



International Cannabis and
Cannabinoids Institute

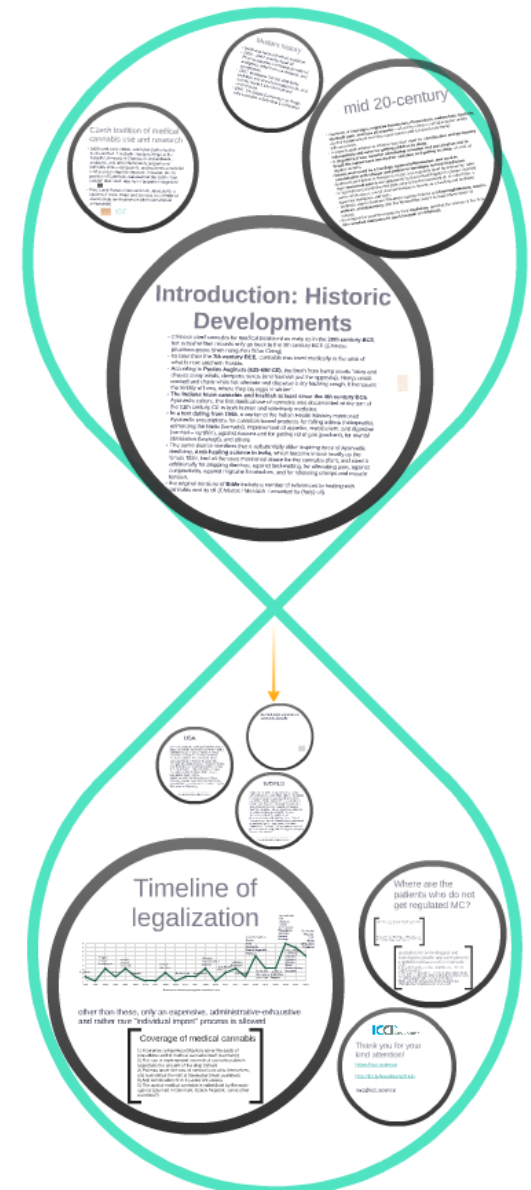
State of Art in Legislation and Practice of Medical Cannabis Globally

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this prezi is available at
<http://bit.ly/MedHempGlob>

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Timeline of Hemp and Human History



27.8 million BC

Cannabis Sativa L. (hemp) diverges from the sister genus *Humulus*, which includes hops on the steppes of central Asia. (McPartland)

8,000 BC

First known evidence of hemp fiber and seeds found in human tombs. (MIT)

1492

Hemp sails to what Spanish explorers dub a New World as rigging on explorer Christopher Columbus' ships. The Spanish Crown orders hemp be sewn in the New World by 1545. (Campos)

1776

Colonial Virginian farmers are able to pay taxes to the government in hemp. (History.org)

1937

The US Marijuana Tax Act destroys the domestic hemp trade in beginning of war on cannabis. (RAND Drug Policy Research Center)

1942

World War II-era shortages in fiber causes US hemp production to ramp up again to supply the Navy with rigging, due to loss of international supplies. (RAND Drug Policy Research Center)

1968

Hippies adopt hemp legalization as part of broader cannabis law reform efforts.

1985

Author and activist Jack Herer releases *The Emperor Wears No Clothes*.

1998

Then-San Francisco county supervisor, and former California state senator Mark Leno moves to legalize industrial hemp in San Francisco. Industrial hemp legalized in Canada.

2014

President Obama signs Farm Bill legalizing research hemp farms.

2018

Kentucky Sen. Mitch McConnell signs the 2018 Farm Bill with a hemp pen, re-legalizing industrial hemp in the US.





