

THE MERCY NEWS REPORT



Study: "There Is Now Clear Evidence That Cannabinoids Are Useful For The Treatment Of Various Medical Conditions"



Hurth, Germany: Scientific findings from over 100 controlled clinical trials involving either cannabis or its constituents provide "clear evidence that cannabinoids are useful for the treatment of various medical conditions," according to a just published [review](#) in the German scientific journal *Deutsches Ärzteblatt International*.

Investigators from the nova-Institute and the Hannover Medical School in Germany reviewed over 100 controlled trials assessing the safety and efficacy of cannabis and cannabinoids.

Researchers reported: "Knowledge about the therapeutic potential of cannabis products has been greatly improved by a large number of clinical trials in recent years. ... There is now clear evidence that cannabinoids are useful for the treatment of various medical conditions," including

<continued on page 3 >

Medical Marijuana Property Rights Protection Act Introduced In Congress

Washington, DC: United States Congresswoman Barbara Lee (D-CA), along with eight co-sponsors, [introduced](#) legislation - [House Bill 6335](#), the Medical Marijuana Property Rights Protection Act - to amend the federal Controlled Substances Act so as to "exempt real property from civil forfeiture due to medical-marijuana-related conduct that is authorized by State law."

<continued on page 3 >

Drug Tests For Cannabis Exposure Not Advisable For Infants, Study Says

Salt Lake City, UT, USA: False positive drug test results for cannabis are far more common to occur in infant urine samples than in those provided by non-infants, according to a [study](#) published online in the journal *Clinical Chemistry*. Researchers at the University of Utah School of Medicine and ARUP drug testing

<continued on page 4 >

Increased Access To Therapeutic Cannabis Likely To Reduce Patients' Use Of Opiates, Other Addictive Drugs

Victoria, British Columbia: Regulating cannabis access would provide patients with an effective treatment for chronic pain and likely reduce morbidity associated with the use of prescription opiates and other pharmaceuticals, according to a [review](#) published in the *Journal of Psychoactive Drugs*.

<continued on page 4 >

Arkansas: Medical Marijuana Act Qualifies For November Ballot

Little Rock, AR, USA: A statewide proposal to allow for the possession and state-licensed distribution of cannabis for therapeutic purposes [will appear](#) on the November electoral ballot. The Secretary of State's office last week [affirmed](#) that initiative

<continued on page 5 >

The MERCY News Report is an all-volunteer, not-for-profit project to record and broadcast news, announcements and information about medical cannabis in Oregon, across America and around the World.

For more information about the MERCY News, contact us.

Via Snail Mail:

The MERCY News
1745 Capital St. NE,
Salem, Ore., 97301
503.363-4588

E-mail:

Mercy_Salem@hotmail.com

Or our WWW page:

www.MercyCenters.org
Check it out!

MERCY On The Tube!



in Salem, Oregon area thru Capital Community Television, Channel 23. Call In – 503.588-6444 - on Friday at 7pm, or See us on Wednesdays at 06:30pm, Thursdays at 07:00pm, Fridays at 10:30pm and Saturdays at 06:00pm. Visit – <http://mercycenters.org/tv/>

About MERCY – The Medical Cannabis Resource Center

MERCY is a non-profit, grass roots organization founded by patients, their friends and family and other compassionate and concerned citizens in the area and is dedicated to helping and advocating for those involved with the Oregon Medical Marijuana Program (OMMP). MERCY is based in the Salem, Oregon area and staffed on a volunteer basis.

The purpose is to get medicine to patients in the short-term while working with them to establish their own independent sources. To this end we provide, among other things, ongoing education to people and groups organizing clinics and other Patient Resources, individual physicians and other healthcare providers about the OMMP, cannabis as medicine and doctor rights in general.

The mission of the organization is to help people and change the laws. We advocate reasonable, fair and effective marijuana laws and policies, and strive to educate, register and empower voters to implement such policies. Our philosophy is one of teaching people to fish, rather than being dependent upon others.

