



What Adverse Effect Does Marijuana Have on Health?

Effects on the Heart

Marijuana increases heart rate by 20-100 percent shortly after smoking; this effect can last up to 3 hours. In one study, it was estimated that marijuana users have a 4.8-fold increase in the risk of heart attack in the first hour after smoking the drug.⁵ This may be due to increased heart rate as well as the effects of marijuana on heart rhythms, causing palpitations and arrhythmias. This risk may be greater in aging populations or in those with cardiac vulnerabilities.

Effects on the Lungs

Numerous studies have shown marijuana smoke to contain carcinogens and to be an irritant to the lungs. **In fact, marijuana smoke contains 50-70 percent more carcinogenic hydrocarbons than tobacco smoke.** Marijuana users usually inhale more deeply and hold their breath longer than tobacco smokers do, which further increase the lungs' exposure to carcinogenic smoke.

Marijuana smokers can have many of the same respiratory problems as tobacco smokers, such as daily cough and phlegm production, more frequent acute chest illness, and a heightened risk of lung infections. A study of 450 individuals found that people who smoke marijuana frequently but do not smoke tobacco have more health problems and miss more days of work than nonsmokers. Many of the extra sick days among the marijuana smokers in the study were for respiratory illnesses.

THC concentrations

Many adolescents in treatment experience a number of negative consequences related to marijuana use including impaired academic performance, deteriorated relationships with parents, and mood and behavioral problems. The U.S. federal government has released information saying that the levels of potency have risen. According to National Institute on Drug Abuse, in 2009, THC concentrations in marijuana averaged close to 10 percent, compared to around 4 percent in the 1980s.

1) The National Institute on Drug Abuse (NIDA) is part of the [National Institutes of Health \(NIH\)](#), a component of the [U.S. Department of Health and Human Services](#). Questions? See our [Contact Information](#).