

Heart Attack in the News, 2019-2026: Peaks, Geography and Tone of Global Coverage of Heart Attack and Cardiac Arrest, 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 heart attack and cardiac arrest were covered in a global news index from January 2019 to July 2026, using 104,450 de-duplicated articles, and set that coverage beside 69,305 research papers (2015-2025) and 1,470 patent families (2015-2024) on the same conditions. Six results stand out:

1. **Peaks coincide with named events.** The topic's largest monthly share of news was January 2023, at 19.89 articles per 10,000, the month of an on-field cardiac arrest in a televised American football game. That is 2.23 times the 2023 annual share.
2. **Attention, not incidence.** The topic took 8.84 articles per 10,000 in 2019 and 6.04 in 2025, a 31.7% smaller share. Raw counts rose, but the index grew faster.
3. **Geography.** India's share of located coverage is 2.12 times its share of all news. The United States, the largest source of located articles (40.15%), is under-represented at 0.83. By continent, Asia (1.43) is over-represented and Africa (0.28) is not. Within India, Madhya Pradesh (1.72), Telangana (1.47) and Punjab (1.46) lead; within the United States, Ohio (3.23), Connecticut (1.81) and Utah (1.77).
4. **Tone and urgency.** 61.9% of articles are negative in tone (all news: 33.6%), and 80.4% are rated critical priority (all news: 42.6%). Obituaries, celebrity deaths and sports injury reports are among the most common themes.
5. **Measurement.** 17.04% of raw matches were structured research abstracts or figurative uses ("gave me a heart attack") and were excluded. News used "heart attack" 1.82 times as often as "cardiac arrest".
6. **Research and invention.** Papers on the topic rose from 8.06 to 10.99 per 10,000 papers between 2015 and 2025 (1.36-fold). The number of patent families grew 2.03-fold from 2015 to 2024, and China's office published the most (776 of 1,470).

Findings stated for citation

- **F1.** January 2023 was the peak month, at 19.89 articles per 10,000 news articles, 2.23 times the 2023 annual share.
- **F2.** The topic took a 31.7% smaller share of news in 2025 than in 2019 (6.04 vs 8.84 per 10,000).
- **F3.** In Denmark the topic reached 221.92 articles per 10,000 of located news in 2021, against 20.99 in 2019.
- **F4.** India's share of located coverage (28.0%) was 2.12 times its share of all news. The United States' (40.15%) was 0.83 times.
- **F5.** Asia (1.43) was the most over-represented continent and Africa (0.28) the least.

- **F6.** 61.9% of articles were negative in tone, 1.84 times the all-news share.
- **F7.** 80.4% of articles were machine-rated critical priority, 1.89 times the all-news share.
- **F8.** Obituaries and memorial services were the most common theme (9.75% of themed articles).
- **F9.** "Heart attack" appeared in 1.82 times as many articles as "cardiac arrest".
- **F10.** Papers on the topic rose 1.36-fold as a share of all papers between 2015 and 2025.
- **F11.** The number of patent families grew 2.03-fold from 2015 to 2024; China's office published the most (776).
- **F12.** Within India, Madhya Pradesh (1.72), Telangana (1.47) and Punjab (1.46) had the most over-represented coverage.
- **F13.** Within the United States, Ohio (3.23), Connecticut (1.81) and Utah (1.77) had the most over-represented coverage.
- **F14.** Coverage as a share of Bangladesh's news rose from 12.66 to 31.82 per 10,000 from 2023 to 2025, and South Korea's 2.16-fold; in the United States it fell to 0.47 times its 2023 level.
- **F15.** Among the 11 countries with the most labelled articles, and relative to each country's own news, coverage was most negative in China (2.64 times) and South Korea (2.40 times).

1. Introduction

Heart attack (myocardial infarction) and cardiac arrest are leading causes of sudden death. A heart attack is the death of heart muscle when its blood supply is blocked. Cardiac arrest is the sudden loss of the heart's pumping action, often from an abnormal rhythm. The two are different events, but news reports name both, often in the same story, and the public meets them first through the news: the death of a public figure, a collapse on a sports field, a new study on risk.

News coverage shapes what readers believe about these conditions and what they do when they see one. Yet coverage is rarely measured as data. Registries count cases, and bibliometric studies count research. Few sources count attention, meaning how much of the news the topic takes, and when, where and in what tone. This paper and its dataset do that for heart attack and cardiac arrest. They combine three records: 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 (26,292 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, a machine-assigned editorial priority rating (1-9), themes, keywords and named organisations. We count unique article identifiers; repeated rows for the same article are removed. When this release was built, 92.88% of the index was readable, so all counts are lower bounds.

Matching. An article is in scope when its opening text contains *heart attack*, *heart attacks*, *cardiac arrest*, *cardiac arrests* or *myocardial infarction* as whole words. Tags alone do not qualify an article. Two families of matches are excluded:

- openings in the format of a structured research abstract ("...background:", "objective:", "methods:"), which the index carries alongside news;
- figurative uses ("gave me a heart attack", "nearly had a heart attack", "heart attack-inducing").

Together these removed 21,457 of 125,907 raw matches (17.04%). One reviewer read 40 randomly drawn matched openings. 39 used the terms in their medical sense (precision 97.5%); the one false match was a machine-translation artefact. In 22 (55%) the heart attack or cardiac arrest was the main subject. Most of the others were obituaries that give it as the cause of death. Some unstructured research abstracts remain in the matched set; 8 of the 40 sampled openings were of this kind.