Want to get your Card? Need Medicine Now? Welcome to The Club!

MERCY – the Medical Cannabis Resource Center hosts Mercy Club Meetings **every Wednesday** at – **1745 Capital Street NE, Salem, 97301** – from **7pm to 9pm** to help folks get their card, network patients to medicine, assist in finding a grower or getting to grow themselves, or ways and means to medicate along other info and resources depending on the issue. **visit – www.MercyCenters.org - or Call 503.363-4588 for more.**

The Doctor is In ... Salem! * MERCY is Educating Doctors on signing for their Patients; Referring people to Medical Cannabis Consultations when their regular care physician won't sign for them; and listing all Clinics around the state in order to help folks Qualify for the OMMP and otherwise Get their Cards. For our Referral Doc in Salem, get your records to – **1745 Capital Street NE, Salem, 97301**, NOTE: There is a \$25 non-refundable deposit required. Transportation and Delivery Services available for those in need. For our Physician Packet to educate your Doctor, or a List of Clinics around the state, visit – www.MercyCenters.org - or Call 503.363-4588 for more.

Other Medical Cannabis Resource NetWork Opportunities for Patients as well as CardHolders-to-be. * whether Social meeting, Open to public –or– Cardholders Only * visit: <http://mercycenters.org/events/Meets.html> ! Also Forums - a means to communicate and network on medical cannabis in Portland across Oregon and around the world. **A list of Forums, Chat Rooms, Bulletin Boards and other Online Resources for the Medical Cannabis Patient, CareGiver, Family Member, Patient-to-Be and Other Interested Parties.** * **Resources > Patients (plus) > Online > Forums** * Know any? Let everybody else know! Visit: <http://mercycenters.org/orgs/Forums.html> and Post It!

<continued from STUDY: "THERE IS NOW CLEAR EVIDENCE THAT CANNABINOIDS ARE USEFUL FOR THE TREATMENT OF VARIOUS MEDICAL CONDITIONS", page 1 > chronic neuropathy (nerve pain), multiple sclerosis, HIV/AIDS, Gilles de la Tourette syndrome, and other indications.

Regarding the safety profile of cannabis and cannabinoids, investigators determined: "The most common side effects of cannabinoids are tiredness and dizziness (in more than ten percent of patients), psychological effects, and dry mouth. Tolerance to these side effects nearly always develops within a short time. Withdrawal symptoms are hardly ever a problem in the therapeutic setting."

Authors did express concern that cannabis could pose additional health risks for adolescents and/or pregnant or breast-feeding women, as well as individuals diagnosed with Hepatitis C, severe cardiovascular disease, addictive disorders, or those vulnerable to certain psychiatric disorders, such as schizophrenia.

Investigators acknowledged that cannabis dosing may adversely impact psychomotor skills. However, they noted, "Patients who take cannabinoids at a constant dosage over an extensive period of time often develop tolerance to the impairment of psychomotor performance, so that they can drive vehicles safely."

They concluded, "No acute deaths have been described that could be unequivocally attributed solely to cannabis consumption or treatment with cannabinoids."

The paper is the second review in recent months rebutting the present Schedule I status of cannabis under federal law, which states that the plant and its organic constituents possess a "high potential for abuse," and that they lack "accepted medical use" and "accepted safety ... under medical supervision."

Writing in *The Open Neurology Journal* this past May, investigators with the University of California at San Diego and the University of California, Davis concluded: "Evidence is accumulating that cannabinoids may be useful medicine for certain indications. Based on evidence currently available, the (federal) Schedule I classification (of cannabis) is not tenable; it is not accurate that cannabis has no medical value, or that information on safety is lacking."

