

PFAS in the News, 2019-2026: Attention, Geography and Tone of Coverage of "Forever Chemicals", and How It Compares with Research and Invention

Fliar BI · Prism Research Layer · Working paper, October 2026 · Dataset and code: github.com/fliarbi/prism-news-api · Licence CC BY-NC 4.0

Abstract

We measure how per- and polyfluoroalkyl substances (PFAS) were covered in a global news index from January 2019 to July 2026, using 23,502 de-duplicated PFAS articles, and set that coverage beside 13,001 research papers and 991 patent families on PFAS. Six results stand out:

1. **Rising attention.** PFAS took 1.95 of every 10,000 news articles in 2025, against 1.01 in 2019, a 1.93-fold rise in share. The low point was 2020, at 0.75 per 10,000.
2. **Regulatory months lead.** The peak month was April 2024, the month the US Environmental Protection Agency finalized national drinking-water limits, at 4.7 articles per 10,000. The second-highest was March 2023, the month the limits were proposed (2.96). Coverage shows no seasonal cycle.
3. **Geography.** The United States holds 75.24% of located PFAS news, 1.55 times its share of all news. Asia (0.14), Africa (0.11) and South America (0.1) are strongly under-represented. Within the United States, Maine (7.66) and Wisconsin (6.6) lead by a wide margin, ahead of New Mexico (3.93) and Minnesota (3.06). The United Kingdom's attention rose 1.84 times from 2023 to 2025, while the United States' fell to 0.72 times.
4. **Tone and urgency.** 59.2% of PFAS articles are negative in tone (all news: 33.6%), and 89.9% are rated critical priority (all news: 42.6%).
5. **Measurement.** 24.8% of raw matches for PFAS vocabulary were repeated laboratory bulletins, webinar notices, copied legal alerts or other meanings of the abbreviation. Counting them would add spikes made of duplicated pages, not of attention.
6. **Research and invention.** PFAS papers grew from 0.58 to 4.37 per 10,000 papers between 2015 and 2025 (7.53-fold). The yearly count of PFAS patent families grew 4.1-fold from 2015 to 2024, and China's office held 47.1% of office filings.

Findings stated for citation

- **F1.** PFAS took 1.95 of every 10,000 news articles in 2025, against 1.01 in 2019 (1.93-fold).
- **F2.** April 2024 was the peak month for PFAS news, at 4.7 articles per 10,000, 2.37 times the 2024 annual share.
- **F3.** March 2023 was the second-highest month, at 2.96 articles per 10,000.
- **F4.** The United States' share of located PFAS news (75.24%) was 1.55 times its share of all news. The United Kingdom's (4.62%) was 0.79 times.
- **F5.** North America (1.52) and Oceania (1.42) over-represent PFAS; Asia (0.14), Africa (0.11) and South America (0.1) under-represent it.

- **F6.** Within the United States, Maine (7.66) and Wisconsin (6.6) had the most over-represented PFAS coverage, followed by New Mexico (3.93) and Minnesota (3.06); New Jersey (0.17) the least.
- **F7.** PFAS attention in the United Kingdom's news rose 1.84 times from 2023 to 2025; in the United States it fell to 0.72 times.
- **F8.** 59.2% of PFAS articles were negative in tone, 1.76 times the all-news share.
- **F9.** 89.9% of PFAS articles were rated critical priority, 2.11 times the all-news share.
- **F10.** Water treatment chemistry appeared in 8.04% of themed PFAS articles, 581.9 times its frequency in all themed news.
- **F11.** 24.8% of raw PFAS-vocabulary matches were templated or off-topic items.
- **F12.** PFAS papers rose 7.53-fold as a share of all papers between 2015 and 2025.
- **F13.** China's office held 47.1% of office filings of PFAS patent families (2015–2024).
- **F14.** The yearly count of PFAS patent families published grew 4.1-fold between 2015 and 2024 (a raw count).

1. Introduction

PFAS are a large family of synthetic organofluorine chemicals used in non-stick coatings, water-repellent textiles, food packaging and firefighting foams [1, 3]. Their carbon-fluorine bonds make them persistent, which is why they are called "forever chemicals". Some are linked to adverse health effects, and they have been found in drinking water, soils and human blood [2, 4, 5, 6]. Over the period studied here, regulators in the United States, the European Union and elsewhere moved to limit them, and large lawsuits against manufacturers were settled.

News is where most people first hear about PFAS: a contaminated well, a new limit, a settlement. Yet the volume and shape of that attention are rarely measured. Monitoring programmes record concentrations. Bibliometric studies record research. Few sources record how much of the news PFAS take, and when, where and in what tone.

