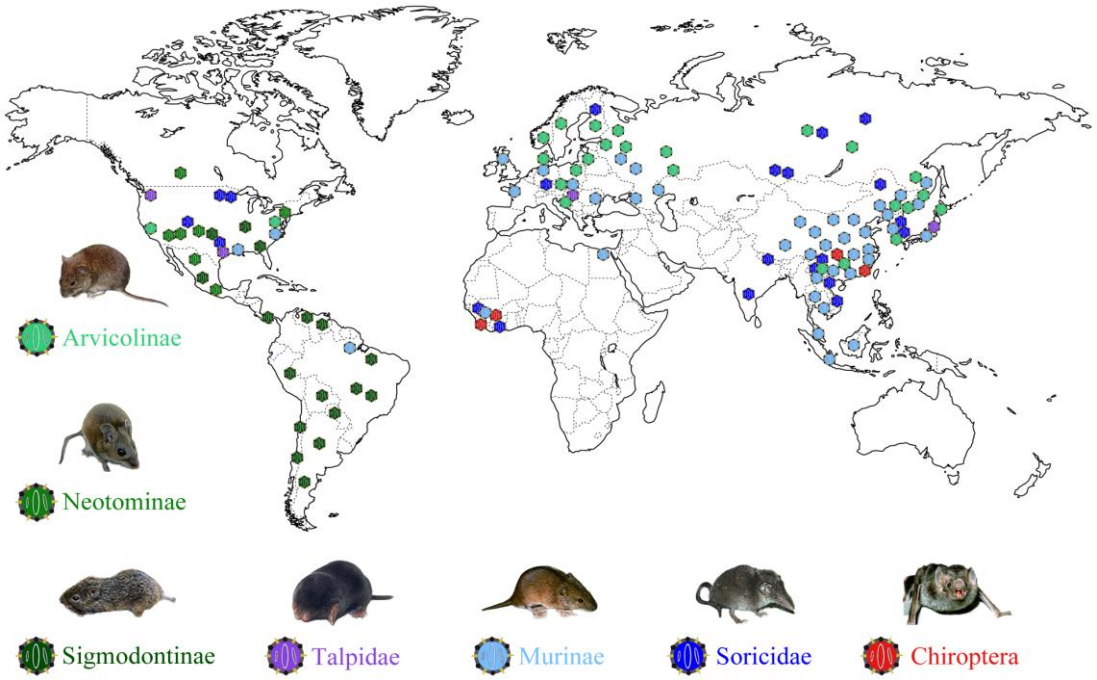
Overview: Hantavirus - Andes virus

World Health Organization

Hantaviruses

- Hantaviruses are a group of viruses carried by rodents that can cause a range of illnesses, including severe disease and death.
- People usually get infected through contact with infected rodents or their urine, droppings or saliva.
- In the Americas, hantaviruses can cause hantavirus pulmonary syndrome (HPS), a severe respiratory illness, with a case fatality rate up to 50%. (including ANDV)
- In Europe and Asia, hantaviruses cause haemorrhagic fever with renal syndrome (HFRS).



Source: Guo, Wen-Ping, et al. "Phylogeny and origins of hantaviruses harbored by bats, insectivores, and rodents." PLoS pathogens 9.2 (2013): e1003159.

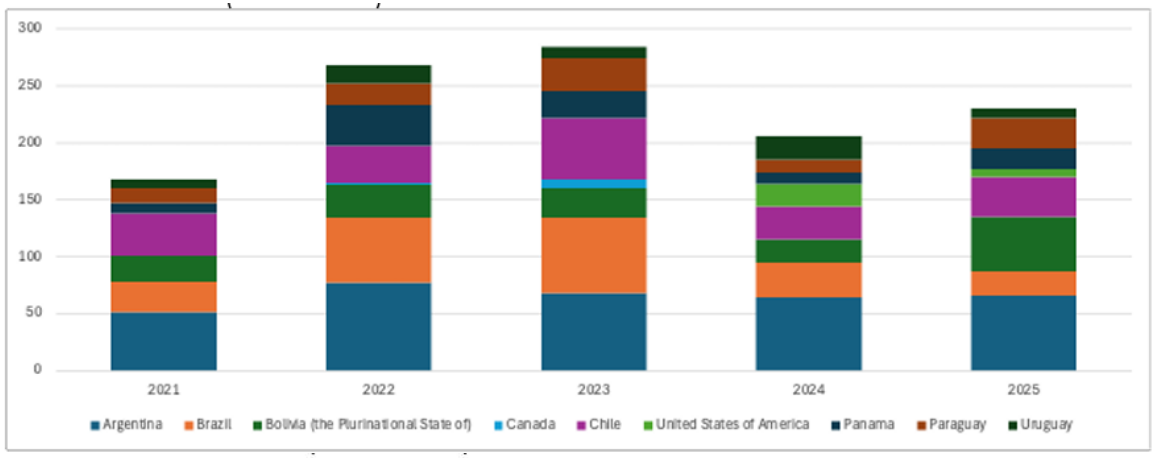
Hantavirus Pulmonary Syndrome (HPS) in Central-South America

