

Factsheet: Cannabis legalization

E-Vapes

Basics

- Cannabis extract (partly dissolved in carrier oil), which is vaporized using e-vapes.
- Components are extract / isolate and possibly carrier oil
- The higher the content of the extract (potency), the less carrier oil is required

Pro

- Fast onset of action
- High dosage control
- Long shelf life
- No burning process and therefore less risk for respiratory diseases than smoking (prerequisite: certified carrier oil, e.g. glycerin, MCT)

Contra

- Could encourage consumption due to easy handling
- Long-term effects of carrier oils only partially explored (Jensen et al., 2015)

Risk of illegal vapes

- Illegal vapes without end analysis may be contaminated with synthetic cannabinoids, heavy metals, pesticides, etc. (Guo et al. 2021)
- Illegal vapes may contain vitamin E acetate as a carrier, which was predicted to lead to "vape lung disease" (EVALI) (CDC, 2020)

Recommendation

- Allow sale of certified vape products
- MCT or glycerol should be used as a carrier oil
- Do not set a THC upper limit, otherwise more carrier oil must be used (with potentially stronger side effects than THC)
- "Disposable" vapes should be avoided as they can only be used once and create additional waste



Sources

- CDC (2020): https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html#what-we-know
- Guo et al. (2021): Major Constituents of Cannabis Vape Oil Liquid, Vapor and Aerosol in California Vape Oil Cartridge Samples. *Frontiers in Chemistry*, 21 June 2021 | <https://doi.org/10.3389/fchem.2021.694905>
- Jensen et al. (2015): Hidden Formaldehyde in E-Cigarette Aerosols. *New England Journal of Medicine* 2015; 372:392-394 https://www.nejm.org/doi/10.1056/NEJM1413069?url_ver=Z39.88-2003&rft_id=ori:rid:crossref.org&rft_dat=cr_pub%20%200www.ncbi.nlm.nih.gov