This paper and its dataset do that. They combine three records for one topic: a global news index, research papers and patents. Each comparison uses a denominator, so that growth in the index or in publishing is not mistaken for growth in interest. The companion dataset publishes an article-level sample (5,845 rows) and full coverage tables, so every figure here can be re-derived. The [Prism News API](#) serves the full history.

2. Data and methods

News. The Prism news index holds articles from outlets worldwide; non-English articles are indexed in English translation. Each article carries its opening text (the first few sentences), a primary location, a graded tone label, an editorial priority rating (1–9), themes, keywords and named organisations. We count unique article identifiers; repeated rows for the same article are removed.

Matching. An article is about PFAS when its opening text contains, as whole words, *PFAS*, *forever chemical(s)*, *perfluoroalkyl*, *polyfluoroalkyl*, *perfluorinated*, *polyfluorinated*, *PFOA*, *PFOS*, *PFHxS*, *perfluorooctanoic acid*, or *perfluorooctane sulfonate* (or *sulfonic acid*). The term *PFAS* alone matches 17,132 articles and *forever chemicals* 5,653. Four families of matches are excluded:

- repeated pages of one testing laboratory's website: numbered regulatory bulletins, service pages and explainers, each indexed many times over (most in March 2025);
- webinar, conference and training notices;
- two law-firm alerts copied hundreds of times in January and February 2026;
- other meanings of the abbreviation: Nigerian "pension fund administrators (PFAs)" and cardiac pulsed-field ablation.

Together these removed 7,762 of 31,264 raw matches (24.8%). One reviewer read 40 randomly drawn matched openings after the exclusions. All 40 used PFAS in the chemical sense (precision 100%), and in 37 (92.5%) PFAS were the main subject. In the other three, PFAS were one of several contaminants or a product was described as PFAS-free. 11 of the 40 openings (27.5%) were scientific paper abstracts that the index carries next to journalism; they are counted as coverage.

Measures. Coverage over time is expressed per 10,000 articles in the index that month or year, because the index grew from 11,807,177 articles in 2019 to 26,990,006 in 2025. Year comparisons use the complete years 2019–2025. Geography, tone, priority and themes use January 2023 – July 2026. Geography is expressed as lift: a place's share of PFAS articles divided by its share of all located articles. For states, the baseline is all located news from that country. Place tags derived from ordinary words (such as "Congress", "Earth", "Winter" or "Mobile") were treated as unlocated in every location field, which removed 15.3% of city-tagged articles.

Research and patents. Research papers are de-duplicated articles and reviews (2000–2025) with a PFAS term in the title. Repository deposits and the materials-science sense of "perfluorinated" (fuel-cell ionomers and membranes) are excluded. Patent families (2006–2024) use the same title rule, are counted once per filing office, and exclude cardiac ablation and ionomer senses.

3. Results

3.1 How much and when

The index holds 23,502 PFAS articles from January 2019 to July 2026. Raw counts rose from 1,197 in 2019 to 5,258 in 2025, a rise that partly reflects the index's own growth. As a share of all news, PFAS rose from 1.01 per 10,000 in 2019 to 1.98 in 2024 and 1.95 in 2025 (Table 1). The low point was 2020, at 0.75 per 10,000, 25.7% below 2019.

Year	PFAS articles	All articles in index	Per 10,000
2019	1,197	11,807,177	1.01
2020	1,211	16,230,014	0.75
2021	1,867	17,281,220	1.08
2022	2,669	19,115,515	1.4
2023	3,828	20,484,506	1.87
2024	4,609	23,311,896	1.98
2025	5,258	26,990,006	1.95

Table 1. PFAS articles per year and as a share of the index. 2026 (January–July) is partial and omitted.

The highest months in the series (Figure 1) are months of regulatory events. The highest share was April 2024, at 4.7 articles per 10,000 (855 articles), 2.37 times the 2024 annual share. This was the month in which the US Environmental Protection Agency finalized the first national drinking-water limits for several PFAS. The second-highest was March 2023, at

2.96 per 10,000, the month the agency proposed those limits. Other high months include January 2026 (2.81) and June 2023 (2.51).

