

1. Medical condition proposed: Please be specific.

Musculoskeletal disease

2. Provide justification for why this medical condition should be included as a qualifying debilitating medical condition for the use of medical marihuana. Be specific as to why medical marihuana should be used for this condition.

Fibromyalgia is a qualifying condition for medical marijuana in Arkansas, Illinois, New Jersey, North Dakota and Ohio.

Muscular Dystrophy is a qualifying condition for medical marijuana in Illinois, New Hampshire and New Jersey.

Cerebral palsy is a qualifying condition for medical marijuana in Connecticut.

<https://trendct.org/2017/06/14/18000-now-use-medical-marijuana-in-ct/>
<http://medicalmarijuana.procon.org/view.resource.php?resourceID=000881>

Fibromyalgia, Muscular Dystrophy, Cerebral Palsy and other musculoskeletal diseases share similar symptoms with Multiple Sclerosis, which is already a qualifying condition for medical marijuana under the MMMA in Michigan. To allow a person with Multiple Sclerosis to treat symptoms but not a person with Fibromyalgia, Muscular Dystrophy or Cerebral Palsy is unfair and discriminatory.

Connecticut's medical marijuana review board has approved fibromyalgia and muscular dystrophy to be added to the state's medical marijuana program as qualifying conditions.

The three conditions approved by Seagull Friday join four others that were approved in February: fibromyalgia, rheumatoid arthritis, shingles and muscular dystrophy.

<http://www.courant.com/politics/hc-update-medical-marijuana-conditions-20170609-story.html>

In 2014, the FDA held an initiative to research fibromyalgia for Patient-Focused Drug Development. In the report from the Center for Drug Evaluation and Research (CDER) and the U.S. Food and Drug Administration (FDA), titled "The Voice of the Patient", the FDA found patients reported using medical marijuana to treat their disease.

<https://www.fda.gov/downloads/forindustry/userfees/prescriptiondruguserfee/ucm422351.pdf>

Participants emphasized the importance of a holistic approach to managing fibromyalgia symptoms. A summary of these therapies is listed below.

Several participants mentioned that medical marijuana was effective in treating their pain, sleep issues, nausea, and anxiety.

In 2017, the National Academy of Medicine (formerly the Institute of Medicine) issued a comprehensive report about cannabis and cannabinoids on health.

<https://www.nap.edu/catalog/24625/the-health-effects-of-cannabis-and-cannabinoids-the-current-state>

The report finds:

CONCLUSION 4-19 There is moderate evidence that cannabinoids, primarily nabiximols, are an effective treatment to improve short-term sleep outcomes in individuals with sleep disturbance associated with obstructive sleep apnea syndrome, fibromyalgia, chronic pain, and multiple sclerosis.

The approved FDA medications for fibromyalgia cause a lot of unwanted and dangerous side effects. Medical marijuana is much safer than the prescription medications.

<https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm107802.htm>

There are currently only 3 drugs that have FDA approval for use in fibromyalgia:

1. [Pregabalin](#) (Lyrica)
2. [Duloxetine](#) (Cymbalta)
3. [Milnacipran](#) (Savella)

All three of which can cause serious side effects and death. Lyrica, Cymbalta and Savella all increase suicidal thoughts and the risk of suicide.

Effexor is also prescribed to relieve symptoms of depression with fibromyalgia. Effexor increases the risk of suicide and can cause death.

<https://www.drugs.com/cdi/effexor.html>

Medical Marijuana does not increase suicidal thoughts or the risk of suicide, and has no toxicity at any dose, no known LD50. “Safer than aspirin” as stated by Dr. Joseph Mcsherry, a Neurologist at the Larner College of Medicine at UVM. Who graduated from Harvard College in 1965 with a BA in Physics and Baylor College of Medicine in 1971 with an MD and PhD in Neurophysiology.

<http://legislature.vermont.gov/assets/Documents/2018/WorkGroups/House%20Human%20Services/Bills/H.170/Witness%20Testimony/H.170~Joseph%20McSherry~Written%20Testimony~4-11-2017.pdf>

According to an online self-reported survey of 1,339 self-selected fibromyalgia patients, of which, 30% of whom tried medical marijuana, *“Sixty-two percent who have tried cannabis said it was very effective at treating their fibromyalgia symptoms. Another 33% said it helped a little and only 5% said it did not help at all.”*

<http://nationalpainreport.com/marijuana-rated-most-effective-for-treating-fibromyalgia-8823638.html>

A safety profile of Medical Marijuana can be found in the first year report of the Minnesota medical marijuana program. The Minnesota Department of Health surveyed 1500+ patients enrolled in the program.

