

# Institute for Cannabis Therapeutics

## ADDITIONAL NOTES

re: Rescheduling of Cannabis

3-27-10

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**(1)** Add that the CSA is a flawed document - where are tobacco and alcohol listed in the schedules?

Alcohol:

has an LD50 of 0.40% BAC, with approx 100,000 deaths in the US annually

Tobacco:

The LD50 of nicotine is 50 mg/kg for rats and 3 mg/kg for mice. 40–60 mg (0.5-1.0 mg/kg) can be a lethal dosage for adult humans. Tobacco/nicotine accounts for nearly 1/2 million US deaths annually.

Cannabis:

In summary, enormous doses of Delta 9 THC, All THC and concentrated marihuana extract ingested by mouth were unable to produce death or organ pathology in large mammals but did produce fatalities in smaller rodents due to profound central nervous system depression.

The non-fatal consumption of 3000 mg/kg A THC by the dog and monkey would be comparable to a 154-pound human eating approximately 46 pounds (21 kilograms) of 1%-marihuana or 10 pounds of 5% hashish at one time. In addition, 92 mg/kg THC intravenously produced no fatalities in monkeys. These doses would be comparable to a 154-pound human smoking at one time almost three pounds (1.28 kg) of 1%-marihuana or 250,000 times the usual smoked dose and over a million times the minimal effective dose assuming 50% destruction of the THC by smoking.

Thus, evidence from animal studies and human case reports appears to indicate that the ratio of lethal dose to effective dose is quite large. This ratio is much more favorable than that of many other common psychoactive agents including alcohol and barbiturates (Phillips et al. 1971, Brill et al. 1970).

[http://www.druglibrary.org/SCHAFFER/LIBRARY/mj\\_overdose.htm](http://www.druglibrary.org/SCHAFFER/LIBRARY/mj_overdose.htm)

**(2)** I think the most important information to share is that dronabinol (marketed as Marinol; synthetic THC suspended in sesame oil) is listed at Schedule III on the Federal Controlled Substances list. You may also want to remind the Pharmacy Board that the Senate Judiciary heard this testimony and it was significant testimony in getting them to pass the bill out to the floor.

Another important suggestion is that medical cannabis is, really, a non-toxic herbal remedy which ought not to be ranked at all. Given that the legislature has required to rank it at schedule II, III, IV or V, ranking it at V is appropriate.

**(3)** There are a number of different factors used to determine an appropriate schedule for a drug. Below these paragraphs are the generally accepted factors for federal scheduling, and states typically follow the same rubric. It should be noted that Marinol is Schedule III, and would be considered to be a more refined and concentrated form of what they deem to be the active ingredient, THC. Typically, more refined and concentrated forms of drugs are scheduled above their less refined counterparts, which would be a good argument for Schedule IV or V, as marijuana is less concentrated or refined than Marinol. For example, pure hydrocodone is a Schedule II drug, but hydrocodone in cough syrups or with Tylenol, like Vicodin, are Schedule III drugs.

Additionally, marijuana is not physically addicting, while many Schedule III, and Schedule IV drugs are highly physically addicting and highly abused, such as Vicodin in Schedule III, and the benzodiazepines like Valium, Clonopin and Xanax in Schedule IV, which would be an argument for marijuana at Schedule V.

If Marinol was considered to be an ingredient of marijuana, which it is not because it is synthetic, marijuana would be required to be scheduled as a Schedule III in accordance with ORS 475.035(3).

See below for factors:

Schedule I

. The drug or other substance has a high potential for abuse.

. The drug or other substance has no currently accepted medical use in treatment in the United States.

- . There is a lack of accepted safety for use of the drug or other substance under medical supervision.

- . Examples of Schedule I substances include heroin, lysergic acid diethylamide (LSD), marijuana, and methaqualone.

#### Schedule II

- . The drug or other substance has a high potential for abuse.

- . The drug or other substance has a currently accepted medical use in treatment in the United States or a currently accepted medical use with severe restrictions.

- . Abuse of the drug or other substance may lead to severe psychological or physical dependence.

- . Examples of Schedule II substances include morphine, phencyclidine (PCP), cocaine, methadone, and methamphetamine.

#### Schedule III

- . The drug or other substance has less potential for abuse than the drugs or other substances in schedules I and II.

- . The drug or other substance has a currently accepted medical use in treatment in the United States.

- . Abuse of the drug or other substance may lead to moderate or low physical dependence or high psychological dependence.

- . Anabolic steroids, codeine and hydrocodone with aspirin or TylenolR, and some barbiturates are examples of Schedule III substances.

#### Schedule IV

- . The drug or other substance has a low potential for abuse relative to the drugs or other substances in Schedule III.

- . The drug or other substance has a currently accepted medical use in treatment in the United States.

- . Abuse of the drug or other substance may lead to limited physical dependence or psychological dependence relative to the drugs or other substances in Schedule III.

. Examples of drugs included in schedule IV are DarvonR, TalwinR, EquanilR, ValiumR, and XanaxR.

#### Schedule V

. The drug or other substance has a low potential for abuse relative to the drugs or other substances in Schedule IV.

. The drug or other substance has a currently accepted medical use in treatment in the United States.

. Abuse of the drug or other substances may lead to limited physical dependence or psychological dependence relative to the drugs or other substances in Schedule IV.

. Cough medicines with codeine are examples of Schedule V drugs.