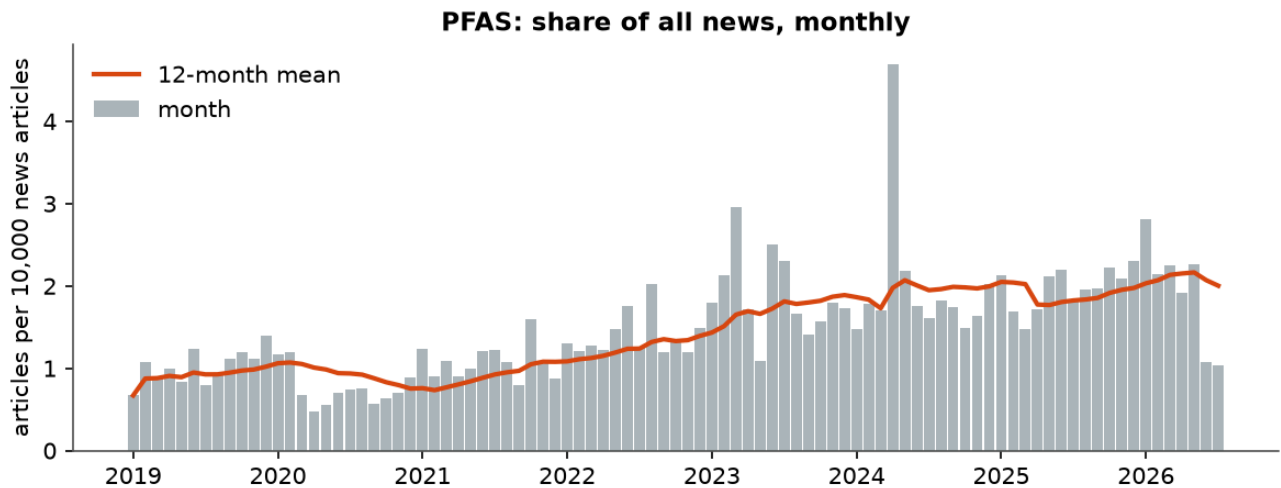


Figure 1. PFAS coverage as articles per 10,000 news articles, monthly, January 2019 – July 2026. Bars are months; the line is the 12-month mean.

Unlike weather-driven topics, PFAS coverage has no seasonal cycle (Figure 2). Averaged over 2019–2025, each month holds between 7.59% (May) and 9.24% (January) of a year's PFAS articles, close to an even spread. Attention follows rule-making, court rulings and new test results rather than the calendar.

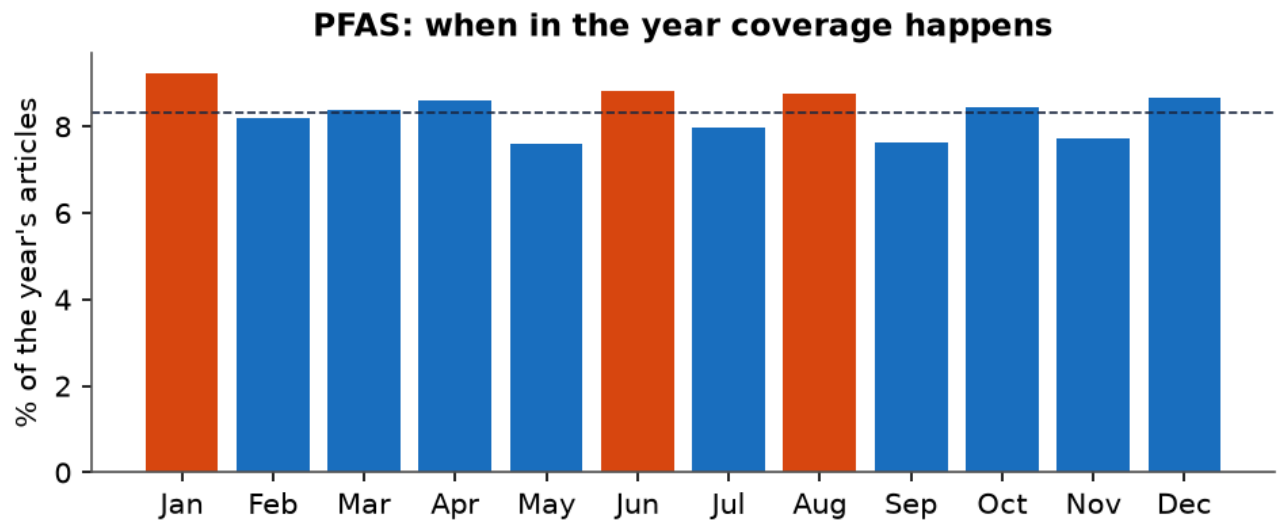


Figure 2. Share of each year's PFAS articles published in each month, averaged over 2019–2025. Dashed line = an even spread.

3.2 Where

Between January 2023 and July 2026, 6,018 PFAS articles carried a primary country, 36.3% of all PFAS articles in the window. The United States dominates: it holds 75.24% of located PFAS articles, and its lift is 1.55, so PFAS take a larger share of American news than of news overall. Australia follows with 2.82% and a lift of 1.32. France holds 2.04% (1.04), close to its weight in the index. The United Kingdom holds 4.62%, the second-largest share, but with a lift of 0.79 it is under-represented (Table 2, Figure 3). No other country reached the minimum number of located articles for a stable share.