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; 2026 covers January–July only. Geography, tone, priority and themes use January 2023 – July 2026. Geography is expressed as lift: a country's share of matched articles divided by its share of all located articles. Of the 56,937 matched articles in that window, 24,414 (42.88%) carry a primary country. Place tags derived from ordinary words ("Congress", "Earth", "Winter", "Cloud", "Mobile", "Hurricane" and others, 714 words in all) were treated as unlocated in every location field, which removes 15.3% of city-tagged articles.

Research and patents. Research papers are de-duplicated articles and reviews (2000–2025) with *heart attack*, *myocardial infarction* or *cardiac arrest* in the title; repository deposits are excluded. Patent families (2006–2024) use the same title rule and are counted once per filing office.

3. Results

3.1 How much and when

The index holds 104,450 matched articles from January 2019 to July 2026. Raw counts rose from 10,436 in 2019 to 16,299 in 2025, but the share of all news did not: 8.84 per 10,000 in 2019, 8.93 in 2023 and 6.04 in 2025 (Table 1). The 2025 share is 31.7% below 2019. 2023 was the highest year, 1.18 times 2022.

Year	Matched articles	All articles in index	Per 10,000
2019	10,436	11,807,177	8.84
2020	10,854	16,230,014	6.69
2021	11,733	17,281,220	6.79
2022	14,485	19,115,515	7.58
2023	18,283	20,484,506	8.93
2024	15,399	23,311,896	6.61
2025	16,299	26,990,006	6.04

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

Coverage moves with single events more than with seasons (Figure 1). The highest monthly share was January 2023, at 19.89 per 10,000 (3,912 articles), the month of Damar Hamlin's

cardiac arrest during a televised game. The next-highest months were March 2022 (10.77), August 2019 (10.14) and October 2019 (9.95). June 2021, the month of Christian Eriksen's collapse at UEFA Euro 2020, reached 9.35. These are coincidences of timing. Other stories ran in the same months.

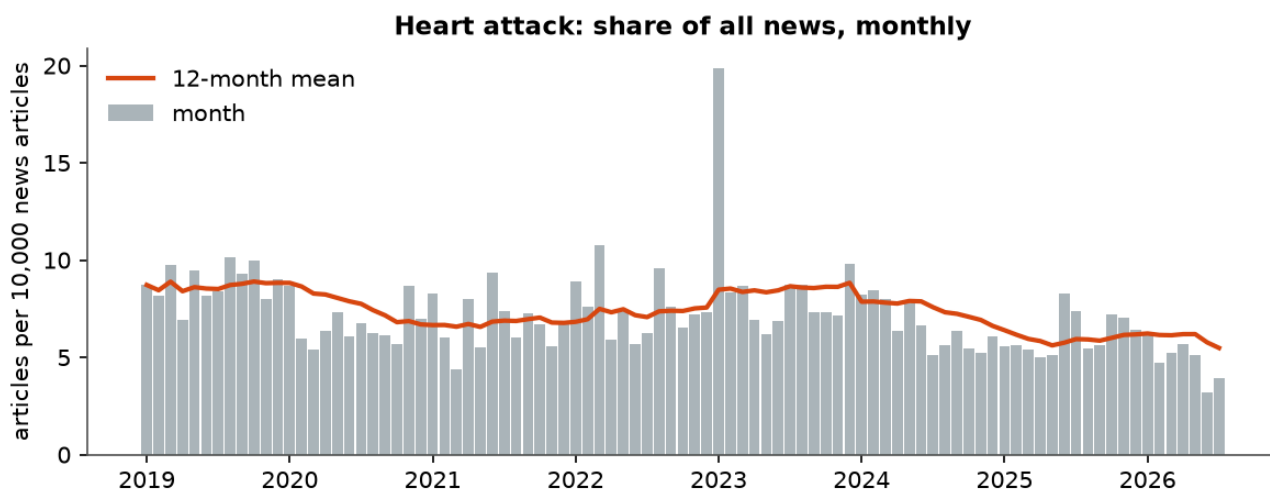


Figure 1. Coverage as articles per 10,000 news articles, monthly, January 2019 – July 2026. Bars are months; the line is the 12-month mean.

Averaged over 2019–2025, January holds 11.86% of a year's coverage, against 8.3% for an even spread (Figure 2). Most of that excess comes from January 2023 alone: January 2019 (8.72 per 10,000) was close to that year's average. The other months range from 7.24% (April) to 8.58% (March). We do not treat this as a seasonal pattern.