Adverse Side Effects: At this point, the safety profile of the medical cannabis products available through the Minnesota program seems quite favorable. Approximately 20-25% of enrolled patients report negative physical or mental side effects of some kind, with the majority – around 60% - reporting only one and 90% reporting three or fewer. The vast majority of adverse side effects, around 90%, are mild to moderate in severity. An assessment of the 30 patients reporting severe side effects, meaning “interrupts usual daily activities,” found no apparent pattern of patient age, medical condition, or type of medical cannabis used. The most common adverse side effects are dry mouth, drowsiness, and fatigue. Fortunately, up to the present no serious adverse events (life threatening or requiring hospitalization) have been reported.

<http://www.health.state.mn.us/topics/cannabis/about/firstyearreport.html>

Medical Marijuana's mild to moderate side effects of dry mouth, drowsiness and fatigue are easily tolerated by the vast majority of patients.

The Mayo Clinic website has assembled dosage information on Medical Marijuana.

<http://www.mayoclinic.org/drugs-supplements/marijuana/dosing/hrb-20059701>

Drugs and Supplements
Marijuana (Cannabis sativa)

Dosing

The below doses are based on scientific research, publications, traditional use, or expert opinion. Many herbs and supplements have not been thoroughly tested, and safety and effectiveness may not be proven. Brands may be made differently, with variable ingredients, even within the same brand. The below doses may not apply to all products. You should read product labels, and discuss doses with a qualified healthcare provider before starting therapy.

Adults (18 years and older)

To treat amyotrophic lateral sclerosis (nerve cell disease), 10 milligrams of THC has been taken by mouth daily for two weeks.

To prevent nausea and vomiting caused by chemotherapy, five milligrams per meter squared of dronabinol (Marinol®) has been taken by mouth 1-3 hours before chemotherapy, then every 2-4 hours after chemotherapy, for a total of 4-6 doses daily. A dose of two milligrams of nabilone has been taken by mouth the night before chemotherapy, 1-3 hours before and after chemotherapy. A dose of 2-3 milligrams of nabilone has been taken by mouth 2-4 times daily. A dose of three milligrams of nabilone has been taken by mouth three times daily as a one-time dose, a four-day duration, and the duration of two cycles of chemotherapy. Cannabinoids have been taken by mouth over a 24-hour period as follows: 1-8 milligrams of nabilone daily as 1-4 milligrams daily, one milligram 3-5 times daily, or two milligrams 2-4 times daily or 24-50 milligrams per meter squared of dronabinol daily as 10 milligrams per meter squared 4-5 times daily, 12 milligrams per meter squared twice daily, or 15 milligrams twice daily. A dose of one milligram of nabilone has been taken by mouth 8-12 hours before chemotherapy, followed by 0.5-2 milligrams of nabilone 2-3 times daily after chemotherapy, depending on body weight. A dose of 10 milligrams per meter squared of THC has been taken by mouth two hours before and four, eight, 16, and 24 hours after chemotherapy. Cannabinoids have been injected into the muscle over the course of 24 hours in the form of 0.5-1 milligrams of levonantradol three times daily.

To treat atopic dermatitis (itchy, scaly skin rashes), hemp seed oil has been taken by mouth for 20 weeks.

To increase appetite in people with cancer, 2.5 milligrams of THC has been taken by mouth with or without one milligram of CBD for six weeks.

To treat chronic pain, cannabinoids have been taken by mouth in the form of capsules or sprayed into the mouth as THC, benzopyranoperidine (BPP), cannabidiol (CBD), nabilone, dronabinol, or synthetic nitrogen THC analogs (NIB), with doses of 2.5-20 milligrams for an average of 25 days. Cannabis-based medicines have been used for 1-6 weeks. Ajulemic acid has been used for one week. Doses of nabilone of 0.25-2 milligrams have been used daily for 4-6 weeks. Doses of smoked cannabis of 1-9.4 percent have been used for six hours to 14 days. Cannabis has been smoked 3-4 times daily for five days. Doses of dronabinol of 10-20 milligrams have been used daily for six hours to six weeks. In people with cancer, 5-20 milligrams of delta-9-THC has been taken by mouth daily, as have the following doses: 2-8 milligrams of nabilone by mouth daily; 0.25-1 milligram of nabilone by mouth daily for four weeks; 1-2 milligrams of nabilone twice daily for a year; 1-2 milligrams of nabilone twice at an eight-hour interval; and 0.5 milligrams of nabilone twice daily for seven days, followed by two milligrams daily for three weeks. A dose of 0.5-1 milligrams of nabilone has been taken twice daily. A dose of 10 milligrams of THC has been taken by mouth, increasing to a maximum tolerated dose for six weeks. A mouth spray has been used in divided doses of 2.5-120 milligrams for two weeks. Doses of Sativex® have been sprayed into the mouth, up to 48 sprays daily, for 1-2 weeks, then 10-15 sprays daily, or 4-8 sprays, with eight being the maximum one-time dose or within a three-hour period.

