

PFAS

Forever chemicals what are they?
where are they? and how to avoid



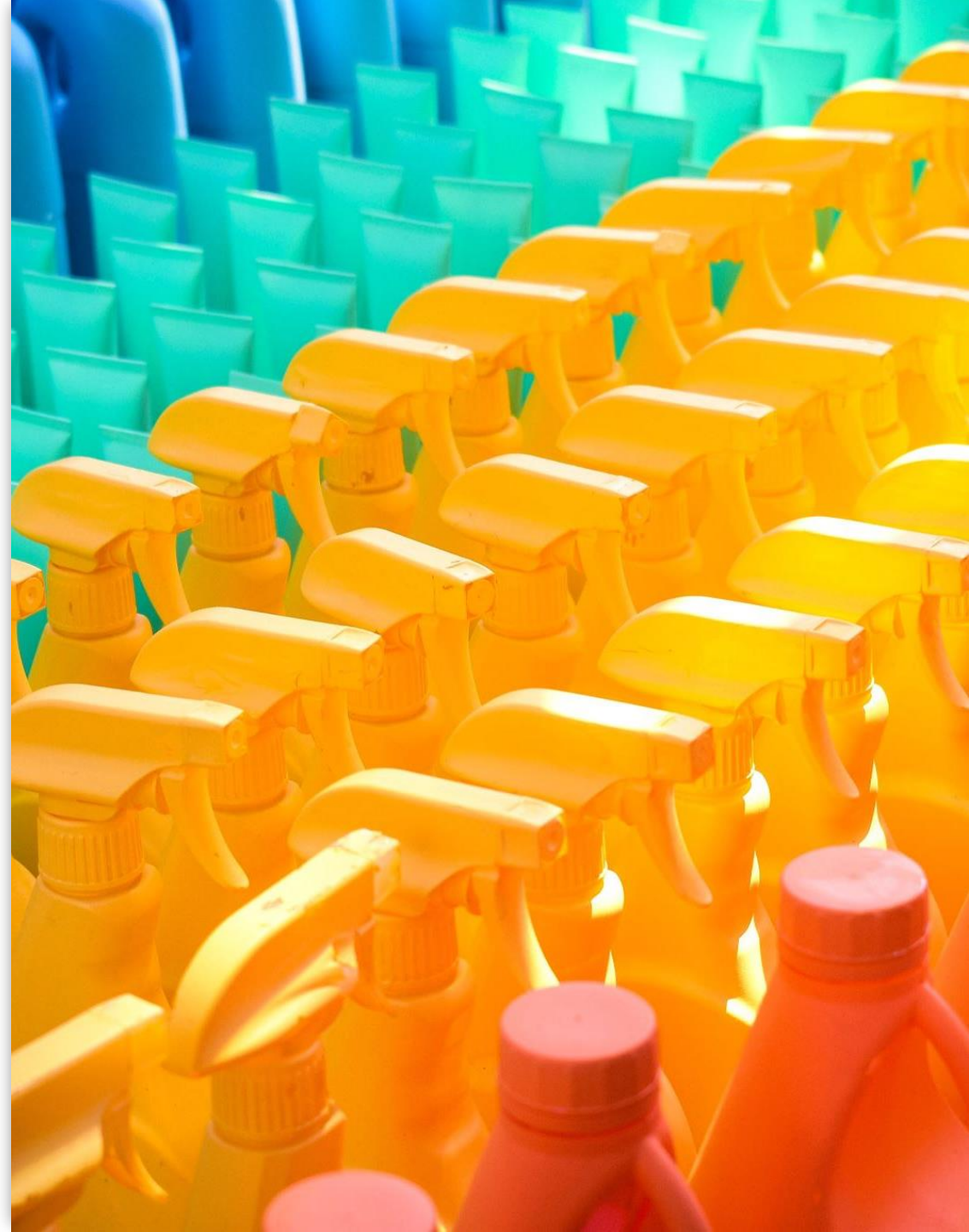


What are PFAS?

