specified in AS 17.35.020(a) (1) and (2); and
(g) the primary care-giver controls the acquisition of such marijuana and the dosage and frequency of its use by the patient.

AS 17.35.060. Addition of debilitating medical conditions. Not later than June 1, 1999, the Department shall promulgate regulations under the Administrative Procedure Act governing the manner in which it may consider adding debilitating medical conditions to the list provided in this section. After June 1, 1999, the Department shall also accept for consideration physician or patient initiated petitions to add debilitating medical conditions to the list provided in this section and, after hearing, shall approve or deny such petitions within one hundred eighty days of submission. The denial of such a petition shall be considered a final agency action subject to judicial review.

AS 17.35.070. Definitions. In this chapter, unless the context clearly requires otherwise: (a) "Correctional facility" means a state prison institution operated and managed by employees of the Department of Corrections or provided to the Department of Corrections by agreement under AS 33.30.031 for the care, confinement or discipline of prisoners.
(b) "Debilitating medical condition" means:

(1) cancer, glaucoma, positive status for human immunodeficiency virus, or acquired immune deficiency syndrome, or treatment for any of these conditions;
(2) any chronic or debilitating disease or treatment for such diseases, which produces, for a specific patient, one or more of the following, and for which, in the professional opinion of the patient's physician, such condition or conditions reasonably may be alleviated by the medical use of marijuana: cachexia; severe pain; severe nausea; seizures, including those that are characteristic of epilepsy; or persistent muscle spasms, including those that are characteristic of multiple sclerosis; or
(3) any other medical condition, or treatment for such condition, approved by the Department, pursuant to its authority to promulgate regulations or its approval of any petition submitted by a patient or physician under AS 17.35.060.

(c) "Department" means the Department of Health and Social Services;
(d) "Medical use" means the acquisition, possession, cultivation, use, and/or transportation of marijuana and/or paraphernalia related to the administration of such marijuana to address the symptoms or effects of a debilitating medical condition only after a physician has authorized such medical use by a diagnosis of the patient's debilitating medical condition.
(e) "Patient" means a person who has a debilitating medical condition.
(f) "Physician" means a person licensed to practice medicine in this state or an officer in the regular medical service of the armed forces of the United States or the United States Public Health Service while in the discharge of their official duties, or while volunteering services without pay or other remuneration to a hospital, clinic, medical office, or other medical facility in this state;
(g) "Primary care-giver" means a person, other than the patient's physician, who is eighteen years of age or older and has significant responsibility for managing the well-being of a patient who has a debilitating medical condition.
(h) "Prisoner" means a person detained or confined in a correctional facility, whether by arrest, conviction, or court order, or a person held as a witness or otherwise, including municipal prisoners held under contract and juveniles held under the authority of AS 47.10.
(i) "Registry identification card" means a document issued by the Department which identifies a patient authorized to engage in the medical use of marijuana and the patient's primary care-giver, if any.
(j) "Usable form" and "usable marijuana" means the seeds, leaves, buds, and flowers of the plant (genus) Cannabis, but does not include the stalks or roots.
(k) "Written documentation" means a statement signed by a patient's physician or copies of the patient's pertinent medical records.

AS 17.35.080. Short title AS 17.35.010 -- 17.35.070 may be cited as the Medical Uses of Marijuana for Persons Suffering From Debilitating Medical Conditions Act.

Sec. 2. AS 11.71.190 (b) is amended to read:

Sec. 11.71.190 (b). Schedule VIA. Marijuana is a schedule VIA controlled substance except for marijuana possessed for medical purposes under AS 17.35.

STATEMENT IN SUPPORT

Yes On #8 Helps Terminally Ill Patients And Others Suffering Debilitating Medical Conditions. Ballot Measure #8 would allow patients to use marijuana as a medicine if they have a debilitating disease and an authorization from their doctor. Dozens of scientific studies, including government and university-sponsored studies, have shown that marijuana can help patients with cancer and other diseases to get relief from severe pain, nausea or muscle spasticity.

Yes On #8 would give physicians the option of authorizing medical use of marijuana for patients in pain, protecting them from being treated as criminals. At the same time, Ballot Measure #8 retains current laws against non-medical use of marijuana, and contains strict controls on medical use. This commonsense measure will help thousands of Alaskans and future Alaskans with debilitating diseases.

Yes On #8 Will Help Many Cancer Chemotherapy Patients. Currently, one in three chemotherapy patients discontinues treatment because of severe nausea and vomiting. When standard anti-nausea drugs fail, marijuana can often ease a patient's nausea and permit continued treatment. New scientific evidence is emerging that helps prove marijuana's value as an alternative treatment for other medical conditions, including stroke and neuropathic pain.

Marijuana Would Still Be Illegal For Non-Medical Use. Ballot Measure #8 provides full protection against abuse of the new law:

Non-medical (or fraudulent medical) use of marijuana would still be a crime.

Only licensed physicians could authorize medical marijuana use.

Amounts that patients could possess would be strictly limited.

No use would be allowed in public or the work place.

A State of Alaska registration and ID card system would be established for medical users.

Only specific diseases would be covered, including cancer, acquired immune deficiency syndrome, multiple sclerosis, glaucoma, epilepsy, or severe pain and nausea.

Doctors Should Be Able To Make Recommendations To Help Their Patients. The opponents of Ballot Measure #8 believe that doctors shouldn't be able to recommend medical marijuana for any medical conditions. However doctors are currently allowed to prescribe morphine and even cocaine. Shouldn't we trust them to recommend a less dangerous substance like medical marijuana?

Yes On #8 Is A Humane Policy For Alaskans Suffering Extreme Pain. Alaska law should show compassion for people who suffer severe medical conditions. Yet while polls show most Alaskans support the medical use of marijuana, both patients and doctors are now subject to prosecution for using or even recommending it. Please vote to join the 24 other states that have adopted a policy of compassion.

Please Vote YES On Ballot Measure #8

Alaskans for Medical Rights
M. Walter Johnson, MD; Arndt von Hippel, MD; Frederick J. Hillman, MD
(907) 277-AKMR

STATEMENT IN OPPOSITION

Marijuana is a debilitating illegal drug. In 1990 the citizens of Alaska voted to "recriminalize" the use of marijuana. Now, at a time when illegal drug use is destroying the very foundation of our Nation and this great State - the family unit - this Act is attempting to legalize marijuana as a "medicine."

This inept Act allows the "patients" and "care-givers" to grow their own "pot." The Act has no provisions to protect against impurities from "street grass." The Act then attempts to hold patients and care-givers, as well as physicians, "harmless" from the use of marijuana. The Act is a license to grow, use, transport and sell marijuana. It is a bad law.

Dronabinol (marinol) is an approved, controlled drug that is the principal "psychoactive" substance in marijuana. Physicians prescribe dronabinol for symptoms ranging from nausea associated with cancer chemotherapy to anorexia in AIDS patients. Due to the "psychoactive" affects of dronabinol, patient supervision, if possible in an inpatient setting is required. Marijuana is no substitute.

The legalizing of street-grade marijuana, grown by its drug-user patients and care-givers, as allowed by this Act borders on "pure folly." What physician would prescribe an illegal drug to patients when there are no quality controls on the purity of the drug? No physician can ignore a basic tenant of medical practice: "Quality care in the best interest of the patient."

This Act is attempting to deceive Alaskans into thinking we are voting for compassion of those having "debilitating" illnesses. The Act is attempting to use the sick, infirm and dying to pry open the door to drug legalization. From 1991 to 1996 marijuana use nationwide among eighth graders tripled from 6% to 18%. Any legalization of marijuana sends the wrong message to the youth of Alaska. Marijuana is the gateway drug to cocaine, heroin and methamphetamine. As a result, this Act is opposed by local, state and federal law enforcement officers.

The use of illegal drugs, including marijuana, leads to lack of individual self respect, as well as lack of respect of others and society in general. Ultimately, marijuana and other illegal drugs destroy an individual's mind, as well as the "soul." Since marijuana users are not able to distinguish between "right from wrong" the burden of use of illegal drugs is ultimately placed on each of us individually and society as a whole.

Legalization of marijuana tells our youth that adults believe illegal drugs can be used responsibly. Within that atmosphere it is very difficult, if not impossible, to reach our youth and convince them that "doing drugs is bad." The youth of Alaska need our support.

Do not be fooled, this Act is not about compassion or care for the sick, infirm and dying. The Act is an attempt to protect those who grow, transport, distribute, sell, possess or use marijuana. Please vote against this Act.

Wevley William Shea
Anchorage
(907) 274-0020

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EXECUTIVE SUMMARY

Marijuana and Medicine

Assessing the Science Base

Janet E. Joy, Stanley J. Watson, Jr., and John A. Benson, Jr., *Editors*

Division of Neuroscience and Behavioral Health

INSTITUTE OF MEDICINE

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NOTICE: The project that is the subject of this report was approved by the Governing Board of the National Research Council, whose members are drawn from the councils of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. The Principal Investigators responsible for the report were chosen for their special competences and with regard for appropriate balance.

The Institute of Medicine was chartered in 1970 by the National Academy of Sciences to enlist distinguished members of the appropriate professions in the examination of policy matters pertaining to the health of the public. In this, the Institute acts under both the Academy's 1863 congressional charter responsibility to be an adviser to the federal government and its own initiative in identifying issues of medical care, research, and education. Dr. Kenneth I. Shine is president of the Institute of Medicine.

This study was supported under contract No. DC7C02 from the Executive Office of the President, Office of the National Drug Control Policy.

This Executive Summary is available in limited quantities from the Institute of Medicine, Division of Neuroscience and Behavioral Health, 2101 Constitution Avenue, N.W., Washington, DC 20418. The full text is available on line at: **www.nap.edu**

The complete volume of *Marijauna and Medicine: Assessing the Science Base* is available for sale from the National Academy Press, 2101 Constitution Avenue, N.W., Lock Box 285, Washington, DC 20055. Call (800) 624-6242 or (202) 334-3313 (in the Washington metropolitan area), or visit the NAP's on-line bookstore at: **www.nap.edu.**

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The serpent has been a symbol of long life, healing, and knowledge among almost all cultures and religions since the beginning of recorded history. The image adopted as a logotype by the Institute of Medicine is based on a relief carving from ancient Greece, now held by the Staatliche Museen in Berlin.

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REVIEWERS

This report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the National Research Council's Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the Institute of Medicine in making the published report as sound as possible and to ensure that the report meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the deliberative process. The committee wishes to thank the following individuals for their participation in the review of this report:

JAMES ANTHONY, Johns Hopkins University
JACK BARCHAS, Cornell University Medical College
SUMNER BURSTEIN, University of Massachusetts Medical School
AVRAM GOLDSTEIN, Stanford University
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CHARLES O'BRIEN, University of Pennsylvania
JUDITH RABKIN, Columbia University
ERIC VOTH, International Drug Strategy Institute

While the individuals listed above have provided constructive comments and suggestions, it must be emphasized that responsibility for the final content of this report rests entirely with the authoring committee and the Institute of Medicine.

Preface

Public opinion on the medical value of marijuana has been sharply divided. Some dismiss medical marijuana as a hoax that exploits our natural compassion for the sick; others claim it is a uniquely soothing medicine that has been withheld from patients through regulations based on false claims. Proponents of both views cite 'scientific evidence' to support their views and have expressed those views at the ballot box in recent state elections. In January 1997, the White House Office of National Drug Control Policy (ONDCP) asked the Institute of Medicine to conduct a review of the scientific evidence to assess the potential health benefits and risks of marijuana and its constituent cannabinoids. That review began in August 1997 and culminates with this report.

The ONDCP request came in the wake of state "medical marijuana" initiatives. In November 1996, voters in California and Arizona passed referenda designed to permit the use of marijuana as medicine. Although Arizona's referendum was invalidated five months later, the referenda galvanized a national response. In November 1998, voters in six states (Alaska, Arizona, Colorado, Nevada, Oregon, and Washington) passed ballot initiatives in support of medical marijuana. (The Colorado vote will not count, however, because after the vote was taken a court ruling determined there had not been enough valid signatures to place the initiative on the ballot.)

Information for this study was gathered through scientific workshops, site visits to cannabis buyers' clubs and HIV/AIDS clinics, analysis of the relevant scientific literature, and extensive consultation with biomedical and social scientists. The three 2-day workshops—in Irvine, California; New Orleans, Louisiana; and Washington, DC—were open to the public and included scientific presentations and reports, mostly from patients and their families, about their experiences with and perspectives on the medical use of marijuana. Scientific experts in various fields were selected to talk about the latest research on marijuana, cannabinoids, and related topics. (Cannabinoids are drugs with actions similar to THC, the primary psychoactive ingredient in marijuana.) In addition, advocates for and against the medical use of marijuana were invited to

present scientific evidence in support of their positions. Finally, the Institute of Medicine appointed a panel of nine experts to advise the study team on technical issues.

Public outreach included setting up a Web site that provided information about the study and asked for input from the public. The Web site was open for comment from November 1997 until November 1998. Some 130 organizations were invited to participate in the public workshops. Many people in the organizations—particularly those opposed to the medical use of marijuana—felt that a public forum was not conducive to expressing their views; they were invited to communicate their opinions (and reasons for holding them) by mail or telephone. As a result, roughly equal numbers of persons and organizations opposed to and in favor of the medical use of marijuana were heard from.

Advances in cannabinoid science of the last 16 years have given rise to a wealth of new opportunities for the development of medically useful cannabinoid-based drugs. The accumulated data suggest a variety of indications, particularly for pain relief, antiemesis, and appetite stimulation. For patients, such as those with AIDS or undergoing chemotherapy, who suffer simultaneously from severe pain, nausea, and appetite loss, cannabinoid drugs might offer broad spectrum relief not found in any other single medication.

Marijuana is not a completely benign substance. It is a powerful drug with a variety of effects. However, the harmful effects to individuals from the perspective of possible medical use of marijuana are not necessarily the same as the harmful physical effects of drug abuse.

Although marijuana smoke delivers THC and other cannabinoids to the body, it also delivers harmful substances, including most of those found in tobacco smoke. In addition, plants contain a variable mixture of biologically-active compounds and cannot be expected to provide a precisely defined drug effect. For those reasons, the report concludes that the future of cannabinoid drugs lies not in smoked marijuana, but in chemically-defined drugs that act on the cannabinoid systems that are a natural component of human physiology. Until such drugs can be developed and made available for medical use, the report recommends interim solutions.

Acknowledgments

This report covers such a broad range of disciplines—neuroscience, pharmacology, immunology, drug abuse, drug laws, and a variety of medical specialties including neurology, oncology, infectious diseases, and ophthalmology—that it would not have been complete without the generous support of many people. Our goal in preparing this report was to identify the solid ground of scientific consensus, and steer clear of the muddy distractions of opinions that are inconsistent with careful scientific analysis. To this end, we consulted extensively with experts in each of the disciplines covered in this report. We are deeply indebted to each of them.