To improve appetite in people with cystic fibrosis (mucus buildup in the organs), a dose of 2.5 milligrams of dronabinol has been taken by mouth, increasing to a maximum of 10 milligrams daily for 1-6 months.

To treat dementia, 2.5 milligrams of dronabinol has been taken by mouth twice daily for six weeks.

To treat eating disorders, 7.5-30 milligrams of THC has been taken by mouth daily for four weeks.

To treat epilepsy, 200-300 milligrams of CBD has been taken by mouth daily for up to 4.5 months.

To improve fatty acid status, hemp seed oil has been taken by mouth.

To treat movement problems caused by Huntington's disease, 1-2 milligrams of nabilone has been taken by mouth daily for five weeks. A dose of 10 milligrams per kilogram of CBD has been taken by mouth daily for six weeks.

To treat sleep disorders, 40-160 milligrams of CBD has been taken by mouth.

To treat multiple sclerosis symptoms, 2.5 milligrams of dronabinol (Marinol®) has been taken by mouth daily, increasing to a maximum of 10 milligrams daily for three weeks. A dose of 15-30 milligrams of cannabis extract capsules has been taken by mouth in five-milligram increments, based on tolerance, for 14 days. Cannabis extracts, including Cannador®, have been taken by mouth for 2-4 weeks. Cannabis plant extracts containing 2.5-120 milligrams of a THC-CBD combination have been taken by mouth daily for 2-15 weeks. A mouth spray (Sativex®, containing 2.7 milligrams of THC and 2.5 milligrams of CBD) has been used at a dose of 2.5-120 milligrams in divided doses for up to eight weeks. Eight sprays within any three hours, up to 48 sprays in a 24-hour period, have been used. Sativex® has been sprayed into the mouth for 6-14 weeks.

As a nutritional supplement, 15-30 milliliters of hemp oil has been taken by mouth daily.

To treat schizophrenia, 40-1,280 milligrams of CBD has been taken by mouth daily for up to four weeks.

To treat Tourette's syndrome, gelatin capsules containing 2.5-10 milligrams of THC have been taken by mouth as a single dose. A dose of 2.5 milligrams of THC has been taken by mouth daily, increasing to 10 milligrams daily in 2.5-milligram intervals over a four-day time period for six weeks.

To treat rheumatoid arthritis, up to six sprays of Sativex® have been used once daily 30 minutes before bed for five weeks.

“Survey Results of Pain Treatments in Adults with Cerebral Palsy” (14) showed that cerebral palsy patients already use marijuana to treat their symptoms. Adding musculoskeletal diseases to the qualifying conditions will protect adults who are currently illegally using medical marijuana to treat their symptoms.

The treatment that was rated as providing the most relief was marijuana; however, less than 5% of the sample reported ever using this drug for pain.

Spasms are one of the most common symptoms of people with cerebral palsy, but the spasms affecting people might be only “moderate” but not “severe” enough to qualify under the MMMA definition.

“(2) A chronic or debilitating disease or medical condition or its treatment that produces 1 or more of the following: ... or severe and persistent muscle spasms , including but not limited to those characteristic of multiple sclerosis.”

There is currently a clinical trial going on for “The Effects of Cannabis on Dystonia and Spasticity on Pediatric Patients”, including cerebral palsy.

<https://clinicaltrials.gov/ct2/show/NCT02470325>

Preliminary results of the study are very promising.

Medical Marijuana Helps Kids With Cerebral Palsy, Israeli Study Finds

Cannabis oil is improving the children's motor skills, researchers at Wolfson Medical Center say

Ido Efrati | Sep 07, 2017 3:22 AM

Medical marijuana significantly improved the condition of children suffering from cerebral palsy, a study by Wolfson Medical Center near Tel Aviv has found. According to the interim findings, treatment with cannabis oil reduced the disorder’s symptoms and improved the children’s motor skills. It also improved the kids’ sleep quality, bowel movements and general mood.