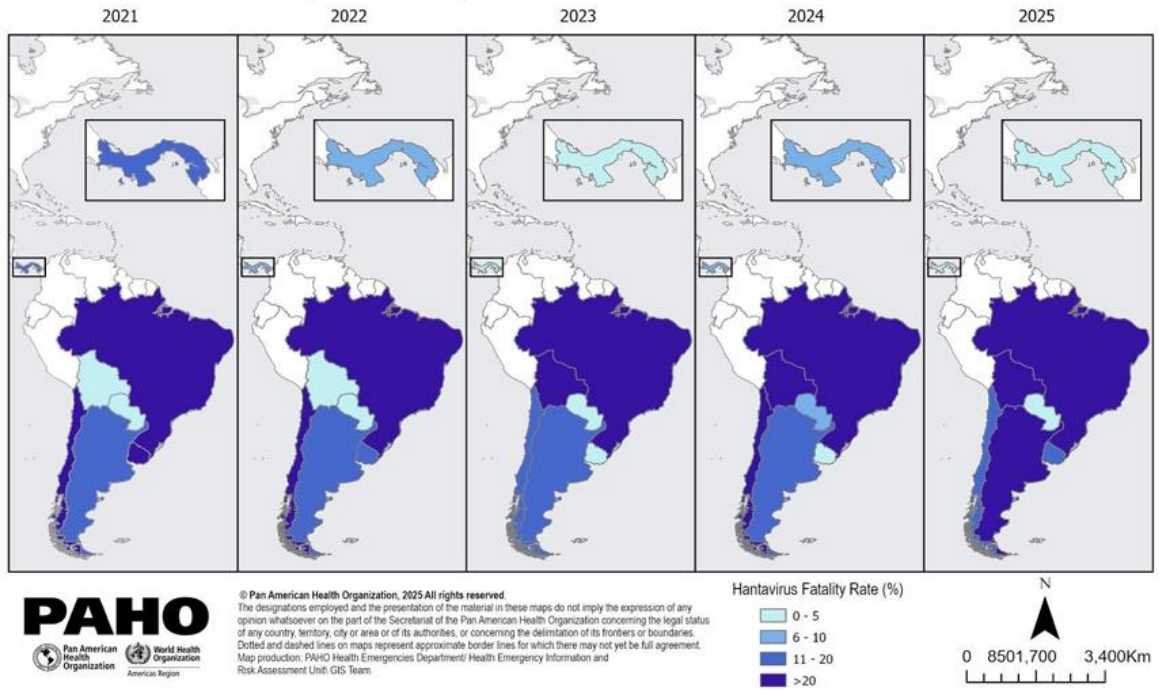
Geographic distribution

- Endemic mainly in the Southern Cone: Argentina (highest burden) and Chile
- Also reported in Bolivia, Paraguay, Uruguay, Brazil, and Panama

Temporal trends (2021–2025)

- ~160–270 cases per year across the region
- Regional case fatality rate: ~26% with country-level variation (Brazil 55%, Argentina 32%, Chile 20%)





Source: https://www.paho.org/en/documents/epidemiological-alert-hantavirus-pulmonary-syndrome-americas-region-19-december-2025

Andes Virus

- People usually get infected through contact with infected rodents (for Andes hantavirus: *Oligoryzomys longicaudatus*, the long-tailed pygmy rice rat) or their urine, droppings or saliva.
- Andes virus, found in South America, is a currently known hantavirus for which limited human-to-human transmission among contacts has been documented.
- No large-scale human-to-human outbreaks have been observed historically, suggesting a low probability of transmission per contact.
- Early symptoms are unspecific and can look like flu.

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Clinical Manifestations of ANDV Infection

Early symptoms of HPS due to Andes virus can include:

- Fatigue
- Fever
- Muscle aches, especially in the large muscle groups like the thighs, hips, back, and sometimes shoulders
- About half of all patients with HPS also experience:
  - Headaches
  - Dizziness
  - Chills
  - Abdominal problems, like nausea, vomiting, diarrhea, and abdominal pain

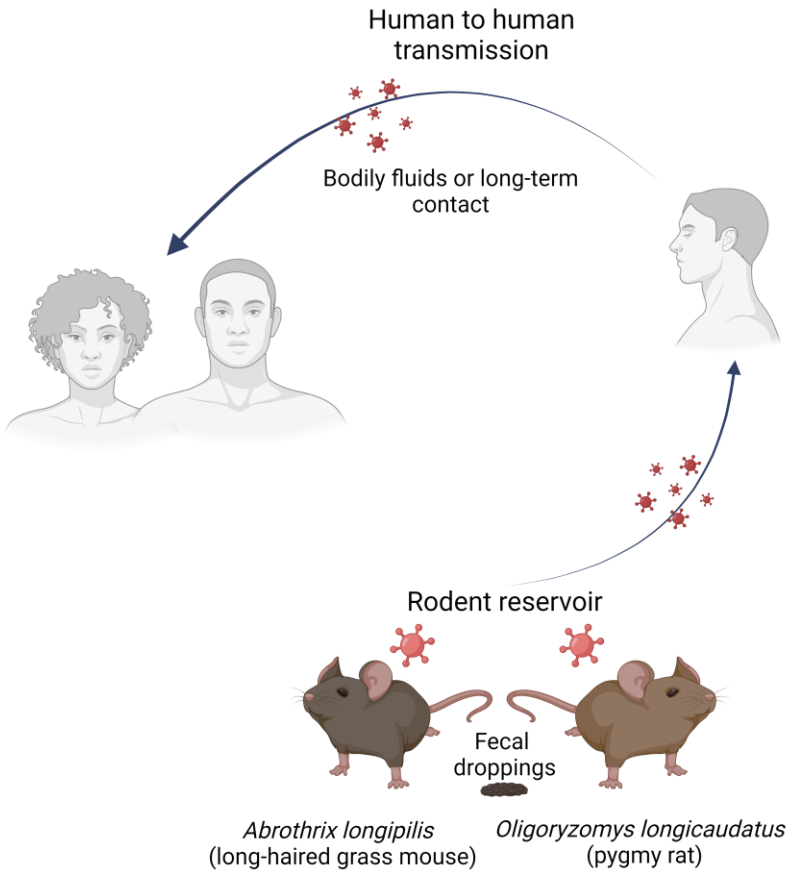
Typically, people are infectious while they have symptoms.

