

AB 617 Biomonitoring Update: Selected Background References
Biomonitoring California Scientific Guidance Panel Meeting
July 16, 2021

Allen RW, Carlsten C, Karlen B, Leckie S, van Eeden S, Vedal S, Wong I, Brauer M (2011). An air filter intervention study of endothelial function among healthy adults in a woodsmoke-impacted community. *Am J Respir Crit Care Med* 183(9):1222-30. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/21257787>.

Barr DB, Puttaswamy N, Jaacks LM, Steenland K, Rajkumar S, Gupton S, Ryan PB, Balakrishnan K, Peel JL, Checkley W, Clasen T, Clark ML (2020). Design and rationale of the biomarker center of the household air pollution intervention network (HAPIN) trial. *Environ Health Perspect* 128(4):47010. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/32347765>.

Brugge D, Simon MC, Hudda N, Zellmer M, Corlin L, Cleland S, Lu EY, Rivera S, Byrne M, Chung M, Durant JL (2017). Lessons from in-home air filtration intervention trials to reduce urban ultrafine particle number concentrations. *Build Environ* 126:266-75. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5791918/>.

Chuang HC, Ho KF, Lin LY, Chang TY, Hong GB, Ma CM, Liu IJ, Chuang KJ (2017). Long-term indoor air conditioner filtration and cardiovascular health: A randomized crossover intervention study. *Environ Int* 106:91-6. Abstract available at: <http://www.ncbi.nlm.nih.gov/pubmed/28624750> (full article available upon request).

Ferguson KK, McElrath TF, Pace GG, Weller D, Zeng L, Pennathur S, Cantonwine DE, Meeker JD (2017). Urinary polycyclic aromatic hydrocarbon metabolite associations with biomarkers of inflammation, angiogenesis, and oxidative stress in pregnant women. *Environ Sci Technol* 51(8):4652-60. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5771235/>.

Gangwar RS, Bevan GH, Palanivel R, Das L, Rajagopalan S (2020). Oxidative stress pathways of air pollution mediated toxicity: Recent insights. *Redox Biol* 34:101545. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/32505541>.

Graille M, Wild P, Sauvain JJ, Hemmendinger M, Guseva Canu I, Hopf NB (2020). Urinary 8-isoprostane as a biomarker for oxidative stress. A systematic review and meta-analysis. *Toxicol Lett* 328:19-27. Abstract available at: <https://www.ncbi.nlm.nih.gov/pubmed/32320775> (full article available upon request).

Graille M, Wild P, Sauvain JJ, Hemmendinger M, Guseva Canu I, Hopf NB (2020). Urinary 8-OHdG as a biomarker for oxidative stress: A systematic literature review and meta-analysis. *Int J Mol Sci* 21(11). Available at: <https://www.ncbi.nlm.nih.gov/pubmed/32466448>.

Huang YD, Hou J, Xu T, Yin WJ, Cheng J, Zheng HY, Yuan J (2020). Non-linear relationships between seasonal exposure to polycyclic aromatic hydrocarbons and urinary 8-hydroxy-2'-deoxyguanosine levels among Chinese young students. *Chemosphere* 251:126352. Abstract available at: <https://www.ncbi.nlm.nih.gov/pubmed/32443248> (full article available upon request).

Kajbafzadeh M, Brauer M, Karlen B, Carlsten C, van Eeden S, Allen RW (2015). The impacts of traffic-related and woodsmoke particulate matter on measures of cardiovascular health: A HEPA filter intervention study. *Occup Environ Med* 72(6):394-400. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5052064/>.

Kwon JW, Park HW, Kim WJ, Kim MG, Lee SJ (2018). Exposure to volatile organic compounds and airway inflammation. *Environ Health* 17(1):65. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/30086760>.

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Mann JK, Lutzker L, Holm SM, Margolis HG, Neophytou AM, Eisen EA, Costello S, Tyner T, Holland N, Tindula G, Prunicki M, Nadeau K, Noth EM, Lurmann F, Hammond SK, Balmes JR (2021). Traffic-related air pollution is associated with glucose dysregulation, blood pressure, and oxidative stress in children. *Environ Res* 195:110870. Abstract available at: <https://www.sciencedirect.com/science/article/pii/S001393512100164X> (full article available upon request).

Moller P and Loft S (2010). Oxidative damage to DNA and lipids as biomarkers of exposure to air pollution. *Environ Health Perspect* 118(8):1126-36. Available at: <https://www.ncbi.nlm.nih.gov/pubmed/20423813>.

National Academies of Sciences, Engineering, and Medicine (2020). Predicting human health effects from environmental exposures: Applying translatable and accessible biomarkers of effect: Proceedings of a workshop in brief. Available at: <https://doi.org/10.17226/25962>.

Senerat AM, Manemann SM, Clements NS, Brook RD, Hassett LC, Roger VL (2020). Biomarkers and indoor air quality: A translational research review. *J Clin Transl Sci* 5(1):e39. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/33948261>.

Shao D, Du Y, Liu S, Brunekreef B, Meliefste K, Zhao Q, Chen J, Song X, Wang M, Wang J, Xu H, Wu R, Wang T, Feng B, Lung CS-C, Wang X, He B, Huang W (2017). Cardiorespiratory responses of air filtration: A randomized crossover intervention trial in seniors living in Beijing: Beijing Indoor Air Purifier Study, BIAPSY. *Sci Total Environ* 603-604:541-9. Abstract available at: <http://www.ncbi.nlm.nih.gov/pubmed/28645052> (full article available upon request).

Wang T, Wang Y, Xu M, Wang Z, Wu N, Qi F, Song J, Dai Y, Wang H, Sun X, Gao S, Wang W, Li Y, Chen R, Sun Z, Jia Q, Li X, Duan H, Liu Z (2021). Polycyclic aromatic hydrocarbons in particulate matter and serum club cell secretory protein change among schoolchildren: A molecular epidemiology study. *Environ Res* 192:110300. Abstract available at: <https://www.ncbi.nlm.nih.gov/pubmed/33038368> (full article available upon request).

Yang L, Hou XY, Wei Y, Thai P, Chai F (2017). Biomarkers of the health outcomes associated with ambient particulate matter exposure. *Sci Total Environ* 579:1446-59. Abstract available at: <https://www.ncbi.nlm.nih.gov/pubmed/27908628> (full article available upon request).

Zhang H, Han Y, Qiu X, Wang Y, Li W, Liu J, Chen X, Li R, Xu F, Chen W, Yang Q, Fang Y, Fan Y, Wang J, Zhang H, Zhu T (2020). Association of internal exposure to polycyclic aromatic hydrocarbons with inflammation and oxidative stress in prediabetic and healthy individuals. *Chemosphere* 253:126748. Abstract available at: <https://www.ncbi.nlm.nih.gov/pubmed/32464779> (full article available upon request).