The study of 40 children, conducted with the medical cannabis company Tikun Olam, began around three years ago. So far 36 children between 1 and 17 have taken part, 20 have completed the test stage and a large majority are continuing treatment with medical marijuana.

“We included the hardest cases in the study, with the highest level of motor disorders,” says child neurologist Luba Blumkin, who is leading the project.

“Usually the motor disorder comes with other problems, like problems with bowel movements that cause pain, orthopedic problems that cause pain, and problems in swallowing and chewing, which make it necessary to feed some of the children by tube directly into the stomach. The pain, which increases with time, causes sleeping problems and makes treatment difficult because every touch is painful.”

In the study's first two months the researchers examined whether there were any changes in each participant's condition. After two months of stability the participants received marijuana oil three times a day orally or via a feeding tube. The patients continued taking the medication they had used previously.

"We used several evaluation indexes for the treatment's effectiveness, such as the effect on the spasticity (muscle contraction), dystonia (involuntary movement) and motor changes, like if the child rolls over or stretches his hand out better. We also checked effects like mood, sleep, constipation, pain and quality of life," Blumkin says.

Three to four months later the children's condition improved. "The most prominent difference statistically was in motor function," she says. "There was also less pain and improvement in sleep and bowel movements."

As a mother of a 2-year-old who took part in the study puts it, "The difference was felt quickly and was reflected in his calm, compared to his previous restlessness. There was also a significant improvement in sleep, which led to an improvement in our sleep. His motor function also improved, but we don't know if this was due to the treatment or the fact that he was getting older."

Today the boy is still being treated with marijuana oil, although with a smaller dosage. "We don't think he needs it during the day and he takes it at bedtime. There's a significant improvement," she says.

Still, the marijuana oil isn't expected to replace other medication the children are taking. "The marijuana treatment is a good supplement, and according to what we've seen so far it's safe and has no side effects," says Lihi Bar-Lev Schleider, a research manager at Tikun Olam. "But it can't be used as the only treatment. Now we have to find the most effective way to provide the marijuana treatment."

The study tested the effectiveness of two cannabis oils with a different proportion of the two main active ingredients THC and CBD.

"The THC's effect is especially relevant to motor function, whether it's Parkinson's disease or other motor symptoms," says Bar-Lev Schleider. "But the THC is also responsible for the psycho-active effect, so we picked a variety that also has a lot of CBD, which moderates the euphoric effect."

One group of children was treated with oil with a 1:6 ratio of THC to CBD, while for another group the ratio was 1:20.

“According to the interim findings both oils are effective,” says Bar-Lev Schleider. “After the study period the treatment — dosage and use — are personally suited to each child.”

<https://www.haaretz.com/israel-news/.premium-1.811010>

NIDA finds it difficult to put the words together, but finally admits there is no gateway theory of marijuana use.

These findings are consistent with the idea of marijuana as a "gateway drug." However, the majority of people who use marijuana do not go on to use other, "harder" substances.

<https://www.drugabuse.gov/publications/research-reports/marijuana/marijuana-gateway-drug>

NIDA also finds it very difficult to backtrack on the propaganda research they grant. When other researchers tried to duplicate the results of the first study on marijuana and IQ points, they were unable to find any IQ loss due to marijuana use. I hope that any knowledge you have on marijuana is up to date, and that you are paying attention when NIDA's biased research grants backfire on them, over and over again.

In a recent study sponsored by NIDA and the National Institute of Mental Health, teens who used marijuana lost IQ points relative to their nonusing peers. However, the drug appeared not to be the culprit. The new findings contribute to an ongoing scientific exploration of the drug's impact on users' cognition.

<https://www.drugabuse.gov/news-events/nida-notes/2016/08/study-questions-role-marijuana-in-teen-users-iq-decline>

3. Provide a summary of the evidence that the use of medical marijuana will provide palliative or therapeutic benefit for this medical condition or is a treatment for this condition.

1. Survey of Australians using cannabis for medical purposes

<https://harmreductionjournal.biomedcentral.com/articles/10.1186/1477-7517-2-18>

In a survey of 128 medical cannabis users, 13% used medical marijuana for fibromyalgia. Cannabis was perceived to provide "great relief" overall (86%), and substantial relief of specific symptoms such as pain, nausea and insomnia. It was also typically perceived as superior to other medications in terms of undesirable effects, and the extent of relief provided.