Place	Located PFAS articles	Share %	Lift vs all news
United States	4,528	75.24	1.55
United Kingdom	278	4.62	0.79
Australia	170	2.82	1.32
France	123	2.04	1.04
North America (continent)	4,509	74.2	1.52
Europe (continent)	1,087	17.89	0.97
Oceania (continent)	226	3.72	1.42
Asia (continent)	206	3.39	0.14
Africa (continent)	25	0.41	0.11
South America (continent)	11	0.18	0.1

Table 2. Countries and continents in located PFAS news, January 2023 – July 2026, with lift against all located news.

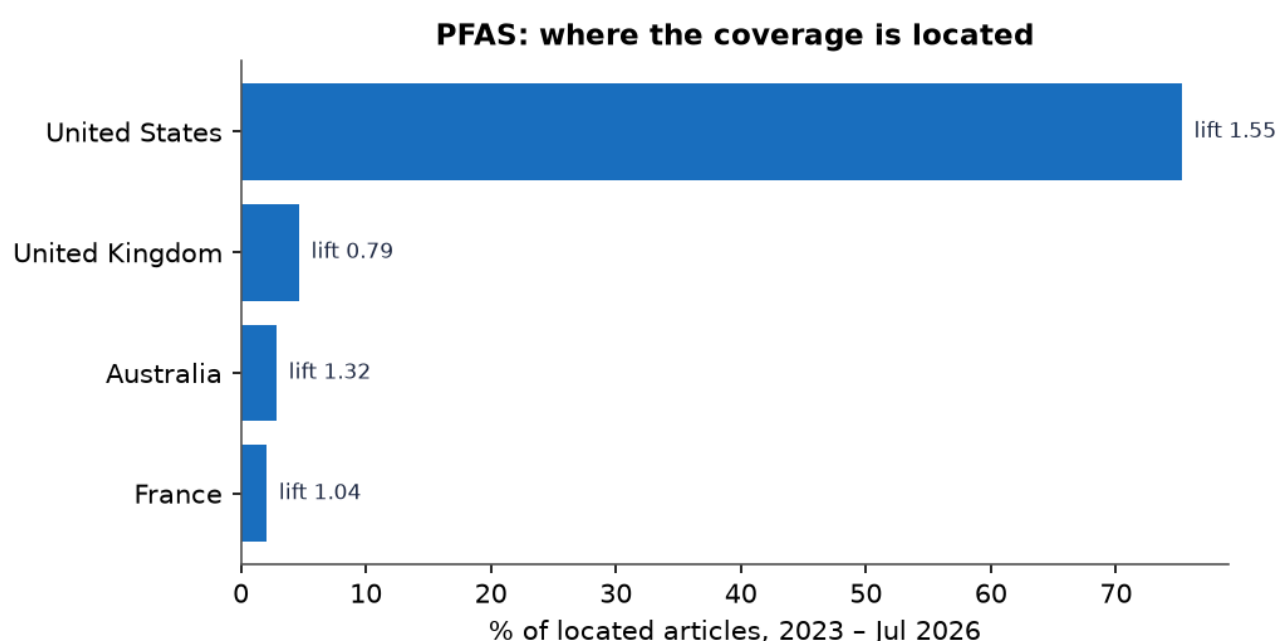


Figure 3. Leading countries by share of located PFAS articles, 2023 – Jul 2026, labelled with lift against all located news.

3.3 Geo intelligence: continents, states and shifting attention

World and continents. A world lift map, as drawn for other topics in this series, is not shown: only four countries passed the minimum article count, too few to colour a map honestly. Continents tell the story instead (Figure 5, left). PFAS are over-represented in the news of North America (1.52) and Oceania (1.42), close to expected in Europe (0.97), and nearly absent from the news of Asia (0.14), Africa (0.11) and South America (0.1). PFAS have been reported in environments worldwide [5], so the gap is one of news attention, not a measure of presence.

States of the United States. Within the United States, the picture is sharper (Table 3, Figure 4). Measured against each state's share of American news, PFAS coverage is most over-represented in Maine (7.66) and Wisconsin (6.6), well ahead of every other state. New Mexico (3.93) and Minnesota (3.06) come next, then North Carolina (2.92), Michigan (2.32) and South Carolina (2.11). Delaware (3.94) and Washington (2.97) are not ranked: in the sample, most Delaware tags come from Wilmington, North Carolina, and most Washington

tags come from the company name DuPont or from Washington, D.C. New Jersey (0.17) and Florida (0.48) are far below their weight in American news, as are Texas (0.63) and Pennsylvania (0.75). New Hampshire, which had ranked among the leaders before place tags from ordinary words were removed, now has 38 located articles and falls below the 50-article threshold. New Jersey's low lift is partly an artefact: the index carries a great deal of New Jersey local news, which enlarges its baseline.