- PFAS are a large family of chemicals and have been around since the 1940s (Wee,2023).
- There are thousands of types (Wee, 2023).
- It's a man-made substance; they are synthetic chemicals that are not found in nature (Dewapriya, 2023).
- They are non-degradable, they have a strong carbon-fluorine bonds making them very resistant to water, heat, and oil (Dewapriya, 2023).
- This is why it has been given the nickname "forever chemicals" (Peritore,, 2023).

What are PFAS used for?

- **Consumer products**
 - These chemicals are found in;
 - Non-stick cookware.
 - Waterproof and stain-resistant clothing.
 - Cosmetics.
 - Some food packaging (Dewapriya, 2023).
- **Industrial products**
 - Electronics (Tansel, 2022).
 - Building materials (Gluge, 2020).



How are people exposed to PFAS?

- People are exposed to hundreds of PFAS everyday (DeLuca, 2022).
- This is because of the use of everyday products (DeLuca, 2022).
- As well as the environment.
- Certain foods; such as fish, fruit, and take away meals (DeLuca, 2022).
- Water; the contamination to drinking water is a growing concern as water treatment plants find it extremely challenging to remove PFAS from the water (Polychronidou, 2025).



How harmful is it?

- These chemicals are toxic to both humans and wildlife (Dickman, 2025).
- The most studied chemicals within the family are PFOA and PFOS, these have been shown to:
- Interfere with the hormonal system (Fenton, 2020).
- Interfere with the reproductive system;
- It can affect pregnant woman with the development of a foetus (Fenton, 2020).
- Impact the immune system (Ayodele, 2024).
- Can cause certain cancers (Kiss, 2024; Ayodele, 2024).



How to limit exposure

- Unfortunately, people cannot eliminate PFAS, but it can be limited
- Recent studies have found increasing fibre to the diet may help the body to reduce PFAS from the body (Schlezingner, 2025).
- **Try to limit:**
- Cosmetics that contain the words fluoro or PFAS in their name by reading the ingredients (Kebede, 2024).
- Avoid the use of non-stick pans (Luo *et al*, 2022).
- If owned and the cookware is scratched, then it should be disposed to limit exposure (Luo *et al*, 2024).
- Use stainless steel or copper cookware (Lou *et al*, 2024).
- Filter drinking water (Waterfield, 2020).
- Check labels on clothing (Yang, 2025).

A close-up shot of a woman with blonde hair, looking directly at the camera with a concerned and distressed expression. Her mouth is slightly open as if she is speaking or about to speak. The background is blurred, showing what appears to be an indoor setting with some indistinct shapes and colors.

‘Chemicals in my blood’

BBC NEWS

What is being put in place to limit exposure?

- Governments plans to raise better awareness, identify harmful releases, and protect the people and the environment.
- Environmental improvement plan (EIP) has been put in place.
- Parliaments environmental audit committee has launched an inquiry.
- This is to assess the UKS current framework for PFAS to see if it is adequate.
- They also want to compare with other nations (UK Parliament, 2025).
- Toby Perkins MP has said:
- **“PFAS forever chemicals are prevalent in countless everyday items. News coverage has exposed the level of problems with PFAS, and has shone a light that the UK’s regulatory approach is far less active than in many other jurisdictions. The Committee is looking into this important topic to better understand the risks associated with PFAS, and to ask what – if anything – the Government should do to strengthen the UK’s approach.” (UK Parliament, 2025).**



What other
Nations are doing
to limit PFAS from
everyday items



- European union has been developing restrictions on many PFAS uses.
- Denmark has banned PFAS in food packaging.
- France has banned PFAS in some products and more ban are to set in place in 2026 (European chemicals agencies, 2024).

Per- and polyfluoroalkyl substances (PFAS) - ECHA

- United States have put in place bans on various consumer products and limit PFAS in drinking water (Tanne, 2024).



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