

Diabetes and the Environment

Fact Sheet Citations

1. Centers for Disease Control and Prevention. *Basics About Diabetes*. 15 Jun 2021. <http://www.cdc.gov/diabetes/consumer/learn.htm>
2. Diabetes Partners in Action Coalition (DPAC), Michigan Department of Community Health's Diabetes Prevention and Control Program. (2011). *The Diabetes Burden Report and the Michigan Diabetes Action Report: 2011-2014*. http://www.michigan.gov/documents/mdch/2011_Burden_Report_365233_7.pdf
 - a. Michigan Department of Health and Human Services. (2019). *Diabetes in Michigan: Update*. https://www.michigan.gov/documents/mdhhs/diabetes-in-Michigan-update-2019_658300_7.pdf
3. Michigan Department of Community Health. (2021). *Health Indicators and Risk Estimates by Community Health Assessment Regions & Local Health Departments, Selected Tables, Michigan Behavioral Risk Factor Survey 2017-2019*. https://www.michigan.gov/documents/mdhhs/2017-2019_MiBRFSS_Reg_LHD_Tables_714467_7.pdf
4. U. S. Environmental Protection Agency. (n.d.). *EPA in Detroit and Downriver Communities*. <https://www.epa.gov/mi/epa-detroit-and-downriver-communities>
5. Jerrold J. Heindel, Bruce Blumberg, Mathew Cave, Ronit Machtinger, Alberto Mantovani, Michelle A. Mendez, Angel Nadal, Paola Palanza, Giancarlo Panzica, Robert Sargis, Laura N. Vandenberg, Frederick vom Saal. (2017). Metabolism disrupting chemicals and metabolic disorders, *Reproductive Toxicology*, 68, 3-33. <https://doi.org/10.1016/j.reprotox.2016.10.001>.
6. Thayer KA, Heindel JJ, Bucher JR, Gallo MA. (2012). Role of Environmental Chemicals in Diabetes and Obesity: A National Toxicology Program Workshop Report. *Environmental Health Perspectives*, 120(6). <http://dx.doi.org/10.1289/ehp.1104597>.
7. National Institute of Environmental Health Sciences. (2021). *Endocrine Disruptors*. <https://www.niehs.nih.gov/health/topics/agents/endocrine/index.cfm>
8. Neel, B.A., Sargis, R. M. (2011). The Paradox of Progress: Environmental Disruption of Metabolism and the Diabetes Epidemic. *Diabetes*. 60(7): 1838-1848. <https://doi.org/10.2337/db11-0153>
9. Sargis, R.M., Simmons, R.A. (2019). Environmental neglect: endocrine disruptors as underappreciated but potentially modifiable diabetes risk factors. *Diabetologia* 62, 1811–1822. <https://doi.org/10.1007/s00125-019-4940-z>
10. Provisiero, D. P., Pivonello, C., Muscogiuri, G., Negri, M., de Angelis, C., Simeoli, C., Pivonello, R., & Colao, A. (2016). Influence of Bisphenol A on Type 2 Diabetes Mellitus. *International journal of environmental research and public health*, 13(10), 989. <https://doi.org/10.3390/ijerph13100989>

