RESOLUTION NUMBER **AADA 001 (A-26)**

TITLE Act to Reduce Per-and Polyfluoroalkyl Substances (PFAS)

INTRODUCED BY Christine Kannler, MD, FAAD

WHEREAS, environmental carcinogens impact people of all races, ethnicities, genders, and ages; and

WHEREAS, the Environmental Protection Agency (EPA) in March 2023 proposed national standards that would establish and enforce maximum PFAS contaminant levels in municipal drinking water supplies to reduce the health effects of these persistent pervasive and toxic substances;[1] and

WHEREAS, nearly all Americans have detectable levels of PFAS in their blood;[1] and

WHEREAS, PFAS are added to cosmetic foundation, mascara, lipstick, and personal hygiene products so the item will last longer, the product will spread more easily, and PFAS are unintentionally added to products if raw ingredients are stored in PFAS plastics;[2-8] and

WHEREAS, Americans unknowingly purchase and use cosmetics and personal hygiene products unaware known carcinogens are included; and[9,10]

WHEREAS, Dermatologic patients can experience conditions such as eczema and psoriasis in which case the epidermal barrier is compromised to possibly allow increased absorption of these chemicals;[11,12] and [13-15]

WHEREAS, PFAS may play a causative role in dermatologic conditions such as urticaria and/or lupus;[16-20] and

WHEREAS, PFAS are currently found in:
Sunscreens
Cosmetics (such as powders/foundations/waterproof mascara/ makeup remover),
Shampoo and other hair products,
Personal care products,
Hand sanitizers,
Food wrappers,
Dental floss, and

WHEREAS, the state of Washington 2023 Toxic-Free Cosmetics Act (TFCA) currently restricts and/or bans certain chemicals (such as PFAS, formaldehyde, heavy metals mercury and lead, triclosan and specific phthalates) from being included in cosmetics and personal care products for sale or distribution in that state,[25] and

WHEREAS, dermatologists as a medical profession bear responsibility: to help educate patients about cosmetic and personal hygiene products, to advocate for healthy options for our patients, and to champion change that will protect both patients and the environment.;

THEREFORE BE IT RESOLVED, that the American Academy of Dermatology Association

(AADA) support increased awareness about PFAS and other forever chemicals through their membership and on the AADA's website via campaign awareness efforts; and

BE IT FURTHER RESOLVED, that the AADA collaborate with patient advocacy organizations such as EPA, Environmental working group, Centers for Disease Control and Prevention (CDC), Safer Chemicals/Healthy Families, Green Science Policy Institute, Silent Spring, and/or Toxic Free Future to support the removal of PFAS and other forever chemicals from cosmetic and personal hygiene products; and

BE IT FURTHER RESOLVED, that the AADA work with relevant stakeholders such as industries that produce or manufacture cosmetic and personal hygiene products to reduce and then ultimately eliminate PFAS and other chemicals from cosmetic and personal hygiene products.

REFERENCES

1. Baum,JM. Enhancing Regulations to Reduce Exposure to PFAS- Federal Acton on "Forever Chemicals". NEJM 388;21 May 25, 2003 page 1924-1926.
2. https://science.nd.edu/news-and-media/news/study-about-pfas-in-cosmetics-gains-distinction-with-2021-best-paper-award/
3. Kezic, S, & Nielsen, J.B. (2009) Absorption of chemicals through compromised skin. Int Arch Occup Environ Health. 82: 677-688
4. Ragnarsdottir,O. et al. (2022). Dermal uptake: An important pathway of human exposure to perfluoroalkyl substances? Environmental Pollution. 307. 119478. 1-14.
5. Shen, M. et al (2022) Perfluoroalkyl substances are linked to incident chronic spontaneous urticaria: A nested case -control study. Chemosphere. 287 (3) 132358
6. Vara, E. et al. (2021) Perfluoroalkyl substances and community vulnerability: Associations with lupus -related autoantibodies and disease. Lupus, Science & Medicine. 8 (Suppl 2) A1-A75.
7. Toxic-Free Cosmetics Act Guide: Restrictions for Cosmetic Industry & Sellers accessed 9/14/25

Does the resolution fall within the scope of the AAD and AADA bylaws, mission, vision, or strategic goals?

To advocate for healthy skin in all individuals by working with corporations to eliminate PFAS (a known carcinogen) exposure in over-the-counter skin products and educate the public to select products without PFAS.

Relevant Background and/or AAD Policy Considerations:

Various studies have shown that cosmetic products, as well as some sunscreens, may be a source of PFAS via dermal exposure.[3-8] However, further studies are needed to determine the effects of both short- and long-term exposure to PFAS from these products.[14,15] It is not necessary to have a skin condition to be exposed to PFAS via dermal exposure. Additionally, it is challenging to determine PFAS absorption levels, as some studies account for individual cosmetic products while others focus on cumulative use across multiple products. Individual use may also affect the level of PFAS absorbed, since not everyone uses cosmetics consistently.

Personal cosmetics may also be a source of PFAS exposure in pregnant and lactating individuals.[9,10] Further studies are needed to determine the effects on pregnancy outcomes and on newborns.

PFAS may also have a role in the development of some dermatological conditions, such as psoriasis, atopic dermatitis, and skin aging.[18-20]

PFAS exposure may vary by race and ethnicity, among other socioeconomic factors.[13,21-24]

Relevant Position Statement:
https://server.aad.org/forms/policies/Uploads/PS/PS-Dermatology%20Workforce%20Diversity%20and%20Health%20Disparities.pdf

"Research, scholarship and publication: The AAD recognizes that an intentional and concerted effort is needed to ensure that research, scholarship and publication ethically addresses, measures, and promotes health equity. We recognize that race is not a reliable proxy for genetic differences and that clinicians, educators and researchers should focus on genetics and biology, and social determinants of health when describing risk factors for disease.11 We support research, data collection, and evidence based performance measures that promote equity in care and impact social determinants of health to identify and reduce health disparities within dermatology. We support efforts to develop and increase scientific research of dermatology disorders that occur disproportionately in racially and ethnically diverse groups."

Fiscal/Resource Impact:
40-80 hours of staff time for advocating with government agencies and patient advocacy organizations.

References:

1. Braun JM. Enhancing Regulations to Reduce Exposure to PFAS - Federal Action on "Forever Chemicals". *N Engl J Med.* 2023;388(21):1924-1926.
2. Study about PFAS in cosmetics gains distinction with 2021 Best Paper Award. University of Notre Dame. https://science.nd.edu/news-and-media/news/study-about-pfas-in-cosmetics-gains-distinction-with-2021-best-paper-award/. Published 2022. Updated 08/09/2022. Accessed 10/17/2025.
3. Abraham K, Monien BH. Transdermal absorption of (13)C(4)-perfluorooctanoic acid ((13)C(4)-PFOA) from a sunscreen in a male volunteer - What could be the contribution of cosmetics to the internal exposure of perfluoroalkyl substances (PFAS)? *Environ Int.* 2022;169:107549.
4. Balan SA, Bruton TA, Harris K, et al. The Total Mass of Per- and Polyfluoroalkyl Substances (PFASs) in California Cosmetics. *Environ Sci Technol.* 2024;58(27):12101-12112.
5. Harris KJ, Munoz G, Woo V, Sauve S, Rand AA. Targeted and Suspect Screening of Per- and Polyfluoroalkyl Substances in Cosmetics and Personal Care Products. *Environ Sci Technol.* 2022;56(20):14594-14604.
6. Wang Z, Yuan G, Sun M, et al. Decorative cosmetics and skin care products contribute significantly to short-chain perfluoroalkyl carboxylates exposure. *J Hazard Mater.* 2025;495:138846.
7. Celine C, Catherine B, Romane C, Laurence C. Per- and polyfluoroalkyls used as cosmetic ingredients - Qualitative study of 765 cosmetic products. *Food Chem Toxicol.* 2024;187:114625.
8. Zhao X, Fu M, Zhou S, et al. Targeted investigation of per- and polyfluoroalkyl substances from domestic cosmetics and personal care products in China and its implications for human exposure. *Sci Total Environ.* 2024;954:176207.
9. Hall AM, Ashley-Martin J, Lei Liang C, et al. Personal care product use and per- and