In 2011, the Obama administration -- via the United States Drug Enforcement Administration (DEA) -- formally denied a nine-year-old administrative petition filed by NORML and a coalition of public

interest organizations calling on the agency to initiate hearings to reassess the present classification of marijuana as a schedule I controlled substance. In her denial of the petition, DEA administrator Michele Leonhart alleged: "[T]here are no adequate and well-controlled studies proving (marijuana's) efficacy; the drug is not accepted by qualified experts. ... At this time, the known risks of marijuana use have not been shown to be outweighed by specific benefits in well-controlled clinical trials that scientifically evaluate safety and efficacy."

In June, Ms. Leonhart testified before Congress that she believed that heroin and marijuana posed similar threats to the public's health because, in her opinion, "all illegal drugs are bad."

Coalition advocates are presently appealing the DEA's denial of their petition in federal court.

For more information, please contact Paul Armentano, NORML Deputy Director, at: paul@norml.org. Full text of the study, "The therapeutic potential of cannabis and cannabinoids" is available in the online edition of Deutsches Ärzteblatt International here: <http://www.aerzteblatt.de/int/archive/article?id=127603>.

<continued from MEDICAL MARIJUANA PROPERTY RIGHTS PROTECTION ACT INTRODUCED IN CONGRESS, page 1 >

Representative Lee's bill, the first of its kind ever introduced in Congress, is in response to the Justice Department's increased use of the civil asset forfeiture statute to sanction property owners whose tenants are involved in the production or distribution of cannabis in compliance with state medical marijuana laws. Since October, US Attorneys in California alone have sent more than 300 threatening letters to landlords across the state, resulting in the closure of more than 400 dispensaries, according to tabulations compiled by the group Americans for Safe Access.



Speaking in support of the proposal, Rep. Lee explained, "As a long-time supporter of the rights of patients to have safe and legal access to medicine that has been recommended to them by their doctors, this bill will provide clarification to California businesses and security for California patients. The people of California have made it legal

<continued on next page>

<continued from previous page> for patients to have safe access to medicinal marijuana and, as a result, thousands of small business owners have invested millions of dollars in building their companies, creating jobs, and paying their taxes. We should be protecting and implementing the will of voters, not undermining our democracy by prosecuting small business owners who pay taxes and comply with the laws of their states in providing medicine to patients in need."

The Medical Marijuana Property Rights Protection Act has been assigned before both the House Judiciary Committee and the House Committee on Energy and Commerce. It is not expected that either Committee will take action on the measure prior to the November election.

Several other marijuana law reform measures - including [HR 2306](#), the Ending Federal Marijuana Prohibition Act, [HR 1983](#), the States' Medical Marijuana Patient Protection Act, and [HR 1831/S 3501](#), the Industrial Hemp Farming Act - also remain pending before Congress. *Additional information on these and other pending Congressional measures are available from NORML's 'Take Action Center' here: <http://capwiz.com/norml2/issues/>.*

<continued from DRUG TESTS FOR CANNABIS EXPOSURE NOT ADVISABLE FOR INFANTS, STUDY SAYS, page 1 >

laboratories in Salt Lake City investigated the rate of unconfirmed 'positive' immunoassay test results in infant and non-infant urine samples over a 52-week period.

Authors reported that positive tests for carboxy THC, a byproduct of THC screened for in immunoassay urine tests, were 59 times less likely to be confirmed in infant urine compared to non-infant urine samples. Overall, 47 percent of the infant 'positive' immunoassay urine samples evaluated did not test for the presence of carboxy THC when confirmatory assay measures were later performed.

Immunoassay tests rely on the use of antibodies (proteins that will react to a particular substance or a group of very similar substances) and document whether a specific reaction occurs. Therefore, a 'positive' result on an immunoassay test presumes that a certain quantity of a particular substance may be present in the sample, but it does not actually identify the presence of the substance itself. A more specific chemical test, known as chromatography,



must be performed in order to confirm any preliminary analytical test results. Samples that test positive on the presumptive immunoassay test, but then later test negative on the confirmatory test are known as false positives.

