

The Difference Between Medical Marijuana and Marijuana-Based Medicines A Guide for Journalists and Policymakers

National Families in Action
January 2015

1. How the Food and Drug Administration Protects Us from Unsafe, Ineffective Drugs

Before a medicine maker can market a new drug to the public, he must establish:

That the drug is safe:

- Must test in animals to make sure it's safe for human use and shows preliminary evidence of effectiveness.

That the drug is effective:

- Must test in healthy humans for safety, then in sick humans to determine if the drug does what its maker says it will do.
- Conducts randomized controlled trials (RCTs) to determine safety and efficacy in humans.

A precise dose and regimen (length of time the drug should be taken).

Once these proofs are established:

FDA approves the new drug.

- Medicine maker can market and distribute it.
- Doctors can prescribe it.
- Pharmacies can sell it.

A reporting system is in place:

- To recall the drug if side-effects appear that did not show up in human testing (clinical trials).

2. Medical Marijuana

Is legalized by voters via initiatives advocates place on the ballot or by elected officials.

Few are scientists, pharmacologists, or doctors licensed to practice medicine.

- Few are trained or qualified to create medicines.
- Legalizing marijuana for medical use has no scientific basis to support such action.

No producers of legalized medical marijuana have submitted their drugs to FDA for approval.

Doctors cannot *prescribe* medical marijuana. Laws call for doctors to either:

- Recommend medical marijuana, or
- Certify that a patient has a disease or symptom which laws claim medical marijuana treats or relieves.

Patients have no guarantees that medical marijuana is:

- Safe, or
- Effective.

Pharmacies cannot sell medical marijuana, and pharmacists cannot dispense it.

- No recall system is in place if side-effects emerge.

Anyone can claim a specific marijuana strain or compound will treat:

- Almost any symptom or disease (see [Leafly](#)).
- Medical marijuana has been legislated to treat more than 50 diseases in 23 states.¹

3. Marijuana-Based Medicines

Are created by researchers and pharmacologists:

Who are trained and qualified to develop and test marijuana-based medicines for FDA approval.

Approved by FDA in the 1980s

Dronabinol (trade name Marinol[®]) and Nabilone (trade name Cesamet[®])

- Synthetic (man-made) THC

- Reduce chemotherapy-related nausea and AIDs wasting in patients who do not respond to standard medicines.

In FDA clinical trials

Nabiximols (trade name Sativex®)

- A mouth spray consisting of highly purified cannabidiol (CBD) and THC
- Extracted from marijuana grown without the use of pesticides in computer-controlled glasshouses by GW Pharmaceuticals in Great Britain
- Approved in 27 countries to treat multiple sclerosis
- In Phase III trials in US to treat advanced cancer pain

CBD (trade name Epidiolex®)

- A highly purified CBD oil
- Extracted from marijuana grown by GW Pharmaceuticals
- In clinical trials in US to treat intractable seizures in children with rare forms of epilepsy
- Through FDA expanded access programs, Epidiolex® is provided to children with epilepsy while clinical trials proceed.

Expected to enter FDA clinical trials in 2015

Insys Therapeutics' CBD candidate

- A synthetic (man-made) CBD oil made with pure chemicals
- To reduce intractable seizures in children with rare forms of epilepsy

There is no need to legalize marijuana-based medicines.

They are legal for patients to possess and use:

- In research studies and during clinical trials, and
- With a prescription once FDA approves them.

Medical Marijuana vs. FDA Approved Marijuana-Based Medicines	
Legalized Medical Marijuana	FDA Approved Marijuana-Based Medicines
No Proven Safety No Proven Efficacy No Established Dose or Regimen No Randomized Controlled Trials No Recall System Doctors Recommend or Certify Dispensaries Sell Budtenders Dispense	Safe Effective Established Dose and Regimen Randomized Controlled Trials Recall System Doctors Prescribe Pharmacies Sell Pharmacists Dispense

Cannabidiol (CBD) Oil

In 2014, 11 states legalized Charlotte's Web or cannabidiol oil (CBD) for children with epilepsy.

- Legalized CBD oil is not a marijuana-based medicine.
- It has not been approved by FDA as safe or effective.