Members of the Advisory Panel, selected because each is recognized as among the most accomplished in their respective disciplines (see list), provided guidance to the study team throughout the study—from helping to lay the intellectual framework to reviewing early drafts of the report.

The following people wrote invaluable background papers for the report: Steven R. Childers, Paul Consroe, J. Richard Gralla, Howard Fields, Norbert Kaminski, Paul Kaufman, Thomas Klein, Donald Kotler, Richard Musty, Clara Sanudo-Pena, C. Robert Schuster, Stephen Sidney, Donald P.Tashkin, and J. Michael Walker.

Others provided expert technical commentary on draft sections of the report: Richard Bonnie, Keith Green, Frederick Fraunfelder, Andrea Hohmann, John McAnulty, Craig Nichols, John Nutt, and Robert Pandina.

Still others responded to many inquiries, provided expert counsel, or shared their unpublished data: Paul Consroe, Geoffrey Levitt, Richard Musty, David Pate, Roger Pertwee, Raphael Mechoulam, Clara Sanudo-Pena, Carl Soderstrom, J. Michael Walker, and Scott Yarnell.

Miriam Davis, consultant to the study team, provided excellent written material for the chapter on cannabinoid drug development.

The reviewers for the report (see list) provided extensive and constructive suggestions for improving the report. It was greatly enhanced by their thoughtful attentions.

Many of these people assisted us through many iterations of the report. All of them made contributions that were essential to the strength of the report. At the same time, it must be

emphasized that responsibility for the final content of report rests entirely with the authors and the Institute of Medicine.

We would also like to thank the people who hosted our visits to their organizations. They were unfailingly helpful and generous with their time. Jeffrey Jones and members of the Oakland Cannabis Buyers' Cooperative, Denis Peron of the San Francisco Cannabis Cultivators Club, Scott Imler and staff at the Los Angeles Cannabis Resource Center, Victor Hernandez and members of Californians Helping Alleviate Medical Problems (CHAMPS), Michael Weinstein of the AIDS Health Care Foundation, and Marsha Bennett of the Louisiana State University Medical Center.

We also appreciate the many people who spoke at the public workshops or wrote to share their views on the medical use of marijuana (see Appendix AA).

Jane Sanville, project officer for the study sponsor, was consistently helpful during the many negotiations and discussion held throughout study process.

Many IOM staff members provided much appreciated administrative, research, and intellectual support during the study. Robert Cook-Deegan, Marilyn Field, Constance Pechura, Daniel Quinn, Michael Stoto provided thoughtful and insightful comments on draft sections of the report. Others provided advice and consultation in many other aspects of the study process: Kathleen Stratton, Susan Fourt, Carolyn Fulco, Carlos Gabriel, Linda Kilroy, Catharyn Liverman, Clyde Behney, Dev Mani. As project assistant throughout the study, Amelia Mathis was tireless, gracious, and reliable.

Deborah Yarnell's contribution as Research Associate for this study was outstanding. She organized site visits, researched and drafted technical material for the report, and consulted extensively with relevant experts to ensure the technical accuracy of the text. The quality of her contributions throughout this study was exemplary.

Finally, the Principal Investigators on this study wish to personally thank Janet Joy for her deep commitment to the science and shape of this report. In addition, her help in integrating the entire data gathering and information organization of this report were nothing short of essential. Her knowledge of neurobiology, her sense of quality control, and her unflagging spirit over the 18 months illuminated the subjects and were indispensable to the study's successful completion.

Contents

The contents of the entire report, from which this Executive Summary is extracted, are listed below.

Executive Summary

Public opinion on the medical value of marijuana has been sharply divided. Some dismiss medical marijuana as a hoax that exploits our natural compassion for the sick; others claim it is a uniquely soothing medicine that has been withheld from patients through regulations based on false claims. Proponents of both views cite "scientific evidence" to support their views and have expressed those views at the ballot box in recent state elections. In January 1997, the White House Office of National Drug Control Policy (ONDCP) asked the Institute of Medicine to conduct a review of the scientific evidence to assess the potential health benefits and risks of marijuana and its constituent cannabinoids (see box: *Statement of Task*). That review began in August 1997 and culminates with this report.

The ONDCP request came in the wake of state "medical marijuana" initiatives. In November 1996, voters in California and Arizona passed referenda designed to permit the use of marijuana as medicine. Although Arizona's referendum was invalidated five months later, the referenda galvanized a national response. In November 1998, voters in six states (Alaska, Arizona, Colorado, Nevada, Oregon, and Washington) passed ballot initiatives in support of medical marijuana. (The Colorado vote will not count, however, because after the vote was taken a court ruling determined there had not been enough valid signatures to place the initiative on the ballot.)

Can marijuana relieve health problems? Is it safe for medical use? Those straightforward questions are embedded in a web of social concerns, most of which lie outside the scope of this report. Controversies concerning the nonmedical use of marijuana spill over onto the medical marijuana debate and obscure the real state of scientific knowledge. In contrast with the many disagreements bearing on social issues, the study team found substantial consensus among experts in the relevant disciplines on the scientific evidence about potential medical uses of marijuana.

This report summarizes and analyzes what is known about the medical use of marijuana; it emphasizes evidence-based medicine (derived from knowledge and experience informed by rigorous scientific analysis), as opposed to belief-based medicine (derived from judgment, intuition, and beliefs untested by rigorous science).

Throughout this report, *marijuana* refers to unpurified plant substances, including leaves or flower tops whether consumed by ingestion or smoking. References to "the effects of marijuana" should be understood to include the composite effects of its various components; that is, the effects of THC, the primary psychoactive ingredient in marijuana, are included among its effects, but not all the effects of marijuana are necessarily due to THC. *Cannabinoids* are the group of compounds related to THC, whether found in the marijuana plant, in animals, or synthesized in chemistry laboratories.

Three focal concerns in evaluating the medical use of marijuana are:

- Evaluation of the effects of isolated cannabinoids.
- Evaluation of the health risks associated with the medical use of marijuana.
- Evaluation of the efficacy of marijuana.

EFFECTS OF ISOLATED CANNABINOIDS

Cannabinoid Biology

Much has been learned since a 1982 IOM *Marijuana and Health* report. Although it was clear then that most of the effects of marijuana were due to its actions on the brain, there was little information about how THC acted on brain cells (neurons), which cells were affected by THC, or even what general areas of the brain were most affected by THC. Additionally, too little was known about cannabinoid physiology to offer any scientific insights into the harmful or therapeutic effects of marijuana. That all changed with the identification and characterization of cannabinoid receptors in the 1980s and 1990s. During the last 16 years, science has advanced greatly and can tell us much more about the potential medical benefits of cannabinoids.

CONCLUSION: At this point, our knowledge about the biology of marijuana and cannabinoids allows us to make some general conclusions:

- Cannabinoids likely have a natural role in pain modulation, control of movement, and memory.
- The natural role of cannabinoids in immune systems is likely multifaceted and remains unclear.
- The brain develops tolerance to cannabinoids.
- Animal research demonstrates the potential for dependence, but this potential is observed under a narrower range of conditions than with benzodiazepines, opiates, cocaine, or nicotine.
- Withdrawal symptoms can be observed in animals, but appear to be mild compared to opiates or benzodiazepines, such as diazepam (Valium®).

CONCLUSION: The different cannabinoid receptor types found in the body appear to play different roles in normal human physiology. addition, some effects of cannabinoids appear to be independent of those receptors. The ety of mechanisms through which cannabinoids can

influence human physiology underlies the variety of potential therapeutic uses for drugs that might act selectively on different cannabinoid systems.

> RECOMMENDATION 1: **Research should continue into the physiological effects of synthetic and plant-derived cannabinoids and the natural function of cannabinoids found in the body. Because different cannabinoids appear to have different effects, cannabinoid research should include, but not be restricted to, effects attributable to THC alone.**

Efficacy of Cannabinoid Drugs

The accumulated data indicate a potential therapeutic value for cannabinoid drugs, particularly for symptoms such as pain relief, control of nausea and vomiting, and appetite stimulation. The therapeutic effects of cannabinoids are best established for THC, which is generally one of the two most abundant of the cannabinoids in marijuana. (Cannabidiol, the precursor of THC, is generally the other most abundant cannabinoid.)

The effects of cannabinoids on the symptoms studied are generally modest, and in most cases, there are more effective medications. However, people vary in their responses to medications and there will likely always be a subpopulation of patients who do not respond well to other medications. The combination of cannabinoid drug effects (anxiety reduction, appetite stimulation, nausea reduction, and pain relief) suggests that cannabinoids would be moderately well suited for certain conditions, such as chemotherapy-induced nausea and vomiting and AIDS wasting.

Defined substances, such as purified cannabinoid compounds, are preferable to plant products which are of variable and uncertain composition. Use of defined cannabinoids permits a more precise evaluation of their effects, whether in combination or alone. Medications that can maximize the desired effects of cannabinoids and minimize the undesired effects can very likely be identified.

Although most scientists who study cannabinoids agree that the pathways to cannabinoid drug development are clearly marked, there is no guarantee that the fruits of scientific research will be made available to the public for medical use. Cannabinoid-based drugs will only become available if public investment in cannabinoid drug research is sustained, and if there is enough incentive for private enterprise to develop and market such drugs.

CONCLUSION: Scientific data indicate the potential therapeutic value of cannabinoid drugs, primarily THC, for pain relief, control of nausea and vomiting, and appetite stimulation; smoked marijuana, however, is a crude THC delivery system that also delivers harmful substances.

> RECOMMENDATION 2: **Clinical trials of cannabinoid drugs for symptom management should be conducted with the goal of developing rapid-onset, reliable, and safe delivery systems.**

Influence of Psychological Effects on Therapeutic Effects

The psychological effects of THC and similar cannabinoids pose three issues for the therapeutic use of cannabinoid drugs. First, for some patients—particularly older patients with no previous marijuana experience—the psychological effects are disturbing. Those patients report experiencing unpleasant feelings and disorientation after being treated with THC, generally more severe for oral THC than for smoked marijuana. Second, for conditions such as movement disorders or nausea, in which anxiety exacerbates the symptoms, the anti-anxiety effects of cannabinoid drugs can influence symptoms indirectly. This can be beneficial or can create false impressions of the drug effect. Third, in cases where symptoms are multifaceted, the combination of THC effects might provide a form of adjunctive therapy; for example, AIDS wasting patients would likely benefit from a medication that simultaneously reduces anxiety, pain, and nausea while stimulating appetite.

CONCLUSION: The psychological effects of cannabinoids, such as anxiety reduction, sedation, and euphoria can influence their potential therapeutic value. Those effects are potentially undesirable for certain patients and situations, and beneficial for others. In addition, psychological effects can complicate the interpretation of other aspects of the drug effect.

> **RECOMMENDATION 3: Psychological effects of cannabinoids such as anxiety reduction and sedation, which can influence medical benefits, should be evaluated in clinical trials.**

RISKS ASSOCIATED WITH MEDICAL USE OF MARIJUANA

Physiological Risks

Marijuana is not a completely benign substance. It is a powerful drug with a variety of effects. However, except for the harms associated with smoking, the adverse effects of marijuana use are within the range of effects tolerated for other medications. The harmful effects to individuals from the perspective of possible medical use of marijuana are not necessarily the same as the harmful physical effects of drug abuse. When interpreting studies purporting to show the harmful effects of marijuana, it is important to keep in mind that the majority of those studies are based on *smoked* marijuana, and cannabinoid effects cannot be separated from the effects of inhaling smoke of burning plant material and contaminants.

For most people, the primary adverse effect of *acute* marijuana use is diminished psychomotor performance. It is, therefore, inadvisable to operate any vehicle or potentially dangerous equipment while under the influence of marijuana, THC, or any cannabinoid drug with comparable effects. In addition, a minority of marijuana users experience dysphoria, or unpleasant feelings. Finally, the short-term immunosuppressive effects are not well established but, if they exist, are not likely great enough to preclude a legitimate medical use.

The *chronic* effects of marijuana are of greater concern for medical use and fall into two categories: the effects of chronic smoking, and the effects of THC. Marijuana smoking is

associated with abnormalities of cells lining the human respiratory tract. Marijuana smoke, like tobacco smoke, is associated with increased risk of cancer, lung damage, and poor pregnancy outcomes. Although cellular, genetic, and human studies all suggest that marijuana smoke is an important risk factor for the development of respiratory cancer, proof that habitual marijuana smoking does or does not cause cancer awaits the results of well-designed studies.

CONCLUSION: Numerous studies suggest that marijuana smoke is an important risk factor in the development of respiratory disease.

> **RECOMMENDATION 4: Studies to define the individual health risks of smoking marijuana should be conducted, particularly among populations in which marijuana use is prevalent.**

Marijuana Dependence and Withdrawal

A second concern associated with chronic marijuana use is dependence on the psychoactive effects of THC. Although few marijuana users develop dependence, some do. Risk factors for marijuana dependence are similar to those for other forms of substance abuse. In particular, antisocial personality and conduct disorders are closely associated with substance abuse.

CONCLUSION: A distinctive marijuana withdrawal syndrome has been identified, but it is mild and short-lived. The syndrome includes restlessness, irritability, mild agitation, insomnia, sleep EEG disturbance, nausea, and cramping.

Marijuana as a "Gateway" Drug

Patterns in progression of drug use from adolescence to adulthood are strikingly regular. Because it is the most widely used illicit drug, marijuana is predictably the first illicit drug most people encounter. Not surprisingly, most users of other illicit drugs have used marijuana first. In fact, most drug users begin with alcohol and nicotine before marijuana—usually before they are of legal age.

In the sense that marijuana use typically precedes rather than follows initiation of other illicit drug use, it is indeed a "gateway" drug. But because underage smoking and alcohol use typically precede marijuana use, marijuana is not the most common, and is rarely the first, "gateway" to illicit drug use. There is no conclusive evidence that the drug effects of marijuana are causally linked to the subsequent abuse of other illicit drugs. An important caution is that data on drug use progression cannot be assumed to apply to the use of drugs for medical purposes. It does not follow from those data that if marijuana were available by prescription for medical use, the pattern of drug use would remain the same as seen in illicit use.

Finally, there is a broad social concern that sanctioning the medical use of marijuana might increase its use among the general population. At this point there are no convincing data to support this concern. The existing data are consistent with the idea that this would not be a

problem if the medical use of marijuana were as closely regulated as other medications with abuse potential.

CONCLUSION: Present data on drug use progression neither support nor refute the suggestion that medical availability would increase drug abuse. However, this question is beyond the issues normally considered for medical uses of drugs, and should not be a factor in evaluating the therapeutic potential of marijuana or cannabinoids.

