PFAS
in Outdoor Recreation:
What You Need to Know

Per- and Polyfluoroalkyl Substances (PFAS) are a group of human-made chemicals that build up over time in the environment, animals, and humans; and can be harmful to health. Understanding which products are likely to contain PFAS and how to avoid buying them helps reduce your personal exposure and decreases the amount of PFAS entering the environment and drinking water supplies. For an introduction to PFAS, read the "*What are PFAS & Why Should I Care?*"* factsheet.

Many outdoor products are treated with PFAS to achieve durability and water-resistant qualities. Examples of outdoor recreation products that might contain PFAS include:

- Bike lubricants
- Boots, shoes & care products
- Rain gear & other outdoor clothing
- Ski, boat, surfboard & hockey wax
- Tents
- Backpacks
- Waterproofing & protectant sprays

When PFAS-containing outdoor products are used, some of the PFAS rub or wash off into the environment, polluting the soil and water. When gear is washed at home, some of the PFAS come out into the wash water discharged from your home. If you have a septic system, the wastewater is discharged below ground where it can contaminate the groundwater. If your home is on a sewer system, the treatment plant cannot remove PFAS and it enters the environment.

Rules-of-Thumb

Items that have a waterproof, water-resistant, or water-repellent claim are likely to contain PFAS.

Outdoor products primarily contribute to human exposure to PFAS from:

- Drinking water that is impacted from runoff and deposition containing PFAS
- Eating game and fish from PFAS polluted environments
- Breathing in and consuming dusts from textiles, waxes, and protectant sprays

Warning!

PFAS can be found in fish and game. Please check local 'Do Not Eat' advisories before consumption and recognize that bodies of water, fish, and game in many locations have not yet been tested.

Durable Water Repellant (DWR) and waterproofing treatments create a barrier by using PFAS chemicals. Many waterproofing sprays used on apparel and shoes can lead to inhalation of PFAS – a direct exposure. Rain, sweat, and dirt can cause the PFAS coating to come off and enter the environment.

PFAS are often found in cross-country and high-end downhill ski waxes. A 2020 study* found high levels of PFAS along the first 3.9 kilometers of a cross-country ski race. Ski wax residue deposits on the soil when the snow melts and can lead to contamination of soil and water resources. Some states, such as Vermont and Maine have banned PFAS in ski wax.

Be Skeptical of PFAS-free Claims

Some companies have PFAS responsibility statements that may lead to confusion. Some companies state that their products are PFC-free, PFOA-free, and/or PFOS-free, but such statements only cover some specific PFAS chemicals and they might still be using different PFAS chemicals in their products. Even if a website states a product is PFAS-free that doesn't mean it is!

*Visit https://www.newmoa.org/pfas-in-consumer-products-factsheets/ for more information, including links to the mentioned studies

WHAT YOU CAN DO

- Use PFAS-free wax
  - o Many brands offer PFAS-free waxes
- Limit washing Durable Water Repellant products
  - o In addition to releasing PFAS to the environment, washing reduces the water-resistant properties and reduces the functional life of the item
  - o Try spot cleaning with plain soap & water to minimize the removal of PFAS
  - o If an item must be washed – wash it without laundry detergent/soap or with a PFAS-free technical fiber wash to remove oils and dirt from the surface
  - o If re-waterproofing is needed, use a PFAS-free polymer treatment
- If you must use a PFAS-containing waterproofing material, do not use an aerosol (spray) – instead use a rub-on product to reduce chances of breathing in PFAS
- Use PFAS-free boot & shoe care products
  - o Silicone-based sprays
  - o Wax balms – natural (such as beeswax) or petroleum-based paraffin
  - o PFAS-free polymer spray for suede and nubuck

Is PFAS in My Wax?

Wax is not naturally oil resistant! One way to test if wax contains PFAS is pour baby oil on the base of a freshly-waxed ski or another product – if it beads up, then the wax likely contains PFAS

NEWMOA
NORTHEAST WASTE MANAGEMENT OFFICIALS' ASSOCIATION

NEWMOA is a non-profit, non-partisan, interstate association whose membership is composed of the state environment agency programs that address pollution prevention, toxics use reduction, sustainability, materials management, hazardous waste, solid waste, emergency response, waste site cleanup, underground storage tanks, and related environmental challenges in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont (www.newmoa.org).

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