Andes Virus Transmission

The exact mode (s) through which human-to-human transmission occurs is currently **uncertain** and may include:

- contact (with an infected individual or contaminated surfaces), and/or
- through the air (via direct deposition of infectious respiratory particles onto exposed facial mucosal surfaces (mouth, nose, or eyes), and/or
- airborne transmission via inhalation of infectious respiratory particles).

- The virus does not exhibit transmission dynamics consistent with highly transmissible airborne pathogens (e.g., measles).



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Previous Outbreaks - Clusters

First reporting of P2P transmission of Andes virus

› Virology. 1998 Feb 15;241(2):323-30. doi: 10.1006/viro.1997.8976.

Hantavirus pulmonary syndrome outbreak in Argentina: molecular evidence for person-to-person transmission of Andes virus

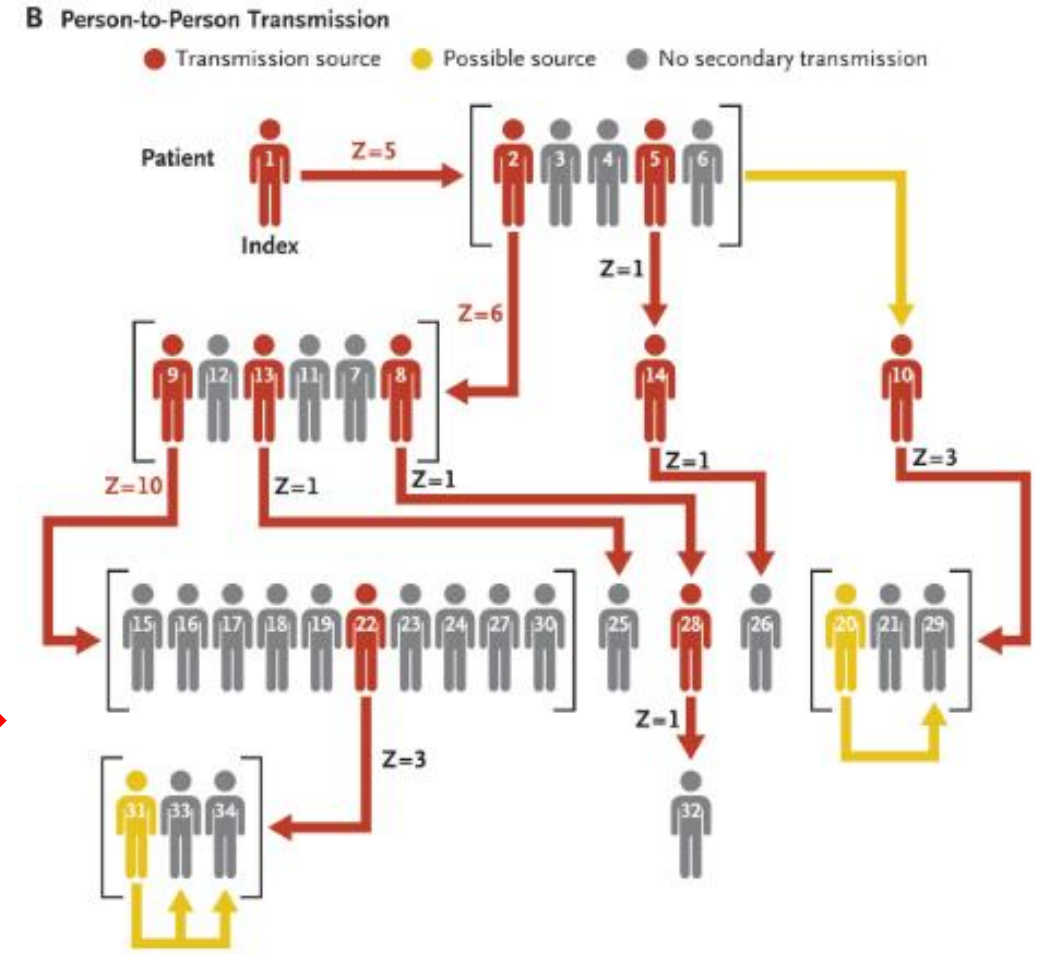
P J Padula [1], A Edelstein, S D Miguel, N M López, C M Rossi, R D Rabinovich

