

Tobacco in Australia

Facts & Issues

Relevant news and research

2.6 Comparisons of quality and results using various estimates of tobacco consumption in Australia

Last updated January 2021

Research:	1
2.6.1 Limitations of data	5
News reports:	5

Research:

Bade, R, White, JM, Tscharke, BJ, Ghetia, M, Abdelaziz, A, & Gerber, C. (2020). Anabasine-based measurement of cigarette consumption using wastewater analysis. *Drug Test Anal*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32506745>

Rossouw, L, & Vellios, N. (2019). Dataset on discarded cigarette packs in Mongolia. *Data Brief*, 26, 104452. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31667224>

Saddleson, ML, Wileyto, EP, Darwar, R, Ware, S, Strasser, AA. The Importance of Filter Collection for Accurate Measurement of Cigarette Smoking. *Tob Regul Sci*. 2017 Jul;3(3):248-257. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30135863>

Jeong, M, Zhang, D, Morgan, JC, Ross, JC, Osman, A, Boynton, MH, Mendel, JR, Brewer, NT. Similarities and Differences in Tobacco Control Research Findings From Convenience and Probability Samples. *Ann Behav Med*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30052702>

tobaccoinaustralia.org.au

Eberth, JM, McLain, AC, Hong, Y, Sercy, E, Diedhiou, A, Kilpatrick, DJ. Estimating county-level tobacco use and exposure in South Carolina: a spatial model-based small area estimation approach. *Ann Epidemiol*, Apr 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29685650>

Imtiaz, MH, Ramos-Garcia, RI, Senyurek, VY, Tiffany, S, Sazonov, E. Development of a Multisensory Wearable System for Monitoring Cigarette Smoking Behavior in Free-Living Conditions. *Electronics (Basel)*. 2017 Dec;6(4). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29607211>

Schober, MF, Suessbrick, AL, Conrad, FG. When Do Misunderstandings Matter? Evidence From Survey Interviews About Smoking. *Top Cogn Sci*, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29630774>

Siegel, DA, Henley, SJ, Wike, JM, Ryerson, AB, Johnson, CJ, Rees, JR, Pollack, LA, Enhancement of, Npcr for Comparative Effectiveness Research Team. Capture of tobacco use among population-based registries: Findings from 10 National Program of Cancer Registries states. *Cancer*, 2018. Mar 26, 2018. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29579317>

Shiffman, S, Scholl, SM. Three Approaches to Quantifying Cigarette Consumption: Data From Nondaily Smokers. *Psychol Addict Behav*. 2018 Jan 25. pii: 2018-03106-001. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29369671>

Garey, L, Manning, K, Jardin, C, Leventhal, AM, Stone, M, Raines, AM, Pang, RD, Neighbors, C, Schmidt, NB, Zvolensky, MJ. Smoking Consequences Questionnaire: A Reevaluation of the Psychometric Properties Across Two Independent Samples of Smokers. *Psychol Assess*, 2017. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28782978>

Banks, APW, Lai, FY, Mueller, JF, Jiang, G, Carter, S, Thai, PK. Potential impact of the sewer system on the applicability of alcohol and tobacco biomarkers in wastewater-based epidemiology. *Drug Test Anal*, Jul 2017. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28688172>

Kraemer, JD, Strasser, AA, Lindblom, EN, Niaura, RS, Mays, D. Crowdsourced data collection for public health: A comparison with nationally representative, population tobacco use data. *Prev Med*. 2017 Jul 8;102:93-99. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28694063>

Lai, FY, Been, F, Covaci, A, van Nuijs, A. Novel wastewater-based epidemiology approach based on liquid chromatography-tandem mass spectrometry for assessing population exposure to tobacco-specific toxicants and carcinogens. *Anal Chem*, 2017. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28737035>

Wilson, N, Pearson, AL, Thomson, G, Edwards, R. Actual and potential use of Google Street View for studying tobacco issues: a brief review. *Tob Control*, Jun 2017. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28667093>

Berkowitz, Z, Zhang, X, Richards, TB, Peipins, L, Henley, SJ, Holt, J. Multilevel small-area estimation of multiple cigarette smoking status categories using the 2012 Behavioral Risk Factor Surveillance System. *Cancer Epidemiol Biomarkers Prev*. 2016 Oct;25(10):1402-1410. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27697795>

Tomintz, M, Kosar, B, Clarke, G. smokeSALUD: exploring the effect of demographic change on the smoking prevalence at municipality level in Austria. *Int J Health Geogr*. 2016 Oct 7;15(1):36. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27717358>

Reid, G, Robinson, M. How valid and reliable are cigarette retail sales data for estimating population cigarette consumption? A case study in Scotland. *Nicotine Tob Res*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27613887>

Blank, MD, Breland, AB, Enlow, PT, Duncan, C, Metzger, A, Cobb, CO. Measurement of smoking behavior: comparison of self-reports, returned cigarette butts, and toxicant levels. *Exp Clin Psychopharmacol*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27347741>

Guillory, J, Lisha, N, Lee, YO, Ling, PM. Phantom smoking among young adult bar patrons. *Tobacco Control*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27048205>

