RESOLUTION 12-19

Title: Understanding the Effects of PFAS on Human Health

Introduced by: Phillip Yang for the Medical Student Section

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Referred to: Reference Committee D

House Action: **APPROVED AS AMENDED**

Whereas, perfluoroalkyl and polyfluoroalkyl chemicals (PFAS) are a group of synthetic compounds that have been used in thousands of industrial applications and consumer products worldwide and are recognized by the Centers for Disease Control and Prevention (CDC) as substances toxic to human health[1], and

Whereas, the Environmental Protection Agency (EPA) has found PFAS in water and soil nationwide, termed PFAS an "emerging contaminant," and set health advisory levels for two specific PFAS chemicals at 70 parts per trillion (ppt)[2], and

Whereas, Michigan declared a state of emergency in July 2018 for Kalamazoo County for PFAS levels over 20 times higher than the EPA safety limit[3], and

Whereas, as of February 2019, 43 sites in Michigan have detected PFAS, including PFAS levels higher than 70 ppt in 6 schools, and PFAS in the drinking water that serves more than two million Michigan residents[4], and

Whereas, the CDC's Agency for Toxic Substances and Disease Registry (ATSDR) recommended in June 2018 reducing the minimum risk levels of PFAS ten-fold, from 70 ppt to 7 ppt, because of the chemicals' negative health effects[1], and

Whereas, PFAS bioaccumlate in human tissues and bodily fluids through contaminated foods, drinking water and consumer products, with half-life estimates ranging from 2.3 to 12 years based on the type of chemical[5], and

Whereas, PFAS cross the placenta barrier, are transmitted through breast milk and are consistently associated with fetal and postnatal growth and immune function in epidemiologic studies[6], and

Whereas, PFAS serum levels are negatively associated with vaccine antibody concentrations in adolescents, which may be a result of an inhibited initial vaccination response or a greater waning of immunity over time[7], and

Whereas, many additional research studies have suggested that PFAS in humans may increase risk of hypertension and pre-eclampsia during pregnancy, increase cholesterol levels, increase risk of thyroid disease, decrease fertility, and increase risk of kidney disease[1,8], and

Whereas, while current research has been limited to a few PFAS chemicals, more than 4000 PFAS chemicals have been manufactured by humans; hundreds of these have been detected in environmental samples and there are not currently assays to detect them all[7], and

Whereas, the EPA has not lowered the recommended PFAS health advisory levels since the release of the aforementioned June 2018 CDC report[9], and

Whereas, despite CDC and EPA recommendations, only seven states, including Michigan, have developed water guideline levels for PFAS, but their advisory levels range from 13 to 1000 ppt for only a few PFAS chemicals[10]; therefore be it

RESOLVED: That MSMS advocate for further studies on the impact of perfluoroalkyl and polyfluoroalkyl chemicals on human health; and be it further

RESOLVED: That the Michigan Delegation to the American Medical Association (AMA) ask our AMA to advocate for continued research on the impact of perfluoroalkyl and polyfluoroalkyl chemicals on human health; and be it further

RESOLVED: That the Michigan Delegation to the American Medical Association (AMA) ask our AMA to advocate for states to, at minimum, follow the Centers for Disease Control and Prevention's and the Environmental Protection Agency (EPA) recommended guidelines for levels perfluoroalkyl and polyfluoroalkyl chemicals.

WAYS AND MEANS COMMITTEE FISCAL NOTE: $25,000 or more as this resolution directs MSMS to engage in governmental advocacy.

Relevant MSMS Policy:

Policy Statement of Environmental Pollution
MSMS supports efforts to improve environmental health. MSMS supports all agencies charged with the control of environmental pollution. (Prior to 1990)
– Edited 1998
– Reaffirmed (Res35-05A)
– Reaffirmed (Res02-16)

Air and Water Pollution
Reasonable and scientific study should be directed toward the sensible control of the major problems of air and water pollution, whether it is the dusts and wastes of industry, the products of combustion of gasoline or oil (automobiles), the combustion products of home heating and burning equipment, or of smoking tobacco. (Prior to 1990)
– Edited 1998
– Reaffirmed (Res02-16)

Timely and Transparent Data Sharing for Drinking Water Testing
MSMS supports the following:
1. Creation and availability of a real-time alert system for all water test results, which exceed federal, state, or local standards within a person's designated zip code(s), to which the public could subscribe; and
2. Creation and implementation of a process in which all collected test results related to the quality of water that are excluded from final data analysis are annotated and explained.