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hooves,
the Fingo tribe used the leaves to
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Introduction: Historic Developments

- Chinese used cannabis for medical treatment as early as in the **28th century BCE**, but actual written records only go back to the 9th century BCE (Chinese pharmacopoeia Shen-nung Pen Ts'ao Ching)
- no later than the **7th century BCE**, cannabis was used medically in the area of what is now southern Russia.
- According to **Paulus Aegineta (625-690 CE)**, the broth from hemp seeds "dries and chases away winds, dampens sexus (and hashish just the opposite). Hemp seeds cooked and drunk while hot alleviate and disperse a dry hacking cough. It increases the fertility of hens, where they lay eggs in winter".
- **The Indians knew cannabis and hashish at least since the 4th century BCE.** Ayurvedic culture, the first medical use of cannabis was documented at the turn of the 13th century CE in both human and veterinary medicine.
- **In a text dating from 1965**, a worker at the Indian Health Ministry mentioned Ayurvedic prescriptions for cannabis-based products for falling asleep (nidraprada), enhancing the libido (kamada), improvement of appetite, metabolism, and digestion (vanhivi – vardhin), against nausea and for getting rid of gas (pachani), for mental stimulation (kaphajit), and others
- The same source mentions that a substantially older inspiring force of Ayurvedic medicine, **Arab healing science in India**, which became known locally as the Unani Tibbi, had all the uses mentioned above for the cannabis plant, and used it additionally for stopping diarrhea, against bed-wetting, for alleviating pain, against conjunctivitis, against migraine headaches, and for releasing cramps and muscle tension.
- the original versions of **Bible** include a number of references to healing with cannabis and its oil (Christos / Messiah / anointed by (holy) oil)

mid 20-century

- treatment of **neuralgia, migraine headaches, rheumatism, melancholy, hysteria, stomach pain, and loss of appetite** – all of this using a cannabis butter and/or alcohol-based extract from the upper leaves and female (rarely male) inflorescences.
- A water-based solution or infusion was then used for **constipation and pulmonary tuberculosis and even for getting children to sleep**;
- in **Argentina** it was used for stimulating urination and perspiration and in **Brazil** the leaves were smoked for sedation and getting to sleep, as well as against asthma.
- **leaves were used as a bandage against inflammation, and used in combination with vinegar and juniper in bandages to treat headaches.**
- before its prohibition in Europe cannabis was regularly used by women for relief from **menstrual pain** (even apparently by the United Kingdom's Queen Victoria).
- in North America until the mid-20th century for the treatment of, or relief from, a series of illnesses; use of crushed marijuana leaves as a healing and antibiotic agent for erysipelas and boils.
- antibiotic use in Southern Rhodesia against malaria and **haemoglobinuria, sepsis, anthrax, and dysentery**, that the Xhosa tribe used it to treat inflammation of hooves,
- the Fingo tribe used the leaves to treat **snakebite**, and that the women of the Suto tribe **smoked marijuana to quell the pain of childbirth**

Modern history

- traditional natural (herbal) medicine
- 1850 - 1940: standard part of Pharmacopoeias worldwide (mostly for analgesia, relief from convulsions, and as sedative)
- 1937: Marijuana Tax Act effectively prohibits any use of cannabis in US, and quickly made it into international environment
- 1961: UN Single Convention on Drugs sets cannabis a Schedule 1 substance

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Czech tradition of medical cannabis use and research

- 1950s and early 1960s: extensive studies by the teams of Prof. J. Kabelik, Santavy, Krejci at the Palacky University in Olomouc found antibiotic, analgesic, and anti-inflammatory properties of cannabis indica compounds, and isolated cannabidiol acid and described its structure. However, due to position of Czechoslovakia behind the 1950s "iron curtain" their work was never properly recognized.



[https://doi.org/10.1016/j.jep.2017.05.011](#)

- Prof. Lumir Hanus (now LumirLab, Jerusalem), a student of Profs. Krejci and Santavy, is co-finder of anandamide (and numerous other cannabinoid compounds)



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Current legal situation in cannabis globally