Soulakova, JN, Huang, H, Crockett, LJ. Racial/ethnic disparities in consistent reporting of smoking-related behaviors. *J Addict Behav Ther Rehabil*. 2015;4(4). Available from: <http://www.ncbi.nlm.nih.gov/pubmed/27088100>

Wang, DG et al. Using Monte Carlo simulation to assess variability and uncertainty of tobacco consumption in a city by sewage epidemiology. *BMJ Open*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26888732>

Desai, RJ et al. Identification of smoking using Medicare data - a validation study of claims-based algorithms. *Pharmacoepidemiol Drug Saf*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26764576>

Pike, JR et al. Developing an internet- and mobile-based system to measure cigarette use among Pacific Islanders: an ecological momentary assessment study. *JMIR Mhealth Uhealth*, 2016. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26743132>

Mackulak, T et al. Evaluation of different smoking habits during music festivals through wastewater analysis. *Environ Toxicol Pharmacol*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26606646>

Wray, JM et al. A comparative evaluation of self-report and biological measures of cigarette use in nondaily smokers. *Psychol Assess*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26479132>

Alberg, AJ et al. The validity of self-reported recent smoking in head and neck cancer surgical patients. *Otolaryngology--Head and Neck Surgery*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26195573>

Tscharke, BJ et al. Estimates of tobacco use by wastewater analysis of anabasine and anatabine. *Drug Testing and Analysis*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26198173>

Wilson, AG et al. Behavioral economics of cigarette purchase tasks: within-subject comparison of real, potentially real, and hypothetical cigarettes. *Nicotine & Tobacco Research*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26187389>

Griffith, SD et al. Model-based imputation of latent cigarette counts using data from a calibration study. *International Journal of Methods in Psychiatric Research*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26081923>

Philibert, R et al. A quantitative epigenetic approach for the assessment of cigarette consumption. *Frontiers in Psychology*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26082730>

Stelmach, R et al. Comparison between objective measures of smoking and self-reported smoking status in patients with asthma or COPD: are our patients telling us the truth? *Jornal Brasileiro de Pneumologia*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25972966>

Christensen, AI et al. What is wrong with non-respondents? Alcohol-, drug- and smoking related mortality and morbidity in a 12-year follow up study of respondents and non-respondents in the Danish Health and Morbidity Survey. *Addiction*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25845815>

Khariwala, SS et al. Self-reported Tobacco use does not correlate with carcinogen exposure in smokers with head and neck cancer. *Laryngoscope*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25877866>

Gass, JC et al. The reliability and stability of puff topography variables in non-daily smokers assessed in the laboratory. *Nicotine & Tobacco Research*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25744955>

Grace, RC et al. Assessing the temporal stability of a cigarette purchase task after an excise tax increase for factory-made and roll-your-own smokers. *Nicotine & Tobacco Research*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25744952>

Howland, RE et al. Reliability of reported maternal smoking: comparing the birth certificate to maternal worksheets and prenatal and hospital medical records, New York City and Vermont, 2009. *Maternal and Child Health Journal*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25676044>

Kaestle, CE. Age of smoking milestones: longitudinal inconsistencies and recanting. *The Journal of Adolescent Health*, 2015. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25659993>

Al-Sheyab N, Kheirallah KA, Mangnall LJ, and Gallagher R. Agreement between exhaled breath carbon monoxide threshold levels and self-reported cigarette smoking in a sample of male adolescents in Jordan. *Int J Environ Res Public Health*, 2015; 12(1):841-54. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25599375>

Tennekoon V and Rosenman R. The Pot Calling the Kettle Black? A Comparison of Measures of Current Tobacco Use. *Appl Econ*, 2015; 47(5):431-448. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25587199>

Berg CJ. Reasons for Nondaily Smoking among Young Adults: Scale Development and Validation. *J Smok Cessat*, 2014; 9(1):17-25. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25258646>

Thurl J, Buhler A, and Ferguson SG. An Internet-Based Ecological Momentary Assessment Study Relying on Participants' Own Mobile Phones: Insights from a Study with Young Adult Smokers. *Eur Addict Res*, 2014; 21(1):1-5. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25342514>

Pulcu E. Self-report distortions of puffing topography in daily smokers. *J Health Psychol*, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25504771>

Wu C, Thompson ME, Fong GT, Jiang Y, Yang Y, et al. Methods of the International Tobacco Control (ITC) China Survey: waves 1, 2 and 3. *Tob Control*, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25550421>

Soulakova JN, Bright BC, and Crockett LJ. On Consistency of Self- and Proxy-reported Regular Smoking Initiation Age. *J Subst Abus Alcohol*, 2013; 1(1):1001. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25408943>

2.6.1 Limitations of data

Szklo, AS, & Iglesias, RM. (2020). [Interference by the tobacco industry in data on cigarette consumption in Brazil]. *Cad Saude Publica*, 36(12), e00175420. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/33331554>

Senyurek, VY, Imtiaz, MH, Belsare, P, Tiffany, S, & Sazonov, E. (2020). A CNN-LSTM neural network for recognition of puffing in smoking episodes using wearable sensors. *Biomed Eng Lett*, 10(2), 195-203. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32431952>

News reports: