FIGO calls for removal of PFAS from global use

Over the past 15 years, scientists who have reviewed data on increased rates of cancer, endocrine disruption, birth defects or complications of pregnancy, among other adverse outcomes, have found evidence that shows chemical exposure has negative impacts on women and children's health. During pregnancy, chemicals stored in a woman's body may cross the placenta, while during breastfeeding, stored lipophilic chemicals may accumulate in milk and be shared with feeding infants. As with methyl mercury, these chemical transfers may result in long-term conditions in children.

PFAS and the risk to human health

PFAS (per- and polyfluoroalkyl substances) are a large class of thousands of industrial chemicals that are recognised by many prominent scientists and agencies as toxicants.[1,2,3,4,5] Extreme persistence is the defining characteristic of this class of compounds, but they can also be highly mobile, bio-accumulative and hazardous.

PFAS are known as "forever chemicals" – synthetic compounds that do not readily degrade, but instead migrate to, accumulate in and contaminate human environments.[6] Known pathways of human exposure to PFAS include ingestion of contaminated food or water, inhalation of contaminated air or dust, contact with contaminated soils, and hand or skin exposure to PFAS-containing household dust and consumer products.[7]

Many of the most-studied PFAS persist in human tissue for years, with serum half-lives ranging from several years to decades.[1] PFAS cross the placenta, are detected in cord serum, and are transmitted to newborns and infants via contaminated breast milk.[8]

Human toxicity to PFAS derives from the inherent properties of the chemicals, as well as their prevalence in consumer products. PFAS are widely used in cosmetics, waterproof and stain-resistant fabrics and clothing, grease- and water-resistant food packaging and non-stick cookware, as well as in firefighting foam and industrial applications. Their extreme persistence and widespread use has resulted in PFAS being ubiquitous globally.[9,10,11]

Like most industrial chemicals, individual PFAS have been marketed, sold and put into common use without being comprehensively tested for the potential to cause human harm. As a result, even as the number of commercial PFAS in use and human exposure to them has ballooned, published toxicological research on PFAS as a whole has lagged behind. Even though data about some PFAS – such as perfluorooctanoic acid (PFOA) – have led to restrictions on their use, those PFAS have been replaced by other chemicals without adequate safety testing and datasets.

Published toxicological and epidemiological research around some of the oldest and most common PFAS, however, is robust and indicates that PFAS constitutes a more-than-plausible risk of harm. PFAS exposure in children, including perinatal exposure, is associated with impaired kidney and immune function, altered production of thyroid hormone and lipid levels, alterations in the onset of puberty, and adverse effects on the development of the brain and nervous system.[1,12,13]

Epidemiological data also associate PFAS exposure with preeclampsia, intrauterine growth retardation, and decreased birth weight, altered antibody responses to vaccines, increased risk of infertility and thyroid disease, and certain cancers such as testicular and kidney cancer.[1] In 2017, the International Agency for Research on Cancer (IARC) classified PFOA as "possibly carcinogenic to humans" (Category 2B).[14] Several PFAS are listed or proposed to be listed under the Stockholm Convention on Persistent Organic Pollutants, and a rising number of PFAS are now regulated in drinking water and other media.[15,16,17]

FIGO's position on the issue

FIGO's position reflects a review of the scientific literature on PFAS, as well as our embrace of our social responsibility to protect the public from exposure to harm when scientific investigation has found a plausible risk to children, adolescent girls, pregnant women and other adult women. Protections can be relaxed only if further scientific findings emerge that provide sound evidence that no harm will result. This principle of precautionary action has been codified in some legal systems, including that of the EU.

Conventional management approaches are ineffective

The conventional chemical-by-chemical management approach has been ineffective at controlling widespread exposure to this large class of persistent chemicals with known and potential hazards. Governments and leading companies have started using broader approaches to control PFAS exposure, such as targeting all PFAS within certain use categories, like carpet, food contact materials and firefighting foam.[18,19,20,21,22,23]

Recently, scientists proposed an even more comprehensive risk management approach that would look beyond product use categories to allow the use of PFAS only if deemed essential for health or safety, or critical for the functioning of society, and also for which there are no safer available alternatives that are technically and economically feasible.[6,24,25] Using this framework, several European countries recently announced developing plans to phase out all non-essential PFAS uses by 2030.[4,26] Additionally, the European Chemicals Agency is working on restrictions for PFAS, and the European Commission and the US state of Vermont are evaluating regulating PFAS as a class in drinking water.[5,27]

Acting with precaution to reduce or eliminate exposures to PFAS

FIGO points out the inherent problem to current public policy in the United States and elsewhere that has allowed PFAS and other toxic chemicals to be manufactured and released into the environment, exposing pregnant women, children and others, without first having required pre-market toxicological testing to have demonstrated safety from those uses and presumed exposures. As it is with new pharmaceuticals, the priorities around other new chemical compounds should be rigorous in establishing safety – now and across generations – prior to the use of chemical products and their exposure to humans.

FIGO recommendations

In 2015, FIGO adopted Reproductive Health Impacts of Exposure to Toxic Environmental Chemicals, a scientific opinion reflecting the need for this approach to better address the threat that toxic environmental chemicals now pose to human reproductive and environmental health. Subsequently, FIGO established a global Reproductive and Developmental Environmental Health (RDEH) working group, which was designated a formal FIGO Committee in 2018.

As a result of the nearly ubiquitous use of PFAS and ongoing human exposure to these chemicals that begins in utero, FIGO calls for a global policy approach that will reduce and eventually eliminate exposure to PFAS. Global health should be our guiding light. We recommend that PFAS exposure to populations should end with a full global phase out.

FIGO urges hospitals, childcare centres, schools and other settings in which FIGO members work to preferentially purchase PFAS-free furniture, upholstery, carpet, clothing and food packaging. In addition, we recommend that governments:

- prioritise legislation to phase out all non-essential uses and manufacturing of PFAS, starting with uses that are likely to result in greater exposures to pregnant women and children
- require transparency on PFAS use
- invest in safer alternatives for essential uses and in improved monitoring, clean-up and disposal technologies
- mitigate ongoing exposure to PFAS by cleaning up polluted environmental resources and securing storage of highly contaminated PFAS waste until a safe destruction method has been determined
- require regulatory assessment of PFAS, including toxicological and exposure assessment, as a class.

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About FIGO

FIGO is a professional organisation that brings together more than 130 obstetrical and gynaecological associations from all over the world. FIGO's vision is that women of the world achieve the highest possible standards of physical, mental, reproductive and sexual health and wellbeing throughout their lives. We lead on global programme activities, with a particular focus on sub-Saharan Africa and South East Asia.

FIGO advocates on a global stage, especially in relation to the Sustainable Development Goals (SDGs) pertaining to reproductive, maternal, newborn, child and adolescent health and non-communicable diseases (SDG3). We also work to raise the status of women and enable their active participation to achieve their reproductive and sexual rights, including addressing female-genital mutilation (FGM) and gender-based violence (SDG5).

We also provide education and training for our Member Societies and build capacities of those from low-resource countries through strengthening leadership, good practice and promotion of policy dialogues.

FIGO is in official relations with the World Health Organization and a consultative status with the United Nations.

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