

Dear Friends:

A few days ago, the State of California Office of Environmental Health Hazard Assessment declared that marijuana smoke causes cancer. This was after an extensive review of over 30 scientific papers and a hearing. The state agency found marijuana smoke contains 33 of the same harmful chemicals as tobacco smoke. Their statement is attached.

Smoking marijuana is not medicine. It will make sick people sicker and healthy people sick. It may cause Kaposi's sarcoma in people with AIDS (see below link to a study from Harvard Medical School). This is a fatal form of cancer. This is not compassionate.

No FDA approved medicines are smoked. It is difficult to administer safe, regulated dosages of medicines in smoked form. Furthermore, the harmful chemicals and carcinogens that are byproducts of smoking create entirely new health problems. [FN1]
Internet links to studies are below.

The respiratory difficulties associated with marijuana use preclude the inhaled route of administration as a medicine. Smoked marijuana is associated with higher concentrations of tar, carbon monoxide, and carcinogens than even cigarette smoke.[FN2]

Marijuana adversely impairs some aspects of lung function, causes abnormalities in the cells lining the airways of the upper and lower respiratory tract and in the airspaces deep within the lung, and it causes cancer.[FN3].

In addition to these cellular abnormalities and consequences, contaminants of marijuana smoke are known to include certain forms of bacteria and fungi. Those at particular risk for the development of disease and infection when these substances are inhaled, are those users with impaired immunity such as those with AIDS. [FN4]

Smoking marijuana can cause intoxication, precipitation of anxiety or acute psychotic reactions, orthostatic hypotension and bronchial inflammation. For a drug to be acceptable, its beneficial results must outweigh the adverse effects, especially when the claim is that it can be used repeatedly for symptomatic relief of chronic disorders.[FN5]

In recent years there has been a great public effort to curtail tobacco because of its effects on health yet the advocates of legalization promote smoking marijuana. Yet, a recent study shows that marijuana smoke has ammonia levels 20 times higher than tobacco smoke. Marijuana has hydrogen cyanide, nitric oxide, and aromatic amines at 3-5 times higher than tobacco smoke. [FN6]

Another study shows that that marijuana smokers face rapid lung destruction - as much as 20 years ahead of tobacco smokers. [FN7]

A just released study shows that marijuana damages DNA and that it is toxic to the body. [FN8]

LINKS TO STUDIES

Marijuana Damages DNA And May Cause Cancer, New Test Reveals

<http://www.sciencedaily.com/releases/2009/06/090615095940.htm>

Marijuana Smoke Contains Higher Levels Of Certain Toxins Than Tobacco Smoke

<http://www.sciencedaily.com/releases/2007/12/071217110328.htm>

Marijuana Smokers Face Rapid Lung Destruction -- As Much As 20 Years Ahead Of Tobacco Smokers

<http://www.sciencedaily.com/releases/2008/01/080123104017.htm>

Impact On Lungs Of One Cannabis Joint Equal To Up To Five Cigarettes

<http://www.sciencedaily.com/releases/2007/07/070731085550.htm>

Marijuana Component Opens The Door For Virus That Causes Kaposi's Sarcoma (link to Harvard study)

<http://www.sciencedaily.com/releases/2007/08/070801112156.htm>

References

[FN1] Brief of the Institute on Global Drug Policy of the Drug Free America Foundation; National Families in Action; Drug Watch International; Drug-free Kids: America's Challenge, et al., as Amici Curiae in Support of Petitioner 2001WL 30659 (Jan. 10, 2001), U.S. v. Oakland Cannabis Buyers' Cooperative, 121 S.Ct. 1711 (2001)

[FN2] Wu et al., Pulmonary hazards of smoking marijuana as compared with tobacco, *NEJM*, 1988:318:347-351.

[FN3] Barbers et al., Differential examination of bronchoalveolar lavage ceus in tobacco cigarette and marijuana smokers, *Am Rev Respir Dis* 1987:135:1271-1275; Fligel et al., Bronchial pathology in chronic marijuana smokers: a light and electron microscopic study, *Journal of Psychoactive Drugs* 1988:20:33-42; Gong et al., Acute and subacute bronchial effects of oral cannabinoids, *Clin Pharmacol Ther.* 1984:35:26-32; Tashkin, Is frequent marijuana smoking harmful to health? *Western Journal of Medicine* 1993:158:635-637; Tashkin et al., Respiratory status of seventy-four habitual marijuana smokers, *Chest* 1980:78:699-706; Tashkin, Shapiro, Lee & Harper, Subacute effects of heavy marijuana smoking on pulmonary function in healthy men, *NEJM* 1976:294:125-129; Tashkin, Sirons & Clark, Effect of habitual smoking of marijuana alone and with tobacco on nonspecific airways hyperreactivity, *Journal of Psychoactive Drugs* 1988:20:21-25; Tilles et al., Marijuana smoking as cause of reduction in single-breath carbon monoxide diffusing capacity, *American Journal of Medicine* 1986:80:601-606; Barbers et al., Chemotaxis of peripheral blood and lung leukocytes obtained from tobacco and marijuana smokers, *Journal of Psychoactive Drugs* 1988:20:15-20; Bucklev, A case-control study of acute non-lymphoblastic leukemia: evidence for an association with marijuana exposure, *Cannabis: Physiopathology, Epidemiology, Detection* pp. 155-162 (CRC Press 1993); Murison et al., Cannabinoids induce incomplete maturation of cultured human leukemia cells, *Proc Natl Acad Sci USA* 1987:84:5414-5418. Robison et al., Maternal drug use and risk of childhood non-lymphoblastic leukemia among offspring, *Cancer* 1989:63:1904-1911.

[FN4] Fleisher, Winawer & Zauber, Aspergillosis and marijuana, *Annals of Internal Medicine* 1991:115:578-579; Ramirez, Acute pulmonary histoplasmosis: newly recognized hazard of marijuana plant hunters, *American Journal of Medicine* 1990:88:5-60N-5-62N; Taylor et al., Salmonellosis associated with marijuana: a multi state outbreak traced by plasmid fingerprinting, *NEJM* 1982:306:1249-1254.

[FN5] "Smoked Marijuana as Medicine: Not Much Future," *Clinical Pharmacology &*

Therapeutics (2008), H Kalant, Department of Pharmacology, University of Toronto, Toronto, Ontario, Canada

[FN6] Marijuana Smoke Contains Higher Levels of Certain Toxins Than Tobacco Smoke, Science Daily, December 18, 2007

[FN7] Marijuana Smokers Face Rapid Lung Destruction - As Much as 20 Years Ahead of Tobacco Smokers, Science Daily, January 27, 2008

[FN8] Marijuana Damages DNA and May Cause Cancer, New Test Reveals, Science Daily, June 15, 2009