Highest lift: state	Articles	Lift	Lowest lift: state	Articles	Lift
Maine	124	7.66	New Jersey	120	0.17
Wisconsin	332	6.6	Florida	98	0.48
New Mexico	52	3.93	Texas	140	0.63
Minnesota	184	3.06	Pennsylvania	169	0.75
North Carolina	175	2.92	New York	358	0.82
Michigan	204	2.32	California	313	0.83
South Carolina	52	2.11	Georgia	60	0.85
Ohio	116	1.44	Illinois	102	1.03

Table 3. US states with the highest and lowest lift in PFAS coverage, January 2023 – July 2026 (states with at least 50 articles; Delaware and Washington are excluded because their tags mostly point to other places or senses). Lift = the state's share of US located PFAS articles ÷ its share of all located US news.

PFAS: states of United States by lift

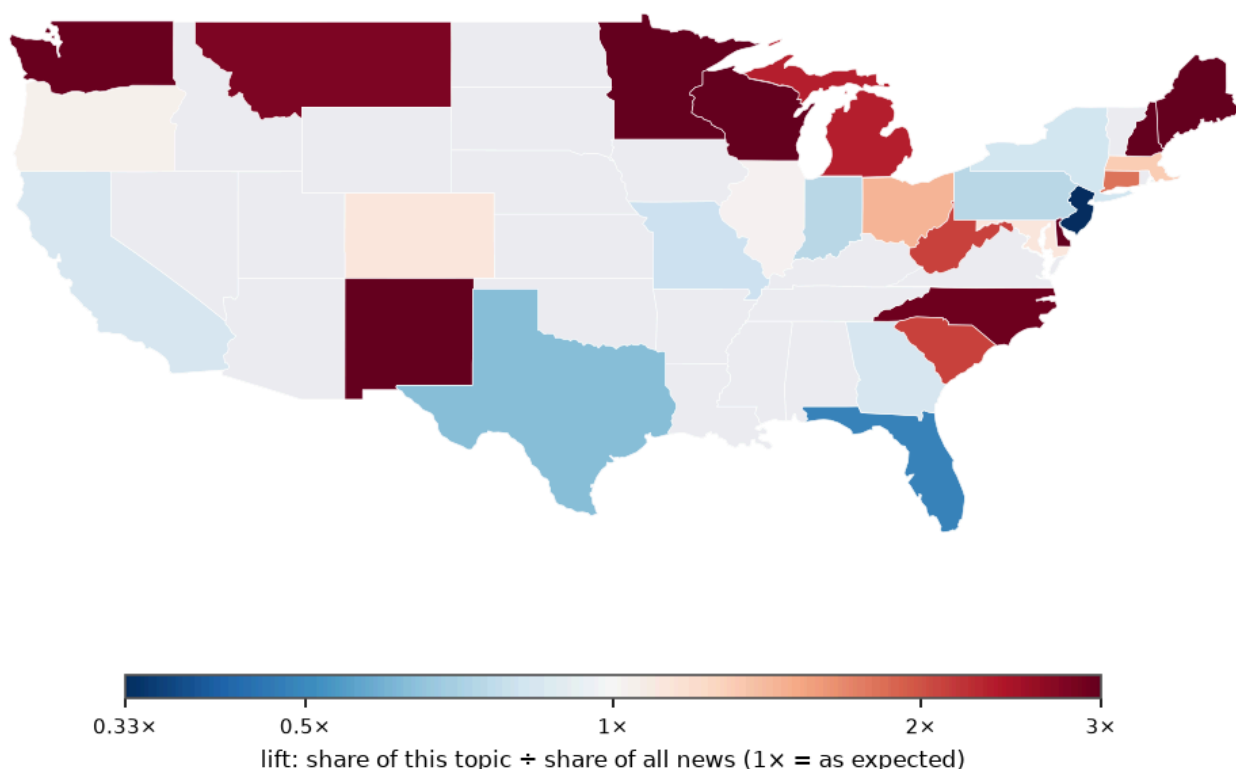


Figure 4. Lift of each US state's share of located PFAS articles against its share of all located US news, January 2023 – July 2026.

India has too few located PFAS articles (18 in the window) for a state map or any state-level statement.

Shifting attention. Attention moves between countries from year to year (Figure 5, right). Measured as PFAS articles per 10,000 of each country's located news, the United Kingdom rose from 0.8 in 2023 to 1.47 in 2025 (1.84 times), and Australia from 1.05 to 2.73. France

moved little (1.65 to 1.53). The United States fell from 2.83 in 2023 to 2.05 in 2025 (0.72 times), though it remains the country where PFAS take the largest share of the news.