2. <https://www.ncbi.nlm.nih.gov/pubmed/15857325?dopt=Abstract>

23 Patients reported using medical marijuana to treat their Fibromyalgia.

Fibromyalgia patients in the study reported using medical marijuana for 2-14 years.

Overall Effectiveness. Of 948 reported users, 648 (68%) reported that cannabis made their symptoms overall much better, 256 (27%) said a little better, 36 (4%) said no difference and eight subjects said a little worse (four subjects) or much worse (four subjects). Effectiveness Compared to Other Medications. When asked how cannabis compared to other medications overall, 412 of 916 subjects (45%) said it worked much better than prescribed medications, 261 (28%) said it was somewhat better and 45 (5%) said it was about the same; only 27 subjects said that prescription medicines worked better than cannabis (18 somewhat better and nine much better). One hundred and seventy-one (19%) subjects said it was impossible to tell.

3. 10.1002/acr.21732.

People use medical marijuana illegally just to alleviate the symptoms of fibromyalgia.

We have observed cannabinoid use by 13% of persons referred with a diagnosis of FM, with only one-quarter having acquired cannabinoids legally. The mostly illicit use of herbal cannabis may be driven by factors such as poor effect from current available medications, popular advocacy, or familiarity with marijuana from recreational use.

4. <https://www.ncbi.nlm.nih.gov/pubmed/16834825>

However, a sub-population of FM patients reported significant benefit from the delta-9-THC monotherapy.

5. 10.1016/j.jpain.2007.09.002

There were significant decreases in the VAS, FIQ, and anxiety in the nabilone treated group at 4 weeks. There were no significant improvements in the placebo group. The treatment group experienced more side effects per person at 2 and 4 weeks, respectively. Nabilone appears to be a beneficial, well-tolerated treatment option for fibromyalgia patients, with significant benefits in pain relief and functional improvement.

6. 10.1213/ANE.0b013e3181c76f70

Thirty-one subjects were enrolled and 29 completed the trial (26 women, mean age 49.5 yr). Although sleep was improved by both amitriptyline and nabilone, nabilone was superior to amitriptyline (Insomnia Severity Index difference = 3.2; 95% confidence interval = 1.2-5.3). Nabilone is effective in improving sleep in patients with FM and is well tolerated. Low-dose nabilone given once daily at bedtime may be considered as an alternative to amitriptyline.

7. [10.1371/journal.pone.0018440](https://doi.org/10.1371/journal.pone.0018440)

After 2 hours of cannabis use, VAS scores showed a statistically significant ($p < 0.001$) reduction of pain and stiffness, enhancement of relaxation, and an increase in somnolence and feeling of well being.

The use of cannabis was associated with beneficial effects on some FM symptoms.

8. <https://www.ncbi.nlm.nih.gov/pubmed/15159679>

Migraine, fibromyalgia, IBS and related conditions display common clinical, biochemical and pathophysiological patterns that suggest an underlying clinical endocannabinoid deficiency that may be suitably treated with cannabinoid medicines.

9. <https://www.ncbi.nlm.nih.gov/pubmed/24977967>

Subsequent research has confirmed that underlying endocannabinoid deficiencies indeed play a role in migraine, fibromyalgia, irritable bowel syndrome and a growing list of other medical conditions. Clinical experience is bearing this out.

10. <https://www.ncbi.nlm.nih.gov/pubmed/26317379>

367 medical marijuana patients in Arizona were surveyed.

26 patients reported using medical marijuana for treatment of Fibromyalgia.

General relief from Fibromyalgia symptoms was 76.9%

Relief by medical marijuana compared to other medications was 76.2%

Less frequent use of other medications was 93.8%

11 Cannabis in the Treatment of Dystonia, Dyskinesias, and Tics

Although clinical studies in this area are difficult to do, even in countries where the use of cannabis has been allowed for years, there is a clear role for cannabis products in symptom management for these difficult conditions. The movement disorders are well-known to be worsened in patients who are anxious, but the careful observations reviewed above lead to the conclusion that there is a direct effect of cannabis in various formulations in some conditions, especially hyperkinetic symptoms.

12. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1262744/>

This exploratory study examined the patterns of medicinal cannabis use among a sample of 128 Australian adults who responded to media stories about this issue.

16 patients reported using medical marijuana for fibromyalgia

Nearly one in ten (8%) reported no effect on depression or anxiety. More than one in ten (14%) specified that while cannabis could ease their symptoms and enabled them to cope, they realised that it could not cure their underlying condition.

