

Study Finds No Cancer-Marijuana Connection

By Marc Kaufman
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The largest study of its kind has unexpectedly concluded that smoking marijuana, even regularly and heavily, does not lead to lung cancer.

The new findings "were against our expectations," said Donald Tashkin of the University of California at Los Angeles, a pulmonologist who has studied marijuana for 30 years.

"We hypothesized that there would be a positive association between marijuana use and lung cancer, and that the association would be more positive with heavier use," he said. "What we found instead was no association at all, and even a suggestion of some protective effect."

Federal health and drug enforcement officials have widely used Tashkin's previous work on marijuana to make the case that the drug is dangerous. Tashkin said that while he still believes marijuana is potentially harmful, its cancer-causing effects appear to be of less concern than previously thought.

Earlier work established that marijuana does contain cancer-causing chemicals as potentially harmful as those in tobacco, he said. However, marijuana also contains the chemical THC, which he said may kill aging cells and keep them from becoming cancerous.

Tashkin's study, funded by the National Institutes of Health's National Institute on Drug Abuse, involved 1,200 people in Los Angeles who had lung, neck or head cancer and an additional 1,040 people without cancer matched by age, sex and neighborhood.

They were all asked about their lifetime use of marijuana, tobacco and alcohol. The heaviest marijuana smokers had lighted up more than 22,000 times, while moderately heavy usage was defined as smoking 11,000 to 22,000 marijuana cigarettes. Tashkin found that even the very heavy marijuana smokers showed no increased incidence of the three cancers studied.

"This is the largest case-control study ever done, and everyone had to fill out a very extensive questionnaire about marijuana use," he said. "Bias can creep into any research, but we controlled for as many confounding factors as we could, and so I believe these results have real meaning."

Tashkin's group at the David Geffen School of Medicine at UCLA had hypothesized that marijuana would raise the risk of cancer on the basis of earlier small human studies, lab studies of animals, and the fact that marijuana users inhale more deeply and generally hold smoke in their lungs longer than tobacco smokers -- exposing them to the dangerous

chemicals for a longer time. In addition, Tashkin said, previous studies found that marijuana tar has 50 percent higher concentrations of chemicals linked to cancer than tobacco cigarette tar.

While no association between marijuana smoking and cancer was found, the study findings, presented to the American Thoracic Society International Conference this week, did find a 20-fold increase in lung cancer among people who smoked two or more packs of cigarettes a day.

The study was limited to people younger than 60 because those older than that were generally not exposed to marijuana in their youth, when it is most often tried.