

Monitoring cannabis use & the changing cannabis policies landscape

& the controlled cannabis supply chain experiment in the Netherlands

05-05-2022

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This presentation

- What is happening in North- America, Europe: Malta, Germany, Luxemburg, Switzerland, Netherlands..?
- Monitoring & evaluation of the Dutch closed cannabis chain experiment
- Challenges in monitoring cannabis use and assessing policy impacts
- International initiatives



Wide variety of models regulating cannabis supply

With regard to objectives

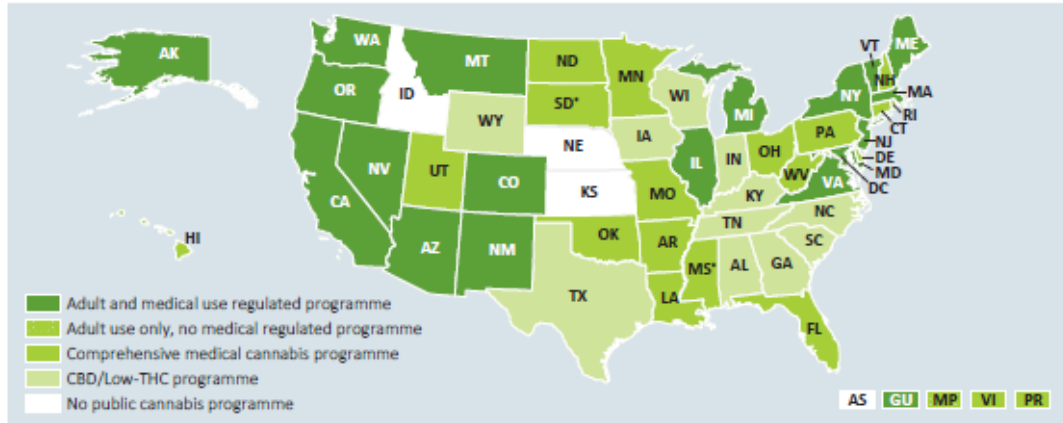
- Public Health
- Crime & safety
- Commercialisation

Kind of regulations

- Personal possession limits
- Age limits
- Quality control
- Limitations of THC levels
- Retail transaction limit
- Home cultivation
- Commercial production & sale
- Advertising
- Restrictions on use (locations)
- Taxation

Norht America

MAP 1 Jurisdictions in the United States that allow non-medical use of cannabis or medical use of cannabis and those that do not allow access to cannabis, April 2021



Source: National Conference of State Legislatures, April 2021.

* Limited adult possession and growing allowed. No regulated production or sale; D.C.

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

<https://www.ncsl.org/research/civil-and-criminal-justice/marijuana-overview.aspx>

US:

- Cannabis is legal for **medical purposes** in 38 states and DC.
- 18 states and Washington, DC have legalized **recreational marijuana**.

Canada

- In 2018, cannabis was legalized in Canada for recreational and medical purposes
- (It was already legal for medicinal purposes)



Invited review

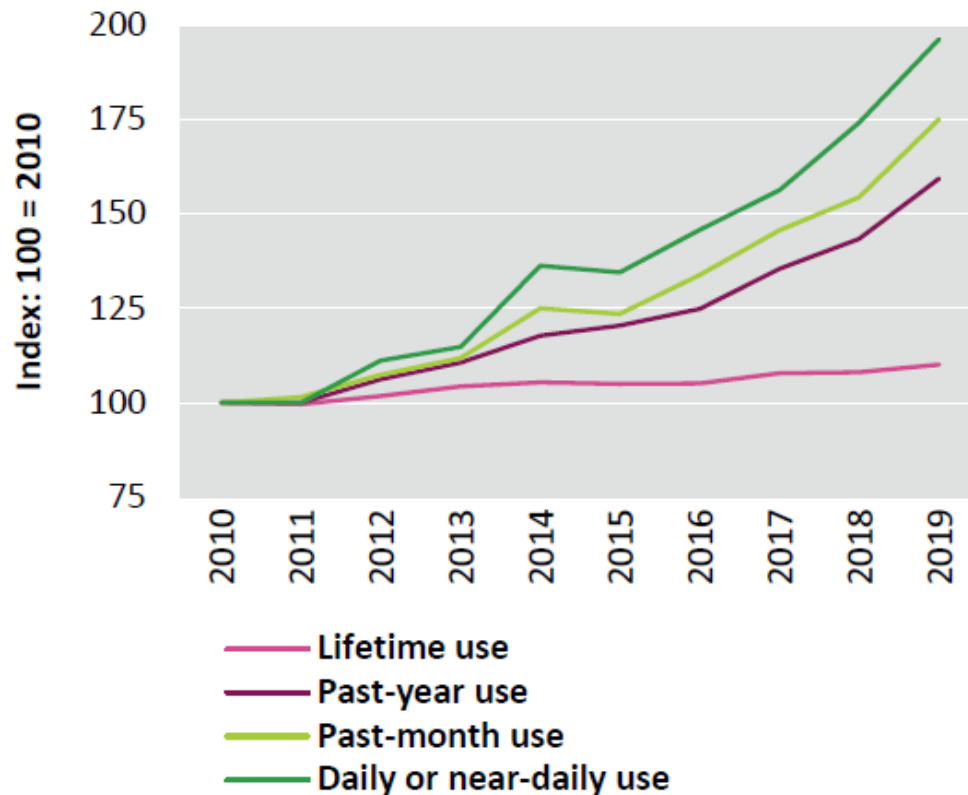
Public health impacts to date of the legalisation of medical and recreational cannabis use in the USA

