

Marijuana Smoke Contains Higher Levels Of Certain Toxins Than Tobacco Smoke

ScienceDaily (Dec. 18, 2007) — Here's another reason to "keep off the grass." Researchers in Canada report that marijuana smoke contains significantly higher levels of several toxic compounds -- including ammonia and hydrogen cyanide -- than tobacco smoke and may therefore pose similar health risks.

David Moir and colleagues note that researchers have conducted extensive studies on the chemical composition of tobacco smoke, which contains a host of toxic substances, including about 50 that can cause cancer. However, there has been relatively little research on the chemical composition of marijuana smoke.

In this new study, researchers compared marijuana smoke to tobacco smoke, using smoking machines to simulate the smoking habits of users. The scientists found that ammonia levels were 20 times higher in the marijuana smoke than in the tobacco smoke, while hydrogen cyanide, nitric oxide and certain aromatic amines occurred at levels 3-5 times higher in the marijuana smoke, they say. The finding is "important information for public health and communication of the risk related to exposure to such materials," say the researchers.

The study, "A Comparison of Mainstream and Sidestream Marijuana and Tobacco Cigarette Smoke Produced under Two Machine Smoking Conditions," is scheduled for the Dec. 17 issue of ACS' *Chemical Research in Toxicology*.

Adapted from materials provided by American Chemical Society, via EurekaAlert!, a service of AAAS.

American Chemical Society (2007, December 18). Marijuana Smoke Contains Higher Levels Of Certain Toxins Than Tobacco Smoke. *ScienceDaily*. Retrieved January 2, 2009, from <http://www.sciencedaily.com/releases/2007/12/071217110328.htm>

[enlarge](#)



Marijuana smoke contains higher levels of several toxic compounds, including ammonia and hydrogen cyanide, than tobacco smoke. (Credit: U.S. Drug Enforcement Administration)

Ads by Google