To date, a few states are administering Epidiolex® to these children:

- In clinical trials and via FDA expanded access programs.
- Epidiolex® is a marijuana-based medicine seeking FDA approval.
- It is not medical marijuana.

Journalists should use correct terms:

- To distinguish between marijuana-based medicines, i.e. Epidiolex, and medical marijuana, i.e., Charlotte's Web oil, when reporting this story.

¹ Some medical marijuana states include a provision that enables citizens to petition state agencies to add additional diseases they believe medical marijuana treats.

States Have Legalized Medical Marijuana to Treat The Following Diseases as of 1.1.2015

Alaska

Cachexia
Cancer
Chronic Pain
Glaucoma
HIV or AIDS
Multiple Sclerosis
Nausea
Seizures

Arizona

Alzheimer's Disease
Amyotrophic Lateral Sclerosis (Lou Gehrig's disease)
Cachexia or wasting syndrome
Cancer
Chronic pain
Crohn's Disease
Glaucoma
Hepatitis C
HIV or AIDS
Multiple Sclerosis
Nausea
PTSD
Seizures

California

Arthritis
Cachexia
Cancer
Chronic pain
HIV or AIDS
Epilepsy
Migraine
Multiple Sclerosis
Any debilitating illness where the medical use of marijuana has been "deemed appropriate and has been recommended by a physician"

Colorado

Cachexia
Cancer
Chronic pain
Chronic nervous system disorders
Epilepsy
Glaucoma
HIV or AIDS
Multiple Sclerosis
Nausea

Connecticut

Cachexia
Cancer
Crohn's disease
Epilepsy
Glaucoma
HIV or AIDS
Intractable spasticity
Multiple Sclerosis
Parkinson's Disease
Posttraumatic Stress Disorder (PTSD)
Other medical conditions may be approved by the Department of Consumer Protection

Delaware

Alzheimer's disease
Amyotrophic Lateral Sclerosis
Cachexia
Cancer
Chronic pain
HIV/AIDS
Nausea
Post-traumatic Stress Disorder (PTSD)
Seizures
Severe and persistent muscle spasms

District of Columbia

Any debilitating condition as recommended by a DC licensed doctor

Hawaii

Cachexia
Cancer
Chronic pain
Crohn's disease
Epilepsy and other disorders characterized by seizures
Glaucoma
HIV or AIDS
Multiple sclerosis and other disorders characterized by muscle spasticity
Nausea

Illinois

Alzheimer's disease
Amyotrophic Lateral Sclerosis (ALS)
Arnold Chiari malformation
Cachexia/wasting syndrome
Cancer
Causalgia
Chronic Inflammatory Demyelinating Polyneuropathy
Crohn's Disease
Dystonia
Fibromyalgia
Glaucoma
Hepatitis C
HIV/AIDS
Hydrocephalus
Hydromyelia
Interstitial Cystitis
Lupus
Multiple Sclerosis
Muscular Dystrophy
Myasthenia Gravis
Myoclonus
Nail patella syndrome
Neurofibromatosis
Parkinson's disease
Reflex Sympathetic Dystrophy (RSD)
Rheumatoid Arthritis
Sjogren's syndrome
Spinal cord disease
Spinal cord injury
Spinocerebellar Ataxia (SCA)
Syringomyelia
Tarlov cysts
Tourette's syndrome
Traumatic brain injury and post-concussion syndrome

Maine

Alzheimer's disease
Amyotrophic Lateral Sclerosis
Cachexia or wasting syndrome
Cancer
Chronic pain
Crohn's disease
Epilepsy
Glaucoma
Hepatitis C
HIV or AIDS
Huntington's disease
Inflammatory bowel disease
Multiple Sclerosis
Nausea
Nail-patella syndrome
Parkinson's disease
Post-traumatic stress disorder (PTSD)

Maryland

Alzheimer's disease
Amyotrophic Lateral Sclerosis
Cachexia or wasting syndrome
Cancer
Chronic pain
Crohn's disease
Epilepsy
Glaucoma
Hepatitis C
HIV or AIDS
Huntington's disease
Inflammatory bowel disease
Multiple Sclerosis
Nausea
Nail-patella syndrome
Parkinson's disease
Post-traumatic stress disorder (PTSD)