Biggest reported outbreak

"Super-Spreaders" and Person-to-Person Transmission of Andes Virus in Argentina

Authors: Valeria P. Martínez, Ph.D., Nicholas Di Paola, Sc.D., Daniel O. Alonso, B.Sc., Unai Pérez-Sautu, Ph.D., Carla M. Bellomo, Ph.D., Ayelén A. Iglesias, B.Sc., Rocio M. Coelho, B.Sc., +26, and Gustavo Palacios, Ph.D.
Author Info & Affiliations

Published December 2, 2020 | N Engl J Med 2020;383:2230-2241 | DOI: 10.1056/NEJMoa2009040



Sources:

- https://pubmed.ncbi.nlm.nih.gov/9499807/
- https://www.nejm.org/doi/full/10.1056/NEJMoa2009040

Medical Counter Measures

- Limited knowledge on transmission dynamics
- No vaccines
- No therapeutics
- Diagnosis:
  - Molecular diagnosis
  - Serological diagnosis

Andes Hantavirus Outbreak

Situation Overview – 20 May 2026

World Health Organization

Epidemiological Overview

Situation Overview – Andes hantavirus outbreak

- **On 2 May 2026, WHO received an IHR notification from the United Kingdom regarding a cluster of severe acute respiratory illness on a cruise ship (MV Hondius) headed towards Cabo Verde**
  - Laboratory confirmation of **hantavirus on 2 May**. **Andes virus confirmed on 6 May**, both by NICD, South Africa, and HUG/CRIVE – Switzerland.
  - MV Hondius arrived in **Cabo Verde** with 147 passengers and crew from 23 countries on 2 May.
  - Two individuals with symptoms and a high-risk contact were medically evacuated from the MV Hondius to the Netherlands on 6 May.
  - Public health experts from **WHO and the European Center for Disease Prevention and Control**, and 2 medical experts from the Netherlands **joined the MV Hondius** on 6 May.
- After **arrival in Tenerife**, Spain, on 10 May, disembarkation was completed on 11 May, and the MV Hondius arrived in its home port in the Netherlands on 18 May.
- **As of 19 May 2026, there are a total of 11 cases, including three deaths**
  - **Nine confirmed cases** (1 hospitalized in South Africa, 2 in the Netherlands (ex MV Hondius), 1 in Switzerland, 1 in France, 1 in Spain, 1 in Canada), including 2 who died
  - **Two probable cases** (1 in Tristan da Cunha, and the index case who died onboard)

MV Hondius Itinerary	
01/04/24	Ushuaia, Argentina
04/04/26	Godthul, South Georgia
05/04/26	Grytviken, South Georgia
06/04/26	St. Andrews bay, South Georgia
07/04/26	Gold Harbour, South Georgia
07/04/26	Cooper Island and drygalski Fjord
13/04/26	Edinbourg of the Seven Seas, Tristan da Cunha
14/04/26	Inaccessible Island, Tristan da Cunha
15/04/26	Edinbourgh of the Seven Seas, Tristan da Cunha
16/04/26	Nightingale Island, Tristan da Cunha
17/04/26	Gough Island
24/04/26	St. Helena
27/04/26	Ascension Island