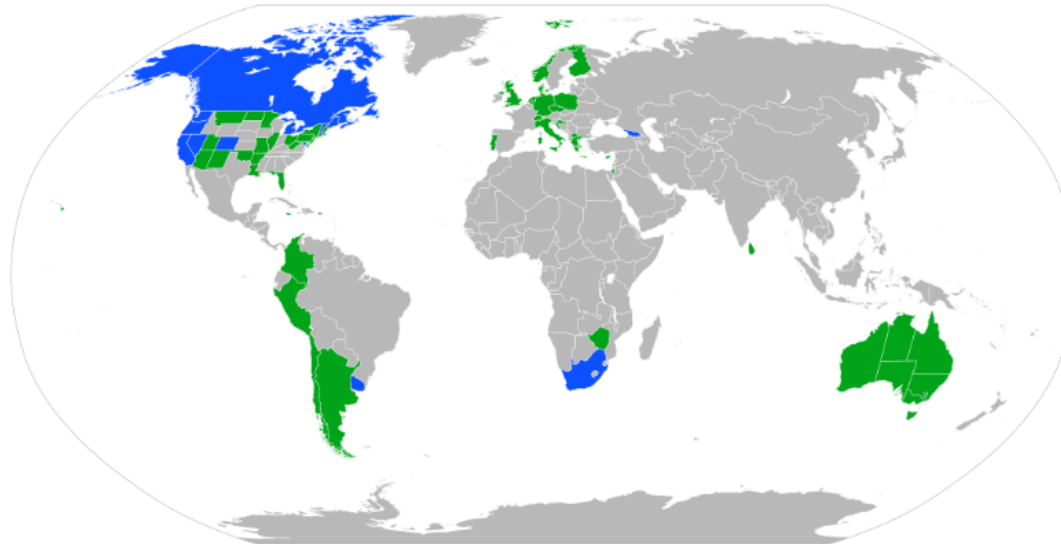


Figure 1: Legal status of medical cannabis across the world (CC BY-SA 4.0)

■ Legal as authorized by a physician ■ Legal for any use (no prescription required)

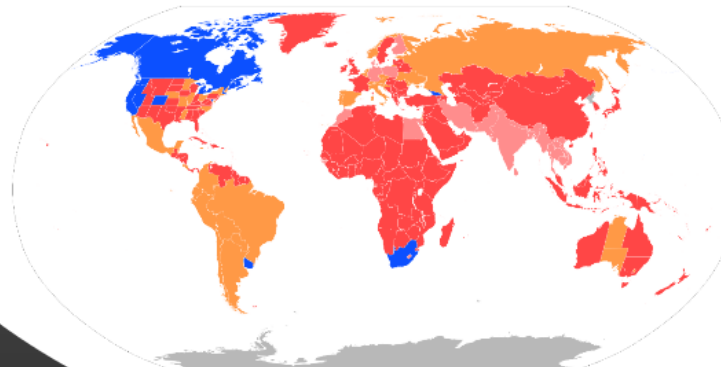
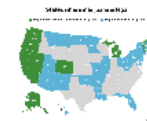


Figure 2: Legal status of recreational cannabis across the world (CC BY-SA 4.0)

