FOR IMMEDIATE RELEASE
September 9, 2005

Contacts: Nikki Hillier, Health Educator
Community Health Surveillance, Planning and Education
(217) 531-2914
Diana Yates, Communications Coordinator
(217) 531-4275, mobile: (217) 202-7781
Champaign-Urbana Public Health District

Public Health Study Finds Dangerous Pollution Levels in Restaurants and Bars That Permit Smoking

Two or More Smokers Can Produce Levels of Particulate Matter in the Air That Are Significantly Higher Than Federal Safety Standards

Restaurant and bar workers and patrons of local establishments that permit cigarette smoking may be exposed to dangerously high levels of particulate matter from ambient tobacco smoke, according to data released today by the Champaign-Urbana Public Health District.

Public Health staff measured the concentration of particles the air smaller than 2.5 microns in diameter (PM2.5) in thirteen local taverns, bar and grills, and bars. Particles of this size are released in the air in significant amounts from burning cigarettes and are easily inhaled deeply into the lungs.

In the six local smoking-permitted establishments sampled where more than 1 person was smoking, particulate matter averaged 310 micrograms per cubic meter of air when smoking was present. The maximum number of smokers recorded during any observations was eight.

The EPA has set limits of 15 micrograms per cubic meter as the maximum average annual level of PM2.5 exposure and 65 micrograms per cubic meter as the maximum safe level of exposure over a 24 hour period [US Environmental Protection Agency. National ambient air quality standards for particulate matter; final rule. Federal Register 1997; 62(138):38651-38701].

Not surprisingly, smaller establishments with a higher density of smokers yield extremely high levels of particulate matter exposure. In such establishments, Public Health staff recorded PM2.5 rates over 1,000 micrograms per cubic meter, far in excess of EPA recommended safe maximums.

In addition to the above findings, Public Health notes that air quality in smoking permitted establishments remains poor even when few if any smokers are present. Particulate matter levels averaged 128 (more than twice the standard) for such establishments even when only one or no smokers were smoking. Sitting outdoors may bring exposure down to safe levels (average for outdoor areas was 51), but PM2.5 rates over 200 were recorded in outdoor areas where smokers were present. Consistently safe levels of particulate matter well below the EPA maximums are only found in smoke-free public places according to the results of the study.

"These data show that the quality of the air we breathe in public places is seriously compromised," said Kerisa Fish, a health educator at the Champaign-Urbana Public Health District. "Workers in any smoking-permitted establishment should be very concerned about the consequences for their health."

"This also reinforces the need for a comprehensive approach to a smoke-free Champaign and Urbana by requiring public places and workplaces to be smoke-free," she said.

Other cities, such as Bloomington, Indiana have experienced up to an 84% reduction in particulate matter pollution as a result of going smoke-free.

###