

Michigan Medical Marijuana



October 17, 2017

What is Medical Marijuana?

The term *medical marijuana* refers to the use, possession, and/or cultivation of marijuana for medical purposes.



51 Medical Conditions Marijuana is Approved For by States

1. Alzheimer's Disease
2. Anorexia
3. Arnold-Chiari malformation
4. Arthritis
5. Ataxia
6. Cachexia
7. Cancer
8. Cardiopulmonary respiratory syndrome
9. Causalgia
10. Cervical dystonia
11. Crohn's disease
12. Decompensated cirrhosis
13. Dystonia
14. Epilepsy
15. Fibromyalgia
16. Glaucoma
17. Hepatitis C
18. HIV/AIDS
19. Huntington's disease
20. Hydrocephalus
21. Inflammatory autoimmune-mediated arthritis
22. Inflammatory bowel disease (IBS)
23. Inflammatory demyelinating polyneuropathy
24. Interstitial cystitis
25. Lou Gehrig's disease (amyotrophic lateral sclerosis, ALS)
26. Lupus
27. Migraines
28. Multiple Sclerosis
29. Muscle spasms
30. Muscular dystrophy
31. Myasthenia gravis
32. Myoclonus
33. Nail-patella syndrome
34. Nausea or vomiting
35. Neurofibromatosis
36. Neuropathy
37. Pain
38. Pancreatitis
39. Parkinson's disease
40. Peripheral neuropathy
41. Post-traumatic stress disorder (PTSD)
42. Reflex sympathetic dystrophy
43. Residual limb pain from amputation
44. Seizure disorders
45. Sjogren's syndrome
46. Spasticity
47. Spinal cord damage with intractable spasticity
48. Syringomyelia
49. Terminal illness
50. Tourette's syndrome
51. Traumatic brain injury

Sources: Marijuana Policy Project, 2014. Key Aspects of State and D.C. Medical Marijuana Laws, from National Conference of State Legislatures, "State Medical Marijuana Laws," www.ncsl.org; Rahn, B., 2014. Qualifying Conditions for Medical Marijuana by State, www.Leafly.com

Recognized Medical Conditions under Michigan Medical Marijuana Act-MCL 333.26423(b)

- ▶ Cancer
- ▶ Glaucoma
- ▶ Positive status for human immunodeficiency virus (HIV)
- ▶ AIDS
- ▶ Hepatitis C
- ▶ Amyotrophic lateral sclerosis
- ▶ Crohn's disease
- ▶ Agitation of Alzheimer's disease
- ▶ Severe and chronic pain
- ▶ Severe nausea
- ▶ Seizures - including but not limited to those characteristic of epilepsy; or severe and persistent muscle spasms, including but not limited to those characteristics of multiple sclerosis.

Video: Charlotte's Web

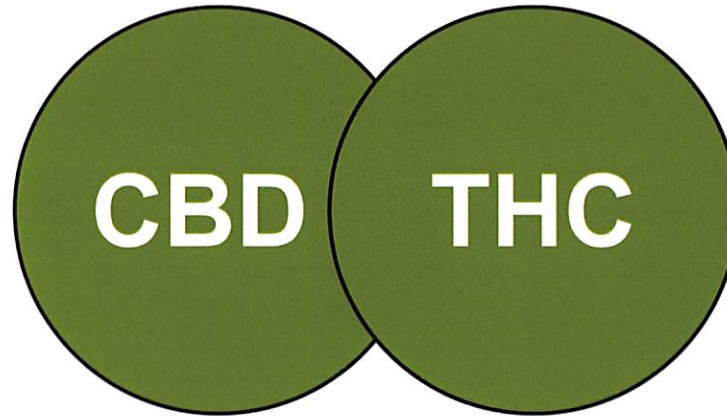
Charlotte's Web

Charlotte's Web was developed by Colorado-based growers for Charlotte Figi, a young girl who suffered from severe and nearly continuous epileptic seizures. Dr. Sanjay Gupta, renowned chief medical correspondent for CNN, is treating Charlotte with a medical marijuana strain high in cannabidiol ("CBD").

During the research for his documentary "MARIJUANA", Gupta interviewed the Figi Family, and according to the film, the drug decreased her seizures from 300 per week to just one every seven days. Forty other children are using the same medication, and it has helped them too. The doctors who are recommending this medication say that the cannabidiol in the plant interacts with the brain cells to quiet the excessive activities in the brain that causes the seizures.



CBD vs. THC



Understanding the Difference Between CBD and THC

- A high CBD strain such as Charlotte's Web is a highly efficient way to create the high-CBD cannabis oil that is vital for many treatments.
- CBD oil is rapidly gaining medical and legal acceptance beyond even medical marijuana itself.
- When stripped of THC, cannabis oil can be used to treat a variety of illnesses and diseases.
- CBD has been studied for use in patients with everything from chronic pain to cancer, and its efficacy as a seizure preventative is now well-documented.
- Generally, high CBD strains are not often used for smoking, but instead used to create low or no THC tinctures. High CBD strains avoid a "stoned" or "high" experience, allowing medical patients to complete their day without feeling as though they are under the influence.
- The Colorado-based growers who developed Charlotte's Web were able to reduce the THC content of the strain while boosting its CBD, creating a product that has an extremely calming "body high" without any mental side effects.