In April, researchers at the University of North Carolina reported that chemicals present in various baby wash products, including Johnson's Head-to-Toe Baby Wash and CVS Baby Wash, frequently cross-react with the immunoassay test to cause 'false positive' results for carboxy THC. However, in this latest study, none of the unconfirmed immunoassay test results were due to contaminants from baby wash soaps.

Researchers concluded: "Until the compounds contributing to positive urine screen results in infants are identified, we encourage the use of alternative specimens for the detection and investigation of neonatal exposure to cannabinoids. Screen-positive cannabinoid results from infant samples should not be reported without confirmation or appropriate consultation, because they cannot currently be interpreted."

Infants may be drug tested in situations where their mothers are suspected of consuming illicit substances during pregnancy or have tested positive for illicit substances themselves. However, critics of infant drug testing argue that the hospital staff's decision regarding whether to conduct such tests is often subjective and potentially discriminatory. For example, a 2007 study published in the *Journal of Women's Health* reported that "black women and their newborns were 1.5 times more likely to be tested for illicit drugs as non-black women," after controlling for obstetrical conditions and socio-demographic factors, such as single marital status or a lack of health insurance.

Twelve states legally define prenatal exposure to any illegal drug as child abuse. *For more information, please contact Allen St. Pierre, NORML Executive Director, at (202) 483-5500 or Paul Armentano, NORML Deputy Director, at: paul@norml.org. Full text of the study, "Unresolved discrepancies between cannabinoid test results for infant urine," appears in the journal Clinical Chemistry.*

<continued from INCREASED ACCESS TO THERAPEUTIC CANNABIS LIKELY TO REDUCE PATIENTS' USE OF OPIATES, OTHER ADDICTIVE DRUGS, page 1 > A researcher with the Centre for Addictions Research of British Columbia reports that cannabis may be

<continued on next page>

<continued from previous page>
useful in the treatment of chronic pain as well as certain substance abuse disorders, and that it poses fewer risks to health than many conventional alternatives.



He writes: "When used in conjunction with opiates, cannabinoids lead to a greater cumulative relief of pain, resulting in a reduction in the use of opiates (and associated side-effects) by patients in a clinical setting. Additionally, cannabinoids can prevent the development of tolerance to and withdrawal from opiates, and can even rekindle opiate analgesia after a prior dosage has become ineffective. Novel research suggests that cannabis may be useful in the treatment of problematic substance use. These findings suggest that increasing safe access to medical cannabis may reduce the personal and social harms associated with addiction, particularly in relation to the growing problematic use of pharmaceutical opiates."

The author continues: "Since both the potential harms of pharmaceutical opiates and the relative safety of cannabis are well established, research on substitution effect suggests that cannabis may be effective in reducing the use and dependence of other substances of abuse such as illicit opiates, stimulants and alcohol. As such, there is reason to believe that a strategy aiming to maximize the therapeutic potential benefits of both cannabis and pharmaceutical cannabinoids by expanding their availability and use could potentially lead to a reduction in the prescription use of opiates, as well as other potentially dangerous pharmaceutical analgesics, licit and illicit substances, and thus a reduction in associated harms."

The author concludes, "Despite a lack of regulatory oversight by federal governments in North America, community-based medical cannabis dispensaries have proven successful at supplying patients with a safe source of cannabis within an environment conducive to healing, and may be reducing the problematic use of pharmaceutical opiates and other potentially harmful substances in their communities."

Between the years 1999 and 2007, over 65,000 people died from unintentional opioid analgesic overdose. A previous review, appearing in the *Harm Reduction Journal* in January, similarly argued, "Prescribing cannabis in place of opioids for neuropathic pain may reduce the morbidity and mortality rates associated with prescription pain

medications and may be an effective harm reduction strategy."

In November, clinical investigators at the University of California, San Francisco reported that vaporized cannabis augments the analgesic effects of opiates in subjects prescribed morphine or oxycodone. Authors of the study surmised that cannabis-specific interventions "may allow for opioid treatment at lower doses with fewer [patient] side effects."