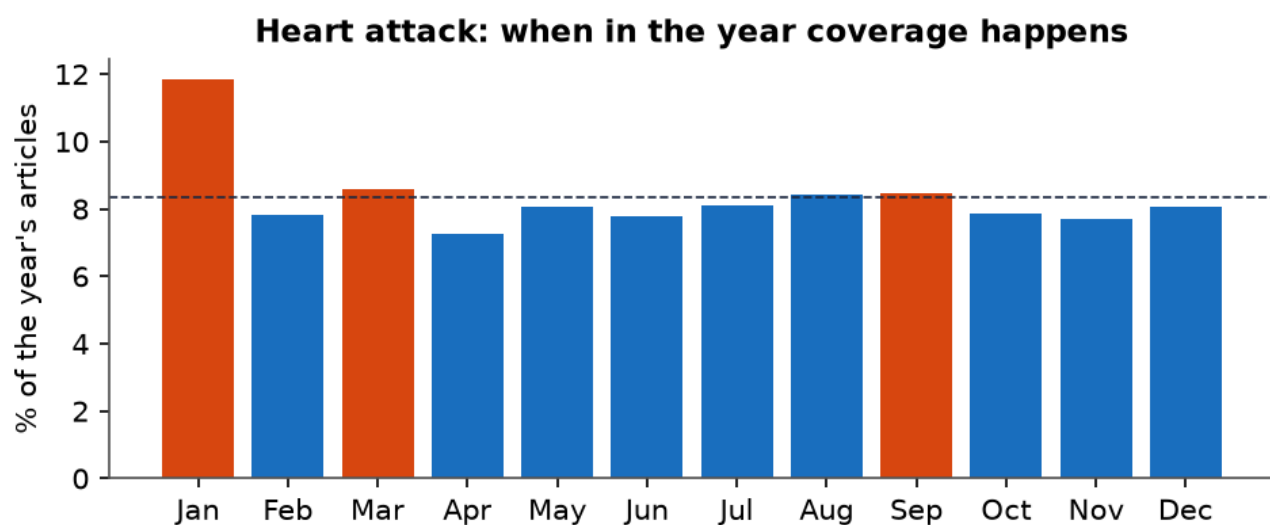


Figure 2. Share of each year's articles published in each month, averaged over 2019–2025. Dashed line = an even spread (8.3% per month).

3.2 Where

Between January 2023 and July 2026, 24,414 matched articles carried a primary location. The United States holds the largest raw share (40.15%), but its lift is 0.83: the topic takes a smaller share of American news than of news overall. India's share (28.0%) comes with a lift of 2.12, and the United Kingdom's (8.36%) with 1.43. Among the 19 countries with the most articles, Denmark (3.61), Sweden (2.62) and Bangladesh (2.36) are the most over-represented, and China (0.5), Germany (0.53) and Canada (0.56) the most under-represented (Table 2, Figure 3).

Country	Located articles	Share %	Lift vs all news
United States	9,803	40.15	0.83
India	6,837	28.0	2.12
United Kingdom	2,040	8.36	1.43
France	488	2.0	1.01
Australia	478	1.96	0.91
Brazil	333	1.36	1.58
China	320	1.31	0.5
Canada	292	1.2	0.56
Spain	224	0.92	0.94
South Korea	208	0.85	1.42
Bangladesh	149	0.61	2.36
Sweden	140	0.57	2.62
Denmark	103	0.42	3.61

Table 2. Leading countries in located coverage, January 2023 – July 2026, with lift against all located news.

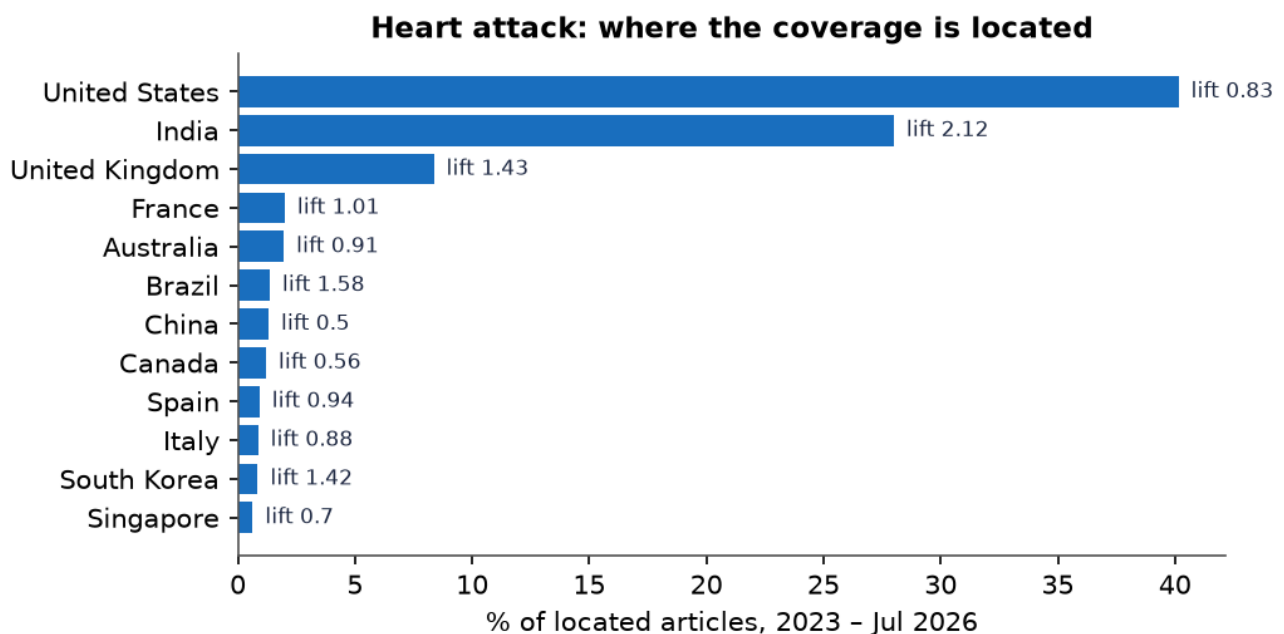


Figure 3. Leading countries by share of located articles, 2023 – Jul 2026, labelled with lift against all located news.