11. Environmental Protection Agency. (2021). *Persistent Organic Pollutants: A Global Issue, A Global Response*.
<https://www.epa.gov/international-cooperation/persistent-organic-pollutants-global-issue-global-response>
12. Charles D, Berg V, Nøst TH, Bergdahl IA, Huber S, Ayotte P, Wilsgaard T, Averina M, Sandanger T, Rylander C. (2021). Longitudinal changes in concentrations of persistent organic pollutants (1986-2016) and their associations with type 2 diabetes mellitus. *Environmental Research*, 204(Pt B):112129. <https://doi.org/10.1016/j.envres.2021.112129>
13. Taylor, K. W., Novak, R. F., Anderson, H. A., Birnbaum, L. S., Blystone, C., Devito, M., Jacobs, D., Köhrle, J., Lee, D. H., Rylander, L., Rignell-Hydbom, A., Tornero-Velez, R., Turyk, M. E., Boyles, A. L., Thayer, K. A., & Lind, L. (2013). Evaluation of the association between persistent organic pollutants (POPs) and diabetes in epidemiological studies: a national toxicology program workshop review. *Environmental health perspectives*, 121(7), 774–783.
<https://doi.org/10.1289/ehp.1205502>
14. Centers for Disease Control and Prevention. (n.d.). *National Biomonitoring Program: Phthalates Factsheet*. https://www.cdc.gov/biomonitoring/Phthalates_FactSheet.html
15. Benjamin, S., Masai, E., Kamimura, N., Takahashi, K., Anderson, R. C., Faisal, P. A. (2017). *Phthalates impact human health: Epidemiological evidences and plausible mechanism of action*, *Journal of Hazardous Materials*, 340, 360-383. <https://doi.org/10.1016/j.jhazmat.2017.06.036>.
16. Radke, E. G., Galizia, A., Thayer, K. A., Cooper, G. S. (2019). Phthalate exposure and metabolic effects: a systematic review of the human epidemiological evidence, *Environment International*, 132. <https://doi.org/10.1016/j.envint.2019.04.040>.
17. Bowe, B., Xie, Y., Li, T., Yan, Y., Xian, H., & Al-Aly, Z. (2018). The 2016 global and national burden of diabetes mellitus attributable to PM2-5 air pollution. *The Lancet*. Planetary health, 2(7), e301–e312. [https://doi.org/10.1016/S2542-5196\(18\)30140-2](https://doi.org/10.1016/S2542-5196(18)30140-2)
18. Schraufnagel, D. E., Balmes, J. R., Cowl, C. T., De Matteis, S., Jung, S. H., Mortimer, K., Perez-Padilla, R., Rice, M. B., Riojas-Rodriguez, H., Sood, A., Thurston, G. D., To, T., Vanker, A., & Wuebbles, D. J. (2019). Air Pollution and Noncommunicable Diseases: A Review by the Forum of International Respiratory Societies' Environmental Committee, Part 1: The Damaging Effects of Air Pollution. *Chest*, 155(2), 409–416. <https://doi.org/10.1016/j.chest.2018.10.042>
19. U.S. Energy Information Administration. (2021). *Michigan State Energy Profile*.
<https://www.eia.gov/state/print.php?sid=MI>
20. Batterman, S., Ganguly, R., & Harbin, P. (2015). High resolution spatial and temporal mapping of traffic-related air pollutants. *International journal of environmental research and public health*, 12(4), 3646–3666. <https://doi.org/10.3390/ijerph120403646>
21. Centers for Disease Control. (2021). *Living with Diabetes*. Accessed September 2, 2021.
<https://www.cdc.gov/diabetes/managing/index.html>
22. Lim, C. C., Hayes, R. B., Ahn, J., Shao, Y., Silverman, D. T., Jones, R. R., & Thurston, G. D. (2019). Mediterranean Diet and the Association Between Air Pollution and Cardiovascular Disease Mortality Risk. *Circulation*, 139(15), 1766–1775.

<https://doi.org/10.1161/CIRCULATIONAHA.118.035742>

23. Lane, K. F. (2017). *Constructing an Index of Food Insecurity*. Data Driven Detroit. Accessed September 2, 2021. <https://datadrivendetroit.org/blog/2017/10/09/11184/>
24. United States Census Bureau. (n. d.). *The Household Pulse Survey*. Accessed September 2, 2021. https://www.census.gov/data-tools/demo/hhp/#/?s_state=00026&s_metro=19820&areaSelector=msa
25. Seligman HK, Jacobs EA, Lopez A, Tschann, J., Fernandez A. (2019). Food Insecurity and Glycemic Control Among Low Income Patients with Type 2 Diabetes. *Diabetes Care*, 35(2): 233-238 <https://doi.org/10.2337/dc11-1627>
26. Sun, C., Liu, Y., Zhan, L., Rayat, G. R., Xiao, J., Jiang, H., Li, X., Chen, K. (2021). Anti-diabetic effects of natural antioxidants from fruits. *Trends in Food Science & Technology*, 117, 3-14. <https://doi.org/10.1016/j.tifs.2020.07.024>.

Additional Resources

1. Mezuk, B., Li, X., Cederin, K., Rice, K., Sundquist, J., & Sundquist, K. (2016). Beyond Access: Characteristics of the Food Environment and Risk of Diabetes. *American journal of epidemiology*, 183(12), 1129–1137. <https://doi.org/10.1093/aje/kwv318>
2. Dendup, T., Feng, X., Clingan, S., & Astell-Burt, T. (2018). Environmental Risk Factors for Developing Type 2 Diabetes Mellitus: A Systematic Review. *International journal of environmental research and public health*, 15(1), 78. <https://doi.org/10.3390/ijerph15010078>
3. Alderete, T. L., Chen, Z., Toledo-Corral, C. M., Contreras, Z. A., Kim, J. S., Habre, R., Chatzi, L., Bastain, T., Breton, C. V., & Gilliland, F. D. (2018). Ambient and Traffic-Related Air Pollution Exposures as Novel Risk Factors for Metabolic Dysfunction and Type 2 Diabetes. *Current epidemiology reports*, 5(2), 79–91. <https://doi.org/10.1007/s40471-018-0140-5>
4. Lim, C. C., Hayes, R. B., Ahn, J., Shao, Y., Silverman, D. T., Jones, R. R., Garcia, C., & Thurston, G. D. (2018). Association between long-term exposure to ambient air pollution and diabetes mortality in the US. *Environmental research*, 165, 330–336. <https://doi.org/10.1016/j.envres.2018.04.011>