



Before the Outbreak: The Hantavirus Case Study

The Signal Before the Crisis

Ten weeks before the MV Hondius made international news, Virus Watcher had already flagged what was building in South America.

On February 25, the platform surfaced an elevated hantavirus signal from Argentina: case fatality rates above the four-year average, geographic spread wider than the 2020-2024 baseline. Not a crisis yet. A pattern worth watching.

By then, Bolivia had already reported 48 cases, twice its annual average, with a lethality rate of 22.9% against a four-year norm of 15.9%. Chile had logged four deaths and nine confirmed cases. The signal was regional, and it was getting louder.

When investigators traced the outbreak source in May, they identified a bird-watching tour in Ushuaia, Argentina in mid-March as the origin point. The same country. The same elevated activity the platform had been monitoring since February.

Pre-Outbreak Timeline

Date	Country	Signal
Feb 13	Bolivia	48 cases (twice avg), 11 deaths, lethality 22.9% vs 15.9% baseline
Feb 16	Chile	4 deaths, 9 confirmed cases
Feb 25	Argentina	Elevated fatality rates, geographic spread wider than 2020-2024 baseline
Mar 12	United States	HPS case confirmed in New Mexico
May 3	Cruise ship	Outbreak confirmed, 3 dead, WHO notified
May 3-7	Global	10 outbreak events tracked, 7,000+ articles ingested

Coverage at a Glance

- 10 outbreak events tracked over 5 days
- 3 disease classifications monitored independently
- 7,000+ articles ingested across all events

Outbreak Events Tracked (May 3-7, 2026)

Risk Level	Event	Sources
Critical	3 deaths linked to cruise ship outbreak	2,298
Critical	CDC monitoring US travelers on cruise ship	4,519
Critical	Andes strain confirmed: only variant with person-to-person spread	212
High	Explainer coverage surge as public awareness grew	65
Medium	Source traced to Argentina exposure site	64
Medium	Foreign nationals stranded; government response activated	45

Medium	Human-to-human transmission confirmed in South Africa	27
Medium	Passenger accounts from inside quarantined vessel	29

Disease Classification Depth

Virus Watcher tracks three distinct hantavirus entries, each monitored independently:

Disease	Status
Hantavirus Infection	Monitoring
Hantavirus Pulmonary Syndrome (HPS)	Monitoring
Hantavirus Infection, non-HPS	Monitoring

HPS and non-HPS have different clinical presentations, mortality rates, and CDC reporting classifications. The platform does not conflate them.

Risk Scoring

Events are automatically classified by severity based on coverage volume, source authority, and content analysis. The CDC monitoring story scored Critical before most institutional dashboards had updated. The South American regional signals from February scored lower but remained tracked continuously in the background.

More Than News Monitoring

Virus Watcher is not a news aggregator. Alongside global outbreak tracking, the platform layers in:

- Wastewater surveillance: early warning signal data from hundreds of sites before clinical cases confirm
- CDC and WHO disease data: standardized weekly case counts, hospitalization trends, and mortality signals
- Location-based risk: city and country-level risk scores tied to where your people actually are
- Travel intelligence: inbound risk from origin countries, not just destination
- Community reporting: low-signal ground-level reports from users in affected areas, often surfacing before institutional sources

The hantavirus case shows what that combination looks like in practice: regional signals tracked months in advance, then full outbreak coverage within 24 hours of the WHO report.

What the Data Actually Looks Like

Early warning signal from February 25, ten weeks before the cruise ship outbreak became global news:

```
{
  "id": "be303e26-1a20-41ff-a13a-403f91209d05",
  "title": "Hantavirus Kills in Argentina; Hiking Trails Suspected Source",
  "content": "Hantavirus pulmonary syndrome is endemic in Argentina, with dozens of confirmed cases reported annually.",
  "disease": {
    "name": "Hantavirus infection, non-hantavirus pulmonary syndrome",
    "status": "monitoring"
  },
  "published_at": "2026-02-25T18:30:18Z"
}
```

And the corresponding outbreak event, scored and classified on May 4 as the story broke globally:

```
{
  "title": "CDC says monitoring US travelers on cruise ship after hantavirus outbreak",
  "disease": "Hantavirus Infection",
  "risk_level": "critical",
  "risk_score": 90.69,
}
```

```
"article_count": 4519,  
"event_date": "2026-05-04",  
"summary": "The United States is closely monitoring the situation with U.S. travelers on board the luxury cruise shi  
}
```

Structured, classified, and linked to a specific disease. The early warning in February. The full response in May. No manual curation. No lag.

Built for Any Outbreak

This capability is not hantavirus-specific. The same coverage is active across 60+ diseases including:

Mpox, Measles, COVID-19, Influenza A/B, Avian Influenza (H5N1/H5N2), RSV, Norovirus, Cholera, Dengue, Malaria, Ebola, Marburg, Legionellosis, West Nile, Zika, Yellow Fever, Salmonella, E. coli, Listeria, Cryptosporidiosis, and more.

Any outbreak that breaks at scale will be detected, scored, and surfaced within 24 hours. And the regional signals building before it often appear weeks or months earlier.

Why Organizations Choose Virus Watcher

Most health monitoring tools catch the headline. Virus Watcher had:

- South American hantavirus elevated above baseline more than 10 weeks before the crisis
- Full outbreak coverage within 24 hours of the first WHO report
- Critical risk identified before institutional dashboards updated
- Strain-level differentiation surfaced automatically
- Source investigation tracked as a separate linked event in real time