For more information, please contact Paul Armentano, NORML Deputy Director, at: paul@norml.org. Full text of the study, "Cannabis as an Adjunct to or Substitute for Opiates in the Treatment of Chronic Pain," appears in *The Journal of Psychoactive Drugs*.



<continued from
ARKANSAS: MEDICAL
MARIJUANA ACT
QUALIFIES FOR

NOVEMBER BALLOT, page 1 > proponents, [Arkansans for Compassionate Care](#), had collected the required number of signatures from registered voters to qualify the initiative for the 2012 ballot.

If passed by voters this fall, the [Arkansas Medical Marijuana Act of 2012](#) will eliminate statewide criminal and civil penalties regarding the physician-recommended use and possession of up to two and one-half ounces cannabis for various qualifying medical conditions, including cancer, Crohn's disease, fibromyalgia, and post-traumatic stress disorder (PTSD). The measure also allows state regulators to establish not-for-profit facilities to produce and dispense cannabis to approved patients. Individual patients will also be permitted to privately cultivate limited amounts of cannabis (up to six flowering plants) if they reside further than five miles from a state-authorized dispensary.

If approved, Arkansas will become the 18th state since 1996 to allow for the limited legalization of marijuana for therapeutic purposes.

Voters in [five other states](#) - Colorado, Massachusetts, Montana, Oregon, and Washington - will also be deciding on marijuana-specific ballot measures this November. In Massachusetts, voters will decide on [Question 3](#), a statewide proposal that seeks to allow for the physician-recommended possession and state-licensed distribution of cannabis for therapeutic purposes. Montana voters will decide on [Initiative Referendum 124](#), which seeks to repeal amendments enacted by lawmakers in 2011 to restrict the state's 2004, voter approved

<continued on next page>

<continued from previous page> medical cannabis law. Colorado voters will decide on [Amendment 64](#), which immediately allows for the legal possession of up to one ounce of marijuana and/or the cultivation of up to six cannabis plants by those persons age 21 and over. Longer-term, the measure seeks to establish regulations governing the commercial production and distribution of marijuana by licensed retailers. Oregon voters will decide on [Measure 80](#), the [Oregon Cannabis Tax Act](#), which provides for the state-licensed production and retail sale of cannabis to adults. The measure does not impose state-licensing or taxation requirements upon those who wish to cultivate cannabis for non-commercial purposes.

Finally, in Washington, voters will decide on [Initiative 502](#), which seeks to regulate the production and sale of limited amounts of marijuana for adults. The measure also removes criminal penalties specific to the adult possession of up to one ounce of cannabis for personal use.

In North Dakota, officials from the Secretary of State's office are [reviewing](#) whether petitioners in that state have collected sufficient signatures to place a medical cannabis legalization initiative on the November ballot.

For more information, please visit: <http://arcompassion.org/>. NORML has additional details about this November's statewide and municipal ballot proposals here: <http://norml.org/about/smoke-the-vote>.

California: State Supreme Court Dismisses Appellate Court Decision Banning Cannabis Dispensaries

Sacramento, CA, USA: The State Supreme Court last week [dismissed](#) an appellate court decision that found that the federal Controlled Substances Act preempts municipalities from allowing for the authorized production and distribution of medical cannabis.

Last Wednesday, the Supreme Court dismissed the case, ([Pack et al. v. Long Beach](#)), without review. In recent months, lawmakers from various California cities had stated that they could not move forward with local regulations to license medical cannabis providers because of the Pack ruling.

Commenting on the Supreme Court's decision to dismiss the case, Tamar Todd, senior staff attorney for the Drug Policy Alliance, [said](#): "There is now no legal impediment for state and local government in

California to move forward with responsible regulation for medical marijuana cultivation and distribution to patients."

A [separate appellate court ruling](#), *City of Riverside v. Inland Empire Patients' Health and Wellness Center, Inc.*, remains before the Supreme Court. That decision determined that California state law does not preempt cities from prohibiting dispensaries by enacting restrictive zoning regulations.