polyfluoroalkyl substances in pregnant and lactating people in the Maternal-Infant Research on Environmental Chemicals study. *Environ Int.* 2024;193:109094.
10. Kaiser AM, Forsthuber M, Widhalm R, et al. Prenatal exposure to per- and polyfluoroalkyl substances and pregnancy outcome in Austria. *Ecotoxicol Environ Saf.* 2023;259:115006.
11. Kezic S, Nielsen JB. Absorption of chemicals through compromised skin. *Int Arch Occup Environ Health.* 2009;82(6):677-688.
12. Ragnarsdóttir O, Abdallah MA, Harrad S. Dermal uptake: An important pathway of human exposure to perfluoroalkyl substances? *Environ Pollut.* 2022;307:119478.
13. Collins HN, Johnson PI, Calderon NM, et al. Differences in personal care product use by race/ethnicity among women in California: implications for chemical exposures. *Journal of Exposure Science & Environmental Epidemiology.* 2023;33(2):292-300.
14. Espartero LJL, Ishaq Z, Bradley S, et al. Dermal permeation of perfluoroalkyl substances in human skin–An in-vitro study. *Chemosphere.* 2025;378:144408.
15. Keawmanee S, Piyaviriyakul P, Boontanon N, et al. Concentration and health risk assessment of per- and polyfluoroalkyl substances in cosmetic and personal care products. *J Environ Sci Health B.* 2024;59(9):551-561.
16. Shen M, Xiao Y, Huang Y, et al. Perfluoroalkyl substances are linked to incident chronic spontaneous urticaria: A nested case-control study. *Chemosphere.* 2022;287(Pt 3):132358.
17. Vara E, Wilson D, Pearce J, Oates J, Kamen D. *1103 Perfluoroalkyl substances and community vulnerability: associations with lupus-related autoantibodies and disease.* Vol 82021.
18. Zhang Q, Zhang M, Zhao C. Exposure to Per- and Polyfluoroalkyl Substances and Risk of Psoriasis: A Population-Based Study. *Toxics.* 2024;12(11).
19. Hatem G, Faria AM, Pinto MB, et al. Exposure to per-and poly-fluoroalkyl substances and respiratory and skin effects in children and adolescents: A systematic review and meta-analysis. *J Hazard Mater.* 2025;491:137978.
20. Mousavi SE, Delgado-Saborit JM, Godderis L. Exposure to per- and polyfluoroalkyl substances and premature skin aging. *J Hazard Mater.* 2021;405:124256.
21. Park SK, Peng Q, Ding N, Mukherjee B, Harlow SD. Determinants of per- and polyfluoroalkyl substances (PFAS) in midlife women: Evidence of racial/ethnic and geographic differences in PFAS exposure. *Environ Res.* 2019;175:186-199.
22. Mathew S, Biggs E. Examining racial and income differences in per-and poly-fluoroalkyl substances (PFAS) exposure among United States adolescents participating in the NHANES 2017-2018 Cycle. *International Public Health Journal.* 2024;16(4).
23. Goin DE, Abrahamsson D, Wang M, et al. Disparities in chemical exposures among pregnant women and neonates by socioeconomic and demographic characteristics: a nontargeted approach. *Environmental research.* 2022;215:114158.
24. Preston EV, Chan M, Nozhenko K, et al. Socioeconomic and racial/ethnic differences in use of endocrine-disrupting chemical-associated personal care product categories among pregnant women. *Environ Res.* 2021;198:111212.
25. Toxic-Free Cosmetics Act Guide: Restrictions for Cosmetic Industry & Sellers. Department of Ecology State of Washington. https://apps.ecology.wa.gov/publications/documents/2404019.pdf. Published 2024. Updated 04/2024. Accessed 10/17/2025.