Approximately three quarters of participants (71%) claimed to have experienced a return of their symptoms or condition on stopping cannabis, especially: pain (53% of those who claimed a return of symptoms), depression or anxiety (30%), insomnia (11%), spasm (10%) and nausea/vomiting or lack of appetite (9%).

Almost two thirds (62%) of respondents claimed that they decreased or discontinued their use of other medicines when they started using cannabis medicinally. This was more common in males (65% vs. 58% of females) and older participants (aged 50 years +) (70% vs. 59% among younger participants). For some people this was a substantial change, representing a shift away from chronic, high-dose medication use.

Perhaps not surprisingly, cannabis was typically perceived as superior to other medications in terms of undesirable effects, and the extent of relief provided. Thus, cannabis was rated to produce equivalent (8%) or worse side effects (3%) by a minority of therapeutic users. It was considered to work "a bit" or "much better" than other medicines, or to be the only source of relief, by more than three quarters (82%).

13. 2014 FDA report on fibromyalgia patients "The Voice of the Patient"

Participants emphasized the importance of a holistic approach to managing fibromyalgia symptoms. A summary of these therapies is listed below.

Several participants mentioned that medical marijuana was effective in treating their pain, sleep issues, nausea, and anxiety.

14 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3036542/>

The treatment that was rated as providing the most relief was marijuana; however, less than 5% of the sample reported ever using this drug for pain. Although a full account of the legal and medical issues surrounding marijuana use are beyond the scope of the current paper (see Aggarwal et al for review), these data do suggest that a not-insignificant number of patients with CP are using this drug for pain management and are finding it to be at least as effective as other more standard treatments for pain.

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<https://www.nap.edu/catalog/24625/the-health-effects-of-cannabis-and-cannabinoids-the-current-state>

CONCLUSION 4-19 There is moderate evidence that cannabinoids, primarily nabiximols, are an effective treatment to improve short-term sleep outcomes in individuals with sleep disturbance associated with obstructive sleep apnea syndrome, fibromyalgia, chronic pain, and multiple sclerosis.

16. <https://www.ncbi.nlm.nih.gov/pubmed/3793381>

Cannabidiol (CBD), a non psychoactive cannabinoid of Cannabis, was given to 5 patients with dystonic movement disorders in a preliminary open pilot study. Oral doses of CBD rising from 100 to 600 mg/day over a 6 week period were administered along with standard medication. Dose-related improvement in dystonia was observed in all patients and ranged from 20 to 50%. Side-effects of CBD were mild and included hypotension, dry mouth, psychomotor slowing, lightheadedness, and sedation.

17. <http://onlinelibrary.wiley.com/doi/10.1002/j.1552-4604.1981.tb02621.x/full>

Spasticity is a common neurologic condition in patients with multiple sclerosis, stroke, cerebral palsy or an injured spinal cord. Animal studies suggest that THC has an inhibitory effect on polysynaptic reflexes. Some spastic patients claim improvement after inhaling cannabis. We tested muscle tone, reflexes, strength and performed EMGs before and after double-blinded oral administration of either 10 or 5 mg THC or placebo. The blinded examiner correctly identified the trials in which the patients received THC in seven of nine cases. For the group, 10 mg THC significantly reduced spasticity by clinical measurement ($P < 0.01$). Quadriceps EMG interference pattern was reduced in those four patients with primarily extensor spasticity. THC was administered to eight other patients with spasticity and other CNS lesions. Responses varied, but benefit was seen in three of three patients with "tonic spasms."

18. 10.2202/1941-2851.1017

26 people reported using medical marijuana for relief of fibromyalgia symptoms.

19. 10.1212/01.WNL.0000127707.07621.72

Medical use is reportedly effective for pain, stress, sleep, mood, and muscle spasm, consistent with reports from the United Kingdom and the United States, 3 as well as Canada. 2 The use of cannabis for stress and anxiety is reported in other populations, such as patients with HIV/AIDS and chronic noncancer pain, and emphasizes the need to better address these symptoms in clinical practice. 4

4. Provide articles published in peer-reviewed scientific journals reporting the results of research on the effects of marijuana on the medical condition or treatment of the medical condition and supporting why the medical condition should be added to the list of debilitating medical conditions under the Medical Marijuana Act. Attach a copy of all

articles that are discussed in this section. Please do not attach articles that are not discussed in this section.

See enclosed.