3.3 Geo intelligence: continents, states and shifting attention

The world map (Figure 4) shows the pattern at a glance. The topic is over-represented in the news of Denmark, Sweden, Bangladesh, India, Brazil, the United Kingdom and South Korea, and under-represented in China, Germany, Canada and Japan. By continent, Asia (1.43) and South America (1.1) are over-represented. Europe (0.97), Oceania (0.85) and North America (0.85) sit near or below parity, and Africa (0.28) is far below it (Figure 7, left).

Heart attack: which countries over- and under-cover the topic

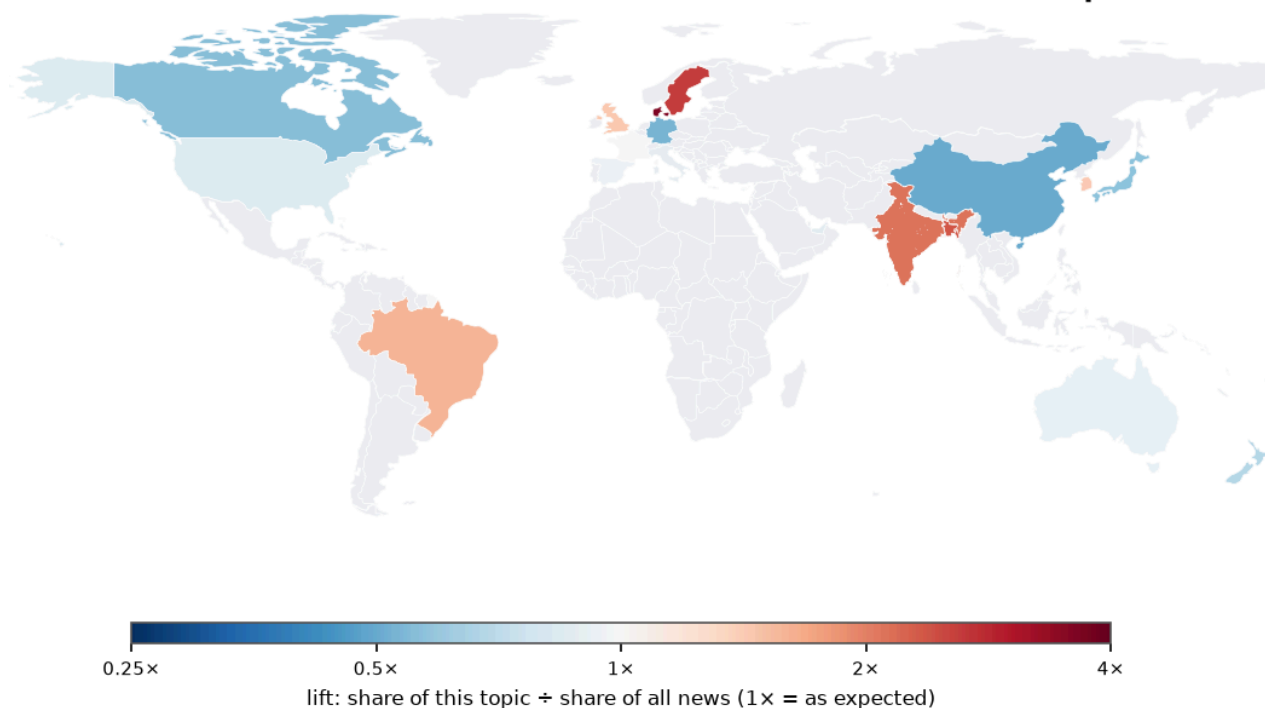


Figure 4. Lift of each country's share of located articles, January 2023 – July 2026 (red = over-represented, blue = under-represented, grey = fewer than 100 articles). India is drawn with its official outline.

Within countries, the spread is narrower than between countries, but it is clear (Table 3). In India, measured against each state's share of Indian news, Madhya Pradesh (1.72), Telangana (1.47), Punjab (1.46) and Uttar Pradesh (1.29) are the most over-represented. West Bengal (0.51), Jharkhand and Jammu and Kashmir (each 0.52) and Uttarakhand (0.6) are under-represented (Figure 5). In the United States, Ohio (3.23) leads by a wide margin, followed by Connecticut (1.81), Utah (1.77), Maryland (1.63) and California (1.61). New Jersey (0.11) is far below its weight in American news, and Alabama (0.67) and Wisconsin (0.7) are also under-represented (Figure 6). Ohio's high lift sits in a window that includes January 2023, when the game in which Hamlin collapsed was played in Cincinnati; we do not test whether that one story explains it. States with fewer than 50 articles are left out of the text.