Tone by country. PFAS coverage is negative well beyond each country's own baseline. Among located articles, 76.8% of American PFAS articles were negative in tone, against 33.1% of all American news, and 74.5% of British PFAS articles, against 36.9% of all British news. Located articles are more negative than PFAS articles overall (59.2%). One possible reason, not tested here, is that the unlocated part includes many research abstracts.

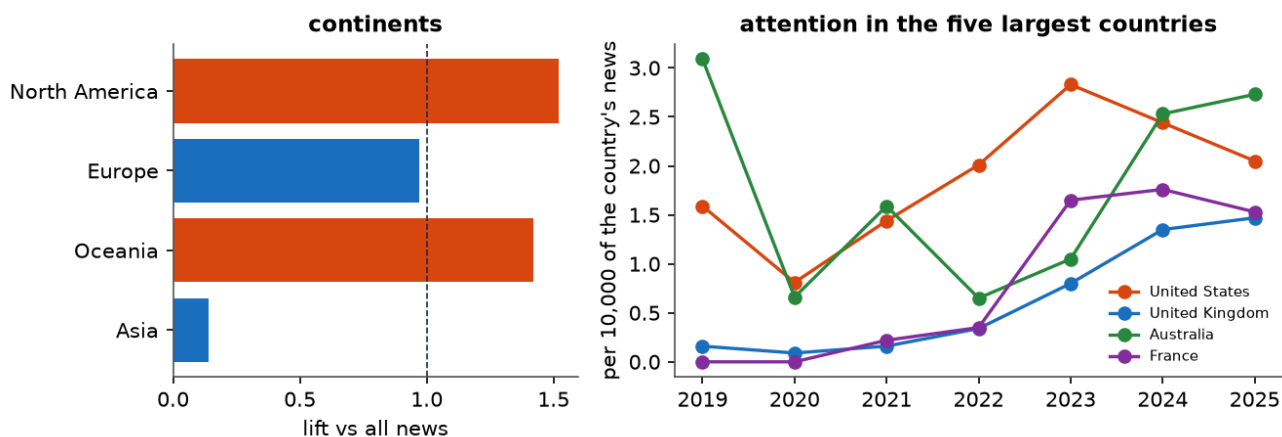


Figure 5. Left: lift by continent, January 2023 – July 2026. Right: PFAS articles per 10,000 of each country's located news, 2019–2025, for the countries with the most articles.

3.4 Tone, urgency and themes

PFAS coverage is more negative and far more urgent than news in general (Figure 6). Among articles with a tone label, 59.2% are negative, against 33.6% across the index (1.76 times). The machine-assigned priority rating puts 89.9% of PFAS articles at critical level (7 or higher), against 42.6% of all news (2.11 times).

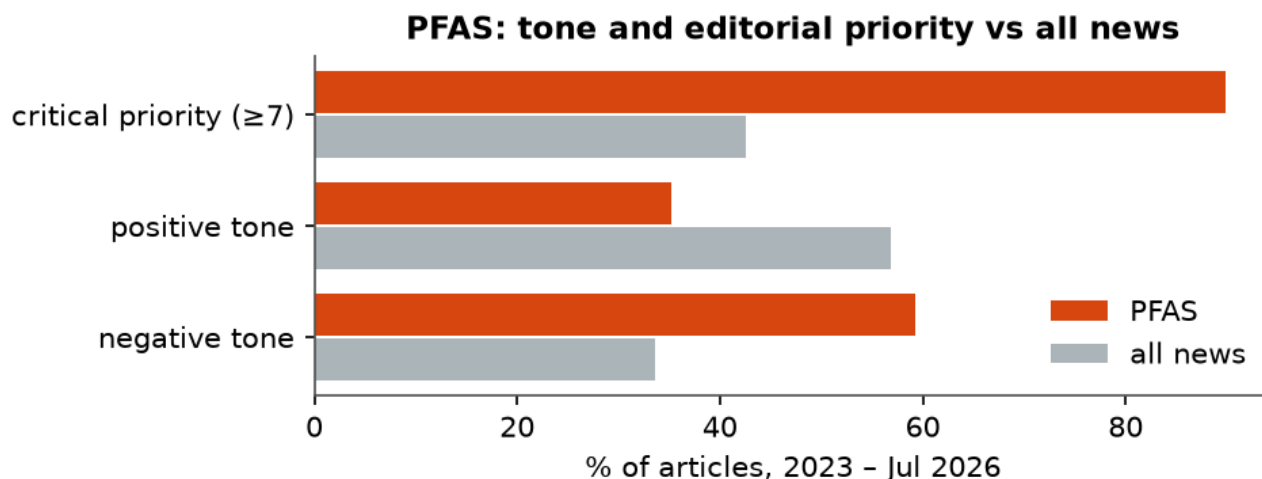


Figure 6. Tone and the share rated critical priority, PFAS articles vs all news, 2023 – Jul 2026.

