

https://openresearch-repository.anu.edu.au/bitstream/1885/262914/1/Electronic%20cigarettes%20health%20outcomes%20review_2022_WCAG.pdf.

Report of Centre for Epidemiology & Population Health, Australian National University, for the Australian Department of Health, by Banks et al. 2022:

Electronic cigarettes and health outcomes: systematic review of global evidence

- Smoking and nicotine cessation – *limited/insufficient/no evidence*
- Smoking uptake – *strong evidence* that never smokers who use e-cigs are around three times more likely to initiate cigarette smoking; *strong evidence* that non-smokers who use e-cigarettes are around three times more likely to become current cigarette smokers; *limited evidence* that former smokers who use e-cigarettes are more likely to relapse to smoking. Conclusions highlight particular concerns for youth uptake and state that nicotine e-cigs are highly addictive and underpinning increasing and widespread use among children and adolescents
- Respiratory health outcomes – *conclusive evidence* that the use of e-cigarettes can cause respiratory disease (half of cases relating to THC plus vitamin E acetate, 14% patients reporting use of nicotine delivering products only, indicating the latter can cause EVALI)
- Burns and injuries – *conclusive evidence*
- Poisoning – *conclusive evidence*
- Environmental hazards with health implications – *conclusive evidence* of increased airborne particulate matter indoors; *substantial evidence* that e-cigarettes can cause fires and environmental waste
- Neurological outcomes – *conclusive evidence* that the use of e-cigarettes can lead to seizures
- Less serious adverse effects – *moderate evidence* of symptoms like throat irritation, cough, dizziness, headaches occurring with the use of nicotine e-cigarettes
- Conclusions state that dual e-cigs/cigs use is the commonest pattern, generally considered an adverse outcome.