Massachusetts

Cachexia, Anorexia, or Wasting Syndrome
Chronic Pain
Nausea
Seizures
Severe or persistent muscle spasms
Michigan
Alzheimer's disease
Amyotrophic Lateral Sclerosis
Cachexia or wasting syndrome
Cancer
Chronic pain
Crohn's disease
Glaucoma
HIV or AIDS
Hepatitis C
Nail patella
Nausea
Post-traumatic stress disorder (PTSD)
Seizures
Severe and persistent muscle spasms

Minnesota

Amyotrophic Lateral Sclerosis
Cancer/cachexia
Glaucoma
HIV/AIDS
Seizures
Severe and persistent muscle spasms
Terminal illness
Tourette's Syndrome

Montana

Cachexia or wasting syndrome
Chronic pain
Nausea
Seizures
Severe or persistent muscle spasms

Nevada

AIDS
Cachexia
Cancer
Glaucoma
Post-traumatic stress disorder (PTSD)
Persistent muscle spasms or seizures
Severe nausea or pain
Other conditions are subject to approval

New Hampshire

Cancer
Crohn's disease
Hepatitis C
Muscular Dystrophy
Multiple Sclerosis

New Jersey

Cancer
Glaucoma
HIV/AIDS
Inflammatory bowel disease
Lou Gehrig's disease
Multiple Sclerosis
Muscular Dystrophy
Seizure and/or spasticity disorders
Any terminal illness if a doctor has determined the patient will die within a year

New Mexico

Amyotrophic Lateral Sclerosis (Lou Gehrig's disease)
Anorexia/cachexia
Arthritis
Cancer
Chronic pain
Crohn's disease
Epilepsy
Glaucoma
Hepatitis C
HIV/AIDS
Hospice patients
Huntington's disease
Intractable nausea/vomiting
Multiple sclerosis
Painful peripheral neuropathy
Parkinson's disease
Post-traumatic Stress Disorder
Spinal cord damage

New York

Cancer
 Epilepsy
 HIV/AIDS
 Huntington's Disease
 Inflammatory bowel disease
 Lou Gehrig's disease
 Parkinson's Disease
 Multiple Sclerosis
 Neuropathies
 Spinal cord damage

Oregon

Alzheimer's disease
 Cachexia
 Cancer
 Chronic pain
 Epilepsy
 Glaucoma
 HIV or AIDS
 Multiple Sclerosis
 Nausea
 Post-traumatic stress
 Other conditions are subject to approval

Rhode Island

Alzheimer's Disease
 Cachexia
 Cancer
 Chronic pain
 Glaucoma
 Hepatitis C
 Nausea
 Seizures
 Severe and persistent muscle spasms
 Other conditions are subject to approval

Vermont

Cachexia or wasting syndrome
 Cancer
 HIV or AIDS
 Multiple Sclerosis
 Seizures
 Severe pain
 Severe nausea

Washington

Cachexia
 Cancer
 Crohn's disease
 Epilepsy
 Glaucoma
 Hepatitis C
 HIV or AIDS
 Intractable pain
 Muscle spasms, and/or spasticity
 Multiple Sclerosis
 Nausea
 Seizures
 Other conditions are subject to approval

The following states legalized medical marijuana CBD oil only in 2104:

Alabama
 Florida
 Iowa
 Kentucky
 Mississippi
 Missouri
 North Carolina
 South Carolina
 Tennessee
 Utah
 Wisconsin

Source: National Organization for the Reform of Marijuana Laws ([NORML](#))

About National Families in Action

[National Families in Action](#) (NFIA) is a drug policy, education, and prevention organization founded in Atlanta in 1977. Its mission is to educate the public about the science that underlies addictive drugs and prevent their industries from targeting children. Learn more about marijuana at NFIA's new website [The Marijuana Report.Org](#) and by subscribing to [E-Highlights](#). Learn more about the difference between medical marijuana and marijuana-based medicines at [The Marijuana Report.Org: Reports](#).