**July 29, 2022 - Association of cannabis potency with mental ill health and addiction: a systematic review.** Cannabis potency, defined as the concentration of Δ9-tetrahydrocannabinol (THC), has increased internationally, which could increase the risk of adverse health outcomes for cannabis users. We present, to our knowledge, [the first systematic review](https://www.sammn.org/s/Lancet-meta-analysis.pdf)of the association of cannabis potency with mental health and addiction (PROSPERO, CRD42021226447). We searched Embase, PsycINFO, and MEDLINE (from database inception to Jan 14, 2021). Included studies were observational studies of human participants comparing the association of high-potency cannabis (products with a higher concentration of THC) and low-potency cannabis (products with a lower concentration of THC), as defined by the studies included, with depression, anxiety, psychosis, or cannabis use disorder (CUD). Of 4171 articles screened, 20 met the eligibility criteria: eight studies focused on psychosis, eight on anxiety, seven on depression, and six on CUD. Overall, use of higher potency cannabis, relative to lower potency cannabis, was associated with an increased risk of psychosis and CUD. Evidence varied for depression and anxiety. The association of cannabis potency with CUD and psychosis highlights its relevance in health-care settings, and for public health guidelines and policies on cannabis sales. Standardization of exposure measures and longitudinal designs are needed to strengthen the evidence of this association.