India: state	Articles	Lift	United States: state	Articles	Lift
Madhya Pradesh	319	1.72	Ohio	579	3.23
Telangana	320	1.47	Connecticut	107	1.81
Punjab	233	1.46	Utah	132	1.77
Uttar Pradesh	1,029	1.29	Maryland	139	1.63
Gujarat	261	1.26	California	1,351	1.61
Rajasthan	256	1.18	Arkansas	52	1.56
lowest: Uttarakhand	85	0.6	lowest: Tennessee	146	0.76
Jharkhand	80	0.52	Wisconsin	79	0.7
Jammu and Kashmir	76	0.52	Alabama	64	0.67
West Bengal	111	0.51	New Jersey	171	0.11

Table 3. States with the highest and lowest lift, January 2023 – July 2026, among states with at least 50 articles. Lift = the state's share of the country's located matched articles ÷ its share of all located news from that country.

Heart attack: states of India by lift

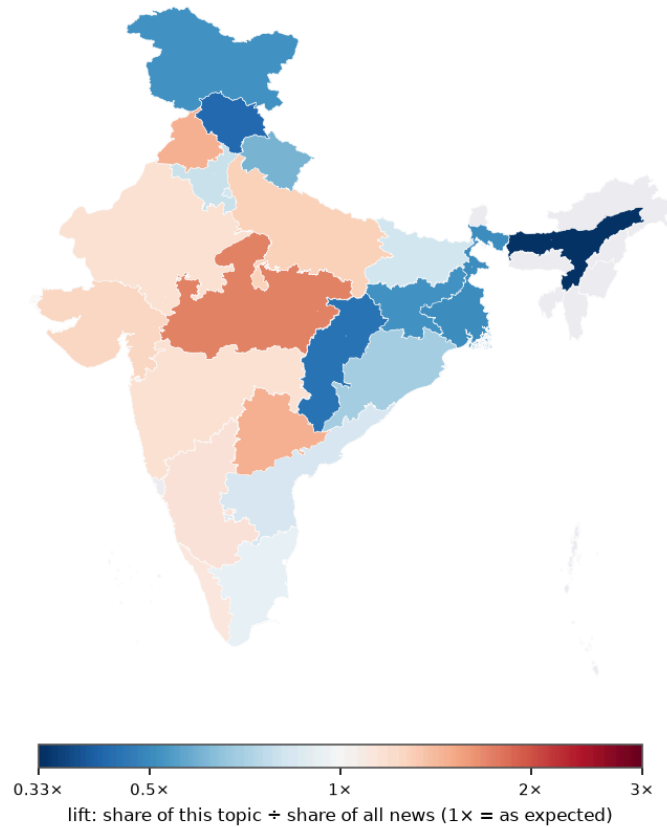


Figure 5. Lift of each Indian state's share of located articles against its share of all located Indian news, January 2023 – July 2026. Official outline; Ladakh is drawn within Jammu and Kashmir in the boundary file used.

Heart attack: states of United States by lift

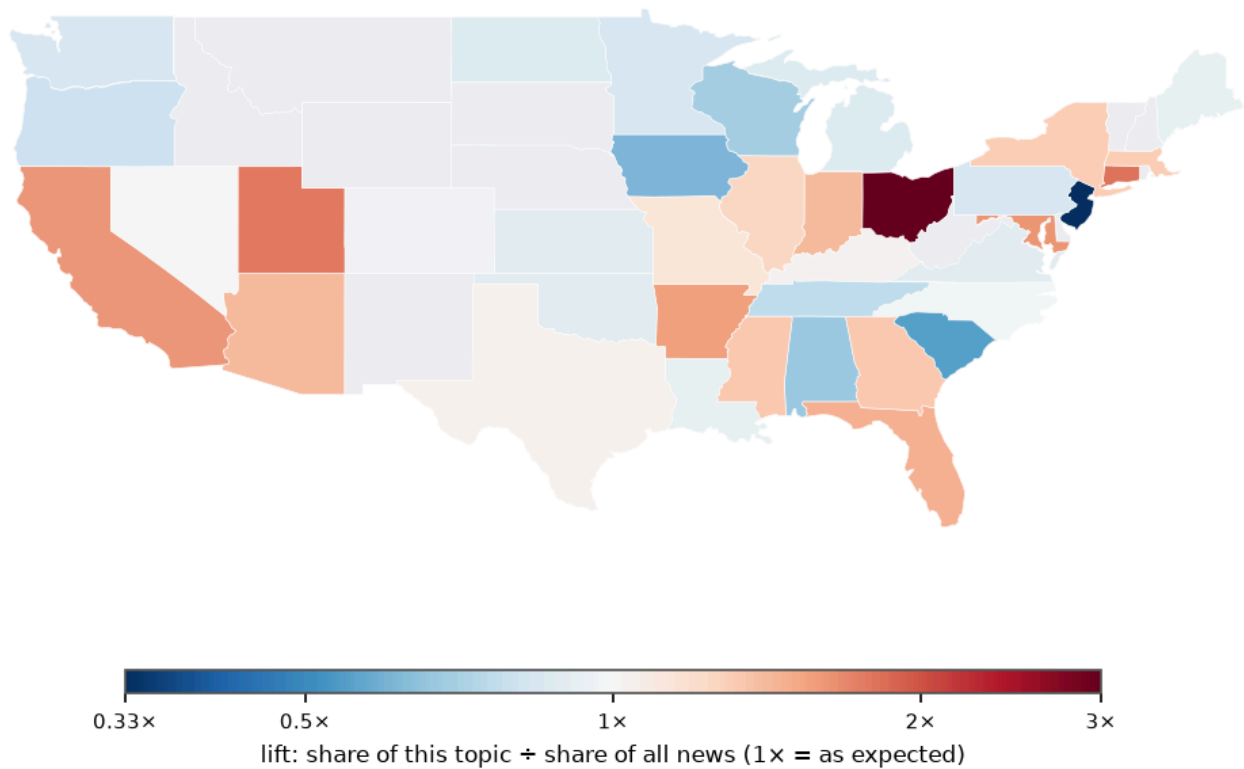


Figure 6. Lift of each US state's share of located articles against its share of all located US news, January 2023 – July 2026.

