

Global prevalence of heated tobacco product use, 2015 - 2021: a systematic review and meta-analysis.

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Introduction: *Heated tobacco products (HTPs) are electronic devices that heat tobacco to release aerosols that contain nicotine and other chemicals when inhaled. To inform future public health policy, this meta-analytic review estimated the global prevalence of HTP use by country, region, survey year, sex, and age group from nationally representative studies.*

Method: *Five databases were systematically searched between 2010, and 2021. Included studies reported prevalence of HTP use in nationally representative samples in populations of any age. Studies were excluded if data were drawn from specialist panels that did not apply appropriate weighting or did not use methods that ensured recruitment of a nationally representative sample. A random effects meta-analysis estimated overall prevalence for lifetime, current and daily use.*

Results: *There were 39 studies (n=864,040) identified representing 36 countries that met the inclusion criteria. The estimated prevalence for lifetime HTP use was 4.2% (95%CI:3.5,5.1), 1.4% (95%CI:1.0,1.7) for current use and 0.7% (95%CI:0.4,1.1) for daily use. Meta-regression showed that prevalence of current HTP use was higher for the Western Pacific Region (3.8% [95%CI:2.8,5.0]) compared to the European Region (0.8% [95%CI:0.7,1.0]) and the Region of the Americas (0.8% [95%CI:0.5,1.3]), males (3.4% [95%CI:2.1,4.9]) compared to females (1.2% [95%CI:0.8,1.7]) and older adults (>18 years) (2.2% [95%CI:1.5,3.1]) compared to adolescents (<18 years) (1.1% [95%CI:0.8,1.4]).*

Conclusions: *Overall, around 4% of the populations included in the meta-analysis had tried HTPs and just over 1% are current users. The prevalence of HTP use has increased in regions where HTPs can be legally sold and are heavily marketed.*

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