

Tobacco in Australia

Facts & Issues

Relevant news and research

4.9 Lung cancer and secondhand smoke

Last updated December 2022

Research:

Blechter, B, Chien, LH, Chen, TY, Chang, IS, Choudhury, PP, Hsiao, CF et al. (2023). Polygenic Risk Score, Environmental Tobacco Smoke, and Risk of Lung Adenocarcinoma in Never-Smoking Women in Taiwan. *JAMA Netw Open*, 6(11), e2339254. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/37955902>

He, H, & Zhong, R. (2022). Reply to: "Early Life Exposure to Tobacco Smoke and Lung Cancer in Adulthood". *Am J Respir Crit Care Med*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36191307>

Liu, N, & Xiong, W. (2022). Early Life Exposure to Tobacco Smoke and Lung Cancer in Adulthood. *Am J Respir Crit Care Med*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36191304>

Stepanek, L, Sevcikova, J, Horakova, D, Patel, MS, & Durdakova, R. (2022). Public Health Burden of Secondhand Smoking: Case Reports of Lung Cancer and a Literature Review. *Int J Environ Res Public Health*, 19(20). Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36293731>

Kurmi, OP. (2022). Household Air Pollution, Passive Smoking, and Lung Cancer: Do We Know Enough About This Conundrum? *Am J Respir Crit Care Med*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/36095140>

Zhang, Z, Li, Z, Zhang, X, Ye, W, Chen, J, Wang, L et al. (2022). Association between secondhand smoke and cancers in adults in the US population. *J Cancer Res Clin Oncol*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/35943599>

Cheng, ES, Chan, KH, Weber, M, Steinberg, J, Young, J, Canfell, K, & Yu, XQ. (2022). Solid Fuel, Second-Hand Smoke, and Lung Cancer Mortality: A Prospective Cohort of 323,794 Chinese Never-

tobaccoinaustralia.org.au

Smokers. *Am J Respir Crit Care Med*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/35616543>

Hori, M, Tanaka, H, Saito, E, Wakai, K, & Katanoda, K. (2021). Response to the Dr Shikata's letter: 'Secondhand smoke exposure and risk of lung cancer in Japan: a systematic review and meta-analysis of epidemiologic studies'. *Jpn J Clin Oncol*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/33454775>

Dubin, S, & Griffin, D. (2020). Lung Cancer in Non-Smokers. *Mo Med*, 117(4), 375-379. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/32848276>

Li, J, Xu, HL, Yao, BD, Li, WX, Fang, H, Xu, DL, & Zhang, ZF. (2020). Environmental Tobacco Smoke and Cancer Risk, a Prospective Cohort Study in a Chinese Population. *Environ Res*, 110015. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/32818497>

Abdel-Rahman, O. (2020). Incidence and Mortality of Lung Cancer Among Never Smokers in Relationship to Secondhand Smoking: Findings From the PLCO Trial. *Clin Lung Cancer*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32389507>

Du, Y, Cui, X, Sidorenkov, G, Groen, HJM, Vliegenthart, R Heuvelmans, M.A et al (2020). Lung cancer occurrence attributable to passive smoking among never smokers in China: a systematic review and meta-analysis. *Transl Lung Cancer Res*, 9(2), 204-217. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32420060>

Bhopal, A, Peake, MD, Gilligan, D, & Cosford, P. (2019). Lung cancer in never-smokers: a hidden disease. *J R Soc Med*, 141076819843654. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31022354>

Dao, D, O'Connor, JM, Jatoi, A, Ridgeway, J, Deering, E, Schwecke, A et al. (2019). A qualitative study of healthcare-related experiences of non-smoking women with lung cancer. *Support Care Cancer*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30989430>

Butler, KM, Huntington-Moskos, L, Rayens, MK, Wiggins, AT, Hahn, EJ. Perceived Synergistic Risk for Lung Cancer After Environmental Report-Back Study on Home Exposure to Tobacco Smoke and Radon. *Am J Health Promot*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30092646>

Sheng, L, Tu, JW, Tian, JH, Chen, HJ, Pan, CL, Zhou, RZ. A meta-analysis of the relationship between environmental tobacco smoke and lung cancer risk of nonsmoker in China. *Medicine (Baltimore)*. 2018 Jul;97(28):e11389. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29995781>

He, F, Xie, JX, Liu, CL, Xiong, WM, Xu, QP, Liu, ZQ, Lin, T, Xiao, RD, Li, X, Cai, L. The relationship of lung cancer with menstrual and reproductive factors may be influenced by passive smoking, cooking oil fumes, and tea intake: A case-control study in Chinese women. *Medicine (Baltimore)*. 2017 Nov;96(46):e8816. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29145344>

Sun, YQ, Chen, Y, Langhammer, A, Skorpen, F, Wu, C, Mai, XM. Passive smoking in relation to lung cancer incidence and histologic types in Norwegian adults: the HUNT study. *Eur Respir J*. 2017 Oct 12;50(4). pii: 1700824. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29025890>

Becher, H, Belau, M, Winkler, V, Aigner, A. Estimating lung cancer mortality attributable to second hand smoke exposure in Germany. *Int J Public Health*, 2017. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28756465>

Hori, M, Tanaka, H, Wakai, K, Sasazuki, S, Katanoda, K. Secondhand smoke exposure and risk of lung cancer in Japan: a systematic review and meta-analysis of epidemiologic studies. *Jpn J Clin Oncol*, Aug 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27511987>

Li, W, Tse, LA, Au, JS, Wang, F, Qiu, H, Yu, IT. Secondhand smoke enhances lung cancer risk in male smokers: an interaction. *Nicotine Tob Res*, Apr 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27107433>

Kim, CH et al. Secondhand tobacco smoke exposure and lung adenocarcinoma in situ/minimally invasive adenocarcinoma (AIS/MIA). *Cancer Epidemiol Biomarkers Prev*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26503035>

Lee, HW et al. Cigarette side-stream smoke lung and bladder carcinogenesis: inducing mutagenic acrolein-DNA adducts, inhibiting DNA repair and enhancing anchorage-independent-growth cell transformation. *Oncotarget*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26431382>

Couraud, S et al. No impact of passive smoke on the somatic profile of lung cancers in never-smokers. *The European Respiratory Journal*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25745045>

No authors listed. Patient pages. Secondhand smoke causes lung cancer. *The Journal of the Oklahoma State Medical Association*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25790608>

News reports:

Campbell, D. One in six people dying of lung cancer in UK are non-smokers, experts say *The Guardian*, 2019. Apr 26, 2019. Available from: <https://www.theguardian.com/society/2019/apr/26/one-in-six-people-dying-of-lung-cancer-in-uk-are-non-smokers-experts-say>

No authors listed. Over 30% of lung cancer patients exposed to passive smoking: survey. *Japan Today*, 2017. Oct 20, 2017. Available from: <https://japantoday.com/category/national/over-30-of-lung-cancer-patients-exposed-to-passive-smoking-survey>

Bankhead, Charles . Lung cancer on the rise in nonsmokers – but why? *Medpage Today*, 2015. Sept 9, 2015. Available from: http://www.medpagetoday.com/MeetingCoverage/IASLC/53476?xid=nl_mpt_DHE_2015-09-10&eun=g220600d0r