Medical Marijuana Cardholders in Bay County

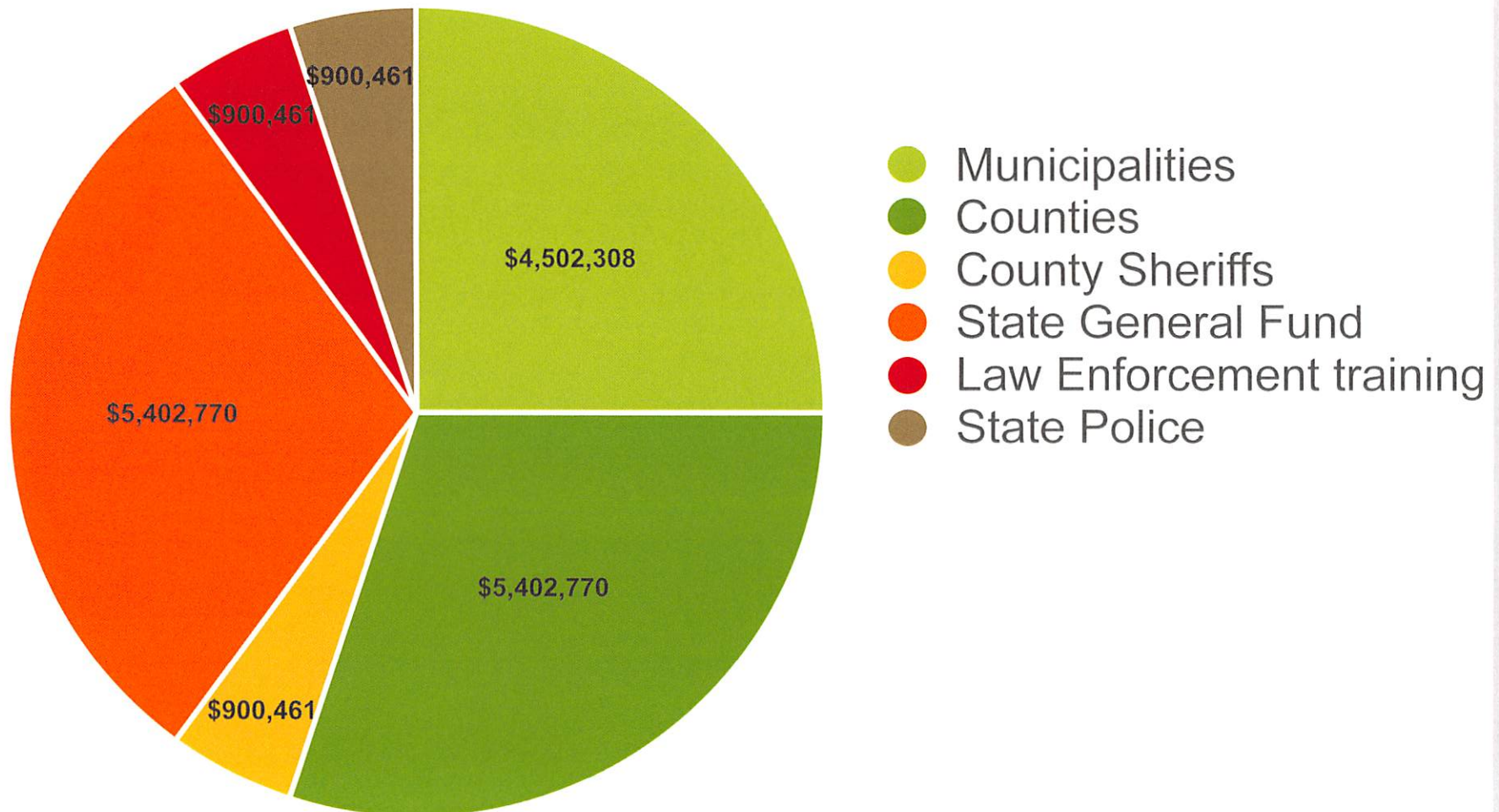
Cardholders and Caregivers (2012-16)

2017 Cardholders 2,776	2017 Caregivers 429
2016 Cardholders 2,327	2016 Caregivers 372
2015 Cardholders 1,971	2015 Caregivers 387
2014 Cardholders 1,132	2014 Caregivers 273
2013 Cardholders 1,347	2013 Caregivers 292
2012 Cardholders 1,419	2012 Caregivers 558

Tax Revenues

To date, Michigan had 261,983 registered patients. It is estimated that those patients will purchase 2,106,343 ounces per year. At an average cost of \$285 per ounce, the total generated would be \$600,307,846. The excise tax to be charged is 3% at the retail level. This results in \$18,009,235 in tax revenue that would be generated to be split as follows:

