

AFFF Foam

Aqueous Film Forming Foams (AFFF) are firefighting foams used on chemical fires and petroleum-based fires (called Class B fires). Class B fires usually occur at industrial sites such as military bases, airports, and petroleum refineries (1).

AFFF contains two types of extremely harmful PFAS, called PFOA and PFOS. These compounds have exceptionally strong chemical bonds that make them effective at fighting Class B fires, but also make them nearly impossible to break down in our bodies or environment. This causes significant damage to environmental and human health (2).



AFFF is a public health concern

PFAS from AFFF bind to proteins and accumulate in our bodies, building up in our blood and causing cancer, liver and heart disease in adults, and immune and developmental issues in children (3). Studies have shown elevated blood levels of PFAS and increased risk of cancer in firefighters due to occupational exposure to AFFF (4). When AFFF foam is used, it seeps into groundwater and runs off on surface water, contaminating local drinking water supplies and persisting in the environment.

Alternatives to AFFF

There are competitively priced, equally effective, non PFAS-containing Class B firefighting foams called 3F foams that are **proven alternatives to AFFF (5)**. 3F foams are widely manufactured and have been in development since the early 2000s. They are used in states around the country, have replaced AFFF in countries around the world, and are approved as AFFF alternatives for military use in the U.S. (6).

Take Action Now!

We must take steps to prevent the spread of PFAS in the environment. **Many other states have taken legislative action on the use of AFFF—Missouri can do the same.**

There are a multitude of ongoing lawsuits across the country brought by military personnel and firefighters, demanding compensation for the health costs they've experienced from increased exposure to PFAS in AFFF.

Help us protect our first responders, military personnel, and the general public by supporting legislation to phase out AFFF foam in Missouri.



Sources:

(1) [americanchemistry.com](https://www.americanchemistry.com): Best Practice Guidance for Fluorinated Firefighting Foams

(2) epa.illinois.gov: Per- and Polyfluoroalkyl Substances (PFAS)

(3) [sciencedirect.com](https://www.sciencedirect.com): Accumulation of perfluoroalkyl substances in human tissues

(4) [nih.gov](https://www.nih.gov): Firefighters' exposure to per-and polyfluoroalkyl substances (PFAS) as an occupational hazard: A review

(5) [ipen.org](https://www.ipen.org): Fluorine-free firefighting foams (3F) Viable Alternatives to Fluorinated Aqueous Film Forming Foams (AFFF)

(6) DoD PFAS Taskforce: First Qualified Fluorine-Free Foam (F3) Announced