USE OF SMOKED MARIJUANA

Because of the health risks associated with smoking, smoked marijuana should generally not be recommended for long-term medical use. Nonetheless, for certain patients, such as the terminally ill or those with debilitating symptoms, the long-term risks are not of great concern. Further, despite the legal, social, and health problems associated with smoking marijuana, it is widely used by certain patient groups.

> **RECOMMENDATION 5: Clinical trials of marijuana use for medical purposes should be conducted under the following limited circumstances: trials should involve only short-term marijuana use (less than six months); be conducted in patients with conditions for which there is reasonable expectation of efficacy; be approved by institutional review boards; and collect data about efficacy.**

The goal of clinical trials of smoked marijuana would not be to develop marijuana as a licensed drug, but rather as a first step towards the possible development of nonsmoked, rapid-onset cannabinoid delivery systems. However, it will likely be many years before a safe and effective cannabinoid delivery system, such as an inhaler, will be available for patients. In the meantime, there are patients with debilitating symptoms for whom smoked marijuana might provide relief. The use of smoked marijuana for those patients should weigh both the expected efficacy of marijuana and ethical issues in patient care, including providing information about the known and suspected risks of smoked marijuana use.

> **RECOMMENDATION 6: Short-term use of smoked marijuana (less than six months) for patients with debilitating symptoms (such as intractable pain or vomiting) must meet the following conditions:**
>
> - **failure of all approved medications to provide relief has been documented;**
> - **the symptoms can reasonably be expected to be relieved by rapid-onset cannabinoid drugs;**
> - **such treatment is administered under medical supervision in a manner that allows for assessment of treatment effectiveness;**
> - **and involves an oversight strategy comparable to an institutional review board process that could provide guidance within 24 hours of a**

submission by a physician to provide marijuana to a patient for a specified use.

Until a non-smoked, rapid-onset cannabinoid drug delivery system becomes available, we acknowledge that there is no clear alternative for people suffering from *chronic* conditions that might be relieved by smoking marijuana, such as pain or AIDS wasting. One possible approach is to treat patients as n-of-1 clinical trials, in which patients are fully informed of their status as experimental subjects using a harmful drug delivery system, and in which their condition is closely monitored and documented under medical supervision, thereby increasing the knowledge base of the risks and benefits of marijuana use under such conditions.

STATEMENT OF TASK

The study will assess what is currently known, and not known about the medical use of marijuana. It will include a review of the science base regarding the mechanism of action of marijuana, an examination of the peer-reviewed scientific literature on the efficacy of therapeutic uses of marijuana, and the costs of using various forms of marijuana versus approved drugs for specific medical conditions (e.g., glaucoma, multiple sclerosis, wasting diseases, nausea, and pain).

The study will also include an evaluation of the acute and chronic effects of marijuana on health and behavior; a consideration of the adverse effects of marijuana use compared with approved drugs; an evaluation of the efficacy of different delivery systems for marijuana (e.g., inhalation vs. oral); and an analysis of the data concerning marijuana as a gateway drug; and an examination of the possible differences in the effects of marijuana due to age and type of medical condition.

Specific Issues

Specific issues to be addressed fall under three broad categories: the science base, therapeutic use, and economics.

Science Base

- Review of neuroscience related to marijuana, particularly relevance of new studies on addiction and craving
- Review of behavioral and social science base of marijuana use, particularly assessment of the relative risk of progression to other drugs following marijuana use
- Review of the literature determining which chemical components of crude marijuana are responsible of possible therapeutic effects and for side effects

Therapeutic Use

- Evaluation of any conclusions on the medical use of marijuana drawn by other groups
- Efficacy and side-effects of various delivery systems for marijuana compared to existing medications for glaucoma, wasting syndrome, pain, nausea, or other symptoms
- Differential effects of various forms of marijuana that relate to age or type of disease.

Economics

- Costs of various forms of marijuana compared with costs of existing medications for glaucoma, wasting syndrome, pain, nausea, or other symptoms
- Assessment of differences between marijuana and existing medications in terms of access and availability

These specific areas, along with the assessments described above will be integrated into a broad description and assessment of the available literature relevant to the medical use of marijuana.

RECOMMENDATIONS

RECOMMENDATION 1: Research should continue into the physiological effects of synthetic and plant-derived cannabinoids and the natural function of cannabinoids found in the body. Because different cannabinoids appear to have different effects, cannabinoid research should include, but not be restricted to, effects attributable to THC alone.

Scientific data indicate the potential therapeutic value of cannabinoid drugs for pain relief, control of nausea and vomiting, and appetite stimulation. This value would be enhanced by a rapid onset of drug effect.

RECOMMENDATION 2: Clinical trials of cannabinoid drugs for symptom management should be conducted with the goal of developing rapid-onset, reliable, and safe delivery systems.

The psychological effects of cannabinoids are probably important determinants of their potential therapeutic value. They can influence symptoms indirectly which could create false impressions of the drug effect or be beneficial as a form of adjunctive therapy.

RECOMMENDATION 3: Psychological effects of cannabinoids such as anxiety reduction and sedation, which can influence perceived medical benefits, should be evaluated in clinical trials.

Numerous studies suggest that marijuana smoke is an important risk factor in the development of respiratory diseases, but the data that could conclusively establish or refute this suspected link have not been collected.

RECOMMENDATION 4: Studies to define the individual health risks of smoking marijuana should be conducted, particularly among populations in which marijuana use is prevalent.

Because marijuana is a crude THC delivery system that also delivers harmful substances, smoked marijuana should generally not be recommended for medical use. Nonetheless, marijuana is widely used by certain patient groups, which raises both safety and efficacy issues.

RECOMMENDATION 5: Clinical trials of marijuana use for medical purposes should be conducted under the following limited circumstances: trials should involve only short-term marijuana use (less than six months); be conducted in patients with conditions for which there is reasonable expectation of efficacy; be approved by institutional review boards; and collect data about efficacy.

If there is any future for marijuana as a medicine, it lies in its isolated components, the cannabinoids and their synthetic derivatives. Isolated cannabinoids will provide more reliable effects than crude plant mixtures. Therefore, the purpose of clinical trials of smoked marijuana would not be to develop marijuana as a licensed drug, but such trials could be a first step towards the development of rapid-onset, nonsmoked cannabinoid delivery systems.

Continued on next page

RECOMMENDATIONS *Continued*

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- **and involves an oversight strategy comparable to an institutional review board process that could provide guidance within 24 hours of a submission by a physician to provide marijuana to a patient for a specified use.**

Marijuana: Facts Parents Need to Know

(Revised November, 1998)

Contents

A Letter to Parents

Marijuana is the illegal drug most often used in this country. Since 1991, lifetime marijuana use has doubled among 8th- and 10th-grade students, and increased by a third among high school seniors. Our research shows that accompanying this upward pattern of use is a significant erosion in antidrug perceptions and knowledge among young people today. As the number of young people who use marijuana has increased, the number who view the drug as harmful has decreased. Among high school seniors surveyed in 1997, current marijuana use has increased by about 72 percent since 1991. The proportion of those seniors who believe regular use of marijuana is harmful has dropped by about 26 percent since 1991.

These changes in perception and knowledge may be due to a decrease in antidrug messages in the media, an increase in prodrug messages through the pop culture, and a lack of awareness among parents about this resurgence in drug use - most thinking, perhaps, that this threat to their children had diminished.

In December 1994, HHS Secretary Donna E. Shalala, Ph.D., called for an Initiative to alert the public - particularly parents - to the rise in marijuana use, its potential health consequences to young people, and the need for parents to take action to prevent the return of a full-blown epidemic of teenage drug use.

Because many parents of this generation of teenagers experimented with marijuana when they were in college, they often find it difficult to talk about marijuana use with their children and to set strict ground rules against drug use. But marijuana use today starts at a younger age - and more potent forms of the drug are available to these young children. Parents need to recognize that marijuana use is a serious threat - and they need to tell their children not to use it.

We at the National Institute on Drug Abuse (NIDA) are pleased to offer these two short booklets, Marijuana: Facts for Teens and Marijuana: Facts Parents Need to Know, for parents and their children to review the scientific facts about marijuana. While it is best to talk about drugs when children are young, it is never too late to talk about the dangers of drug use.

Talking to our children about drug abuse is not always easy, but it is very important. I hope these booklets can help.

Alan I. Leshner, Ph.D.
Director
National Institute on Drug Abuse

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Fact: There are stronger forms of marijuana available to adolescents today than in the 1960's. Stronger marijuana means stronger effects.

Q: What is marijuana? Are there different kinds?

A: Marijuana is a green, brown, or gray mixture of dried, shredded leaves, stems, seeds, and flowers of the hemp plant *(Cannabis sativa)*. Before the 1960s, many Americans had never heard of marijuana, but today it is the most often used illegal drug in this country.

Cannabis is a term that refers to marijuana and other drugs made from the same plant. Strong forms of cannabis include sinse-milla (sin-seh-me-yah), hashish ("hash" for short), and hash oil.

All forms of cannabis are mind-altering (psychoactive) drugs; they all contain THC

(delta-9-tetrahydrocannabinol), the main active chemical in marijuana. They also contain more than 400 other chemicals.

Marijuana's effect on the user depends on the strength or potency of the THC it contains. THC potency has increased since the 1970s but has been about the same since the mid-1980s. The strength of the drug is measured by the average amount of THC in test samples confiscated by law enforcement agencies.

- Most ordinary marijuana has an average of 3 percent THC.
- Sinsemilla (made from just the buds and flowering tops of female plants) has an average of 7.5 percent THC, with a range as high as 24 percent.
- Hashish (the sticky resin from the female plant flowers) has an average of 3.6 percent, with a range as high as 28 percent.
- Hash oil, a tar-like liquid distilled from hashish, has an average of 16 percent, with a range as high as 43 percent.

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Q: What are the current slang terms for marijuana?

A: There are many different names for marijuana. Slang terms for drugs change quickly, and they vary from one part of the country to another. They may even differ across sections of a large city.

Terms from years ago, such as pot, herb, grass, weed, Mary Jane, and reefer, are still used. You might also hear the names Aunt Mary, skunk, boom, gangster, kif, or ganja.

There are also street names for different strains or "brands" of marijuana, such as "Texas tea," "Maui wowie," and "Chronic." A recent book of American slang lists more than 200 terms for various kinds of marijuana.

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Q: How is marijuana used?

A: Most users roll loose marijuana into a cigarette (called a joint or a nail) or smoke it in a pipe. One well-known type of water pipe is the bong. Some users mix marijuana into foods or use it to brew a tea. Another method is to slice open a cigar and replace the tobacco with marijuana, making what's called a blunt. When the blunt is smoked with a 40 oz. bottle of malt liquor, it is called a "B-40."

Lately, marijuana cigarettes or blunts often include crack cocaine, a combination known by various street names, such as "primos" or "woolies." Joints and blunts often are dipped in PCP and are called "happy sticks," "wicky sticks," "love boat," or "tical."

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Q: How many people smoke marijuana? At what age do children generally start?

A: A recent government survey tells us:

- Marijuana is the most frequently used illegal drug in the United States. Nearly 69 million Americans over the age of 12 have tried marijuana at least once.
- About 10 million had used the drug in the month before the survey.
- Among teens 12 to 17, the average age of first trying marijuana was 14 years.

A yearly survey of students in grades 8 through 12 shows that 23 percent of 8th-graders have tried marijuana at least once, and by 10th grade, 21 percent are "current" users (that is, used within the past month). Among 12th-graders, nearly 50 percent have tried marijuana/hash at least once, and about 24 percent were current users.

Other researchers have found that use of marijuana and other drugs usually peaks in the late teens and early twenties, then declines in later years.

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Fact: Research shows that nearly 50 percent of. teenagers try marijuana before they graduate from high school.

Q: How can I tell if my child has been using marijuana?

A: There are some signs you might be able to see. If someone is high on marijuana, he or she might

- seem dizzy and have trouble walking;
- seem silly and giggly for no reason;
- have very red, bloodshot eyes; and
- have a hard time remembering things that just happened.

When the early effects fade, over a few hours, the user can become very sleepy.

Parents should be aware of changes in their child's behavior, although this may be difficult with teenagers. Parents should look for withdrawal, depression, fatigue, carelessness with grooming, hostility, and deteriorating relationships with family members and friends. In addition, changes in academic performance, increased absenteeism or truancy, lost interest in sports or other favorite activities, and changes in eating or sleeping habits could be related to drug use. However, these signs may also indicate problems other than use of drugs.

In addition, parents should be aware of:

- signs of drugs and drug paraphernalia, including pipes and rolling papers.
- odor on clothes and in the bedroom
- use of incense and other deodorizers
- use of eye drops
- clothing, posters, jewelry, etc., promoting drug use

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Q: Why do young people use marijuana?

A: Children and young teens start using marijuana for many reasons. Curiosity and the desire to fit into a social group are common reasons. Certainly, youngsters who have already begun to smoke cigarettes and/or use alcohol are at high risk for marijuana use.

Also, our research suggests that the use of alcohol and drugs by other family members plays a strong role in whether children start using drugs. Parents, grandparents, and older brothers and sisters in the home are models for children to follow.

Some young people who take drugs do not get along with their parents. Some have a network of friends who use drugs and urge them to do the same (peer pressure). All aspects of a child's environment - home, school, neighborhood - help to determine whether the child will try drugs.

Children who become more heavily involved with marijuana can become dependent, and that is their prime reason for using the drug. Others mention psychological coping as a reason for their use - to deal with anxiety, anger, depression, boredom, and so forth. But marijuana use is not an effective method for coping with life's problems, and staying high can be a way of simply not dealing with the problems and challenges of growing up.

Researchers have found that children and teens (both male and female) who are physically and sexually abused are at greater risk than other young people of using marijuana and other drugs and of beginning drug use at an early age.

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Q: Does using marijuana lead to other drugs?

A: Long-term studies of high school students and their patterns of drug use show that very few young people use other drugs without first trying marijuana. The risk of using cocaine has been estimated to be more than 104 times greater for those who have tried marijuana than for those who have never tried it. Although there are no definitive studies on the factors associated with the movement from marijuana use to use of other drugs, growing evidence shows that a combination of biological, social, and psychological factors are involved.

Marijuana affects the brain in some of the same ways that other drugs do. Researchers are

examining the possibility that long-term marijuana use may create changes in the brain that make a person more at risk of becoming addicted to other drugs, such as alcohol or cocaine. While not all young people who use marijuana go on to use other drugs, further research is needed to determine who will be at greatest risk.

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Q:What are the effects of marijuana?

