

Tobacco in Australia

Facts & Issues

Relevant news and research

4.13 Secondhand smoke and type 2 diabetes

Last updated October 2020

Research:

Rias, YA, Gordon, CJ, Niu, SF, Wiratama, BS, Chang, CW, & Tsai, HT. (2020). Secondhand Smoke Correlates with Elevated Neutrophil-Lymphocyte Ratio and Has a Synergistic Effect with Physical Inactivity on Increasing Susceptibility to Type 2 Diabetes Mellitus: A Community-Based Case Control Study. *Int J Environ Res Public Health*, 17(16). Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/32781787>

Kim, BJ, Kim, JH, Kang, JG, Kim, BS, & Kang, JH. (2020). Association between secondhand smoke exposure and diabetes mellitus in 131,724 Korean never-smokers using self-reported questionnaire and cotinine levels: Gender differences. *J Diabetes*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/32613744>

Wu, J, Pan, G, Huang, YT, Liu, DK, Zeng, HX, Zhou, XJ et al (2020). Effects of passive smoking and its duration on the prevalence of prediabetes and type 2 diabetes mellitus in Chinese women. *Aging (Albany NY)*, 12. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32453705>

Oba, S, Goto, A, Mizoue, T, Inoue, M, Sawada, N, Noda, M, & Tsugane, S. (2020). Passive smoking and type 2 diabetes among never-smoking women: The Japan Public Health Center-based Prospective Study. *J Diabetes Investig*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32232941>

Mukharjee, S, Bank, S, & Maiti, S. (2020). Chronic Tobacco Exposure by Smoking develops Insulin Resistance. *Endocr Metab Immune Disord Drug Targets*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32065107>

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Zhang, M, Yang, Y, Liu, F, Jia, J, Qin, X, Wang, L et al. (2019). The association of husband smoking with wives' dysglycemia status: a cross-sectional study among over 10 million Chinese women aged 20-49. *J Diabetes*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31747113>

Huang, C, Chen, G, Zhang, M, Lu, Y, Hua, Y, Hu, Y et al. (2019). Association between environmental tobacco smoke exposure and risk of type 2 diabetes mellitus in Chinese female never-smokers: a population-based cohort study. *J Diabetes*. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31642603>

Jiang, L, Chang, J, Ziogas, A, Deapen, D, Reynolds, P, Bernstein, L, & Anton-Culver, H (2019). Secondhand smoke, obesity, and risk of type II diabetes among California teachers. *Ann Epidemiol*, 32, 35-42. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30846276>

Chen, HJ, Li, GL, Sun, A, Peng, DS, Zhang, WX, & Yan, YE. (2019). Age Differences in the Relationship between Secondhand Smoke Exposure and Risk of Metabolic Syndrome: A Meta-Analysis. *Int J Environ Res Public Health*, 16(8). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31010129>

Calcaterra, V, Winickoff, JP, Klersy, C, Schiano, LM, Bazzano, R, Montalbano, C, Musella, V, Regalbuto, C, Larizza, D, Cena, H. Smoke exposure and cardio-metabolic profile in youth with type 1 diabetes. *Diabetol Metab Syndr*. 2018 Jul 6;10:53. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29989097>

Kim, BJ, Han, JM, Do, JH, Kim, BS, Kang, JH. Sex-specific relationship between cotinine-verified second-hand smoke exposure and diabetes in 85,697 never-smokers. *Atherosclerosis*. 2017 Aug;263:e254. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29365970>

Kermah, D, Shaheen, M, Pan, D, Friedman, TC. Association between secondhand smoke and obesity and glucose abnormalities: data from the National Health and Nutrition Examination Survey (NHANES 1999-2010). *BMJ Open Diabetes Res Care*. 2017 Mar 21;5(1):e000324. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28405342>

van Waateringe, RP, Mook-Kanamori, MJ, Slagter, SN, van der Klauw, MM, van Vliet-Ostapchouk, JV, Graaff, R, Lutgers, HL, Suhre, K, El-Din Selim, MM, Mook-Kanamori, DO, Wolffenbuttel, BHR. The association between various smoking behaviors, cotinine biomarkers and skin autofluorescence, a marker for advanced glycation end product accumulation. *PLoS One*. 2017 Jun 20;12(6):e0179330. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/28632785>

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Kim, D, Yoon, SC, Park, EC. Association between secondhand smoke and glycemic control in adult diabetes patients. *Prev Med*. 2016 Nov 14. pii: S0091-7435(16)30366-8. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/27856339>

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Faggiano F and Allara E. Passive smoke exposure and type-2 diabetes: is it time for action? *Endocrine*, 2014. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/25239204>

News reports:

Campbell, Denis. Passive smoking raises risk of type 2 diabetes. *The Guardian*, 2015. Sept 18, 2015. Available from: <http://www.theguardian.com/society/2015/sep/17/passive-smoking-raises-diabetes-type-2-risk>