Attention also moves between countries from year to year (Figure 7, right). Measured as matched articles per 10,000 of each country's located news, Bangladesh rose from 12.66 in 2023 to 31.82 in 2025 and South Korea from 7.44 to 16.1 (2.16 times), and the United Arab Emirates from 4.35 to 8.2. The steepest falls were in China, from 6.72 to 2.22, and Japan, from 6.26 to 2.5. The United States fell from 8.48 to 3.98 (0.47 times), after its January 2023 peak, Australia from 7.81 to 4.91 and France from 5.02 to 3.27. India stayed high: 15.74 in 2023 and 13.62 in 2025, and the United Kingdom moved from 10.75 to 9.57. The largest single-year value in the table is Denmark's 221.92 in 2021, the year of the Euro 2020 collapse, against 20.99 in 2019.

In each of the 11 countries with the most labelled articles, coverage is more negative than that country's news overall, but by different margins. In China 71.9% of labelled articles were negative against 27.2% of all Chinese news (2.64 times), and in South Korea 60.1% against 25.0% (2.40 times), followed by Canada, Italy and Spain. In India the ratio is 2.00 (82.5% against 41.2%), in the United States 1.86 (61.7% against 33.1%), and in Australia, the lowest, 1.72 (66.0% against 38.4%).

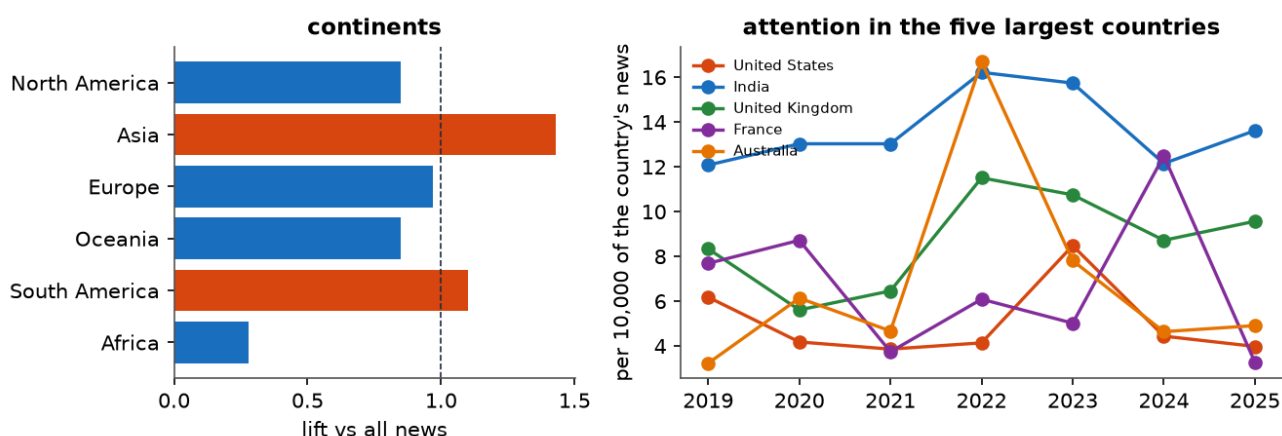


Figure 7. Left: lift by continent, January 2023 – July 2026. Right: articles per 10,000 of each country's located news, 2019–2025, for the five countries with the most articles.

3.4 Tone, urgency and themes

Coverage is more negative and more urgent than news in general (Figure 8). Among articles with a tone label, 61.9% are negative, against 33.6% across the index (1.84 times). A machine-assigned priority rating puts 80.4% of articles at critical level (7 or higher), against 42.6% of all news (1.89 times). Another 36.3% are positive in tone; recovery and prevention advice are frequent themes.