(Res58-16)

Toxic Chemicals in Michigan's Water Supply
MSMS supports the goal of "zero discharge" for PCB/dioxin compounds in the Great Lakes Basin. (Res79-92A)
– Amended 1993
– Edited 1998
– Reaffirmed (Res02-16)

Relevant AMA Policy:

Modern Chemicals Policies H-135.942
Our AMA supports: (1) the restructuring of the Toxic Substances Control Act to serve as a vehicle to help federal and state agencies to assess efficiently the human and environmental health hazards of industrial chemicals and reduce the use of those of greatest concern; and (2) the Strategic Approach to International Chemicals (SAICM) process leading to the sound management of chemicals throughout their life-cycle so that, by 2020, chemicals are used and produced in ways that minimize adverse effects on human health and the environment.

Modernization of the Federal Toxic Substances Control Act (TSCA) of 1976 D-135.976
Our AMA will: (1) collaborate with relevant stakeholders to advocate for modernizing the Toxic Substances Control Act (TSCA) to require chemical manufacturers to provide adequate safety information on all chemicals and give federal regulatory agencies reasonable authority to regulate hazardous chemicals in order to protect the health of all individuals, especially vulnerable populations; (2) support the public disclosure of chemical use, exposure and hazard data in forms that are appropriate for use by medical practitioners, workers, and the public; and (3) work with members of the Federation to promote a reformed TSCA that is consistent with goals of Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH).

Modern Chemicals Policies D-135.987
Our AMA: (1) will call upon the United States government to implement a national modern, comprehensive chemicals policy that is in line with current scientific knowledge on human and environmental health, and that requires a full evaluation of the health impacts of both newly developed and industrial chemicals now in use; and (2) encourages the training of medical students, physicians, and other health professionals about the human health effects of toxic chemical exposures.

Safer Chemical Policies D-135.973
Our AMA will review the recommendations of the National Academies of Sciences with respect to chemical policy reform.

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[2] Technical Fact Sheet - Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA). (2017). United States Environmental Protection Agency (EPA). https://www.epa.gov/sites/production/files/2017-12/documents/ffrrofactsheet_contaminants_pfos_pfoa_11-20-17_508_0.pdf . Accessed February 19, 2019.
[3] Solis, B. Michigan declares state of emergency for Parchment PFAS contamination. (2018). MLive.com. https://www.mlive.com/news/kalamazoo/index.ssf/2018/07/parchment_pfas_levels_prompt_l.html . Accessed February 19, 2019.
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[6] Liew, Z., Goudarzi, H., & Oulhote, Y. (2018). Developmental Exposures to Perfluoroalkyl Substances (PFASs): An Update of Associated Health Outcomes. Curr Environ Health Rep, 5(1), 1-19. doi:10.1007/s40572-018-0173-4. https://www.ncbi.nlm.nih.gov/pubmed/29556975. Accessed February 19, 2019.
[7] Sunderland, E. M., Hu, X. C., Dassuncao, C., Tokranov, A. K., Wagner, C. C., & Allen, J. G. (2019). A review of the pathways of human exposure to poly- and perfluoroalkyl substances (PFASs) and present understanding of health effects. J Expo Sci Environ Epidemiol, 29(2), 131-147. doi:10.1038/s41370-018-0094-1. https://www.ncbi.nlm.nih.gov/pubmed/30470793. Accessed February 21, 2019.
[8] Vaughn, B., Winquist, A., Steenland, K. (2013). Perfluorooctanic Acid (PFOA) Exposures and Incident Cancers among Adults Living Near a Chemical Plant. Environmental Health Perspectives. https://ehp.niehs.nih.gov/doi/10.1289/ehp.1306615. Accessed February 21, 2019.
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[10] Cordner, A., De La Rosa, V. Y., Schaider, L. A., Rudel, R. A., Richter, L., & Brown, P. (2019). Guideline levels for PFOA and PFOS in drinking water: the role of scientific uncertainty, risk assessment decisions, and social factors. J Expo Sci Environ Epidemiol, 29(2), 157-171. doi:10.1038/s41370-018-0099-9. https://www.nature.com/articles/s41370-018-0099-9. Accessed February 21, 2019.