A: The effects of marijuana on each person depend on the

- type of cannabis and how much THC it contains;
- way the drug is taken (by smoking or eating);
- experience and expectations of the user;
- setting where the drug is used; and
- whether drinking or other drug use is also going on.

Some people feel nothing at all when they first try marijuana. Others may feel high (intoxicated and/or euphoric).

It's common for marijuana users to become engrossed with ordinary sights, sounds, or tastes, and trivial events may seem extremely interesting or funny. Time seems to pass very slowly, so minutes feel like hours. Sometimes the drug causes users to feel thirsty and very hungry-an effect called "the munchies."

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Q: What happens after a person smokes marijuana?

A: Within a few minutes of inhaling marijuana smoke, the user will likely feel, along with intoxication, a dry mouth, rapid heartbeat, some loss of coordination and poor sense of balance, and slower reaction time. Blood vessels in the eye expand, so the user's eyes look red.

For some people, marijuana raises blood pressure slightly and can double the normal heart rate. This effect can be greater when other drugs are mixed with marijuana; but users do not always know when that happens.

As the immediate effects fade, usually after 2 to 3 hours, the user may become sleepy.

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Q: How long does marijuana stay in the user's body?

A: THC in marijuana is readily absorbed by fatty tissues in various organs. Generally, traces (metabolites) of THC can be detected by standard urine testing methods several days after a smoking session. However, in heavy, chronic users, traces can sometimes be detected for weeks after they have stopped using marijuana.

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Q: Can a user have a bad reaction?

A: Yes. Some users, especially someone new to the drug or in a strange setting, may suffer acute anxiety and have paranoid thoughts. This is more likely to happen with high doses of THC. These scary feelings will fade as the drug's effects wear off.

In rare cases, a user who has taken a very high dose of the drug can have severe psychotic symptoms and need emergency medical treatment.

Other kinds of bad reactions can occur when marijuana is mixed with other drugs, such as PCP or cocaine.

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Fact: Marijuana has adverse effects on many of the skills for driving a car. Driving while high can lead to car accidents.

Q: How is marijuana harmful?

A: Marijuana can be harmful in a number of ways, through both immediate effects and damage to health over time.

Marijuana hinders the user's short-term memory (memory for recent events), and he or she may have trouble handling complex tasks. With the use of more potent varieties of marijuana, even simple tasks can be difficult.

Because of the drug's effects on perceptions and reaction time, users could be involved in auto crashes. Drug users also may become involved in risky sexual behavior. There is a strong link between drug use and unsafe sex and the spread of HIV, the virus that causes AIDS.

Under the influence of marijuana, students may find it hard to study and learn. Young athletes could find their performance is off; timing, movements, and coordination are all affected by THC.

Some of the more long-range effects of marijuana use are described later in this document.

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Q: How does marijuana affect driving?

A: Marijuana affects many skills required for safe driving: alertness, the ability to concentrate, coordination, and reaction time. These effects can last up to 24 hours after smoking marijuana. Marijuana use can make it difficult to judge distances and react to signals and sounds on the road.

There are data showing that marijuana can play a role in crashes. When users combine marijuana with alcohol, as they often do, the hazards of driving can be more severe than with either drug alone.

A study of patients in a shock-trauma unit who had been in traffic accidents revealed that 15 percent of those who had been driving a car or motorcycle had been smoking marijuana, and another 17 percent had both THC and alcohol in their blood.

In one study conducted in Memphis, TN, researchers found that, of 150 reckless drivers who were tested for drugs at the arrest scene, 33 percent tested positive for marijuana, and 12 percent tested positive for both marijuana and cocaine. Data also show that while smoking marijuana, people show the same lack of coordination on standard "drunk driver" tests as do people who have had too much to drink.

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Fact: Marijuana users may have many of the same respiratory problems that tobacco smokers have, such as chronic bronchitis and inflamed sinuses.

Q: What are the long-term effects of marijuana?

A: While all of the long-term effects of marijuana use are not yet known, there are studies showing serious health concerns. For example, a group of scientists in California examined the health status of 450 daily smokers of marijuana but not tobacco. They found that the marijuana smokers had more sick days and more doctor visits for respiratory problems and other types of illness than did a similar group who did not smoke either substance.

Findings so far show that the regular use of marijuana or THC may play a role in cancer and problems in the respiratory, immune, and reproductive systems.

Cancer

It is hard to find out whether marijuana alone causes cancer because many people who smoke marijuana also smoke cigarettes and use other drugs. Marijuana smoke contains some of the same cancer-causing compounds as tobacco, sometimes in higher concentrations. Studies show that someone who smokes five joints per week may be taking in as many cancer-causing chemicals as someone who smokes a full pack of cigarettes every day.

Tobacco smoke and marijuana smoke may work together to change the tissues lining the respiratory tract. Marijuana smoking could contribute to early development of head and neck cancer in some people.

Immune system
Our immune system protects the body from many agents that cause disease. It is not certain whether marijuana damages the immune system of people. But both animal and human studies have shown that marijuana impairs the ability of T-cells in the lungs' immune defense system to fight off some infections. People with HIV and others whose immune system is impaired should avoid marijuana use.

Lungs and airways
People who smoke marijuana often develop the same kinds of breathing problems that cigarette smokers have. They have symptoms of daily cough and phlegm (chronic bronchitis) and more frequent chest colds. They are also at greater risk of getting lung infections such as pneumonia. Continued marijuana smoking can lead to abnormal function of the lungs and airways. Scientists have found signs of lung tissue injured or destroyed by marijuana smoke.

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Q: What about pregnancy: Will smoking marijuana hurt the baby?

A: Doctors advise pregnant women not to use any drugs because they might harm the growing fetus. One animal study has linked marijuana use to loss of the fetus very early in pregnancy.

Some scientific studies have found that babies born to marijuana users were shorter, weighed less, and had smaller head sizes than those born to mothers who did not use the drug. Smaller babies are more likely to develop health problems. Other scientists have found effects of marijuana that resemble the features of fetal alcohol syndrome. There are also research findings that show nervous system problems in children of mothers who smoked marijuana.

Researchers are not certain whether a newborn baby's health problems, if they are caused by marijuana, will continue as the child grows. Preliminary research shows that children born to mothers who used marijuana regularly during pregnancy may have trouble concentrating.

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Q: What happens if a nursing mother uses marijuana?

A: When a nursing mother uses marijuana, some of the THC is passed to the baby in her breast milk. This is a matter for concern, since the THC in the mother's milk is much more concentrated than that in the mother's blood. One study has shown that the use of marijuana by a mother during the first month of breastfeeding can impair the infant's motor development (control of muscle movement).

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Fact: Marijuana smoking affects the brain and leads to impaired short-term memory, perception, judgment and motor skills.

Q: How does marijuana affect the brain?

A: THC affects the nerve cells in the part of the brain where memories are formed. This makes it hard for the user to recall recent events (such as what happened a few minutes ago). It is hard to learn while high - a working short-term memory is required for learning and performing tasks that call for more than one or two steps.

Among a group of long-time heavy marijuana users in Costa Rica, researchers found that the people had great trouble when asked to recall a short list of words (a standard test of memory). People in that study group also found it very hard to focus their attention on the tests given to them.

Smoking marijuana causes some changes in the brain that are like those caused by cocaine, heroin, and alcohol. Some researchers believe that these changes may put a person more at risk of becoming addicted to other drugs, such as cocaine or heroin.

It may be that marijuana kills brain cells. In laboratory research, scientists found that high doses of THC given to young rats caused a loss of brain cells such as that seen with aging. At 11 or 12 months of age (about half their normal life span), the rats' brains looked like those of animals in old age. It is not known whether a similar effect occurs in humans.

Researchers are still learning about the many ways that marijuana could affect the brain.

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Q: Can the drug cause mental illness?

A: Scientists do not yet know how the use of marijuana relates to mental illness. Some researchers in Sweden report that regular, long-term intake of THC (from cannabis) can increase the risk of developing certain mental diseases, such as schizophrenia.

Still others maintain that regular marijuana use can lead to chronic anxiety, personality disturbances, and depression.

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Q: Do marijuana users lose their motivation?

A: Some frequent, long-term marijuana users show signs of a lack of motivation (amotivational syndrome). Their problems include not caring about what happens in their lives, no desire to work regularly, fatigue, and a lack of concern about how they look. As a result of these symptoms, some users tend to perform poorly in school or at work. Scientists are still studying these problems.

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Q: Can a person become addicted to marijuana?

A: Yes. While not everyone who uses marijuana becomes addicted, when a user begins to seek out and take the drug compulsively, that person is said to be dependent on the drug or addicted to it. In 1995, 165,000 people entering drug treatment programs reported marijuana as their primary drug of abuse, showing they needed help to stop using.

Some heavy users of marijuana show signs of dependence because when they do not use the drug, they develop withdrawal symptoms. Some subjects in an experiment on marijuana withdrawal had symptoms, such as restlessness, loss of appetite, trouble with sleeping, weight loss, and shaky hands.

According to one study, marijuana use by teenagers who have prior serious antisocial problems can quickly lead to dependence on the drug. That study also found that, for troubled teenagers using tobacco, alcohol, and marijuana, progression from their first use of marijuana to regular use was about as rapid as their progression to regular tobacco use, and more rapid than the progression to regular use of alcohol.

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Q: What is "tolerance" for marijuana?

A: "Tolerance" means that the user needs increasingly larger doses of the drug to get the same desired results that he or she previously got from smaller amounts. Some frequent, heavy users of marijuana may develop tolerance for it.

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Q: Are there treatments to help marijuana users?

A: Up until a few years ago, it was hard to find treatment programs specifically for marijuana users. Treatments for marijuana dependence were much the same as therapies for other drug abuse problems. These include detoxification, behavioral therapies, and regular attendance at meetings of support groups, such as Narcotics Anonymous.

Recently, researchers have been testing different ways to attract marijuana users to treatment and help them abstain from drug use. There are currently no medications for treating marijuana dependence. Treatment programs focus on counseling and group support systems. From these studies, drug treatment professionals are learning what

characteristics of users are predictors of success in treatment and which approaches to treatment can be most helpful.

Further progress in treatment to help marijuana users includes a number of programs set up to help adolescents in particular. Some of these programs are in university research centers, where most of the young clients report marijuana as their drug of choice. Others are in independent adolescent treatment facilities. Family physicians are also a good source for information and help in dealing with adolescents' marijuana problems.

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Q: Can marijuana be used as medicine?

A: There has been much debate in the media about the possible medical use of marijuana. Under U.S. law since 1970, marijuana has been a Schedule I controlled substance. This means that the drug, at least in its smoked form, has no commonly accepted medical use.

In considering possible medical uses of marijuana, it is important to distinguish between whole marijuana and pure THC or other specific chemicals derived from cannabis. Whole marijuana contains hundreds of chemicals, some of which are clearly harmful to health.

THC, manufactured into a pill that is taken by mouth, not smoked, can be used for treating the nausea and vomiting that go along with certain cancer treatments and is available by prescription. Another chemical related to THC (nabilone) has also been approved by the Food and Drug Administration for treating cancer patients who suffer nausea. The oral THC is also used to help AIDS patients eat more to keep up their weight.

Scientists are studying whether marijuana, THC, and related chemicals in marijuana (called cannabinoids) may have other medical uses. According to scientists, more research needs to be done on marijuana's side effects and potential benefits before it can be recommended for medical use.

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Q: How can I prevent my child from getting involved with marijuana?

A: There is no magic bullet for preventing teenage drug use. But parents can be influential by talking to their children about the dangers of using marijuana and other drugs, and remain actively engaged in their children's lives. Even after teenage children enter high school, parents can stay involved in schoolwork, recreation, and social activities with their children's friends. Research shows that appropriate parental monitoring can reduce future drug use, even among those adolescents who may be prone to marijuana use, such as those who are rebellious, cannot control their emotions, and experience internal distress. To address the issue of drug abuse in your area, it is important to get involved in drug abuse prevention programs in your community or your child's school. Find out what prevention programs you and your children can participate in together.

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Talking to your children about marijuana

As this booklet has shown, marijuana is clearly a dangerous drug which poses a particular threat to the health and well-being of children and adolescents at a critical point in their lives - when they are growing, learning, maturing, and laying the foundation for their adult years. As a parent, your children look to you for help and guidance in working out problems and in making decisions, including the decision not to use drugs. As a role model, your decision to not use marijuana and other illegal drugs will reinforce your message to your children.

There are numerous resources, many right in your own community, where you can obtain information so that you can talk to your children about drugs. To find these resources, you can consult your local library, school, or community service organization.

The National Clearinghouse for Alcohol and Drug Information (NCADI) offers an extensive collection of publications, videotapes, and educational materials to help parents talk to their children about drug use. For more information on marijuana and other drugs, contact:

National Clearinghouse on Alcohol and Drug Information,
P.O. Box 2345,
Rockville, MD 20847
1-800-729-6686
(TDD Number 1-800-487-4889)

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Resources

Center for Substance Abuse Prevention, U.S. Department of Health and Human Services. *Keeping Youth Drug Free: A Guide for Parents, Grandparents, Elders, Mentors, and Others Caregivers*. NCADI Stock No. PHD711, 1996.

Harrison, P.A.; Fullerson, J.A.; and Beebe, T.J. Multiple substance use among adolescent physical and sexual abuse victims. *Child Abuse and Neglect* 21(6):529-539, 1997.

Hermes, W.J., and Galperin, A. *The Encyclopedia of Psychoactive Drugs: Marijuana, Its Effects on Mind and Body*. Chelsea House Publishers, 1992.

National Institute on Drug Abuse. *Marijuana: Facts Parents Need to Know*. NIH Publication No. 95-4036, 1995.

National Institute on Drug Abuse. *Marijuana: Facts for Teens*. NIH Publication No. 95-4037, 1995.

National Institute on Drug Abuse. *Marijuana: What Can Parents Do?*, Videotape. NCADI Stock No. VHS82, 1995, cost $12.50.

National Institute on Drug Abuse. *Preventing Drug Use Among Children and Adolescents: A Research-Based Guide*. NIH Publication No. 97-5212, March 1997.

Substance Abuse and Mental Health Services Administration, Office of Applied Sciences. *Preliminary Results From the 1996 National Household Survey on Drug Abuse*. DHHS No. (SMA) 97-3149. Rockville, MD: SAMHSA, July 1997.

Substance Abuse and Mental Health Services Administration, Office of Applied Sciences. *National Household Survey on Drug Abuse Main Findings 1996.* DHHS No. (SMA) 98-3200. Rockville, MD:SAMHSA, April 1998.

U.S. Department of Education. *Growing Up Drug Free: A Parent's Guide to Prevention*, Washington, D.C.: NCADI Publication No. PHD533, 1993. *(Note: This item is out of stock but can be viewed on the NCADI Web site at http://www.health.org.)*

University of Michigan. News and Information Services. *Drug use among American teens shows signs of leveling after a long rise.* December 18, 1997.