■ Legal ■ Illegal but decriminalized ■ Illegal but often unenforced ■ Illegal

Current legal circulation in cannabis globally

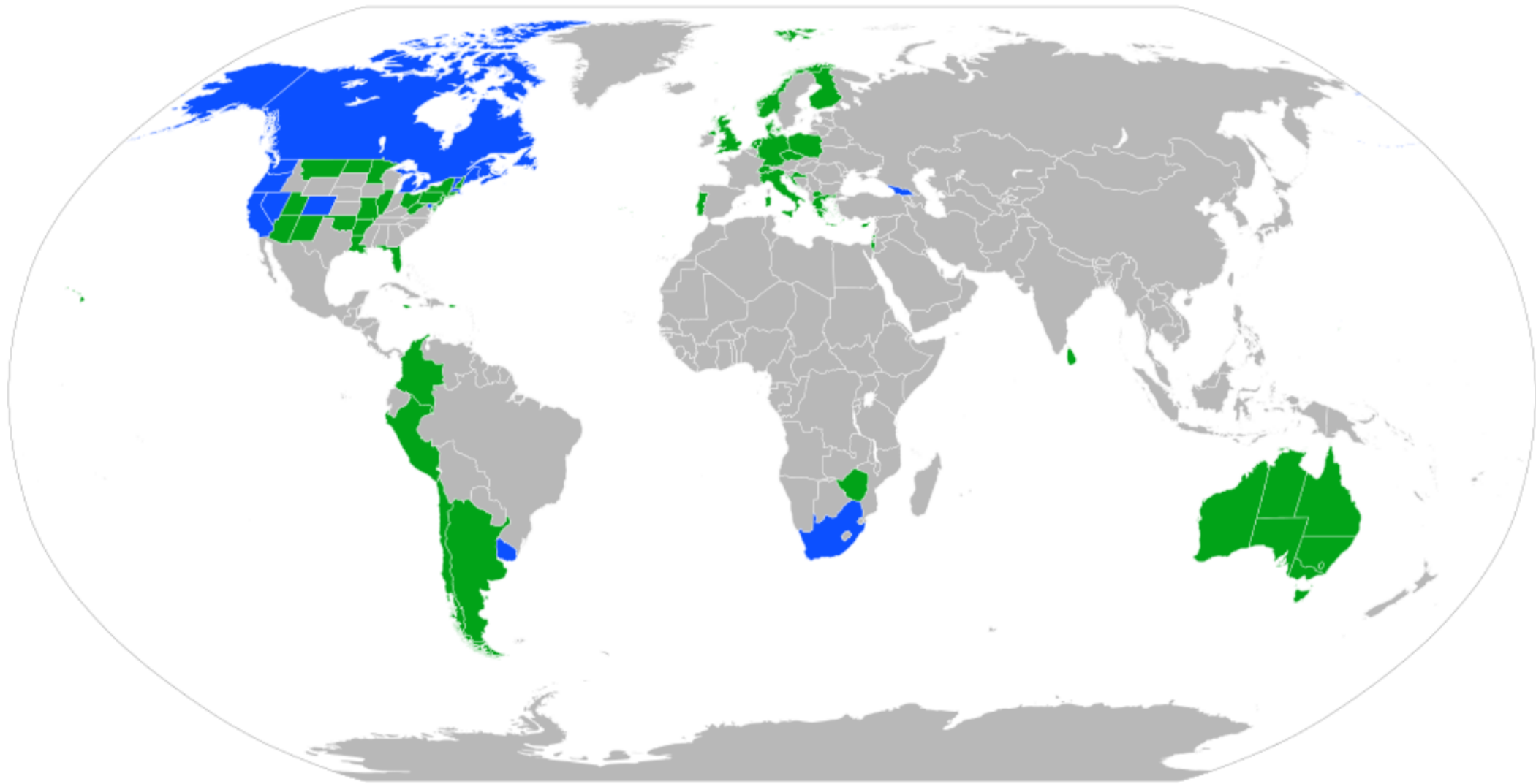


