

New Jersey Air Monitoring Study 2006

Effect of the NJ Smoke-Free Air Act



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Executive Summary

Indoor air quality was assessed in 50 New Jersey locations, in 13 of New Jersey's 21 counties in 2005, before, and in 2006, after, the New Jersey Smoke-Free Air Act (NJ SFAA). Sites tested included 15 smoking-permitted restaurants and diners, some with alcoholic beverage service, and some with bars; 17 smoking-permitted bars, including neighborhood bars, bar clubs catering to young adults, sports bars, university-area bars, a go-go bar, and bars that had food service but were primarily bars; 8 smoking-permitted casinos; and 3 smoking-permitted bowling alleys. Seven smokefree restaurants and diners, including some with alcoholic beverage service and bars, were tested. In addition, all thirteen Atlantic City casinos were also visited twice after the law, including once during the July state government shutdown when casino gambling was suspended.

The concentration of fine particle air pollution, PM_{2.5}, was measured with a TSI SidePak AM510 Personal Aerosol Monitor. PM_{2.5} is particulate matter in the air smaller than 2.5 microns in diameter. Particles of this size are released in significant amounts from burning cigarettes, are easily inhaled deep into the lungs, and cause a variety of adverse health effects including cardiovascular and respiratory morbidity and death.

Key findings of the study include:

- The average level of fine particle indoor air pollution declined 91% after the NJ SFAA went into effect in those venues that went smokefree as a result of the law.
- The average level of fine particle air pollution in casinos remained unchanged and is still well above the safe levels required by the U.S. Environmental Protection Agency
- During the NJ state government shutdown, the level of indoor air pollution was very low in casinos as there was no smoking. This demonstrates the good air quality that would be achieved if NJ casinos were smokefree.
- New Jersey hospitality venues, except casinos, now have fine particle exposures below EPA limits.

Before New Jersey's Smokefree Air Act, locations allowing indoor smoking were significantly more polluted than indoor smokefree sites and than outdoor air in New Jersey, with levels of pollution in excess of EPA standards. As a result of the Smoke-Free Air Act, air quality is dramatically improved for workers and patrons of all New Jersey workplaces and public places where smoking was formerly permitted, except casinos, where smoking is still permitted, and where air quality continues to be poor. This study demonstrates that exposure to indoor toxic air pollution in New Jersey has declined and this translates into improved quality of life and health outcomes for New Jersey workers and residents.

The U.S. Surgeon General has concluded there is no risk-free level of exposure to secondhand smoke, and, consistent with the results of this study, casinos are a source of high concentrations of secondhand smoke for nonsmoking workers and the public. Possible solutions to the on-going air pollution problem in New Jersey casinos include casinos adopting smokefree policies, enacting state or local legislation to make casinos smokefree, and litigation forcing casinos to provide smokefree air.