Source: Oceanwide Expeditions

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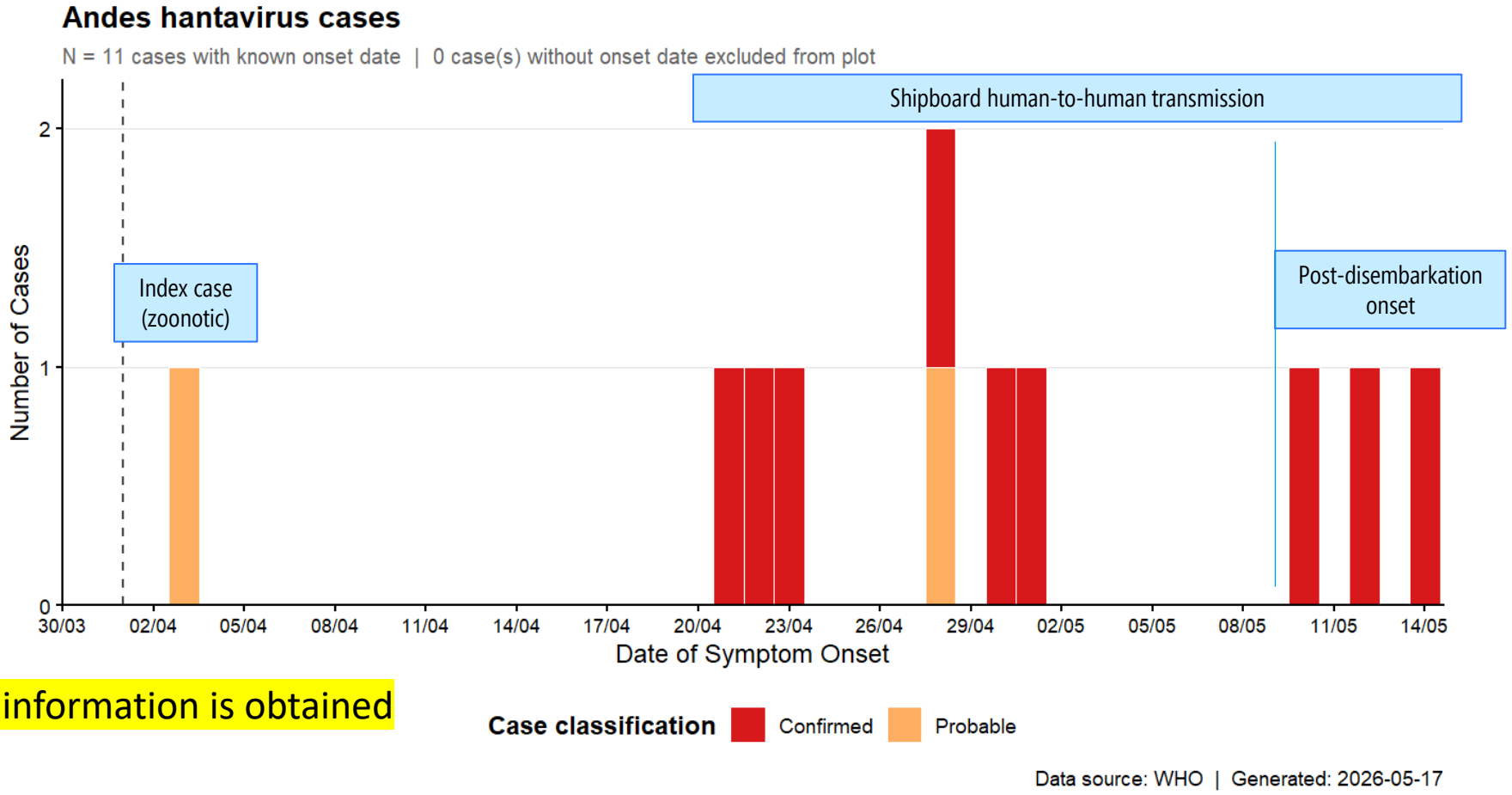
Epidemic Curve and Case Classification

as of 19 May 2026

Total of 11 cases

- 9 confirmed
- 2 probable

*3/11 deaths (27%)



Subject to change as additional information is obtained

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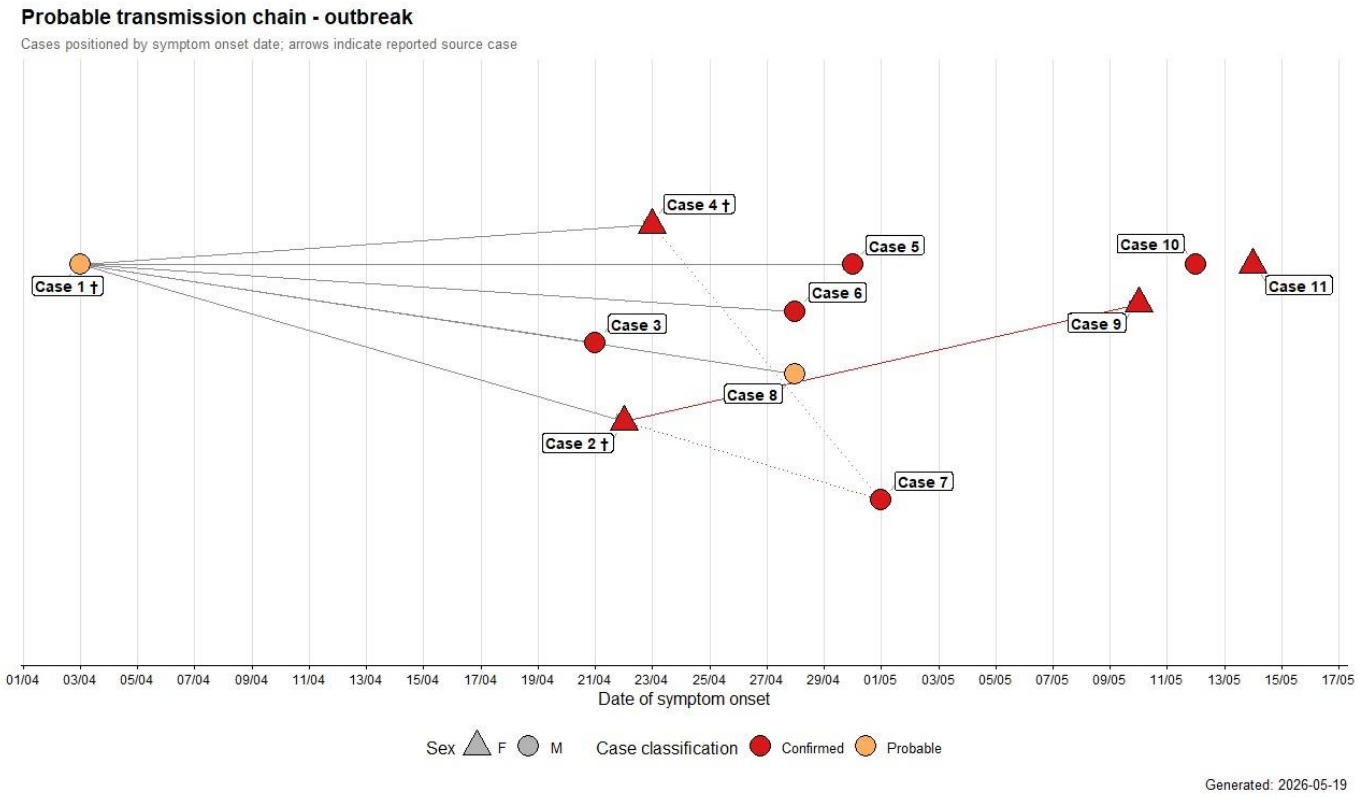
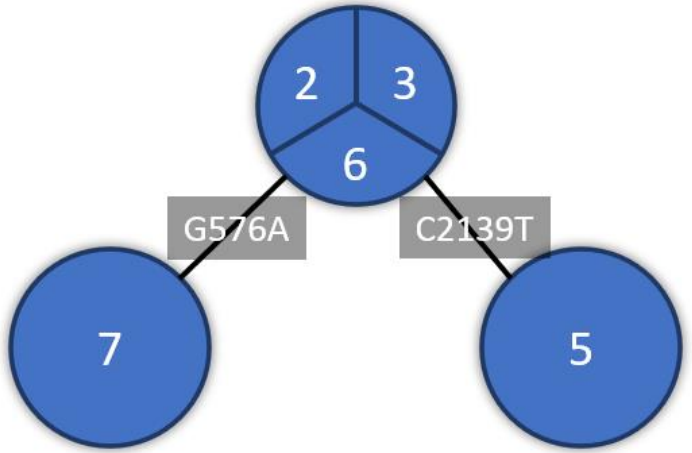
Known Chains of Transmission

