# **Medical Marijuana Information**

### **Prepared By**

# The Office of National Drug Control Policy

### **At A Glance**

- Since 1996, 16 states and the District of Columbia have enacted "medical" marijuana legislation or initiatives.
- Based on available data, it is clear that most users of state-based marijuana programs do not suffer from chronic, life-threatening diseases.
- "Medical" marijuana contributes to softer attitudes and greater use of marijuana.
- Marijuana, as a whole plant, has thousands of unknown and carcinogenic components and has not met the rigorous standards of medicine set forth by the Food and Drug Administration (FDA).
- Some constituents of marijuana, including THC, are available today in pill form (Marinol); some synthetic mimics of those constituents are also available (Cesamet). Research is also investigating other safe delivery methods for these types of medications.
- Currently the National Institutes of Health (NIH) is engaged in a robust research effort to determine what other constituents might have medical use.
- The Department of Justice released two memoranda in 2009 and 2011 stating that that "prosecution of significant traffickers in illegal drugs, including marijuana, remains a core priority" of the Department, and that current policy "was never intended to shield such activities from federal enforcement action and prosecution, even where those activities purport to comply with state law. Persons who are in the business of cultivating. selling, or distributing marijuana, and those who knowingly facilitate such activities, are in violation of the Controlled Substances Act, regardless of state law."

<sup>&</sup>lt;sup>1</sup> Ogden, D. (Oct. 19, 2009). Memorandum to Selected United States Attorneys, *Investigations and Prosecutions in States Authorizing the Medical Use of Marijuana*, Department of Justice and Cole, J. (Jun. 29, 2011). Memorandum to United States Attorneys, *Guidance Regarding the Ogden Memo in Jurisdictions Seeking to Authorize Marijuana for Medical Use*, Department of Justice.

• Additionally, marijuana potency has reached an all-time high average of over 11% THC, with some strains being as high as 30%, contributing to the negative effects of the drug.

## State-based marijuana legislation

- Since 1996, 16 states and DC have passed laws allowing marijuana to be used as "medicine."
- They vary in degree and implementation
  - Started as "affirmative defense" for marijuana use for medicinal purposes; or removal of criminal penalties if "medical" use is claimed
  - o Evolved into state-based production and distribution
  - o None of the state laws rely upon FDA determination of what is a medicine
- States are beginning to re-examine efforts as many local governments are passing laws related to zoning and enforcement. An unofficial count has 64 cities and 6 counties having passed moratoria and 130 cities and 8 counties banning dispensaries outright, in California alone.

### Users of state-based marijuana programs

- A study published in the *Harm Reduction Journal*, analyzing over 3,000 "medical marijuana users in California, found that an overwhelming majority (87.9%) of those queried about the details of their marijuana initiation had tried it before the age of 19, and the average user was a 32-year-old white male. 74% of the Caucasians in the sample had used cocaine, and over 50% had used methamphetamine in their lifetime.<sup>2</sup>
- According to a 2011 study in the *Journal of Drug Policy Analysis* that examined 1,655 applicants in California who sought a physician's recommendation for medical marijuana, very few of those who sought a recommendation had cancer, HIV/AIDS, glaucoma, or multiple sclerosis.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> O'Connell, T and Bou-Matar, C.B. (2007). Long term marijuana users seeking medical cannabis in California (2001–2007): demographics, social characteristics, patterns of cannabis and other drug use of 4117 applicants. *Harm Reduction Journal*, http://www.harmreductionjournal.com/content/4/1/16

<sup>&</sup>lt;sup>3</sup> Nunberg, Helen; Kilmer, Beau; Pacula, Rosalie Liccardo; and Burgdorf, James R. (2011) "An Analysis of Applicants Presenting to a Medical Marijuana Specialty Practice in California," *Journal of Drug Policy Analysis*: Vol. 4: Iss. 1, Article 1. Available at: http://www.bepress.com/jdpa/vol4/iss1/art1

- In Colorado, according to the Department of Health, only 2% of users reported cancer, and less than 1% reported HIV/AIDS as their reason for marijuana. The vast majority (94%) reported "severe pain."
- In Oregon, there are reports that only 10 physicians made the majority all recommendations for "medical" marijuana<sup>5</sup>, and agitation, seizures, cancer, HIV/AIDS, cachexia, and glaucoma were the last six reasons people utilized marijuana for "medical" purposes.<sup>6</sup>

### Effects on use

- A major study in press in *Drug and Alcohol Dependence* by researchers at Columbia University looked at two separate datasets and found that residents of states with "medical" marijuana had higher rates of marijuana and higher rates of marijuana abuse/dependence than states without such laws.<sup>7</sup>
- The 2010 *Monitoring the Future* Survey revealed the perceived harm for smoking marijuana occasionally or regularly has been decreasing among the 8<sup>th</sup> grade since 2007.
- Social disapproval for smoking marijuana once or twice, occasionally, and regularly has been decreasing among 8<sup>th</sup> graders since 2007.
- Research demonstrates that softening attitudes generally precede an increase in drug use rates by approximately two years.

### Research into marijuana's therapeutic components

- Though the whole marijuana plant is not medicine, currently the United States government is conducting a robust marijuana research program to determine the medical efficacy of the constituents within marijuana.
- As of 2011, 209 active researchers registered with the Drug Enforcement Administration (DEA) to perform bona fide research with marijuana, marijuana extracts, and THC.

http://public.health.oregon.gov/DISEASESCONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGR AM/Pages/data.aspx

<sup>&</sup>lt;sup>4</sup> See Colorado Department of Public Health, http://www.cdphe.state.co.us/hs/medicalmarijuana/statistics.html

<sup>&</sup>lt;sup>5</sup> See for example, Danko, D. (2005). Oregon Medical Marijuana Cards Abound, *The Oregonian*, January 23, 2005. Also see Oregon Medical Marijuana, Protect the Patients & Treat it Like Medicine,

<sup>&</sup>lt;sup>6</sup> Oregon Medical Marijuana Program Statistics,

<sup>&</sup>lt;sup>7</sup> Cerda, M. et al. (in press). Medical marijuana laws in 50 states: investigating the relationship between state legalization of medical marijuana and marijuana use, abuse and dependence. *Drug and Alcohol Dependence*. Found at http://www.columbia.edu/~dsh2/pdf/MedicalMarijuana.pdf

- o 109 are approved to perform bona fide research with marijuana, marijuana extracts, and marijuana derivatives such as cannabidiol and cannabinol.
- o <u>Every researcher</u> who has put forth a valid research proposal has received permission to study marijuana.
- o There are currently 288 studies being conducted by the National Institutes of Health to research the constituents in marijuana, or cannabinoids.
- o Studies include evaluation of therapeutic potential, physical/psychological effects, adverse effects, therapeutic potential, and detection.
- o Fourteen researchers are approved to conduct research with smoked marijuana on human subjects.
- Some constituents of marijuana, including THC, are available today in pill form (Marinol); some synthetic mimics of those constituents are also available (Cesamet).
- *Sativex*, a drug approved in Canada, the UK, and other parts of Europe for the treatment of multiple sclerosis spasticity and cancer pain, is currently in late-stage clinical trials with the U.S. FDA.
  - o It combines THC and another active ingredient in marijuana, CBD, to eliminate the "high" from THC.