which secondhand smoke is a major source.

The study found that full-time bar employees in the Treasure Valley are exposed on the job to more than four times the average annual limits of fine particulate air pollution recommended by the Environmental Protection Agency (EPA). The EPA has found that these fine particles can penetrate deep into human lungs, causing serious lung, heart and other health conditions.

These study results come

as Smokefree Idaho is asking Idaho city councils to pass comprehensive ordinances that would protect workers from the health hazards of secondhand smoke by making all workplaces smokefree.

"This study shows precisely why city councils in Idaho should implement comprehensive smokefree ordinances covering all indoor workplaces and all workers," said Shauneen Grange, campaign coordinator of Smokefree Idaho. "The study demonstrates conclusively that the smokefree air law in Idaho is effectively protecting the health of workers and patrons from the health effects of exposure to secondhand smoke in restaurants while those in smoking-permitted bars are still exposed to hazardous levels of

air contaminants."

The Coalition for a Healthy Idaho is a group of more than two dozen organizations working together to decrease the impact of tobacco on the health of Idahoans. The Coalition supports Smokefree Idaho — an effort to make all indoor public and work places in Idaho 100 percent smokefree.

### Additional study details

The Treasure Valley air monitoring study measured concentrations of particulate matter in the air smaller than 2.5 microns in diameter (PM<sub>2.5</sub>). These tiny particles are released in significant amounts from burning cigarettes and are easily inhaled deeply into the lungs. They may be carcinogenic (known to cause cancer) themselves or carry car-

cinogens on their surfaces. The EPA has established guidelines for safe levels of PM<sub>2.5</sub>. High concentrations of these pollutants are found in secondhand smoke, which causes lung cancer, heart disease and chronic lung ailments. There is a direct link between PM<sub>2.5</sub> levels and levels of polycyclic aromatic hydrocarbons (PAH), which are known carcinogens in cigarette smoke.

### How the testing was conducted

A TSI SidePak AM510 Personal Aerosol Monitor was used to unobtrusively sample and record the levels of respirable suspended particles in the air. In May and June, indoor air quality was assessed in 19 bars and restaurants in Boise,

Meridian, and Garden City. Fourteen of these locations were bars that were not required to be smoke-free according to state law. The other five locations include four restaurants that are required to be smoke-free by law and one bar that was voluntarily smoke-free. Researchers spent a minimum of 30 minutes in each venue. The number of people inside the venue and the number of burning cigarettes were recorded every 15 minutes during sampling. These observations were averaged over the time inside the venue to determine the average number of people on the premises and the average number of burning cigarettes. The room dimensions and hence the volume of each of the venues was also measured and calculated.