Themes show what PFAS stories are about (Table 4). The most specific themes are chemical: pollution control in chemical manufacturing (7.84% of themed articles, 1,249 times its rate in all news) and water treatment chemistry (8.04%, 581.9 times). Clean water access advocacy (15.46%) and green chemistry and alternatives (9.66%) are common, which suggests two strands of PFAS news: drinking-water contamination and the search for substitutes.

Theme	Articles	Share %	Lift
environmental pollution and toxin accumulation	122	1.37	1900.76
pollution control in chemical manufacturing	699	7.84	1249.18
water treatment chemical solutions	716	8.04	581.9
green chemistry and eco-friendly alternatives	861	9.66	425.79
regulatory compliance in chemical industries	363	4.07	211.36
chemical waste treatment and storage	140	1.57	155.73
clean water access advocacy	1,378	15.46	144.36
hazardous waste disposal methods	147	1.65	117.14

Table 4. Themes most specific to PFAS coverage (lift against all themed news), January 2023 – July 2026.

The organisations named most often are the US Environmental Protection Agency (3,372 articles, 20.4% of PFAS articles in the window), the Environmental Working Group (728), the chemical manufacturer DuPont (674), the American Chemistry Council (202) and the United States Geological Survey (178). Wire services and generic terms also rank high, so the list reflects sourcing habits more than responsibility.

3.5 Research attention and invention

Research on PFAS grew much faster than the scientific literature. Papers with a PFAS term in the title rose from 0.58 per 10,000 papers in 2015 to 4.37 in 2025, a 7.53-fold increase in share. Between 2015 and 2025, 13,001 such papers were published, most often in *The Science of The Total Environment* (650) and *Environmental Science & Technology* (608). The most-cited include work on PFAS terminology and origins [1], human exposure pathways [2], uses [3], toxicity [4], environmental occurrence [5], drinking-water contamination in the United States [6], removal by adsorption [7] and the case for managing PFAS as a chemical class [8].

News attention rose too, but more slowly (Figure 7). From 2019 to 2025 the research share grew 3.77-fold, while the news share grew 1.93-fold. Research share rose every year; news share dipped in 2020 and has been flat since 2024.

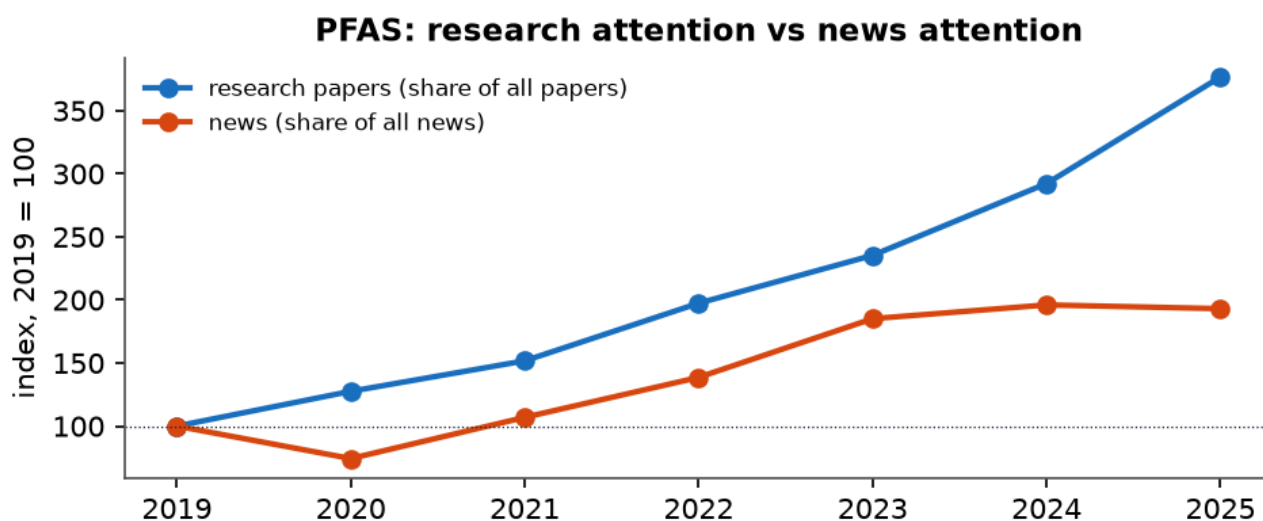


Figure 7. Research papers with PFAS terms in the title (share of all papers) and PFAS news (share of all news), each indexed to 2019 = 100.