as of 19 May 2026



Subject to change as additional information is obtained

Minimum spanning tree of sequenced cases



The overall high level of genetic similarity — with a maximum of one detected SNP per individual — strongly suggests that the outbreak originated from a single zoonotic spillover event

Preliminary analysis of Orthohantavirus andesense virus sequences from a cruise-ship related cluster, May 2026 - Hantavirus - Virological

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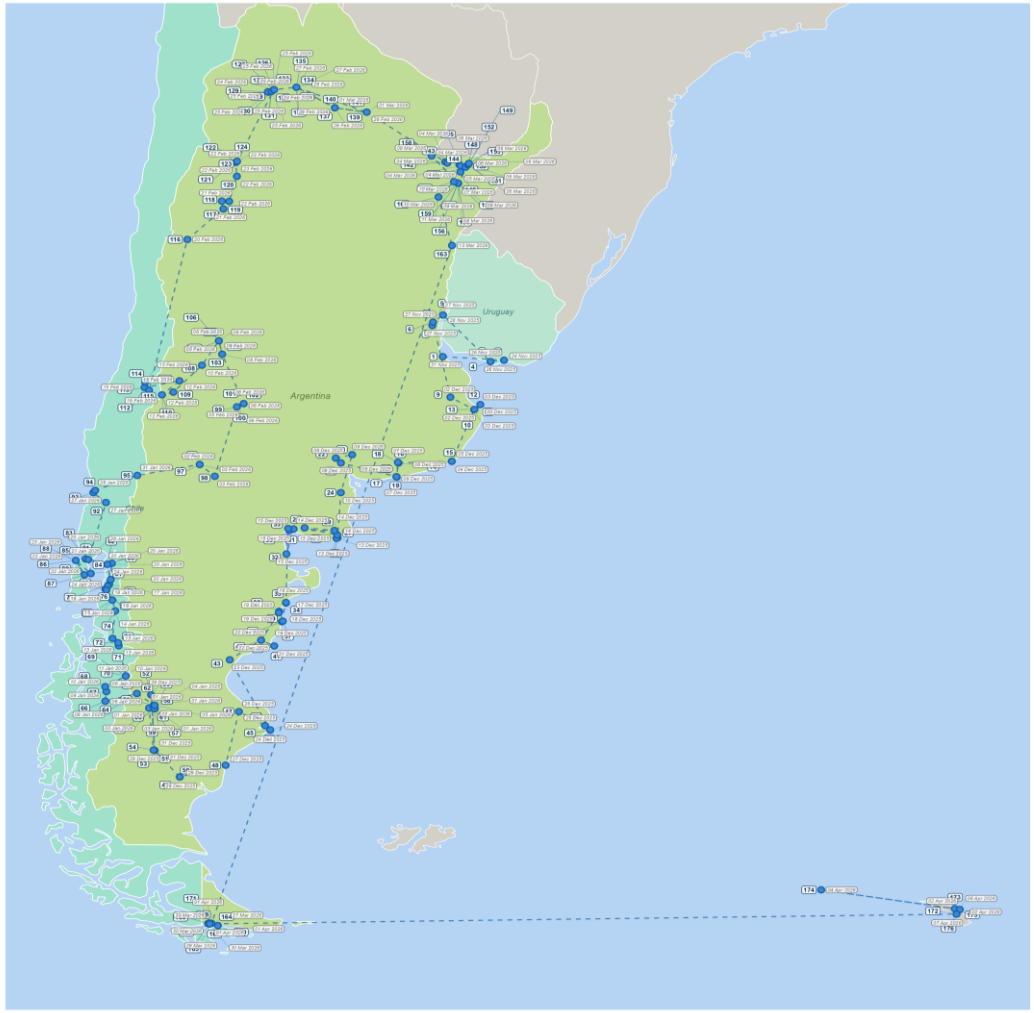
Birding Route of Index Case (data from ebird.com)



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Should we expect more cases?

