Use of e-cigarettes (vaping) has increased rapidly in recent years and is greatest in young people. In 2019, about 5 per cent of people aged 18-24 in Australia reported current vaping.

The global evidence shows that use of e-cigarettes can be harmful to health, particularly for non-smokers and youth. For most major health outcomes — like cancer, cardiovascular disease and mental illness — the impacts of e-cigarettes are not known, so their safety for these outcomes hasn’t been established.

NOT HARMLESS VAPOUR

There are 100s of chemicals in e-cigarettes, including formaldehyde, heavy metals, solvents, and volatile organic compounds.

CAUSES ADDICTION

Nicotine is highly addictive and exposure during adolescence can change the structure and function of the brain.

A GATEWAY TO SMOKING

Non-smokers who vape are three times as likely to take up regular smoking as non-smokers who don’t vape.

CAUSES INJURY

Impacts include poisoning, seizures, burns, and lung disease.

SMOKING CESSATION UNCLEAR

Evidence that e-cigarettes are effective for smoking cessation is limited. Most smokers who use e-cigarettes continue to smoke.

HARMFUL TO THE ENVIRONMENT

E-cigarettes contain single-use plastics and lithium batteries, cause pollution and can start fires.

Knowledge translation and visualisation by the PHXchange

Bank E, Yazidjoglou A, Brown S, Nguyen M, Martin M, Backwith K, Daluwatta A, Campbell S, Joshy G. Electronic cigarettes and health outcomes: systematic review of global evidence. Report for the Australian Department of Health, National Centre for Epidemiology and Population Health, Canberra: April 2022. The study was commissioned by the Australian Department of Health and was undertaken independently by researchers from the National Centre for Epidemiology and Population Health at The Australian National University.