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Marijuana: Facts Parents Need to Know is also available in a color graphic version.

For additional information about NIDA send e-mail to Information@lists.nida.nih.gov

This page last updated Friday, January 8, 1999.

Drugs are scheduled under Federal law according to their effects, medical use, and potential for abuse

DEA Schedule	Abuse Potential	Examples of Drugs Covered	Some of the Effects	Medical Use
I	Highest	heroin, LSD, hashish, marijuana methaqualone, designer drugs	Unpredictable effects, severe psychological or physical dependence, or death	No accepted use; some are legal for limited research use only
II	High	morphine, PCP, codeine, cocaine methadone, Demerol benezedrine, dexedrine	May lead to severe psychological or physical dependence	Accepted use with restrictions
II	Medium	codeine with aspirin or Tylenol, some amphetamines, anabolic steroids	May lead to moderate or low physical dependence or high psychological dependence	Accepted use
IV	Low	Darvon, Talwin phenobarbital, Equanil, Miltown, Librium diazepam	May lead to limited physical or psychological dependence	Accepted use
V	Lowest	Over-the-counter or prescription compounds with codeine, Lomotil Robitussin A-C	May lead to limited physical or psychological dependence	Accepted use

Source: Adapted from DEA, Drugs of Abuse, 1989

DRUGS are scheduled under Federal law according to their effects, medical use, and potential for abuse

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U.S. Department of Justice
Drug Enforcement Administration

DEA

DEA Congressional Testimony

Statement by:
Thomas A. Constantine
Administrator
Drug Enforcement Administration
United States Department of Justice

Before the:
Senate Committee on the Judiciary

Regarding:
The California & Arizona Medical Drug Use Initiatives

Location:
Senate Hart Office Building
Room 216
Washington, D.C.

Date:
December 2, 1996

Note: **This document may not reflect changes made in actual delivery.**

Mr. Chairman, Members of the Committee: I appreciate this opportunity to appear before the Committee today and discuss the issues surrounding the two recently-passed ballot initiatives in California and Arizona which, in essence, legalize the possession of marijuana, and in Arizona, all Schedule I drugs, such as heroin and LSD for medical purposes by "seriously or terminally ill patients." I also wish to thank you, Mr. Chairman, for calling this hearing in such a timely manner. Most Americans have not yet grasped the consequences of what happened last month in California and Arizona, and it is critical that Congress provide factual information about these initiatives. It is also critical that Americans understand that these legalization initiatives were not local, grass-roots efforts, but part of a well-orchestrated, well-financed national movement, not for the compassionate medical use of marijuana, but to legalize drugs. These efforts will have a profound impact on our children, as they struggle to grow up against the backdrop of increased drug use among young people.

Today we are faced with more questions than answers as we examine the impact of these initiatives. It is fair to say that both propositions were well-crafted and well-thought out, and their authors fully intended to mask their true agenda in the guise of drug "medicalization," while keeping the medical conditions for

which controlled substances can be used extremely vague. The passage of these propositions raises important legal and law enforcement issues which we are currently assessing. But there are two very basic facts that have not changed: first, that the Clinton Administration is unequivocally opposed to the legalization of drugs, and second, that the Drug Enforcement Administration will continue to target and arrest the most significant drug traffickers operating domestically and internationally.

What the Propositions Do:

Voters who supported Proposition 215 in California were led to believe that this initiative would simply allow medical doctors to treat terminally ill and suffering patients with marijuana for the relief of pain symptoms. In reality, the proposition allows anyone who receives a doctor's "recommendation" to possess and use marijuana for cancer, AIDs, glaucoma and "any other illness for which marijuana provides relief." It allows doctors to verbally "recommend" marijuana use to minors, prisoners, individuals in sensitive positions --- simply anyone who claims to have a medical condition. The proposition, by extension, also allows individuals to smoke and cultivate marijuana openly, on the premise that marijuana has been recommended for the individual's "medical condition."

In Arizona, voters were asked to approve the "Drug Medicalization, Prevention and Control Act of 1996." Packaged as a truth-in-sentencing and drug prevention measure, proponents masked the true agenda of Proposition 200. Buried within the proposition was a provision which allows a physician to prescribe controlled substances included in Schedule I to terminally ill patients and to seriously ill patients suffering pain.

The Arizona proposition is more restrictive than the California version in that a physician must cite a study confirming the proven medical benefits of a Schedule I drug and provide a written prescription which is kept in the patient's medical file, and the patient is required to obtain a written opinion from a second physician confirming that the prescription for the Schedule I substance is "appropriate to treat a disease or to relieve the pain and suffering of a seriously ill patient or terminally ill patient." However, the Arizona proposition also provided for other actions which erode effective, tough drug policies, including the release of prisoners "previously convicted of personal possession or use of a controlled substance."

Despite the differences between the two ballot initiatives, there is an indisputable similarity: both states now allow individuals to possess substances which have no legitimate medical use. Both California and Arizona, despite what the proponents claim, have taken the first steps towards the proponents' ultimate goal of legalizing drugs.

Who Supported the Proposition

Proposition 215 in California and Proposition 200 in Arizona were drafted, financed and supported by legalization proponents using the compassionate pain argument as a guise for their drug legalization agenda. Billionaire financier and legalization advocate, George Soros, provided hundreds of thousands of dollars in California alone to garner support for the proposition. In Arizona, Soros almost doubled his California donations, a significant portion of which were made through organizations, such as the Drug Policy Foundation, with which he is affiliated. Other donors included representatives from the Progressive Corporation, the Men's Warehouse, and other pro- legalization groups.

Proponents waged a sophisticated, misleading campaign which led voters to believe that the initiatives were simply limited to compassionate pain relief. Opponents of the propositions, including the American Cancer Society, the California Medical Association, the Glaucoma Research Foundation, the National Multiple Sclerosis Society, the California Narcotics Officers Association and many family groups concerned about the impact of drug legalization on the nation's children, were outspent and

out-campaigned by the well-orchestrated effort to legalize drugs on a national basis. These individuals cynically used the suffering and illness of vulnerable people to further their own agenda.

Those of us who fought against the initiative, including General McCaffrey, myself, HHS Secretary Shalala and former Presidents Ford, Carter and Bush, found it extremely difficult to engage the media in California and Arizona and discuss the real issues underlying these propositions. Even the fact that 13,000 members of the International Association of Chiefs of Police, meeting in Phoenix, Arizona in late October, passed a resolution strongly opposing these initiatives, received little attention.

Before discussing the practical implications that these two propositions will have on law enforcement and ultimately on American children, I would like to take a moment to discuss the DEA's position on the medical use of marijuana.

The Medical Use Issue

In March, 1992, DEA Administrator Robert Bonner, re-affirmed the DEA's position that there is "no currently accepted medical use" for marijuana, and denied the petition of the National Organization for Reform of Marijuana Laws (NORML) to re- schedule marijuana from Schedule I to Schedule II. After a lengthy hearing process, the DEA made this conclusion based on testimony and comments from numerous medical doctors who had conducted detailed research and were widely considered experts in their respective fields. Briefly, the decision states among other things that:

- Marijuana has been rejected as medicine by the American Medical Association, the National Multiple Sclerosis Society, the American Glaucoma Society, the American Academy of Ophthalmology and the American Cancer Society.
- No medicine prescribed by physicians is smoked.
- Marijuana is likely to be more cancer-causing than tobacco; damages brain cells; causes lung problems, such as bronchitis and emphysema; may weaken the body's antibacterial defenses....and impairs motor skills.
- No medical study has indicated that marijuana is significantly effective in controlling nausea and vomiting.
- Each of the doctors testifying on behalf of NORML claimed that his opinion was based on scientific studies, yet with one exception, none could identify, under oath, the scientific studies they relied on.

It is common knowledge that the active ingredient in marijuana, known as THC, is available in pure form, manufactured pharmaceutically in capsules as Marinol. There have been no medical studies indicating that any property in marijuana other than THC has any beneficial medical effect. There have been dramatic advances made in relieving the side effects of cancer treatment during the past decade, and drugs such as Zofran and Kytril are available to physicians. Many medical experts consider these new drugs far more effective than Marinol. In the DEA's opinion in 1992, and in 1996, there is no scientific information which supports re-classifying marijuana as a Schedule II substance, making it available for medical use.

To say that marijuana should be used for pain relief is similar to saying that cigarettes should be prescribed as an appetite suppressant to those seeking to lose weight. Our research shows definitively that smoking causes lung cancer and emphysema, and our society acknowledges the dangers of tobacco. Why, then, should we believe, simply on the word of those who seek to normalize their own behavior, that marijuana should be widely available for all to smoke? Why should we allow a few individuals, who write checks in

the comfort of their upper-class homes, to dictate policies which we know are harmful?

Implications for Law Enforcement

Perhaps the most complex questions we are facing today as a result of these propositions pertain to law enforcement. As representatives on the panel of state and local experts will testify, the passage of these initiatives raises important law enforcement issues in both states. Earlier this month, General McCaffrey convened a meeting of representatives from state and local law enforcement to discuss the practical implications of these propositions, and how federal law enforcement together with their state and local task force partners will continue to target and arrest major drug traffickers.

I would like to discuss a few scenarios which raise questions and graphically illustrate the practical issues which face law enforcement in light of these developments.

- Can state and local law enforcement officers seize marijuana in California, and in Arizona, marijuana and other Schedule I drugs from individuals claiming to have received them as a result of a doctor's recommendation or prescription?
- Are these substances medicines under state law or contraband?
-
- Are police officers liable if they let individuals with marijuana, who claim a medical condition, drive off and later injure or kill someone?
-
- Are state and local officers able to detain individuals possessing Schedule I drugs, and call federal officials to come and arrest them on federal charges? How will the federal government meet the burdens of charging and prosecuting cases previously handled on a state level --- without any additional resources and with already staggering workloads?
-
- How will law enforcement officers respond to large marijuana plots when the owners claim that they are "caregivers" who must cultivate marijuana for their customers suffering from AIDS, cancer, or whatever medical conditions they identify?
-
- Can inmates in prison claim that they are suffering from a medical condition requiring treatment with Schedule I substances? Are prison officials obligated to allow the inmates to use these drugs? If so, how are prison officials in Arizona expected to maintain order and discipline with the inmates high on heroin, marijuana, LSD or other Schedule I drugs?
-
- How will law enforcement handle prescriptions or recommendations from doctors or caregivers from other states, or from Mexico and Canada?
- These are serious questions which now face California and Arizona law enforcement officials on a daily basis. There are also significant issues which face the citizens of both states. Parents should ask how these propositions will impact on the safety of their children; will workplaces, including schools and transportation, maintain drug-free requirements? How will parents be assured that their child's Little League Coach or scoutmaster is not using drugs? Perhaps the biggest question of all, however, is what impact the liberalization of drug policy will have on our children at a time when drug use has increased. The mixed messages we are sending will most likely have a terrible effect on parents' ability to provide unequivocal information about drugs to their young children.

What the Federal Government Can Do

The California and Arizona initiatives do nothing to change federal drug enforcement policy. The DEA will continue to target major drug traffickers, including major marijuana growers and

distributors. We also can take both administrative and criminal actions against doctors who violate the terms of their DEA drug registrations that authorize them to prescribe controlled substances. Doctors are registered with the DEA to prescribe only Schedule II-IV substances. Technically, those doctors who prescribe or recommend Schedule I substances are violating federal law. The licenses of over 900 physicians have either been surrendered or revoked in the last two years for fraudulent prescription practices.

The DEA is working with the Department of Justice and the Office of National Drug Control Policy to ensure close coordination between the federal government, and state and local law enforcement agencies. We have met with officials from California and Arizona in an effort to ensure that they have the necessary support from the federal government, but there are still many issues to be worked out. Although there are no guarantees, the DEA is hopeful that continuing consultations with state and local officials will ensure that the citizens of both states will be protected from major drug traffickers and unscrupulous medical practitioners. In some cases, they will be one and the same.

Conclusion

Mr. Chairman, it is important for us to recognize that the proponents of drug legalization will not stop with California and Arizona. They intend to support and finance initiatives in many other states. Citizens of California can overturn this proposition in 1998 through another ballot initiative. It is possible for the Arizona legislature to overturn Proposition 200 within a shorter period of time.

We should keep our attention focused on the next tier of states targeted by the legalizers, and should learn from the California and Arizona experiences. I firmly believe that the legalizers will pour millions of dollars into legalization campaigns, and will work diligently to disguise the legalization issue as a compassionate pain relief issue. However, we must continue to educate Americans about the true nature of the debate, and ensure that they have the facts necessary for them to make a sound decision.

It is instructional to look at what happened in Alaska after marijuana was decriminalized between 1975 and 1990. Marijuana abuse among teenagers doubled during that time period, and parents recognized the need to re-criminalize marijuana. In 1990, Alaskans voted to re- criminalize marijuana after a grass-roots effort educated voters in that state about the consequences of a liberalized drug policy. With marijuana use among 12-17 year olds dramatically increasing, and with surveys indicating that 35% of our children list drugs as their number one concern, we need to provide our next generation with the leadership necessary to reverse the current trends. We need to put our energies and limited resources into reducing the demand for drugs, not legalizing them. I firmly believe that most Americans recognize how dangerous and counterproductive these propositions are, and with encouragement and a fair airing of the pros and cons of the issue, they will stand up to the legalizers and their millions of dollars.

Thank you for the opportunity to speak today, and I look forward to answering any questions you may have.

(This testimony was not coordinated through the interagency clearance process and reflects the views of the Drug Enforcement Administration.)

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Medical Marijuana

The use of Marijuana for medical purposes was recently approved by voters in Alaska and four other states. What does this mean to Alaskan employers who have drug-testing programs?

WorkSafe, Inc has summarized the information in two segments including how the USDOT views the medical use of marijuana and secondly, how employers with non-regulated drug testing programs should approach the change in Alaska law. This information should be used as a tool only and all policy changes to any workplace drug program should be reviewed by an attorney.

U.S. Department of Transportation

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Re-typed from original U.S. DOT Document 1996

On December 12, 1996, following the election when Arizona and California voters approved the medical use of marijuana, a joint press release was developed by General Berry McCaffery, Director of the Office of National Drug Control Policy, and Federico Pena, U.S. Secretary of Transportation. The press release clarified that smoking marijuana is prohibited in safety sensitive jobs as defined by the USDOT.

"In the transportation world, safety is the highest priority. The welfare and confidence of the American public using our airplanes, railroads, and highways depend on transportation workers' unwavering commitment to safety. The use of marijuana and other illicit drugs is incompatible with transportation safety. Since 1988, the USDOT has required drug testing of employees in transportation industries to deter drug use. This is similar to the drug testing programs the Armed Forces have used for more than a decade and to the federal employees drug testing program mandated since 1986.

