

## Hantavirus in our midst: what the Hondius case teaches us and why it directly concerns us



The news spread quickly in the first days of May 2026:

An outbreak of hantavirus was identified on the cruise ship M/V Hondius, under the Dutch flag in the South Atlantic, with one hundred and forty-nine passengers and crew members of twenty-three nationalities on board, including citizens of nine European Union states. The balance, as of May 6, was seven cases, including three deaths, one case in critical condition, two symptomatic and one with unclear status — figures confirmed by the European Centre for Disease Prevention and Control (ECDC), which was officially notified on May 2 through the European Rapid Alert System. The strain identified in the samples analyzed is the Andes virus, abbreviated ANDV, a South American hantavirus carried by rodents in the Patagonian area.

This case brought the subject of hantavirus back to the attention of the European public and, implicitly, the Romanian public. However, it must be said from the outset, clearly, something that does not always appear in press reports: hantavirus is not a single entity, but a group of related viruses, each with its own rodent host and its own disease pattern.

The Andes strain, the one on the Hondius vessel, is an exception in the global landscape of these viruses — it is the only one for which the medical literature documents, albeit rarely, human-to-human transmission, generally in the context of prolonged care, in the family or hospital environment, of a sick person.

For the European strains — Puumala, carried by the red wood mouse and spread throughout the

continent except for Great Britain, the Mediterranean coasts and the extreme north, and Dobrava, carried by the yellow-necked mouse and present in southeastern Europe, including Romania — human-to-human transmission has not been documented. Never. The sick person is not a source of contagion for his family, for the medical staff or for those close to him.

This distinction is not an academic subtlety. It has immediate practical consequences: in rural communities, where information circulates by word of mouth and where panic generated by a misunderstood piece of news can lead to the isolation of a sick person, the refusal to hospitalize him or the stigmatization of his family, it is vital that the message is correct from the start.

the antavirus, in Romania and the Republic of Moldova, comes from rodents. Period. The sick person is not a threat to those around them. What is a real threat is the hay bale in the shed, the chicken coop that has not been ventilated for an entire winter, the grain warehouse with adobe walls through which the mouse makes its galleries, the cabbage kept in the cellar next to the bags in which the rodents have made their home. That is where the danger is, and that is where action must be taken.

The risk, for us, comes from a different direction than for the passengers of the Hondius ship, and it is all the more serious because it is diffuse, everyday and trivialized by habit.

The Romanian or Moldovan farmer who enters the chicken coop on Sunday morning with a broom in his hand, just as their parents and grandparents did, raising a cloud of dust containing, without knowing it, viral particles from the dried excrement of field mice that have wintered there, is exposed to an infection mechanism that ECDC clearly describes in its technical documents: inhalation of contaminated aerosols is the main route of transmission of European hantaviruses.

And the Puumala virus, the main circulating strain in our area, has the peculiarity of remaining infectious outside the host for an unexpectedly long period — up to two weeks at room temperature, according to ECDC data. In other words, the fact that the mice left the coop a week ago does not guarantee anything. The dust you raise today may still carry live virus.

This is the heart of the problem and this is where our attention should be focused. The Hondius case is, for us, a reminder — not a reproduction of the situation we will encounter. Our risk is different, less spectacular but more widespread, and it is prevented by simple gestures, which any family can adopt starting tomorrow morning.

### **\*Cleaning the environment contaminated by rodents\***

(excrement, urine, nests) must be done with the utmost care to avoid inhaling viruses (such as \*hantavirus\*) or other pathogens. Dry dust raised by sweeping or vacuuming increases the risk of infection.

### Steps recommended by the CDC and health authorities (the “wet cleaning” method)

#### 1. \*Ventilate the space well\*

Open windows and doors and let it ventilate for at least \*30–60 minutes\* before starting cleaning (especially in closed spaces, basements, attics, cabins, garages).

2. **\*Required protective equipment\***

- Rubber, plastic, nitrile or vinyl gloves.
- **\*Protective mask\*** (N95, FFP2 or equivalent) – recommended, especially for large infestations.
- Long clothes, possibly safety glasses.

3. **\*Do not sweep or vacuum dry!\***

These actions raise infected particles into the air.

4. **\*Moisten and disinfect\***

- Prepare a solution of **\*chlorine bleach\*** (1 part household bleach to 9–10 parts water) or a registered household disinfectant (e.g. chlorine or phenol-based).
- Spray the droppings, urine, nests, and surrounding surfaces liberally until thoroughly wet.
- Let sit for **\*5–10 minutes\***.

5. **\*Wipe with paper towels\***

Use disposable towels to wipe up everything. Dispose of immediately in a trash bag.

6. **\*Clean surfaces\***

Wash floors, countertops, cabinets, etc. with disinfectant solution (mop or sponge). Clean the entire area.

7. **\*Dispose of waste\***

Place contaminated materials (towels, nests, dead rodents) in **\*two sealed trash bags\*** and dispose of in regular trash. Do not burn or bury in populated areas.

8. **\*Final Hygiene\***

- Disinfect gloves before removing them.
- Wash hands with soap and water for at least 20 seconds.
- Wash clothes at high temperature.

**### Special Cases**

- **\*Dead rodents or large nests\*** — Wet them thoroughly with disinfectant, leave for 5–10 minutes, then pick them up with gloves (use an inverted bag over your hand). Use flea insecticide if necessary.
- **\*Massive infestation\*** — Contact a professional pest control company. Additional equipment may be needed (HEPA filter respirator).
- **\*Unoccupied vehicles or cabins\*** — Ventilate thoroughly before entering.

**### Long-term prevention**

- Seal holes and cracks in walls, doors, pipes.
- Keep food in closed containers.
- Maintain cleanliness and eliminate food and water sources for rodents.
- Use traps and baits (in safe areas).

These measures greatly reduce the risk of **\*hantavirus\***, leptospirosis and other zoonoses. In Romania, the risk is especially present in rural areas, basements or uninhabited houses.

If you have symptoms (fever, muscle aches, cough, difficulty breathing) after such exposure, go to the doctor urgently and mention the contact with rodents. For personalized advice, contact your local Public Health Directorate.

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