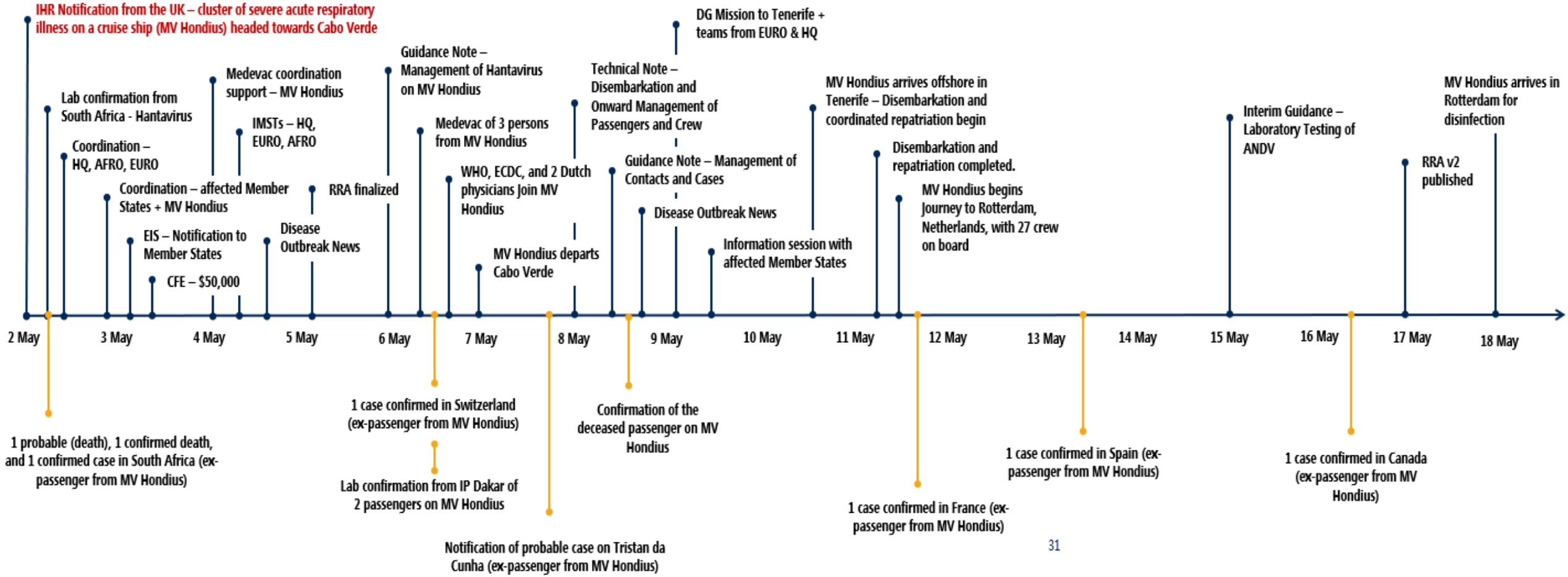
- Stringent public health measures implemented on board following case detection have likely substantially **reduced the risk of further transmission.**
- Three confirmed cases have had onset of symptoms after disembarkation in Tenerife, and given the long incubation period of the disease, it is possible that **additional cases may still occur among exposed individuals currently in their incubation phase.**
- Given previous experience of events even in close quarters (parties, the ship), transmission requires significant **exposure to symptomatic** individuals, and rarely continues for more than **2-3 generations**