Under USDOT's drug and alcohol testing program rules, if you are a truck driver, airline pilot, railroad engineer, or other safety sensitive transportation employee, and you test positive for drugs, you will not continue to perform that function. If the laboratory finds drugs in your

system, you have the opportunity to discuss the test with a doctor or a Medical Review Officer (MRO). If the MRO finds that there is a legitimate medical explanation for the presence of the drug, the MRO declares the test to be negative. The use, however, of marijuana under California Proposition 215 or of any Schedule I drugs under Arizona Proposition 200 is not a legitimate medical explanation. As a matter of fact and a matter of federal law, marijuana and other drugs listed on schedule I of the Controlled Substance Act do not have a legitimate medical use in the United States. Thus, if you test positive for marijuana, and tell the MRO that a doctor recommended or prescribed the use of marijuana for you, the MRO will verify the test positive. You will have to stop performing your safety sensitive transportation function."

Recent Drug Initiatives in California And Arizona

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Q How should Medical Review Officers respond to recent California and Arizona initiatives concerning the medical use of marijuana and other drugs?

Background

On November 5, 1996, California voters passed an initiative (Proposition 215) authorizing physicians to recommend the use of medical marijuana for the treatment of cancer, AIDS, anorexia, chronic pain, spasticity, glaucoma, arthritis, migraine, "or any other illness for which marijuana provides relief." A prescription or other written record of the recommendation for marijuana is not required to authorize its use under the new state law.

In Arizona, voters passed an initiative (Proposition 200) regarding the medical use of drugs. It is in some ways broader and in some ways narrower than the California initiative. It is broader because it applies to all drugs identified on Schedule I of the Controlled Substances Act, not just marijuana. It is narrower because it requires a physician's prescription for legal use of Schedule I drugs, following a second opinion from another physician. Such a drug may be prescribed "to treat a disease, or to relieve the pain and suffering of a seriously ill patient or terminally ill patient".

DOT Policy

The use of Schedule I drugs, whether for recreational or medicinal purposes, is inconsistent with the performance of safety-sensitive transportation functions. The initiatives do not affect Department of Transportation rules concerning the use of these drugs by employees performing safety-sensitive duties. For example, Federal motor carrier safety rules prohibiting the use of controlled substances by commercial motor vehicle drivers continue to apply to the use of these Schedule I drugs, without change.

Guidance to MROs

When the laboratory test of an employee's specimen shows the requisite amount of any of the substances for which the Department

requires testing, the Department's rules impose the consequences of a positive test unless the MRO determines that there is a legitimate medical explanation for the presence of the substance. A legitimate medical explanation must include documentation that the employee obtained the substance in a manner consistent with the requirements of Federal law, including the Controlled Substances Act. These requirements include, with a few specific expectations set forth in federal rule (1), a prescription or other valid order issued by an authorized practitioner and filled by a licensed pharmacist.

What should the MRO do if an employee documents that a physician prescribed or recommended marijuana under California Proposition 215 or prescribed marijuana or any other Schedule I drug under Arizona Proposition 200?(2) The MRO must in every case determine that there is not a legitimate medical explanation for the presence of the drug.

This result is required by Federal Law. Under the Controlled Substances Act, a Schedule I drug is one which 'has no currently accepted medical use in treatment in the United States [and] there is a lack of accepted safety for the use of the drug...under medical supervision."(3) A drug which, as a matter of Federal Law, has no currently accepted medical use in treatment cannot form the basis of a legitimate medical explanation in a federally-mandated drug testing program. Moreover, the Controlled Substances Act authorizes physicians to prescribe only drugs in Schedules II-V.(4) This means that a physician cannot, under Federal Law, legitimately prescribe a Schedule I drug to a patient. A prescription unauthorized by federal law cannot form the basis of a legitimate medical explanation in a Federally-mandated drug-testing program.

The Department's drug testing program is national in scope. Its objective is to foster nationwide transportation safety by ensuring that safety sensitive transportation employees everywhere in the country do not abuse drugs. One of the bases on which the Department's rules pre-empt state law is that "compliance with the state or local requirement is an obstacle to the accomplishment or execution of any requirement" of the Department's rules.(5)

To the extent that the California or Arizona initiatives were construed to authorize or require MROs to determine that a legitimate medical explanation exists when Schedule I drugs are prescribed under state law, the Department would view them as pre-empted by creating a serious obstacle to the implementation of the Department's nationwide safety rules.

For example, MROs nationwide would be asked to verify marijuana positive tests differently depending on whether the employee obtained marijuana after a physician's recommendation in California or through other means in other states. MROs would be asked to act at variance with Federal Law in the context of a Federally-mandated program. This result is unacceptable. When a specimen is positive for THC (the marijuana metabolite the presence of which laboratory tests confirm in the DOT program), the only legitimate medical explanation for its presence in the Department's drug testing program is a prescription for marinol.

It should also be pointed out that an employee can obtain marijuana under California Proposition 215 without a prescription, or even a written recommendation from a physician. There are no circumstances under which it is appropriate for an MRO to accept, as a legitimate

medical explanation for the presence of THC in an employee's specimen, the verbal or written recommendation of a physician for the use of the marijuana. If the employee presents documentation of a "recommendation" that is not a prescription, or does not produce any documentation at all, the MRO has no basis to determine that there is a legitimate medical explanation for the presence of THC in an employee's specimen.

We would also remind MROs that the Department's rules authorize MROs to provide medical information learned during the verification process to employers when the information would result in the medical disqualification of an employee under DOT rules or the information indicates that the continued performance of safety-sensitive functions could pose a significant safety risk. The use of any Schedule I substance by an employee performing safety-sensitive functions in transportation meets these criteria.

Footnotes:

1. For example, a physician may administer a narcotic to a patient to relieve acute withdrawl symptoms while treatment is being arranged (21 CFR 1306.07(b); an individual practitioner may dispense a Schedule II substance directly in the course of his professional practice (21 CFR1306.11(b); and a pharmacist may dispense a Schedule II substance in an emergency with the oral approval of a practitioner (21 CFR 1306.11(d).

2. This guidance also applies with respect to any other state in which a statute or court decision may authorize the allegedly medical use of marijuana or other Schedule I drugs or make "medical necessity" an affirmative defense to a change of possession of a controlled substance. See for instance Rev. code Wash Section 869.51.020 - 040; Ohio Revised Code Annotated 2925.11(I) lenks v. Florida. 582 So.2D 676 (1991); Idaho v. Hastings, 801 P.2d 563 (1990); Washington v. Diana, 604 P.2d 1312 (1979).

3. - 21 U.S.C. 812(b)(1). Schedule I drugs for requires testing are marijuana, heroin, and PCP. Cocaine, amphetamines, methamphetamines, marinol, and many opiates are in Schedule II or other schedules.

4. - 21 U.S.C. 823(f). The only exception is a prescription that is part of a research project approved by the Secretary of Health and Human Services.

5. - This language is from the Federal Highway Administration rule, 49 CFR 382.109(a)(2). There is parallel language in other modal rules.

Claims of Ingestion of Hemp Food Products

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Q How should MROs respond to an assertion by an individual with a confirmed drug test for marijuana that the legal ingestion of food products containing hemp accounts for the presence of THC in the specimen?

A. Recently, some manufacturers have begun to market food products containing hemp seeds or extracts. Some news reports have suggested that eating one of these products may produce levels of THC (the marijuana metabolite the presence of which laboratory tests confirm in the DOT program), high enough to result in a confirmed positive test in the Department's drug testing program. An individual with a confirmed positive test for marijuana might assert to an MRO that the test should be verified negative because the THC in his or her specimen came from a legally obtained hemp food product.

It is not clear, at this time, whether the reports that one or more hemp food products can result in a confirmed THC positive are accurate. The Department of Health and Human Services (DHHS) is conducting research aimed at answering this question. In addition, the Drug Enforcement Agency (DEA) is currently considering whether to determine that hemp snack bars are illegal, on the basis that they contain a controlled substance.

Regardless of the outcome of the DHHS and DEA actions, MROs must never accept an assertion of consumption of a hemp food product as a basis for verifying a marijuana test negative. Whatever else it may be, consuming a hemp food product is not a legitimate medical explanation for a prohibited substance or metabolite in an individual's specimen. When a specimen is positive for THC, the only legitimate medical explanation for its presence in the Department's drug testing program is a prescription for marinol.

Non-Regulated Drug Testing, How Medical Marijuana Effects Alaskans

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In November 1998, Alaskan voters approved an initiative (Ballot Measure 8) allowing for the medical use of marijuana by persons suffering from a debilitating medical condition. See AS 17.35.010-.070. The new law is called the Medical Uses of Marijuana For Persons Suffering from Debilitating Medical Conditions Act.

Pursuant to the new law, no patient or primary care giver may be found guilty of, or penalized in any way for, a violation of any provision of law related to the medical use of marijuana where:

1. the patient has been diagnosed by a physician as having a debilitating medical condition;
2. the patient was advised by his/her physician, in the context of a bona fide physician-patient relationship, that the patient might benefit from the medical use of marijuana in connection with a debilitating medical condition; and
3. the patient and his/her primary care-giver are collectively in possession of not more than one ounce of marijuana and/or no more than six marijuana plants (of which not more than three are mature and producing marijuana in usable form).

"Debilitating medical condition" is defined as: (a) cancer, glaucoma, positive status for HIV, or acquired immune deficiency syndrome, or treatment for any of these conditions; (b) any chronic or debilitating disease (or treatment for such diseases) which produce one or more of the following conditions which the patient's physician believes may be alleviated by marijuana: cachexia (physical wasting and malnutrition), severe pain or nausea, seizures (including those characteristic of epilepsy), or persistent muscle spasms (including those characteristic of multiple sclerosis); and © and other medical condition (or treatment for such condition) which has been approved by the Department of Health and Human Services via its regulatory authority.

"Physician" is defined as a person licensed to practice medicine in Alaska or an officer in the regular medical service of the U.S. armed forces or the U.S. Public Health Service.

Under the new law, starting June 1, 1999, a patient may apply for a registry identification card with the Department of Health and Human Services. To receive such a card, the patient must provide: (1) written documentation stating that s/he has been diagnosed with a debilitating medical condition and the physician's conclusion that s/he might benefit from the medical use of marijuana; (2) the name, address, date of birth and social security number of the patient; (3) the name, address and telephone number of the patient's physician; and (4) the name and address of the patient's primary care-giver. This information is treated as confidential and is not subject to release to the public.

If the information presented is verified, it will then issue a registry identification card to the patient stating that the patient has been certified to the state health agency as a person who has a debilitating medical condition which the patient may address with the medical use of marijuana.

Questions have arisen regarding the effect this new law may have on employers and their drug testing programs. As this is a new law that has not yet been interpreted by the courts, there are no definitive answers. Moreover, each case will vary depending upon the particular facts. However, the following is a reasonable interpretation of an employer's rights under the new law:

1. The law specifically states that nothing in the law requires any accommodation of any medical use of marijuana in any place of employment. This can reasonably be interpreted to mean that an employer may lawfully prohibit an employee from using or being under the influence of medical marijuana while in the workplace or on work time. However, the Alaska Human Rights Commission (charged with enforcing the state law prohibiting disability discrimination) has informally indicated that qualified persons suffering from a protected disability who have a valid recommendation for the medical use of marijuana should be permitted to be under the influence while on the job unless that use poses a direct safety threat or renders the person unable to perform the essential functions of their job. With that in mind, each case must be evaluated individually. If an employee is under the use of medical marijuana while at work, whether it's revealed by the employee or discovered by the employer, it is advisable to contact your attorney.
2. An employee lawfully using medical marijuana may not automatically be terminated for testing positive for marijuana as part of the employer's drug testing program. It is likely that medical marijuana use will be treated the same as a prescription drug. Therefore, an employee who tests positive should be allowed to explain that positive test and provide evidence (i.e., registration card) that s/he is lawfully using marijuana for medical purposes. If the employee provides sufficient evidence, and there is otherwise no evidence of on-the job use or impairment, the employee should not be disciplined or terminated based upon the positive test result.

If you have questions concerning DOT and Non-regulated drug programs after reviewing this guidance tool please call our office. The WorkSafe staff is available to assist employers in understanding this

new statute as it applies to your drug-testing program.

Policy Amendment

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List as Prohibited Conduct:

> Failing to notify the employee's supervisor, before beginning work, that the employee is taking medications or drugs which may interfere with the safe and/or effective performance of duties.

Discipline after positive test result from prescriptive or legal drug use:

> In the case of prescriptive or legal drug use that results in a positive test, the employee may be subject to disciplinary action when:
>
> 1. The employee failed to notify the employee's supervisor, before beginning work, that the employee was taking medications or drugs which might interfere with the safe and/or effective performance of duties;
> 2. Verification of valid current prescription or legal use of such drug is not provided upon request by the next scheduled work day; or
> 3. Misuse of the prescription or recommended drug.

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Summary of Meeting on Impact of Medical Marijuana in Workplace

Katie Tank with Perkins Coie presented information on the effects of the medical marijuana legislation approved by Alaska voters in the November 1998 general election. Similar laws have been passed in California, Arizona, Oregon, and Washington State. Katie Tank detailed the potential effects of the legislation on the workplace, especially on non-regulated drug testing programs. Use of medical marijuana is still prohibited under federal law and, therefore, will not affect Department of Transportation drug testing programs.

The legislation will take effect on June 1, 1999. To implement the law, there will be an exemption inserted in the criminal statutes.

Elements of the legislation discussed: No legislative history or regulations exist on the intent of the law.

- Use allowable for persons with chronic debilitating diseases like cancer, AIDS, and glaucoma. Even though the law was designed to help people who are, in most cases, unable to work, other people who do not have life threatening diseases will be able to use the drug legally. The definition of debilitating

disease in the legislation also includes persons suffering from nausea, seizures, and muscle spasms. The law does not address where marijuana can be obtained or purchased.

- Use must be ***recommended*** by a physician. Currently it is not legal for a physician to issue a ***prescription*** for marijuana.
- Law makes no accomodation for workplace use. A narrow interpretation would mean that an employee can not smoke marijuana at work. A broader interpretation of this section might prohibit an employee from coming to work "under the influence" of the drug.

Protections for employees in Alaska

- ***State Disability Discrimination Law*** provides protection to employees who self-disclose a disability. The employer would have to make an accommodation such as allowing the employee to smoke and remain in his or her existing job or transfer to another job.
- ***Alaska Human Rights Commission*** would consider a person protected unless the use of medical marijuana poses a direct threat to safety or renders them unable to perform job functions, which the employer would have to prove. The commission will investigate complaints. The commission will also be releasing regulations in the near future.