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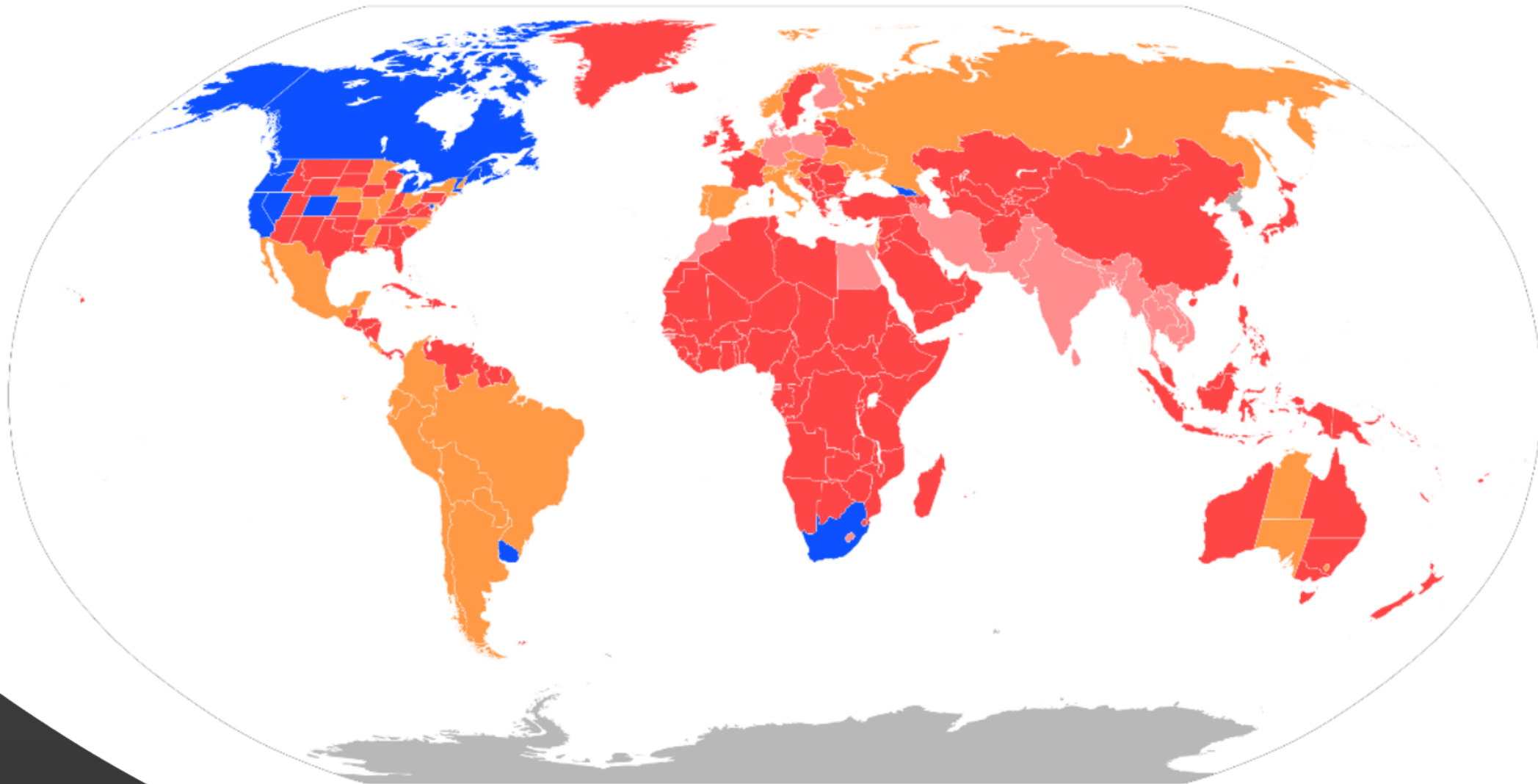
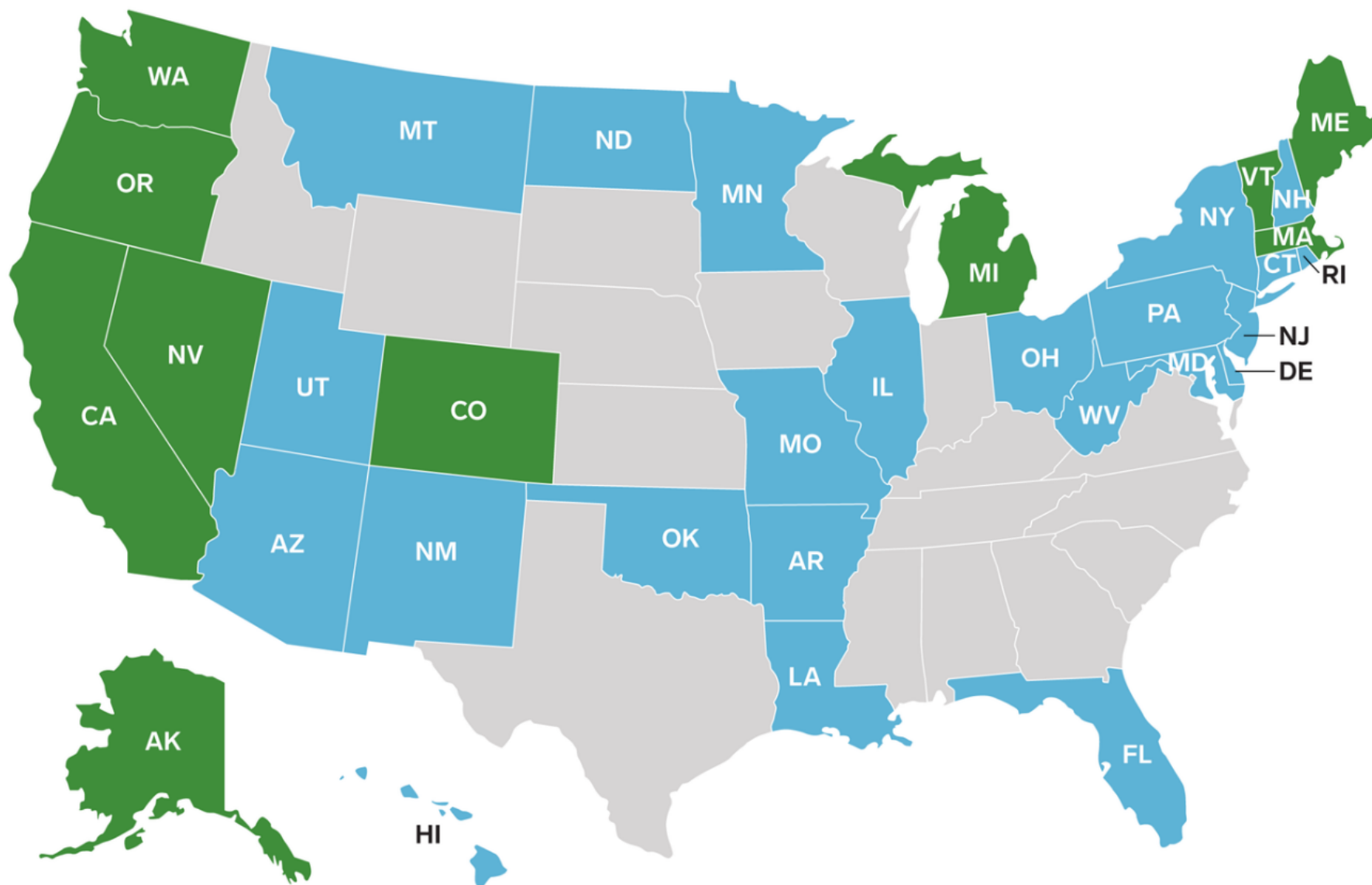