Vivian Chiu ^{a,b,c,*}, Janni Leung ^{a,b,c}, Wayne Hall ^{b,d}, Daniel Stjepanović ^b, Louisa Degenhardt ^c

-"Warming of **public attitudes** toward legalisation, potentially influenced by the increasingly positive portrayal of cannabis in media and **declines in cannabis risk perceptions**.
- **Potency of cannabis products increased** significantly while **prices fell sharply**.
- Adults who use cannabis regularly were sensitive to prices, with an estimated 10% price reduction leading to about 2.5% increase in the rate of use.
- Overall, **past-year cannabis use has increased in adults** since 2002 (.....)
- **Traffic fatalities** involving cannabis temporarily increased in some states post-legalisation, and there were **more presentations to medical services** related to chronic regular cannabis use.
- There is suggestive evidence that **adverse health consequences** have increased among people who use cannabis regularly since legalization..."

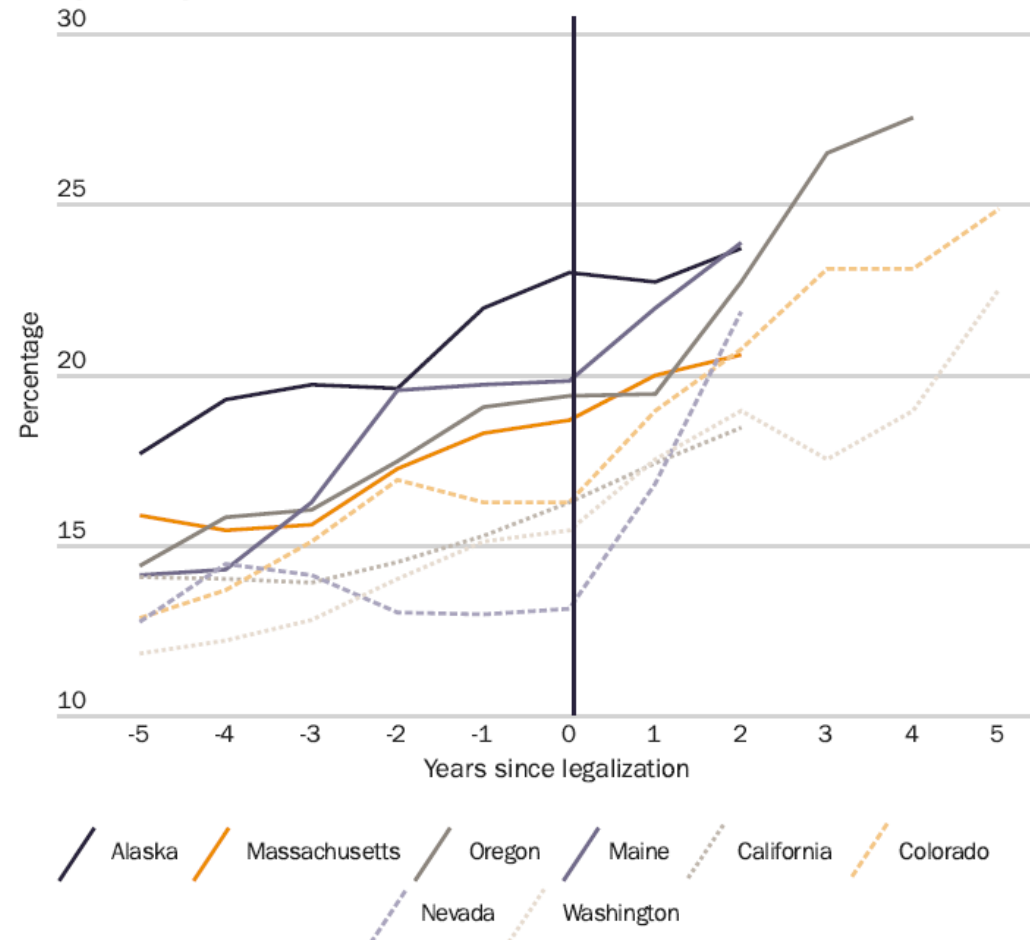
Trends cannabis use in US

FIG. 15 Trends in cannabis use among the population aged 18 and older, United States, 2010–2019



Source: United States, Substance Abuse and Mental Health Services Administration, *Results from the 2019 National Survey on Drug Use and Health: Detailed Tables* (Rockville, Maryland, 2020).

Figure 1
Past year marijuana use rate



Source: "National Survey on Drug Use and Health (NSDUH)," Substance Abuse and Mental Health Services Administration, 2003–2018, <https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health>.

“Legalizing states display higher and increasing rates of use prevalence, but these patterns existed prior to legalization.”

Recent developments (plans) in Europe



- Luxembourg: Home growing



(residents aged 18 and over will be allowed to grow up to 4 plants for personal use & carry 3 grams on their person in public)