According to Katie Tank, AHRC is taking the view that employers will have to accommodate use until there is a court decision that says an employer can prohibit smoking. For example, if an employee is in a safety sensitive position, the employer could make a case for why smoking is prohibited.

Employer Rules to Follow: Advise from Katie Tank

- ***Do not terminate employees who test positive***. Use has been authorized and a registry card issued by the State. However, the employer could legitimately ask the employee to disclose use as in the case of disclosure of a prescription drug. The Alaska State Law on drug testing requires:
    - Employees to provide explanation of prescription use.
    - The availability of a Medical Review Officer to determine legitimate prescription drug use. Because there is no prescription drug to account for the positive drug test, the MRO will report a positive result.
- ***Incorporate into policies how legal use should be reported***. A positive test would not be grounds for termination in situations of legal use.
- ***Evaluate whether use impairs job performance as this relates to safety concerns***. If the employee can not perform the mental functions of the job, he or she is no longer protected under the law.
- ***Educate supervisors*** to withhold employment action and engage in discussions with employees who are discovered to be using medical marijuana.

What the Legislation Does not Affect:

Applicants who test positive in a pre-employment test. **The negative test is a condition of employment. If, in the course of the interview, the applicant volunteers information on the use of medical marijuana, the employer can discuss whether use will affect the ability to effectively and safely perform the job function. If it is determined that the job function will not be negatively impacted, do not take use of medical marijuana into account in making hiring decision.**

Top of Page

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SB 94

SFIN

FILE

SENATE FINANCE COMMITTEE REPORT

5/11/99

DATE: 5/5/99

FURTHER:

DATE TURNED IN TO OFFICE: 12 May 1999

Finance Committee considered SPONSOR SUBSTITUTE FOR SENATE BILL NO. 94

"An Act relating to the medical use of marijuana; and providing for an effective date."

and recommends:

Senate Bill:

[X] be **replaced** with ____ CS SSSB 94 (FIN) [ ] same title [ ] new title

House Bill:

[ ] adopt **previous** ____ CS - CS forthcoming (____) [ ] same title [ ] technical title [ ] new: SCR#____

[ ] attached amendment(s)

[ ] adopt Letter of Intent by ____ Committee

[ ] further referral to the ____ Committee

SIGNING DO PASS	*DP*	*OTHER RECOMMENDATIONS*	*NR*	*DNP*	*AM*
Pete Kelly	✓	Lyda Green	✓		
Drew D. Shuman	✓	Pat Colaw	X		
Dave Donley	✓				
		Tony Knowles	✓		
Co-Chair:	✓	*Co-Chair:*			
Co-Chair:	✓	*Co-Chair:*			

NEW FISCAL NOTE(S):

Department	Date	Zero	Fiscal

PREVIOUS FISCAL NOTE(S):*

Department	Date	Zero	Fiscal
HSS	5/4/99		57.5

[ ] **APPROPRIATION -- no fiscal note**

***include fiscal notes accompanying Governor's bill**

S.C 5/12/99

FISCAL NOTE

No. 2

STATE OF ALASKA
1999 LEGISLATIVE SESSION

Bill Version: CSSSSB 94(HES)
(S) Publish Date: 5-4-99

Revision Date:
Title: An Act relating to the medical use of marijuana; and

Dept. Affected: Health and Social Services
BRU: State Health Services
Component: Bureau of Vital Statistics
COMPONENT SERIAL NO. 961
See also (SN#):

Sponsor: Leman
Requester: SENATE (HES)

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY00	FY01	FY02	FY03	FY04	FY05
PERSONAL SERVICES	37.7	38.0	38.0	40.0	41.0	42.0
TRAVEL						
CONTRACTUAL	10.0	10.9	11.8	7.3	8.1	8.9
SUPPLIES	3.0	1.5	3.0	1.5	3.0	1.5
EQUIPMENT	7.0					
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	57.7	50.4	53.8	48.8	52.1	52.4
CAPITAL EXPENDITURES						
CHANGES IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	52.7	45.4	48.8	43.8	47.1	47.4
1005 GF/Program Receipts	5.0	5.0	5.0	5.0	5.0	5.0
1037 GF/Mental Health						
Other (please specify)						
TOTAL	57.7	50.4	53.8	48.8	52.1	52.4

POSITIONS:

FULL-TIME	1.0	1.0	1.0	1.0	1.0	1.0
PART-TIME						
TEMPORARY						

Estimate of any current year (FY99) cost:

ANALYSIS: (Attach a separate page if necessary)

The Department estimates that changing the registry from voluntary to mandatory will double the workload. The department will also have to redraft the regulations covering medical marijuana and reprocess them through public hearings. These will require the following:

Line 100 One Administrative Clerk III for data entry and review of records
Line 300 Redraft existing regualtions to conform to amendments and petition process and operating costs.
Line 400 Card stock and miscellaneous computer and office supplies
Line 500 Computer and workstation for new position

5/4/99

Prepared by: Peter M. Nakamura, MD, MPH
Division: Public Health
Phone: (907) 465-3090
Date: 05/04/99

Approved by Commissioner: Karen Perdue, Commissioner
Agency: Department of Health & Social Services
Date: 5/4/99

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(Rev. 10/96 fnote dis/OAS_DHSS)

SENATE FINANCE COMMITTEE
Amendment Number: #1
Bill Number: CSSSSB 94(HES)
Sponsor: Wilken Date: 5/10/99
Logged In By: JSottanic

Adopted
1-LS0524\M.1
Luckhaupt
5/10/99

A M E N D M E N T

OFFERED IN THE SENATE BY SENATOR WILKEN

TO: CSSSSB 94(HES)

Page 3, line 31, following "**relationship**":

Insert "**and setting out the date the examination occurred**"

Page 7, line 18, following "documentation":

Insert "**, including a statement signed by the patient's physician containing the information required to be submitted under (c)(1) of this section,**"

Page 8, following line 10:

Insert a new subsection to read:

"**(r) The department may not register a patient under this section unless the statement of the patient's physician discloses that the patient was personally examined by the physician within the one-year period immediately preceding the patient's application. The department shall cancel, suspend, revoke or not renew the registration of a patient whose annual resubmission of updated written documentation to the department under (k) of this section does not disclose that the patient was personally examined by the patient's physician within the one-year period immediately preceding the date by which the patient is required to annually resubmit written documentation.**"

SENATE FINANCE COMMITTEE

1999 COMMITTEE ACTION

Bill Number	SB 94
Amendment	#1
Motion	adopt
Motion by	Wilken
Objection	
Objection by	Torgerson
Removed	✓
Second Objection by	
Committee Member	***Vote***
Senator Lyda Green	
Senator Randy Phillips	
Senator Dave Donley	
Senator Loren Leman	
Senator Al Adams	
Senator Gary Wilken	
Senator Pete Kelly	
Co-Chair Sean Parnell	
Co-Chair John Torgerson	
Tally	
Yea	**0**
Nay	**0**
Absent	**0**
MOTION	no obj. ✓

adopted

SENATE FINANCE COMMITTEE
Amendment Number: #2
Bill Number: CSSSSB 94(HES)
Sponsor: Adams Date: 5/11/99
Joined By: Mindy

1-LS0524\M.3
Luckhaupt
5/8/99

A M E N D M E N T

OFFERED IN THE SENATE BY SENATOR ADAMS

TO: CSSSSB 94(HES)

Page 2, line 3:

Delete "disclosed in the physician's statement described in AS 17.37.010(c)"

Insert "diagnosed by the patient's physician"

Page 4, lines 3 - 4:

Delete "**and specifying the nature of the patient's symptoms**"

SENATE FINANCE COMMITTEE

1999 COMMITTEE ACTION

Bill Number	SB 94
Amendment	#2
Motion	
Motion by	Adams
Objection	
Objection by	Torgerson
Removed	
Second Objection by	
Committee Member	***Vote***
Senator Randy Phillips	
Senator Dave Donley	
Senator Loren Leman	
Senator Al Adams	
Senator Gary Wilken	
Senator Pete Kelly	
Senator Lyda Green	
Co-Chair Sean Parnell	
Co-Chair John Torgerson	
Tally	
Yea	**0**
Nay	**0**
Absent	**0**
MOTION	no obj

SENATE FINANCE
COMMITTEE
Amendment Number: #3
Bill Number: CSSSSB 94(HES)
Sponsor: Adams Date: 5/11/99
Logged In By: Mindy

Adopted
1-LS0524\M.4
Luckhaupt
5/8/99

AMENDMENT

OFFERED IN THE SENATE BY SENATOR ADAMS

TO: CSSSSB 94(HES)

Page 5, lines 6 - 7:

Delete "**reside in the same household as the caregiver and**"

SENATE FINANCE COMMITTEE

1999 COMMITTEE ACTION

Bill Number	SB 94
Amendment	#3
Motion	
Motion by	Adams
Objection	
Objection by	Green
Removed	✓
Second Objection by	
Committee Member	***Vote***
Senator Pete Kelly	
Senator Lyda Green	
Senator Randy Phillips	
Senator Dave Donley	
Senator Loren Leman	
Senator Al Adams	
Senator Gary Wilken	
Co-Chair Sean Parnell	
Co-Chair John Torgerson	
Tally	
Yea	0
Nay	0
Absent	0
MOTION	no objection

SENATE FINANCE
COMMITTEE
Amendment Number: #4
Bill Number: CSSSSB 94(HES)
Sponsor: Adams Date: 5/11/99
Logged In By: Mindy

1-LS0524\M.8
Luckhaupt
5/8/99

AMENDMENT

OFFERED IN THE SENATE BY SENATOR ADAMS

TO: CSSSSB 94(HES)

Page 5, line 8, following "**marriage**":

Insert "**. Notwithstanding this limitation, upon the written request of a patient, the department may list a person as the primary caregiver for more than one patient if**

(1) that listing would avoid unnecessary hardship to the patient; or

(2) the patient's care is being provided in a hospice program licensed under AS 18.18"

SENATE FINANCE COMMITTEE

1999 COMMITTEE ACTION

Bill Number	SB 94
Amendment	#4
Motion	adopt
Motion by	Adams
Objection	
Objection by	Torgerson
Removed	
Second Objection by	

Committee Member	***Vote***
Senator Dave Donley	N
Senator Loren Leman	N
Senator Al Adams	Y
Senator Gary Wilken	N
Senator Pete Kelly	N
Senator Lyda Green	N
Senator Randy Phillips	N
Co-Chair Sean Parnell	N
Co-Chair John Torgerson	N
Tally	
Yea	0 1
Nay	0 8
Absent	0
MOTION	FAIL

SENATE FINANCE
COMMITTEE
Amendment Number: 5
Bill Number: SB94
Sponsor: Leman Date: 5/11/99
Logged In By: Mindy

1-LS0524\M.1
Luckhaupt
5/8/99

A M E N D M E N T

OFFERED IN THE SENATE BY SENATOR LEMAN

TO: CSSSSB 94(HES)

Page 2, line 3:

Delete "disclosed in the physician's statement described in AS 17.37.010(c)"

Insert "diagnosed by the patient's physician"

Page 4, lines 3 - 4:

Delete "**and specifying the nature of the patient's symptoms**"

SENATE FINANCE
COMMITTEE

Amendment Number: 6
Bill Number: SB 94
Sponsor: Leman Date: 5/11/99
Logged In By: Mindy

1-LS0524\M.11 ✓
Luckhaupt
5/10/99

AMENDMENT

OFFERED IN THE SENATE BY SENATOR LEMAN

TO: CSSSSB 94(HES)

Page 5, lines 6 - 7:

Delete "**reside in the same household as the caregiver and**"

SENATE FINANCE
COMMITTEE
Amendment Number: 7
Bill Number: SB 94
Sponsor: Leman Date: 5/11/99
Logged In By: Mindy

adopted
1-LS0524\M.12
Luckhaupt
5/10/99

AMENDMENT

OFFERED IN THE SENATE BY SENATOR LEMAN

TO: CSSSSB 94(HES)

Page 1, line 14, through page 2, line 3:

Delete all material.

Renumber the following paragraphs accordingly.

Page 2, lines 17 - 18:

Delete all material.

Renumber the following paragraphs accordingly.

Page 2, line 20.

Delete all material.

Renumber the following paragraph accordingly.

SENATE FINANCE COMMITTEE

1999 COMMITTEE ACTION

Bill Number	SB 94
Amendment	#7
Motion	adopt
Motion by	Leman
Objection	
Objection by	Torgerson / Adams
Removed	U
Second Objection by	
Committee Member	***Vote***
Senator Pete Kelly	Y
Senator Lyda Green	Y
Senator Randy Phillips	Y
Senator Dave Donley	Y
Senator Loren Leman	Y
Senator Al Adams	N
Senator Gary Wilken	Y
Co-Chair Sean Parnell	Y
Co-Chair John Torgerson	Y
Tally	
Yea	0 8
Nay	0 1
Absent	0
MOTION	Adopt

SENATE FINANCE
COMMITTEE
Amendment Number: 8
Bill Number: SB 94
Sponsor: Leman Date: 5/11/99
Logged In By: Mindy

adopted
1-LS0524\M.13 ✓
Luckhaupt
5/10/99

A M E N D M E N T

OFFERED IN THE SENATE BY SENATOR LEMAN

TO: CSSSSB 94(HES)

Page 11, line 10, following "**possess**":

Insert "**in the aggregate**"

SENATE FINANCE COMMITTEE

1999 COMMITTEE ACTION

Bill Number	SB94
Amendment	#8
Motion	adopt
Motion by	Leman
Objection	
Objection by	Torgerson
Removed	✓
Second Objection by	
Committee Member	***Vote***
Senator Lyda Green	
Senator Randy Phillips	
Senator Dave Donley	
Senator Loren Leman	
Senator Al Adams	
Senator Gary Wilken	
Senator Pete Kelly	
Co-Chair Sean Parnell	
Co-Chair John Torgerson	
Tally	
Yea	**0**
Nay	**0**
Absent	**0**
MOTION	no obj.