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States where marijuana is legal

■ Legalized recreational and medical marijuana ■ Legalized medical marijuana



WORLD

Argentina, Australia, Austria allows cannabis-derived drugs only, as well as Belgium, in Canada medical cannabis is legal, as well as in Chile, Colombia, Croatia, Cyprus (for cancer patients only), Czech Republic, Denmark, Estonia (with special permit), Finland, Republic of Georgia, Germany, Greece, Ireland, Israel, Italy, Jamaica, Luxembourg, Macedonia, Malta, Mexico, Netherlands, New Zealand (derived pharmaceuticals only), Norway, Peru, Poland, Portugal, San Marino, Slovenia (cannabis-based drugs only), South Africa, Spain, Sri Lanka, Switzerland, Thailand, Turkey (cannabis-derived pharmaceuticals only), United Kingdom, Uruguay, Vanuatu, Zimbabwe.

For updated situation always look at https://en.wikipedia.org/wiki/Legality_of_cannabis

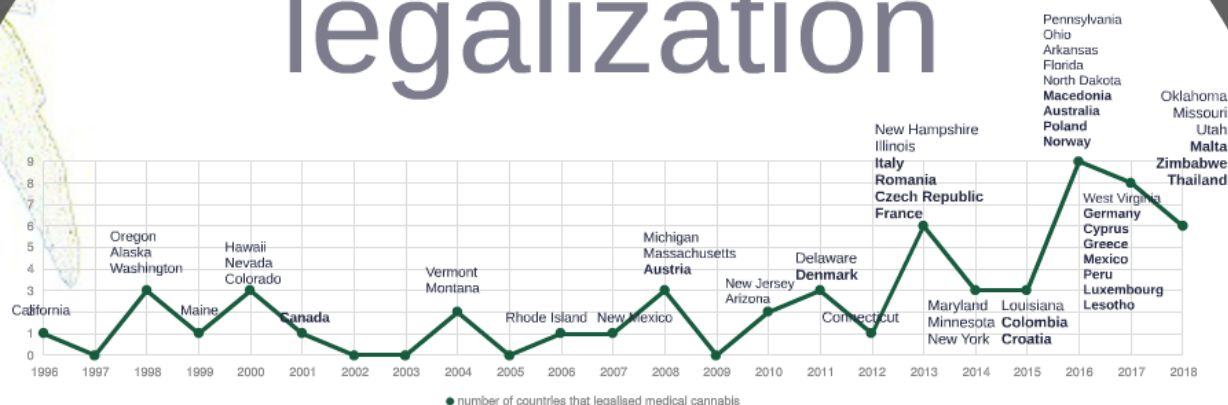
USA

Cannabis is federally prohibited, but there are 33 states and the District of Columbia where medical cannabis is legal : Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Hawaii, Illinois, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, Washington, West Virginia.