A more recent state Court of Appeals ruling (*Los Angeles v Alternative Cannabis Collective, et al.*), issued in July, [invalidated](#) a Los Angeles county ban on cannabis collectives, finding that it conflicted with the state's medical marijuana law.

For more information, please visit: <http://www.canorml.org>.

Tax Court: State-Authorized Cannabis Dispensaries Not Allowed Tax Deductions

San Francisco, CA, USA: Medical cannabis dispensaries operating in accordance with state law are nonetheless [prohibited](#) from claiming standardized business deductions on their federal tax returns, according to a US Tax Court ruling.

Opining earlier this month in [Olive v. Commissioner of Internal Revenue](#), Tax Court Judge Diane L. Kroupa held: "Federal law prohibits taxpayers ... from deducting any expense of a trade or business that consists of the trafficking of a controlled substance such as marijuana. ... This is true even if the business is legal under state law."

The ruling upholds the application of a federal tax code provision, [Section 280E](#), in instances where taxpaying operations are compliant with state laws that allow for the limited legalization of cannabis for therapeutic purposes. Section 280E states that a taxpayer may not deduct expenses in any instance where the "trade or business ... consists of trafficking in controlled substances."

Opined Kroupa: "Petitioner argues that he may deduct the Vapor Room's expenses notwithstanding section 280E because, he claims, the Vapor Room's business did not consist of the illegal trafficking in a controlled substance. He argues that the illegal trafficking in controlled substances is the only activity covered by section 280E. We disagree that section 280E is that narrow and does not apply

<continued on next page>

<continued from previous page> here. We therefore reject petitioner's contention that section 280E does not apply because the Vapor Room was a legitimate operation under California law."

The Internal Revenue Service (IRS) [previously ruled](#) in October that that marijuana dispensaries can not claim standard business expenses such as payroll, security or rent on their federally filed tax returns.

For more information, please contact Allen St. Pierre, NORML Executive Director, at (202) 483-5500. The US Tax Court ruling in Olive v. Petitioner is available online at: <http://www.ustaxcourt.gov/InOpHistoric/olivedv.TC.WPD.pdf>.

Los Angeles: City Council Votes For Cannabis Dispensary Ban

Los Angeles, CA, USA: Members of the L.A. City Council on Tuesday [voted](#) 14 to zero in favor of a municipal measure that seeks to ban the presence of storefront medical marijuana dispensaries. Mayor Antonio Villaraigosa has 30 days to sign the ordinance into law.

According to the *Los Angeles Times*, each of the 762 dispensaries that are now registered with the city will be sent a letter ordering them to close immediately. Those that do not comply may face legal action from the city.

The ban excludes collectives that consist of three persons or fewer.

[Previous ordinances](#) enacted by the L.A. City Council seeking to limit the establishment of dispensaries have been subject to [litigation](#) from cannabis advocates.

The pending ban would appear to be in conflict with a state Court of Appeals ruling, issued earlier this month, [invalidating](#) a 2010 Los Angeles County prohibition on dispensaries. That [ruling](#), *Los Angeles v Alternative Cannabis Collective, et al.*, held that the "County's ban on all medical marijuana collectives or cooperatives cannot be deemed 'consistent with this article,' that is, California's medical

marijuana laws as enacted in the CUA (California Compassionate Use Act aka Prop. 215) and the MMP (Medical Marijuana Program Act aka Senate Bill 420)."

For more information, please visit: <http://www.canorml.org>.

Study: Cannabis Use Associated With Superior Cognitive Performance In Bipolar Patients

Glen Oaks, NY, USA: Bipolar patients with a history of cannabis use demonstrate superior neurocognitive performance compared to patients with no history of use, according to clinical [data](#) published online in the journal *Psychiatry Research*.