SENATE FINANCE
COMMITTEE
Amendment Number: 9
Bill Number: SB 94
Sponsor: Leman Date: 5/11/99
Logged In By: Mindy

adopted
1-LS0524\M.14
Luckhaupt
5/10/99

A M E N D M E N T

OFFERED IN THE SENATE BY SENATOR LEMAN

TO: CSSSSB 94(HES)

Page 3, line 6, following "**investigation**":

Insert "**of an individual suspected of a violation of AS 11.71, AS 17.30, or this chapter**"

SENATE FINANCE COMMITTEE

1999 COMMITTEE ACTION

Bill Number	SB94
Amendment	#9
Motion	adopt
Motion by	Leman
Objection	
Objection by	Torgerson
Removed	J V
Second Objection by	
Committee Member	***Vote***
Senator Randy Phillips	
Senator Dave Donley	
Senator Loren Leman	
Senator Al Adams	
Senator Gary Wilken	
Senator Pete Kelly	
Senator Lyda Green	
Co-Chair Sean Parnell	
Co-Chair John Torgerson	
Tally	
Yea	**0**
Nay	**0**
Absent	**0**
MOTION	no objection

Staff

Alaskan Independence Party
P.O. Box 60231
Fairbanks, Alaska 99706

Alaska First

Alaska Always

March 18, 1999

RECEIVED
MAY 10 1999
Senate Finance
Committee

Sen. Al Adams
State Capitol, room #417
Juneau Alaska 99801-1182

Dear Sen. Adams:

The Alaskan Independence Party would like to express its opposition to Senate Bill #94. We feel that this bill unnecessarily amends the existing law and is little short of an attempt by elements within the Legislature to back door the Alaskan voter.

The Alaskan Independence Party does not advocate or condone the use of marijuana or any other recreational drug. However, used medicinally, cannabis has been shown effective in relieving the discomfort of a wide range of discomforts. Medical marijuana, in the hands of a licensed practitioner, is in some cases an acceptable alternative drug. The Alaskan voters have expressed their opinion on the matter of the medical use of marijuana.

In this last election, by an overwhelming margin, the voters of the State of Alaska OK'd the use of marijuana for medicinal purposes. The medical marijuana law as it stands appears to be a well crafted well thought out law with distinct limitations and safeguards for patients, care-givers, and the average citizen of Alaska.

Senate Bill #94 removes many of the safeguards for both the patients and care-givers. It removes the safeguards that insure the privacy of both the patient and care-giver by allowing excessive access to their records by enlarging the pool of agencies and individuals that may arbitrarily gain access to patients' records.

Senate Bill #94 unnecessarily expands the criteria required for the registration of a patient or care-giver. It there by possibly limits access to medicinal marijuana by those most in need of the relief provided by cannabis.

Our major objection to Senate Bill #94 is that it contains unnecessary emendation to a law already ratified by the voters of the State of Alaska in an overwhelming manner. Despite our reservations concerning the use of drugs we must acknowledge that the people have spoken and accept and respect their decision.

sincerely,

Mark Chryson, Chairman
Alaskan Independence Party
(907) 376-8285

John Fields, Vice-Chairman
Alaskan Independence Party
(907) 496-1790 (pager)

SENATE FINANCE COMMITTEE

S I G N - I N

SB 94-MEDICAL USE OF MARIJUANA

NAME: Elmer Lindstrom Subject/Bill No: _____

Co./Dept./Title: DHSS / Special Asst. Phone: 465-1613

Address: _____ Zip: _____

Do you wish to testify? ___Yes ___No ✓ Respond To Questions

NAME: David Finkelstein Subject/Bill No: _____

Co./Dept./Title: Alaskans for Med. Rights Phone: _____

Address: _____ Zip: _____

Do you wish to testify? X Yes ___No ___Respond To Questions

NAME: _____ Subject/Bill No: _____

Co./Dept./Title: _____ Phone: _____

Address: _____ Zip: _____

Do you wish to testify? ___Yes ___No ___Respond To Questions

NAME: _____ Subject/Bill No: _____

Co./Dept./Title: _____ Phone: _____

Address: _____ Zip: _____

Do you wish to testify? ___Yes ___No ___Respond To Questions

SENATE FINANCE COMMITTEE

SIGN-IN

SB 94-MEDICAL USE OF MARIJUANA

NAME: Al Zangri Sub./Bill No: CSSB 94

Co./Dept./Title: DHSS/Chief, Vital Statistics Phone: 465-3392

Address: _____ Zip: _____

Do you wish to testify? ___Yes ___No ✓Respond to Questions

NAME: _____ Sub./Bill No: _____

Co./Dept./Title: _____ Phone: _____

Address: _____ Zip: _____

Do you wish to testify? ___Yes ___No ___Respond to Questions

NAME: _____ Sub./Bill No: _____

Co./Dept./Title: _____ Phone: _____

Address: _____ Zip: _____

Do you wish to testify? ___Yes ___No ___Respond to Questions

NAME: _____ Sub./Bill No: _____

Co./Dept./Title: _____ Phone: _____

Address: _____ Zip: _____

Do you wish to testify? ___Yes ___No ___Respond to Questions

Senate Bill 94

"An Act relating to the medical use of marijuana; and providing for an effective date."

Letters & resolutions of support

March 24, 1999

To: Senator Loren Leman

From: Alyce Hanley

Re: Testimony in Support of SB 94

I am sorry I will be unable to testify during the Committee Hearing this afternoon. I would appreciate it if you could incorporate my testimony in support of Senate Bill 94.

First, thank you Sen.Leman for your willingness to eliminate the loopholes and vague generalities in Ballot Measure No. 8. I am very familiar with the criticism and abuse you will experience. I appreciate and admire your willingness to take a stand.

A careful review of the Ballot Measure made it obvious that this proposition was a smokescreen to protect those who grow, sell, distribute, possess and use marijuana. It was disguised as a means to express our sympathy and compassion for the sick and dying. I believe the majority of Alaskans who voted for this measure truly believed they were affording the terminally ill a means of obtaining relief from pain and nausea.

In eliminating the loop holes, SB 94 will discourage the recreational use of marijuana. The will of the people will be respected since patients who find that marijuana provides them with relief will be protected by simply registering with the Department of Health and Social Services. It will provide Law Enforcement with the ability to differentiate between those using marijuana for medical purposes from those who use the drug illegally.

I believe your amendments to Ballot Measure No.8 will reflect the will of the majority of people who voted for this proposition. From the primary sponsors of this measure, you will continue to be attacked because the vague generalities and the loop holes were intentional and provided the protection they sought for the illegal use of marijuana.

Again, thank you for having the courage to stand up and be counted, Sen. Leman.

Sincerely,

Alyce

Alyce Hanley

David D. Anderson, M.D.
General Surgery
2841 DeBarr Rd., Suite 42
Anchorage, Alaska 99508
(907) 264-1204

May 6, 1999

Senator Loren Leman
Alaska State Legislature

Dear Senator Leman:

This letter is written to support the two bills (SB 94, HB 213).

As a physician, I believe that the medical uses for marijuana are extremely limited, if they exist at all. In my opinion, all the negative aspects of marijuana use as a drug far outweigh any significant medicinal use of the substance.

I certainly agree with narrowing the indications for its use.

I would further recommend that it be dispensed only by pharmacists in some regulated way, as any other prescription drug that has potential unwanted side effects or addiction potential.

Sincerely,

David D. Anderson, M.D.

David D. Anderson, M.D.

Alaska Association of Chiefs of Police

April 27, 1999

MAY 05 1999

Senator Loran Leman
Alaska State Legislature
State Capitol (MS 3100)
Juneau, AK 99801-1182

Dear Senator Leman:

This letter is written in support of Senate Bill 94, *An Act relating to the medical use of marijuana; and providing for an effective date.*

The Alaska Association of Chiefs of Police supports this amendment to the original legislation because it significantly clarifies the law as it pertains to the medical use of marijuana. The current law, as written, provides little guidance for law enforcement or the courts. Specifically, we believe the issues of registration for the primary care giver and the patient must be addressed. The law must also be clear as to the amount of marijuana that can be grown for medical purposes.

With these amendments, we are confident the law will be better understood and enforceable.

Sincerely,

Duane S. Udland, President
Alaska Association of Chiefs of Police

May 9, 1999

To Members of the Senate Finance Committee:

This serves as my support for CS for SB94, An act relating to the medical use of marijuana. My name is Lynda Adams and I am the founder and now retired executive director of Alaskans For Drug-Free Youth. As a volunteer in this state I spent countless hours along with many, many fellow Alaskans to recriminalize marijuana in the state in 1990. With the increased potency of pot and the alarming increase of its use by our kids, the voters said we had had enough of liberal experimentation of marijuana use.

The voters in last November's election read the one paragraph ballot wording and thought they understood the issue. After all, it was portrayed as compassion in the media. They voted for compassion; they did not vote for legalization. We were told this was not about legalization. I feel very strongly that the passage of SB94 is imperative to keep the distinction between "compassion" and legalization.

The affirmative defense section will remove any ambiguity of who is entitled to use the marijuana. After all, if someone is using marijuana **within** the new law, they should have no problem with the guidelines set forth in this section.

Section 3 of this bill pertaining to a mandatory registration of patients and listing of caregivers is vital to providing accountability to the area of compassion with good medical safe guards. If the patient and caregiver are operating within the law in this regard, there should be no opposition to law enforcement having access to the confidential records for criminal investigation purposes.. This allows protection for the compassionate user to know that the law will not be infringed upon by others who may be using or transporting marijuana in an illicit fashion. This section provides the control to keep the substance LEGALLY used. It will provide a stop gap for illicit use.

I urge you to retain the age of at least "21" for the primary caregiver in this section.

The one objection I have with this bill is the quantity of marijuana for possession. Having used a visible demonstration of rolled "joints" before the vote to recriminalize marijuana in 1989, there were **nearly 100 rolled joints per ounce of pot**. The patient or caregiver can also possess up to six plants in addition to this! I realize this was the stated amount in the initiative statute language, but this sounds like an overdose to me!

It is imperative that CS for SB94 pass the legislature before the end of this session. Without the passage of this bill, all of the voters in the 1989 election who declared we did not want legalized marijuana in Alaska will be disenfranchised. Without passage of this bill, we will be headed back to legalization of an illicit drug. I applaud the Senate for addressing this very necessary and crucial issue. **Please move this bill as soon as possible so it can be voted on by the full Senate.** Thank you.

Lynda Adams
P.O. Box 7171
Ketchikan, AK 99901

CLERK'S OFFICE
APPROVED
Date: 4/27/99

Submitted by: Assemblymember CARLSON
Prepared by: Assembly Office
For reading: APRIL 27, 1999

ANCHORAGE, ALASKA
AR NO. 99- 105 .

A RESOLUTION OF THE ANCHORAGE MUNICIPAL ASSEMBLY SUPPORTING AMENDMENTS TO ALASKA STATUTES GOVERNING THE USE OF MARIJUANA FOR MEDICAL PURPOSES

WHEREAS, in November 1998, the voters of Alaska approved Ballot Measure No. 8, to allow certain patients with debilitating medical conditions to use marijuana for medical purposes; and

WHEREAS, the law created by this initiative became effective on March 4, 1999; and

WHEREAS, the law establishes a state registry for patients using marijuana but does not require registration in order for persons to have a legal right to smoke or otherwise ingest marijuana for what are deemed to be medical purposes; and

WHEREAS, the new law allows persons who choose not to register with the State to smoke marijuana in a public place and in a way that endangers the health and well-being of other persons; and

WHEREAS, the new law may result in policies requiring that the "medical use" of marijuana be accommodated at the workplace, in schools, on school buses, and in prisons; and

WHEREAS, the new law completely removes marijuana possessed for medical purposes from the list of controlled substances found in Title 11, Chapter 71 of Alaska Statutes, a list which otherwise includes and regulates all other drugs that can be presented by doctors; and

WHEREAS, the Chief of the Anchorage Police Department has testified before the Alaska Legislature that the lack of a registration requirement and the absence of firm possession limits in the new law will make it difficult for law enforcement to distinguish between legitimate and illegitimate users of marijuana; and

WHEREAS, the Deputy Director of the Alaska Department of Public Safety has testified before the Alaska Legislature that the failure of the new law to include mandatory registration and firm possession limits will make it difficult for law enforcement officers to effectively enforce Alaska's drug laws; and

WHEREAS, failure of the new law to draw a "bright line" between legitimate and illegitimate use of marijuana may actually result in unintentional arrest and/or prosecution of individuals who have a bona fide need to use marijuana for medical purposes.

NOW, THEREFORE, the Anchorage Assembly resolves:

That the Assembly urges the Alaska Legislature to enact legislation that will amend the medical marijuana law to address the concerns raised by representatives of the Anchorage Police Department and the Department of Public Safety, including a requirement that all persons using marijuana for medical purposes be registered and establishing firm limits on the amount of marijuana that can be possessed for medical use.

PASSED AND APPROVED by the Anchorage Assembly this 27th day of April, 1999.

Fay Von Hemmigen
Chair

ATTEST:

Lejane Ferguson
Municipal Clerk

WORKSAFE, Inc.
OCCUPATIONAL HEALTH & SAFETY

3/16/99

MAR 22 1999

Senator Loren Leman
Alaska State Legislature
Alaska State Capitol
Juneau, AK 99801-1182

Dear Senator Leman:

Thank you for the opportunity to provide comment on, and suggest changes to, CS for Senate Bill 94 relating to medical use of marijuana. I appreciate your hard work and dedication to tightening the language of the ballot measure to prevent manipulation of the statute by those who do not suffer from terminal illnesses.

The draft House Bill provided to me by Representative Murkowski effectively narrowed the definition of "Debilitating Medical Condition" to "severe and chronic pain or nausea resulting from cancer, glaucoma, and positive status for human immunodeficiency virus." CSSB94 seems to focus on use of marijuana associated with glaucoma, epilepsy, multiple sclerosis, and other chronic diseases. Both definitions satisfy a prime concern of employers, which is having an employee in the workplace under the influence of this dangerous substance. Most likely, people with these conditions will not be working. However, to further reduce the incidence of people under the influence of marijuana interfacing with the workplace, we have listed additional suggested changes below along with other revisions that will prevent abuses in the program.

Suggested Changes to Draft Bill

- Incorporate the requirement that a panel of 3 physicians concur that the patient would benefit from medical use of marijuana before a recommendation can be made. The Governor could appoint the panel to serve terms. The physician review board would have the authority to deny or approve all applications.

  Sec. 3 c (1) (C) requires the physician to sign a statement that he or she has "explored other reasonable alternatives for legal treatment.." before recommending use of marijuana. We suggest amending this section to include the involvement of 3 physicians to declare in writing that there is no other treatment option available to alleviate the condition of the patient.

- Incorporate the requirement that the Department of Health and Social Services (DHSS) verify registry information at least once per quarter, which would involve talking with the patient, primary care giver, and physician to evaluate the legitimacy of continued use.

  Sec. 3 (k) through (o) discusses penalties for provision of inaccurate or misleading information, but does not require ongoing verification of registry information.

- Amend Sec. 3(f) [(e)] to extend the time frame within which the DHSS has to deny a registry identification card from 35 to 60 days. This will provide the department more time to evaluate the information submitted by the applicant, which will help the department be more thorough in its investigation of the validity of the information presented.