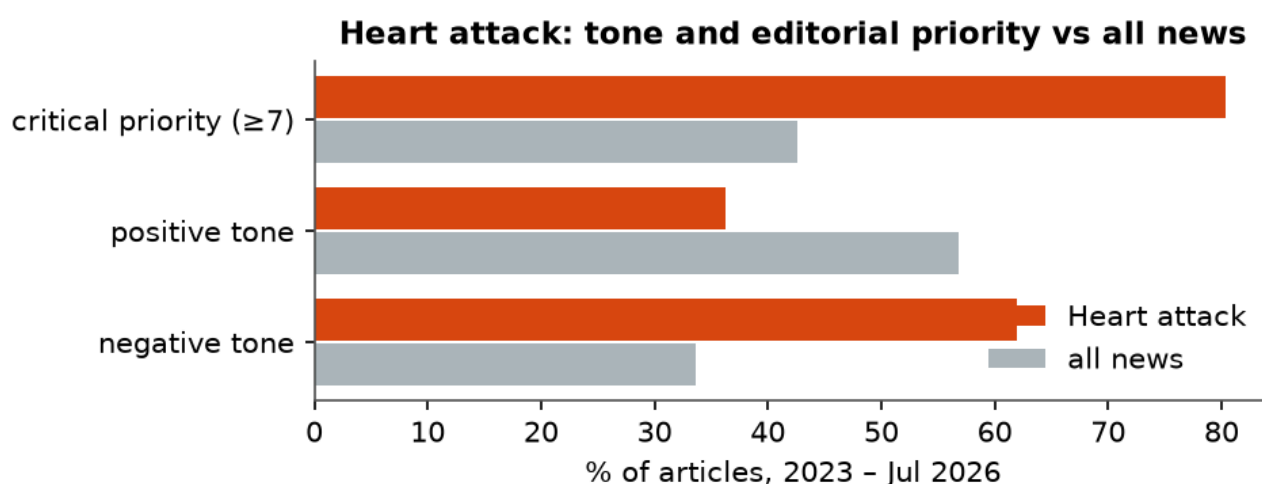


Figure 8. Tone and the share rated critical priority, matched articles vs all news, 2023 – Jul 2026.

Themes show what the stories are about. By count, obituaries and memorial services lead (9.75% of themed articles), followed by heart attack recovery (9.53%), celebrity deaths (6.73%) and sports injury reports (6.58%). By lift, the most specific themes are clinical and preventive: recovery, smoking cessation, coronary artery disease management and women's cardiovascular health (Table 4).

Theme	Articles	Share %	Lift
myocardial infarction (heart attack) recovery	3,008	9.53	353.34
smoking cessation & cardiovascular health	824	2.61	243.36
coronary artery disease management	1,272	4.03	204.17
cardiovascular risk factor analysis	451	1.43	190.15
women-specific cardiovascular health issues	714	2.26	189.78
stress management techniques for hypertension	1,282	4.06	179.48
dietary approaches for heart health	1,722	5.46	152.78
inflammatory heart diseases (myocarditis/pericarditis)	845	2.68	145.31

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

The vocabulary of coverage is lay rather than clinical. Across the full window, 53,204 articles used "heart attack", 29,216 "cardiac arrest" and 16,801 "myocardial infarction". Among named organisations, sports leagues rank high (the National Football League in 1,692 articles, the National Basketball Association in 744), ahead of the American Heart Association (778) and the Mayo Clinic (405). Organisation tags are noisy, so we do not rank them further.

3.5 Research attention and invention

Research on the topic grew faster than the scientific literature. Papers with *heart attack*, *myocardial infarction* or *cardiac arrest* in the title rose from 8.06 per 10,000 papers in 2015 to 10.99 in 2025, a 1.36-fold increase in share. Between 2015 and 2025, 69,305 such papers were published, and 124,810 since 2000. The leading venues are *Circulation* (3,148 papers), the *Journal of the American College of Cardiology* (2,918), the *European Heart Journal* (2,689) and *Resuscitation* (2,530). The most-cited works are management guidelines and the universal definitions of myocardial infarction [1-3], trials of treatment after a heart attack [4, 6] and of temperature management after cardiac arrest [5].

News attention does not track research attention (Figure 9). Between 2019 and 2025, the research share rose from 9.23 to 10.99 per 10,000 papers, while the news share fell from

8.84 to 6.04 per 10,000 articles.

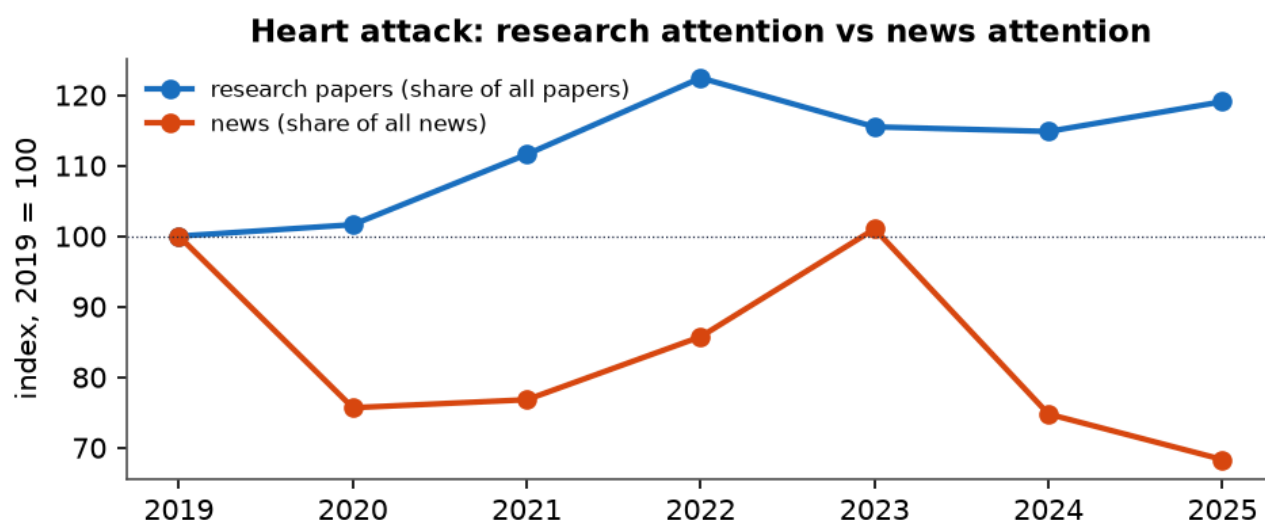


Figure 9. Research papers with the topic in the title (share of all papers) and news coverage (share of all news), each indexed to 2019 = 100.