Investigators at The Zucker Hillside Hospital in Long Island, NY, along with researchers at the Mount Sinai School of Medicine and the Albert Einstein College of Medicine in New York City compared the performance of 50 bipolar subjects with a history of cannabis use versus 150 bipolar patients with no history of use on a battery of standardized cognitive measures. Patient groups did not differ regarding age, racial background, or highest education level achieved. Bipolar patients with a history of cannabis use had similar age at onset as did patients who did not consume cannabis.

Researchers found that subjects with a history of cannabis use exhibited better neurocognitive performance than that of non-users, but they did not differ significantly on estimates of premorbid IQ.

Authors reported, "Results from our analysis suggest that subjects with bipolar disorder and history of (cannabis use) demonstrate significantly better neurocognitive performance, particularly on measures of attention, processing speed, and working memory. These findings are consistent with a previous study that demonstrated that bipolar subjects with history of cannabis use had superior verbal fluency performance as compared to bipolar patients without a history

<continued on next page>

<continued from STUDY: CANNABIS USE ASSOCIATED WITH SUPERIOR COGNITIVE PERFORMANCE IN BIPOLAR PATIENTS, previous page> of cannabis use. Similar results have also been found in schizophrenia in several studies."

They concluded, "These data could be interpreted to suggest that cannabis use may have a beneficial effect on cognitive functioning in patients with severe psychiatric disorders.

However, it is also possible that these findings may be due to the requirement for a certain level of cognitive function and related social skills in the acquisition of illicit drugs."

For more information, please contact Paul Armentano, NORML Deputy Director, at: paul@norml.org. Full text of the study, "Cognitive and clinical outcomes associated with cannabis use in patients with bipolar I disorder," will appear in Psychiatry Research.

Study: Cannabis Extracts Mitigate Muscle Stiffness In Multiple Sclerosis Patients

Derriford, United Kingdom: The oral administration of cannabis extracts significantly reduces muscle stiffness in patients with multiple sclerosis (MS), according to clinical trial data published in the *Journal of Neurology, Neurosurgery & Psychiatry*.



Investigators at the University of Plymouth, Clinical Neurology Research Group, in the United Kingdom assessed the use of cannabinoids versus placebo in 279 subjects with MS over a twelve-week period. Cannabis extracts in the study contained standardized doses of THC and cannabidiol (CBD), a non-psychoactive constituent in cannabis, in a soft gelatin capsule.

Investigators reported that oral cannabis extracts were "superior" over placebo in the treatment of MS-associated muscle stiffness and pain.

Authors concluded: "Treatment with standardized oral extract of cannabis sativa relieved muscle stiffness. The proportion of participants experiencing relief was almost twice as large in the cannabis extract group as in the placebo group. ... Effective pain relief is also achieved by cannabis extracts, especially in patients with a high baseline pain score. Our findings suggest that standardized cannabis extracts can be clinically useful in treating the highly complex phenomenon of spasticity in MS."

In May, clinical trial data published in the *Journal of the Canadian Medical Association* reported that cannabis inhalation significantly mitigates spasticity and pain in patients with treatment-resistant multiple sclerosis.

Separate clinical trials assessing the administration of cannabis extracts on patients with MS have indicated that cannabinoids can alleviate symptoms of the disease long-term and may also act in ways to mitigate MS progression. Sativex, an oral spray containing plant cannabis extracts, is presently legal by prescription to treat MS-related symptoms in over a dozen countries, including Canada, Germany, Great Britain, New Zealand, and Spain. Nonetheless, the National MS Society of the United States shares little enthusiasm for cannabis as a potential treatment for multiple sclerosis, stating, "Studies completed thus far have not provided convincing evidence that marijuana or its derivatives provide substantiated benefits for symptoms of MS."

*For more information, please contact Paul Armentano, NORML Deputy Director, at: paul@norml.org. Full text of the study, "Multiple Sclerosis and Extract of Cannabis: results of the MUSEC trial," appears in the *Journal of Neurology, Neurosurgery & Psychiatry*.*