States that allow restricted use only include: Alabama, Georgia, Iowa, Kentucky, Mississippi, Missouri, North Carolina, South Carolina, Virginia, Wisconsin and Wyoming.

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Timeline of legalization

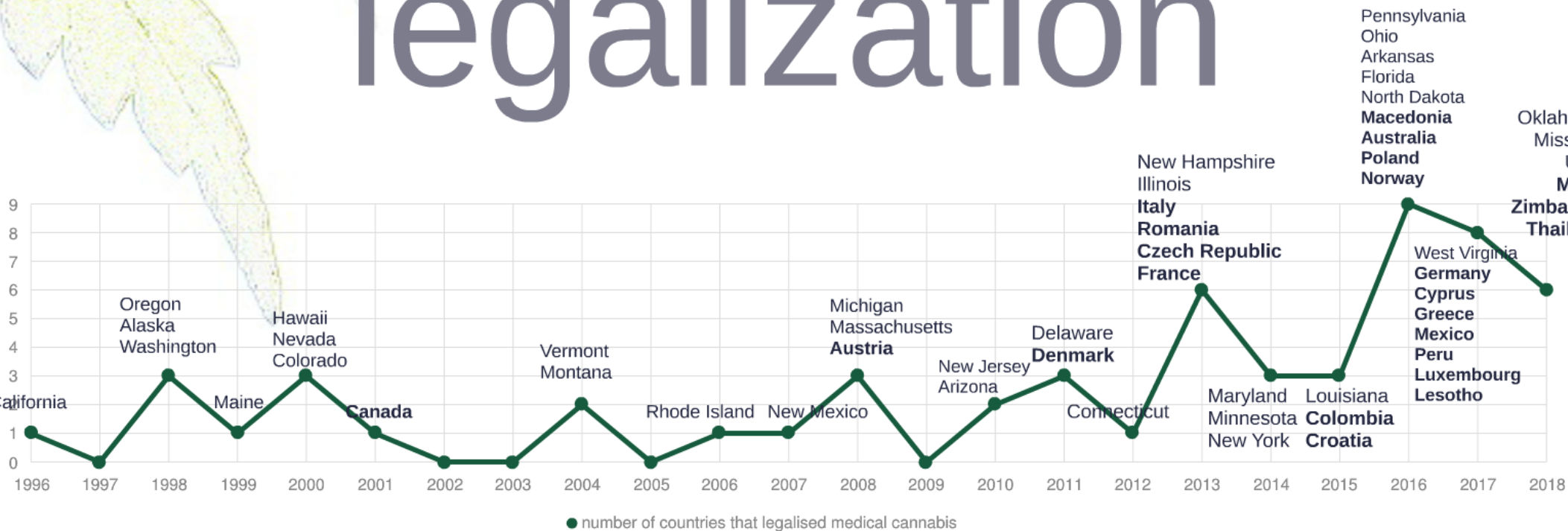


other than these, only an expensive, administrative-exhaustive and rather rare "individual import" process is allowed

Coverage of medical cannabis

- 1) Insurance companies obligatory cover the costs of procedures and of medical cannabis itself (Germany)
- 2) Flat rate is implemented on medical cannabis patients regardless the amount of the drug (Israel)
- 3) Patients cover the cost of medical cannabis themselves, and sometimes the visit at the doctor (most countries)
- 4) Any combination of 2+3 (some US states)
- 5) The cost of medical cannabis is subsidized by the state agency (planned in Denmark, Czech Republic, some other countries?)

