

**National Institute of Occupational Safety & Health (NIOSH)**  
**Health Hazard Evaluation of Casino Dealers (May 2009)**  
***Talking Points from Americans for Nonsmokers' Rights (www.no-smoke.org)***

In 2005, blackjack dealers working in three Las Vegas casinos stepped forward and filed a NIOSH workplace Health Hazard Evaluation (HHE) request asking NIOSH to investigate secondhand tobacco smoke in their workplaces. NIOSH responded with a research team that conducted indoor air quality tests and biomarker assessments on more than 100 non-smoking card dealers in Bally's, Caesars Palace, and Paris casinos on the Las Vegas strip. The two casino workers who originally filed the request with NIOSH were fired within months of contacting NIOSH.

The NIOSH Health Hazard Evaluation is now complete and available at: The NIOSH Health Hazard Evaluation is available at: <http://www.cdc.gov/niosh/hhe/reports/pdfs/2005-0201-3080.pdf>. NIOSH is an agency within the U.S. Centers for Disease Control and Prevention (CDC), which is part of the federal Department of Health and Human Services.

Key Findings and Talking Points:

- A new federal report from the National Institute for Occupational Safety and Health (NIOSH) found that casino workers are exposed to hazardous levels of toxic secondhand smoke at work, including tobacco-specific carcinogens that increased in the body as the shift went on.
- NIOSH recommends making all casinos 100% smokefree to ensure indoor air within casinos is safe to breathe. *Note: NIOSH is not a rule-making agency.*
- Based on the very high levels of tobacco-specific chemicals NNK and cotinine in casino workers' bodies after a work shift, this report shows that casino workers are in the 90th percentile of exposure to secondhand smoke compared to the general population. Casino workers are at great risk to the health hazards caused by secondhand smoke, including heart disease, lung cancer, and acute and chronic respiratory illnesses.
- Secondhand tobacco smoke is a leading cause of preventable death in the U.S., killing on average 53,000 nonsmokers in the U.S. each year due primarily to heart disease and lung cancer.
- According to the [Office of Surgeon General](#) and the U.S. Centers for Disease Control and Prevention (CDC), there is no safe level of exposure to secondhand smoke. Even sophisticated ventilation systems and smoking rooms do not eliminate the health risks associated with secondhand tobacco smoke.<sup>1</sup>
- The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the preeminent U.S. standard-setting body on ventilation issues, has concluded that ventilation technology cannot be relied on to completely control health risks from secondhand smoke exposure. Conventional air cleaning systems can remove large particles, but not the smaller particles or the gases found in secondhand smoke.
- The casinos knew these tests were taking place, and most likely had their ventilation systems cranked to the maximum level during the test period. Even with casinos' sophisticated ventilation systems, workers were still highly exposed to toxic smoke-filled air in their jobsites.
- Customers in casinos can step outside to smoke. But card dealers, wait staff, janitors, and other casino workers cannot step outside to breathe smokefree air.
- This report should serve as a wake-up call to local, state, and tribal lawmakers to ensure that all workers – especially casino workers - have a law to ensure their right to smokefree air in the workplace. This is a health issue. Casino workers should not be left behind for political reasons such as campaign contributions from casino executives.

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<sup>1</sup>U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006. <http://www.surgeongeneral.gov/library/secondhandsmoke/factsheets/factsheet7.html>

## Secondhand Smoke and Casinos

- All workers deserve to breathe smokefree air, and casino workers are no exception.
- Casino workers are at greater risk for lung and heart disease because of elevated levels of secondhand smoke exposure.<sup>2</sup>
- Ventilation systems and smoking rooms may reduce odor, but do not protect people from secondhand tobacco smoke. Casino workers even in a "well-ventilated" casino have cotinine (metabolized nicotine) levels 300-600% higher than in other smoking workplaces during a work shift.<sup>3</sup>
- The average level of cotinine (metabolized nicotine) among nonsmokers increased by 456% and the average levels of the carcinogen NNAL increased by 112% after four hours of exposure to secondhand smoke in a smoke-filled casino with a "sophisticated" ventilation system.<sup>4</sup>
- Smoke-filled casinos have up to 50 times more cancer-causing particles in the air than highways and city streets clogged with diesel trucks in rush hour traffic. After going smokefree, indoor air pollution virtually disappears in the same environments.<sup>5</sup>
- Smokefree laws have no effect on total gambling revenues or on the average revenue per machine. Despite smokefree opponents' claims of economic doomsday, smokefree laws do not harm casinos or other gambling venues, just as they do not harm restaurants, bars, or bingo parlors. Smoking is an incidental activity.<sup>6</sup>
- For more information on secondhand smoke and gambling worksites, visit: <http://no-smoke.org/goingsmokefree.php?id=104>

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<sup>2</sup> Curran, J., "For casino workers, smoke study underscores hazard," *Newsday/AP*, October 17, 2004.

<sup>3</sup> Trout D.; Decker J.; Mueller C.; Bernert J.T.; Pirkle J., "Exposure of casino employees to environmental tobacco smoke," *JOEM*. 1998 March;40(3): 270-6. Accessed on May 20, 2004. Download at [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list\\_uids=9531098&dopt=Abstract](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9531098&dopt=Abstract).

<sup>4</sup> Anderson, K.; Kliris, J.; Murphy, L.; Carmella, S.; Han, S.; Link, C.; Bliss, R.; Puumala, S.; Hecht, S., "Metabolites of Tobacco-Specific Lung Carcinogen in Nonsmoking Casino Patrons," *Cancer Epidemiology, Biomarkers & Prevention*, 12:1544-1546, December 2003.

<sup>5</sup> Repace, J., "Respirable Particles and Carcinogens in the Air of Delaware Hospitality Venues Before and After a Smoking Ban." *JOEM*, September 10, 2004.

<sup>6</sup> Mandel, L.L.; Alamar, B.C.; Glantz, S.A., "Smoke-free law did not affect revenue from gaming in Delaware," *Tobacco Control*; 14: 10-12, 2005.