WHO CONTINUES TO CONSIDER THE GLOBAL RISK TO BE LOW

WHO Response Overview

World Health Organization

Andes Hantavirus Outbreak – Response Timeline



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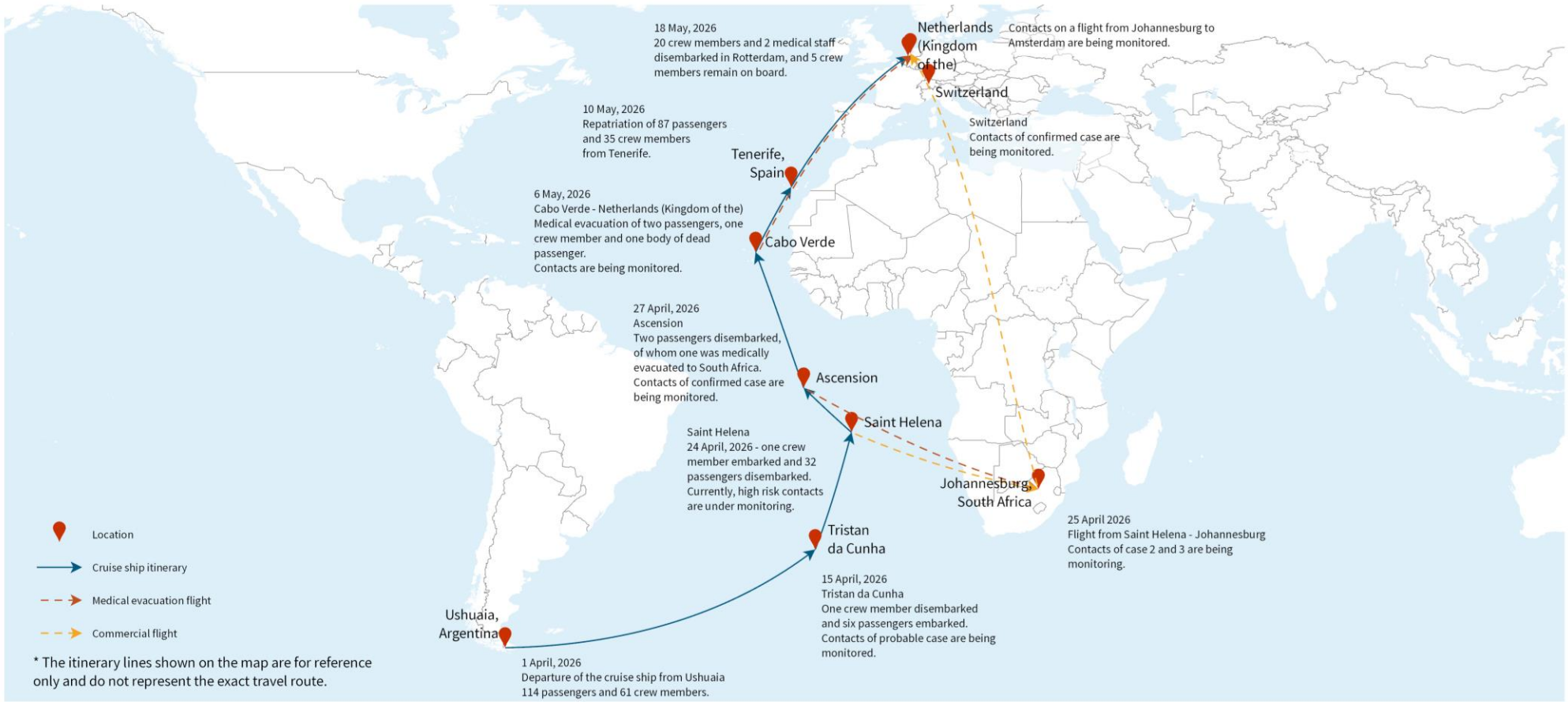
WHO Response Overview

- **Operating on a 'no regrets' basis** across the 3-levels of the Organization since 2 May 2026 with a **goal of total containment**
- Continued **engagement with National IHR Focal Points** – timely information sharing, coordination of response actions, and international contact tracing.
- **High-level discussions with Heads of State to facilitate the safe passage of the MV Hondius**
- **Coordination support for the medical evacuation** of passengers from the MV Hondius from 4 – 6 May.
- Supported **coordination across laboratories**, including logistics support for reference material and key reagents.
- Supported coordination with partners and Member States to **share information on epidemiology, laboratory, clinical management, and infection prevention and control**.
- Coordination of **research** into the natural history of Andes hantavirus infection, disease and treatment

Contact Follow-up

- **As of 19 May 2026, more than 490 contacts** have been identified and are under quarantine or health monitoring by local health authorities in at least **29 countries and territories**. These include:
  - **30 passengers who disembarked from the ship between 14 and 27 April, before the outbreak was detected.**
  - 146 passengers and crew from the ship who disembarked after the detection of the outbreak, including 5 crew members who remained onboard the ship in Rotterdam, the Netherlands.
  - **More than 100 passengers from two flights** who were in contact with one of the confirmed cases (case number 2).
  - **Additional contacts** of confirmed and probable cases, including health care workers, airport and port health officials, security personnel, cleaners, and other close contacts.
- **On 11 May 2026, WHO recommended that State Parties** communicate about the health status of high-risk and low-risk contacts being monitored at least once a week.
- **The process of mapping all contacts identified is still ongoing**, with information shared by Member States via IHR and support from WHO Regional Offices

Hantavirus cruise ship outbreak - contact tracing timeline



Data Source: World Health Organization
Map Production: WHO Health Emergencies Programme
Map Date: 20 May 2026

0 1,500 3,000 Km

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Key WHO Recommendations

- **WHO recommends a precautionary approach with a focus on total containment to minimize the onward risk of transmission, guided by the following:**
  - Evidence of human-to-human transmission – generally requires prolonged, close exposure, but highly infectious individuals may infect others with less contact.
  - Uncertainty about the modes(s) of transmission and which is dominant if there are multiple routes of transmission.
  - If infection occurs, severe disease is common.
- **Contact Identification and Management**
  - Due to the uncertainty around potential exposure while on board the MV Hondius, all passengers and crew members are considered high-risk contacts.
  - For all **high-risk contacts**, active monitoring within a designated **facility or home quarantine is recommended for 42 days** following the last known exposure.
    - Based on current evidence, the probability of safe release from quarantine is around **96% at the end of the recommended 42 day period.**