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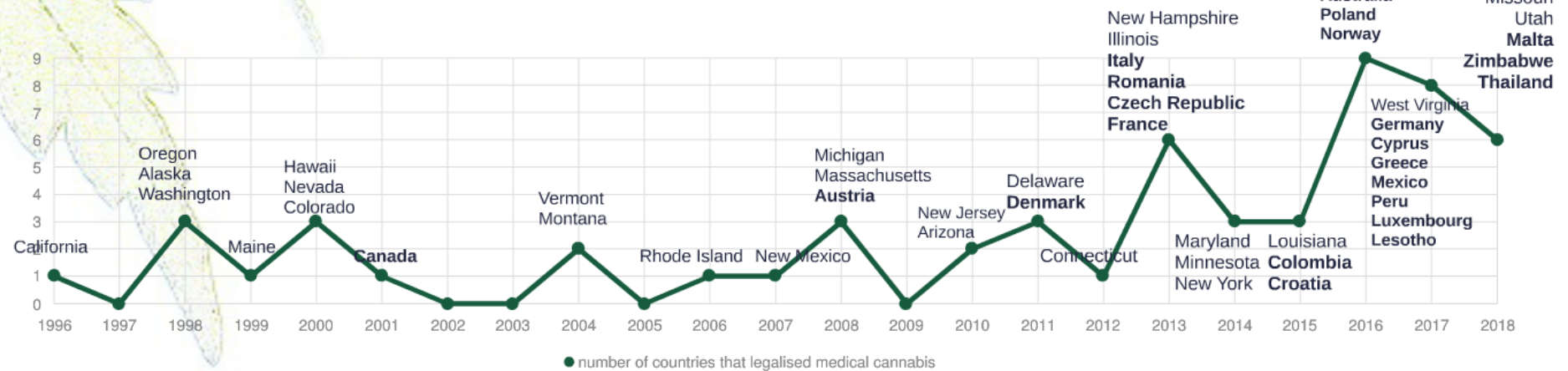


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Where are the patients who do not get regulated MC?

General population survey on drug use, addictive behaviours and related attitudes, 2016
Czech National Monitoring Center on Drugs and Addictions; sample size 4,3 thousand citizens
15+, fully representative for the Czech Republic, and specific gender strata



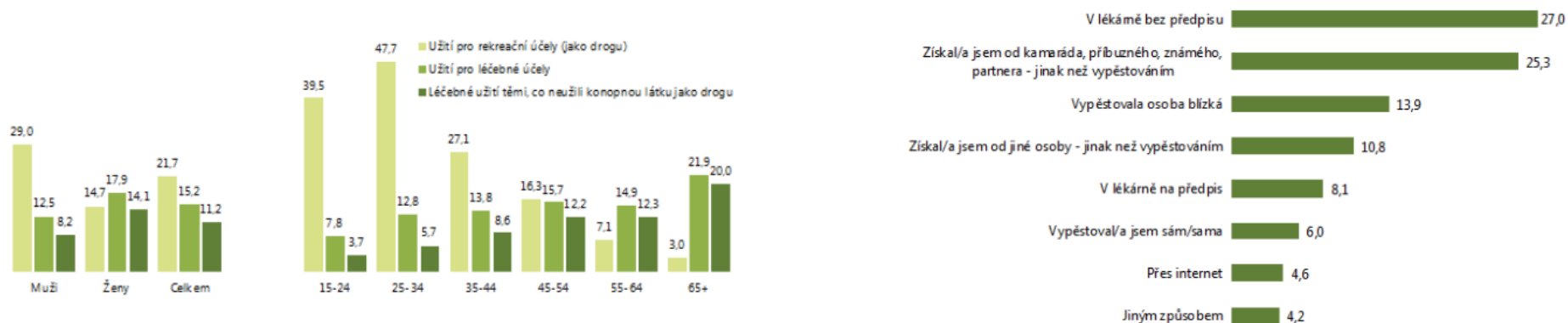
In other words, in the Czech Republic, there is 880 thousand (12% aged 15+) people who have used MC in last 12 months; out of these, 570 thousand (8%) have used the "criminal" THC-higher-than-0.3% non-pharmacy and unregulated cannabis with all the possible legal, and in particular, health consequences.

Questions for criminologists and sociologists (and/or any sane person)

- Is it justifiable to criminalize persons who want to improve their health?
- Is it feasible / realistic (and ethical) to put into prison 10+% of country's population?
- Is it the task of (democratic) governments to protect public health and to allow each individual within its jurisdiction for improvements of her/his individual health (see other UN Treaties)?
- What would be the consequence of your answers for your hypothetical work of political adviser at any level?

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Thank you for your
kind attention!

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