Patenting is small. 109 patent families were published in 2015 and 221 in 2024 (2.03 times), a raw count that also reflects growth in patent publishing overall. From 2015 to 2024, China's office published the most families (776 of 1,470), followed by the United States (158) and the international (WO) route (108) (Figure 10). The leading technology classes are medicinal preparations (A61K, 273 families), diagnosis (A61B, 157) and chemical and biomarker analysis (G01N, 114).

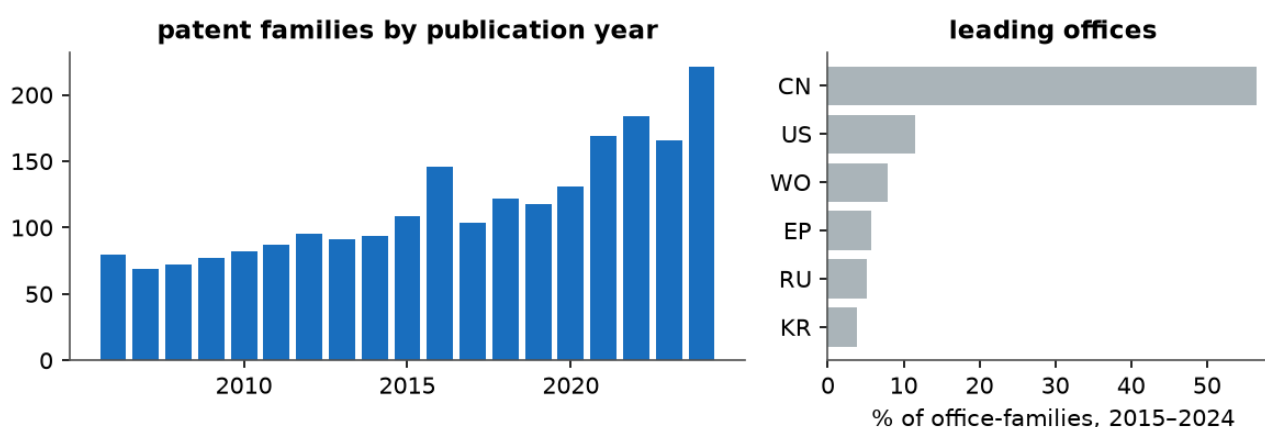


Figure 10. Patent families with the topic in the title, by publication year (left), and the leading filing offices, 2015-2024 (right).

4. Discussion

Three points matter for anyone who uses news as a record of heart attack and cardiac arrest. First, coverage measures attention, and attention follows people. The largest peak in the period fell in the month a well-known athlete collapsed on the field, and obituaries and celebrity deaths are among the most common themes. A count of news stories therefore says more about who was affected than about how many people were. Second, raw shares mislead. The United States leads in raw terms but is under-represented relative to its weight in the index, while India's share of coverage is more than twice its share of all news. Within countries, rankings are sensitive to how places are tagged: once place tags derived from ordinary words were treated as unlocated, Madhya Pradesh replaced Punjab at the top of

the Indian states. Third, keyword counts need cleaning: structured research abstracts and figurative phrases made up 17.04% of raw matches.

The data also give no support for a rise in coverage after 2023. Claims that heart attacks are becoming more common, including claims linking them to vaccines, appear in some articles, but the topic's share of news in 2024 and 2025 was below its 2019 level. Coverage cannot test incidence either way.

Research, invention and news run on different clocks. Research share grows steadily. Patent filings grow from a small base and are concentrated in one office. News follows named events. The dataset lets researchers link the three, for example to test whether heavily covered collapses are followed by more coverage of cardiopulmonary resuscitation and defibrillators in the affected country.

5. Limitations

- **Index availability.** 92.88% of the index was readable at build time, so counts are lower bounds. Shares and lifts are less affected, because the missing part is spread across topics.
- **Coverage after May 2026.** The index thins after May 2026, so 2026 is partial and is excluded from year comparisons.
- **Two conditions in one topic.** Heart attack and cardiac arrest are different events. News reports do not always distinguish them, so they are counted together.
- **Matching.** Matching uses the article opening. Articles that mention the topic only later are missed. 2.5% of matches are not about the topic, and some unstructured research abstracts remain.
- **Machine labels.** Location, tone, priority and themes are machine-labelled. The city field is noisy and is not analysed.
- **Word-derived place tags.** Place tags derived from ordinary words were treated as unlocated (15.3% of city-tagged articles), so located counts are smaller than raw tags, and some genuine places that share a name with a common word are lost.
- **Outlet mix.** The index over-represents English-language outlets, and Indian and American outlets in particular. This shapes the geography.
- **Research and patent counts.** These match titles only. Office shares reflect filing practice.

Data availability

The dataset (article sample, monthly, country, continent and state tables, research and patent tables, all metrics) is released under CC BY-NC 4.0 with this paper. The sample holds 26,292 of 104,435 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 "heart attack" --since 2019-01-01 --until 2026-07-31 --granularity monthly`.

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