- Switzerland: Pilots with regulated cannabis (different retail models)



- Germany: “Legal cannabis market” (licensed cultivation & selling in specialized shops to persons over 18 years)



- Malta: Non-profit social clubs & home cultivation



- Netherlands: Closed cannabis chain experiment (supply of quality controlled cannabis to coffeeshops)

Cannabis indicators

To be used in

- “Routine” monitoring systems
- Purposive/special (cannabis) surveys
- Evaluation studies
- Standardisation/harmonization is important for comparing potential impacts of policies
 - European Model Questionnaire
 - ESPAD/HBSC
 - European web survey
 - PLUS: TDI, emergencies (Euroden), market data,

Challenges: is our monitoring system fit for purpose?

Which indicators?

- Cannabis use versus cannabinoid exposure
- **Route of administration & product diversity** (smoking, vaping, edibles, pipes, with/without tobacco; concentrates; low THC/CBD products)
- **Medical versus recreational use** (NB: pharmaceutical cannabis on prescription versus recreational cannabis for self-medication)
- **HARMS:** Problem use (CAST?), Treatment demand, emergencies, mental health, traffic accidents
- **MARKET:** Price and potency (retail) of different products






Methodological issues

- Representative probability samples?
- Targeted surveys of cannabis users?
- Are high risk groups sufficiently covered?
- Frequency of assessments (annual...?)
- Establish baseline....!
- Feasibility....

International initiatives

ADDICTION

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The International Cannabis Toolkit (iCannToolkit): a multidisciplinary expert consensus on minimum standards for measuring cannabis use

Valentina Lorenzetti , Chandni Hindocha, Kat Petrilli, Paul Griffiths, Jamie Brown ... [See all authors](#) ✓