\$18,009,235



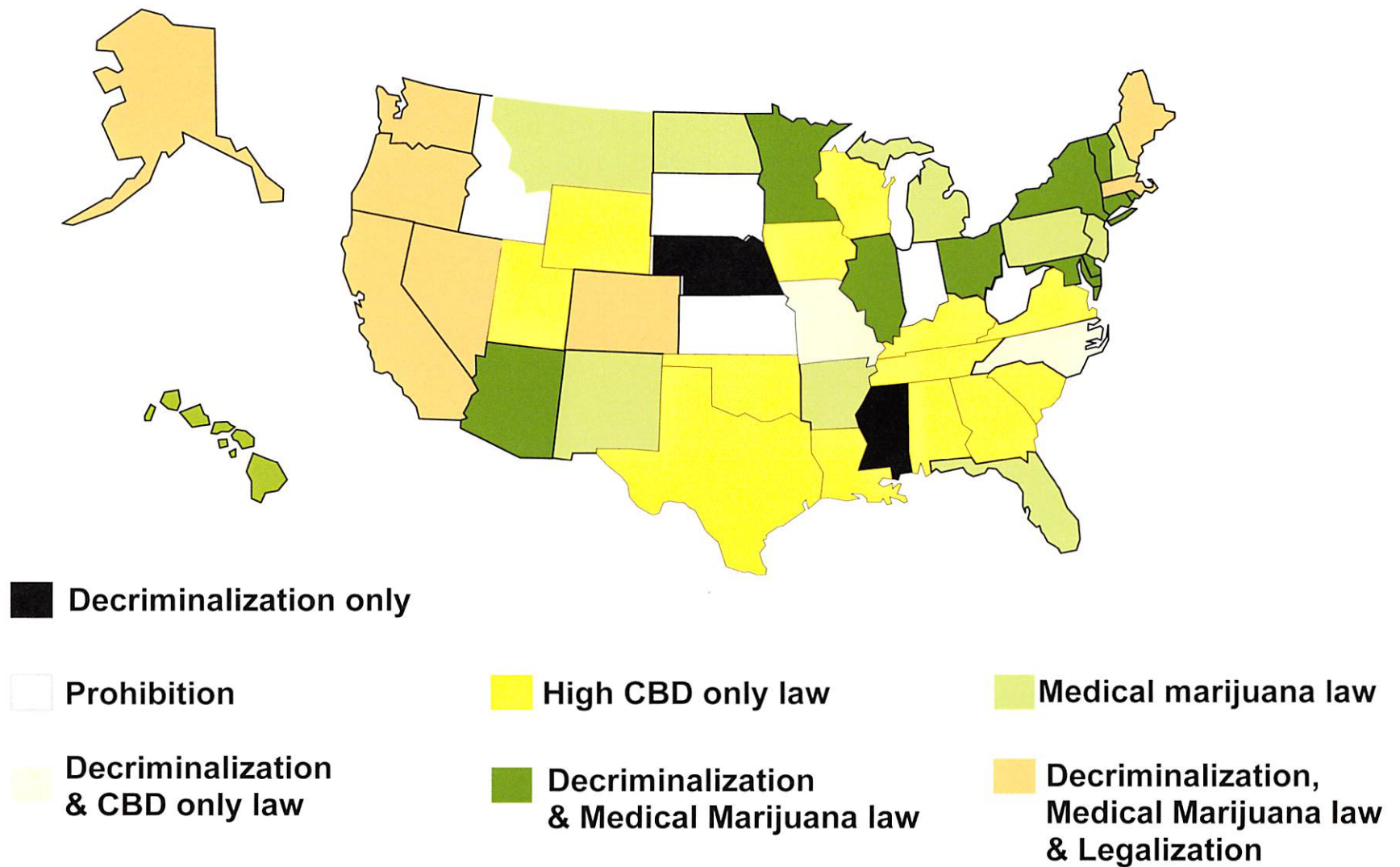
Job Creation

- ▶ An average facility requires 5 to 10 employees.
- ▶ An entry-level employee can expect to be paid at least \$15 per hour.
- ▶ An operations supervisor at a marijuana facility can expect to earn \$50,000 to \$80,000 per year.
- ▶ As of 2014, the most recent full year for which data is available, Colorado reported 6,600 people working in the medical marijuana sector, alone.
- ▶ Nevada is expected to add 1,900 new jobs and they only have 1/4 of the population of Michigan.
- ▶ Given Michigan has twice the population of Colorado and four times the population of Nevada, the economic and jobs impact would be conceivably larger, with an estimated 10,000 jobs in Michigan.



JOB GROWTH

US States Marijuana Laws in Effect as of January 2017



2008 Michigan Law

The original Michigan Medical Marijuana Act, as it is formally known, was initiated by Michigan voters in November 2008. The law legalized the growth, possession and use of marijuana to treat certain debilitating conditions. The law allowed Michigan residents to be issued special licenses by the Department of Licensing and Regulatory Affairs upon the recommendation of a certified doctor that allowed them to possess up to 2.5 ounces of marijuana in order to treat symptoms. The law further allowed individuals in possession of a certified license, or their caregivers, to grow up to 12 marijuana plants in an enclosed, locked facility.