The yearly count of patent families rose 4.1-fold: 52 PFAS-related families were published in 2015 and 213 in 2024. This is a raw count; all published patent families also grew over these years. China's office holds 47.1% of office filings from 2015 to 2024, followed by the United

States (14.5%) and international applications (11.9%) (Figure 8). The leading technology class is water and wastewater treatment (C02F, 119 families), followed by organic chemistry (C07C, 82) and chemical analysis (G01N, 62). Removal and measurement classes rank beside synthesis classes.

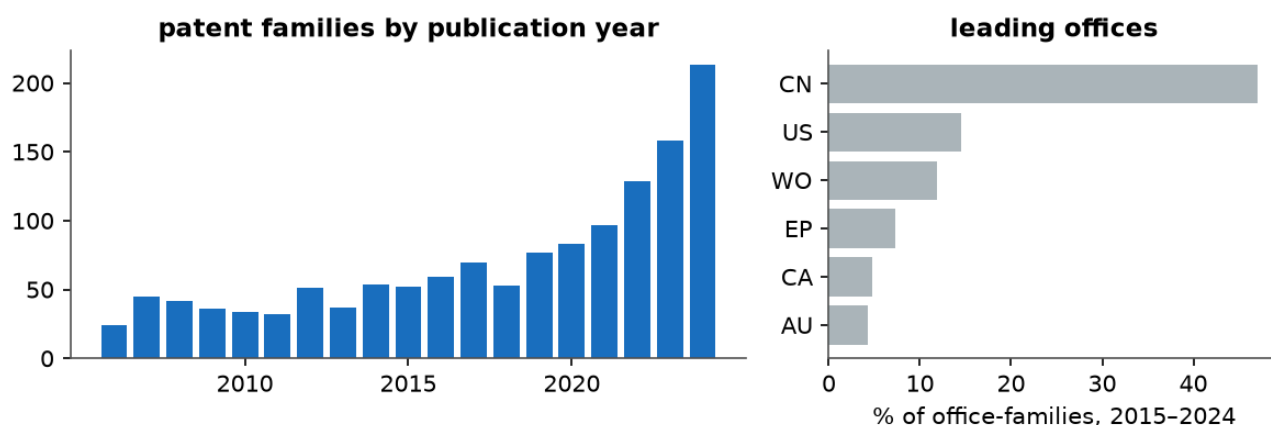


Figure 8. PFAS-related patent families by publication year (left) and the leading filing offices, 2015–2024 (right).

4. Discussion

Three points matter for anyone who uses news as a record of PFAS. First, PFAS news follows rule-making. The two highest months coincide with the proposal and the final adoption of US drinking-water limits, and there is no seasonal rhythm. Coverage is better read as a record of policy attention than of contamination. Second, PFAS news is overwhelmingly American. The United States is over-represented even relative to its large weight in the index, while Asia, Africa and South America hardly appear. Within the United States, two states, Maine and Wisconsin, take more than six times their share. Third, keyword counts of PFAS news need cleaning. A quarter of raw matches were repeated corporate pages, notices, copied alerts or unrelated meanings. Without exclusions, the monthly series would show spikes in March 2025 and early 2026 made of duplicated pages.

Research, invention and news run on different clocks. Research share grew 7.53-fold in a decade, with the largest yearly gain in 2025. Patent counts grow fast and centre on water treatment. News attention roughly doubled and then levelled off. The dataset lets researchers link the three, for example to test whether regulatory events that draw heavy coverage are followed by research or patent activity.

5. Limitations

- **Coverage after May 2026.** The index thins after May 2026, so 2026 is partial and is excluded from year comparisons.
- **Matching.** Matching uses the article opening. Articles that mention PFAS only later are missed. Exclusion patterns were tuned on samples, and some promotional items may remain.
- **What counts as news.** The index carries scientific abstracts and press releases next to journalism (27.5% of the precision sample were abstracts). They are counted, which lowers the negative-tone share.
- **Geography.** Place tags derived from ordinary words were treated as unlocated, which removed 15.3% of city-tagged articles. Only 36.3% of PFAS articles carry a country, and only four countries have enough located articles to compare, so no world map is drawn. India has too few located articles for state analysis.

- **Machine labels.** Location, tone, priority and themes are machine-labelled. The city field is noisy and is not analysed.
- **Outlet mix.** The index over-represents English-language outlets, which strengthens the American share.
- **Research and patent counts.** These match titles only. Office shares reflect filing practice.

Data availability

The dataset (article sample, monthly and country tables, research and patent tables, all metrics) is released under CC BY-NC 4.0 with this paper. The sample holds 5,845 of 23,490 matched articles to 31 July 2026. Full article text, headlines, publishers, later articles and other topics are served by the Prism News API: <https://github.com/fliarbi/prism-news-api> (base URL <https://radar-api.fliarbi.com/news>). A worked query: `prism-news trends "pfas" --since 2019-01-01 --until 2026-07-31 --granularity monthly`.

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