First published: 29 September 2021 | <https://doi.org/10.1111/add.15702>

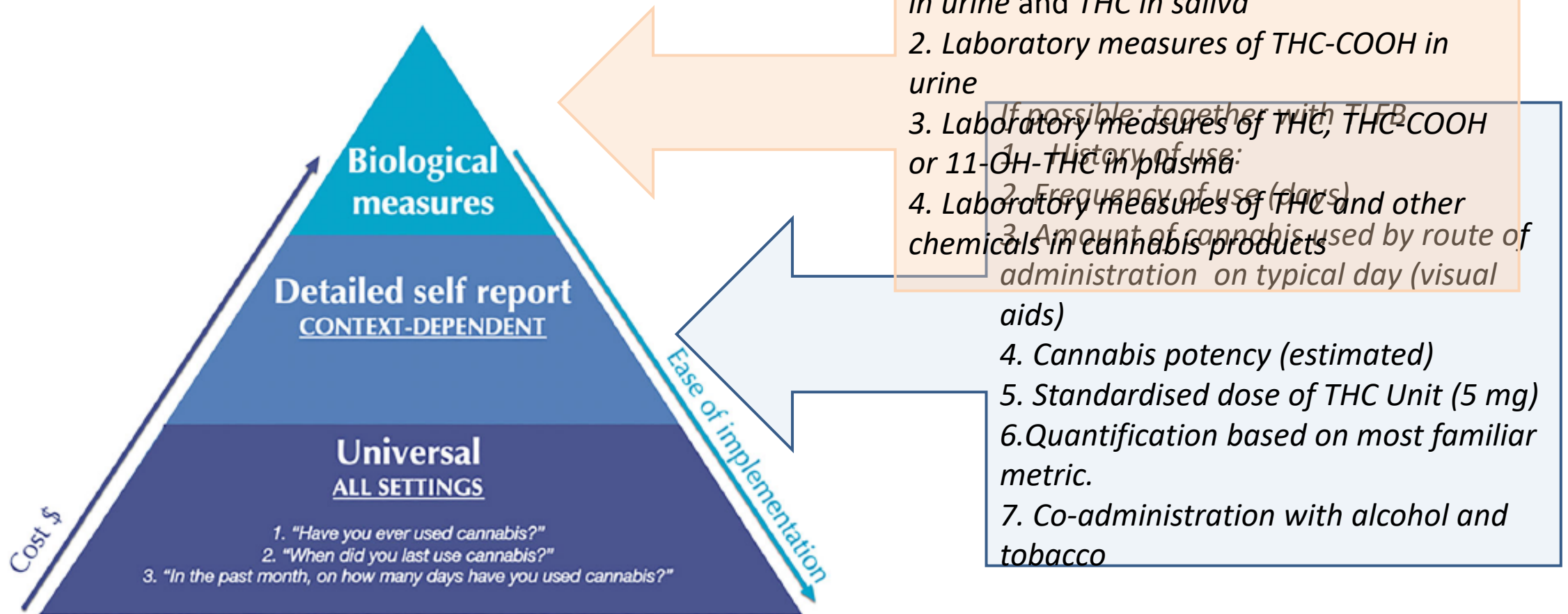
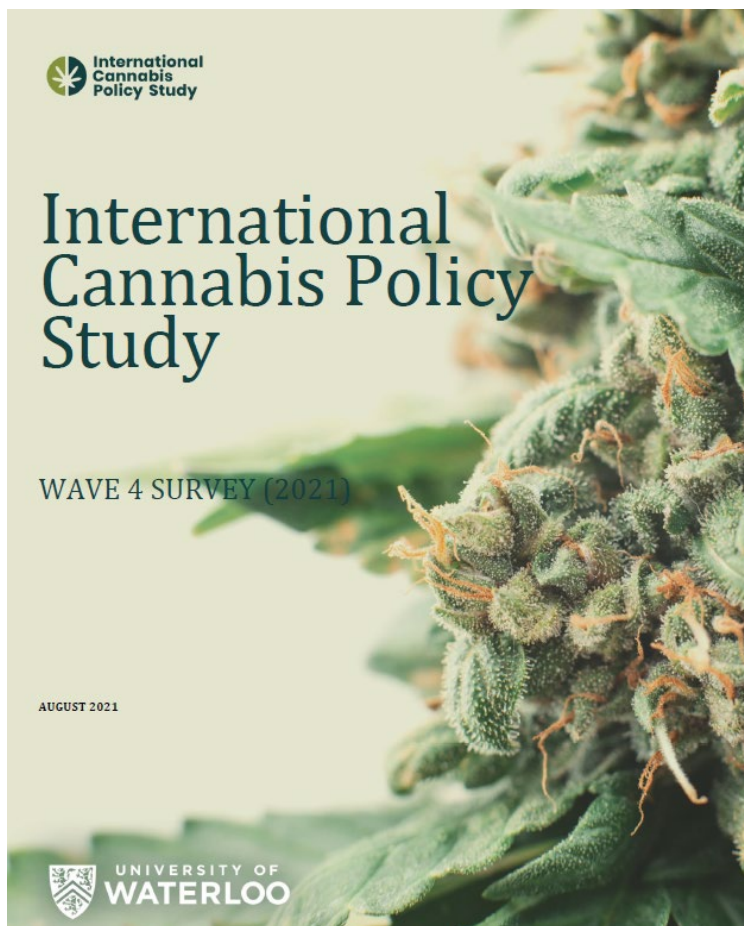


FIGURE 1 Expert consensus-based framework on minimum standards for quantifying cannabis use. From the base up, the measurements increase in cost and their ease of implementation diminishes



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1st wave:

- In Canada
- US states that had legalized non-medical cannabis
- US states in which non-medical cannabis was prohibited

European Cannabis Monitoring Toolkit?



- Long & short list of indicators
- Agreement on measures
- Agreement on best data collection instruments
- Integration in current KI standards
- Indicators selection ideally based on logic models or theory of change based policy evaluation models

Thank you for your attention