

Hantavirus Isn't Just a Threat. It's a Test.

di David Wallace-Wells

If we're lucky, it will be a while before a new pandemic arises to rival the death and disruption of Covid. But the hantavirus outbreak that began several weeks ago on a cruise ship traveling the Atlantic Ocean shows, I think, we are terribly unprepared for even a lesser public health threat.

This does not appear to be the superbug of your nightmares, capable of spreading rapidly across the world and killing far more efficiently than that pandemic ever did. But hantavirus infection does have a terrifyingly high mortality rate. It is spreading from human to human. And health officials around the world have proved terribly inept at even properly describing the risk of transmission, let alone containing it.

There are now potential hantavirus exposures in at least 16 U.S. states. In Europe, the authorities are belatedly forcing people who have had close encounters into quarantine, in one case [removing](#) a British tourist from an Italian bar. This is not a new or unknown disease, but just a week ago officials were reluctant to acknowledge that those who weren't showing symptoms presented any risk of further spread.

Over the past week, as the world began worrying over hantavirus news, officials from the W.H.O., the U.S. Department of Health and Human Services and other organizations spoke almost in unison to caution against public panic. In a certain sense, the message was appropriate: I don't think there's much chance that the outbreak is the beginning of something epochal, given its slow rate of growth and the limited spread of previous outbreaks. But there remains much we don't know how this outbreak will unfold, even armed with knowledge of previous outbreaks, and the estimated mortality rate for this strain — 30 to 40 percent of known cases — offers a grimly worrying anchor. In that context, the most pressing question for health leaders isn't how worried we should be, in part because the threat remains effectively zero

for anyone who hasn't come into close contact with those on board. The question is how seriously health officials are taking the disease, since they are the ones in a position to keep the outbreak small and contained.

And in the critical first week since news of the outbreak broke, they have fumbled that responsibility, issuing an erratic and confusing series of messages that have downplayed the risk of the disease and undermined the effort to aggressively limit its spread, as though they'd prefer to err on the side of permissiveness rather than take actions that might strike an outside observer as alarming. Perhaps they intuited that the average person wasn't as interested in "What should be done?" as in "How much should I panic?"

Six years since the arrival of Covid-19, the panic of 2020 casts a long shadow. But the pandemic also serves a weirdly contradictory role in our collective epidemiological memory: both a perversely reassuring point of comparison for future risks, which look less alarming in contrast, and an enduring cautionary tale for those many Americans who believe that we all went a bit overboard in response to that pandemic. The experience might have been just as discombobulating for public health officials, many of whom appear still scarred by accusations of public-health overreach — or in some cases radicalized by the conviction that in 2020 the world went overboard. The result: Many of them seem to believe their main job now is to reassure the public about novel threats rather than take necessary precautions to protect them.

What are the threats here? The most important concern is the disease's incubation period, the time between exposure and the arrival of symptoms. As best we can tell from previous outbreaks, that period can be distressingly long: perhaps up to eight weeks. This means that the virus can lie dormant for as much as two months in people before presenting symptoms. That is an awfully long time to live in a state of nervous ignorance about how widely the disease has already spread — and makes any authoritative-seeming account of the state of the disease today, or any plan concocted on the basis of that understanding, almost certainly incomplete. We have a few weeks or so until we even get a sense of the second generation of cases; previous outbreaks suggest there may be at least several more waves to follow.

The second thing to know is that, with this strain of the disease, human-to-human transmission is not just possible but also documented. The first case on the ship produced nine more among the passengers, suggesting that though this strain of hantavirus looks considerably less infectious than other respiratory infections, this particular case, in this particular setting, was capable of infecting a number of others. In a well-studied 2018 to '19 outbreak in Argentina, three cases were [responsible](#) for 21 additional cases. Out of a total of 34 cases, 11 ended in death.

The third thing to know is that asymptomatic infection is possible and sick individuals can apparently transmit the disease without showing obvious symptoms. Some reports from the outbreak in Argentina suggest that the window of peak transmission risk might be balanced equally [before and after](#) symptoms appear. This was one of the features that made Covid so difficult to contain, of course, and though the spread of hantavirus has been so far significantly slower than in those early days of Covid, this isn't exactly the only test to apply in deciding whether something is worth worrying about or taking action on.

The fourth thing to know is that transmission does not appear to happen as easily as with other respiratory viruses but that it also doesn't seem to require an enormous amount of close contact. From the 2018 to '19 outbreak, we have evidence of several cases arising when an infected partygoer merely sat a few feet away from or briefly greeted other guests, and the precise dynamics of transmission are not perfectly understood. In such situations, Paul Sax [wrote](#) this week in The New England Journal of Medicine's Voices blog, the temptation is to be categorical and unequivocal in issuing guidance rather than acknowledge what is uncertain — and what, as a result, is possible.

And the fifth point to emphasize is that on each of the first four points, public messaging has been at least confused, often misleading and in many ways counterproductive in this initial window. "In any outbreak, the single most important question is: How does it spread?" Harvard's Joseph Allen [wrote](#) in The Atlantic on Tuesday. Hantavirus is not new or unknown, and neither is this strain. But the W.H.O. issued its first piece of guidance about the outbreak on May 4, three weeks after the

first patient died, and was not able to offer a clear or comprehensive answer to that question.

Over the weekend, the W.H.O. suggested that not all passengers should be treated as high-risk candidates for infection. It did not recommend that all passengers be quarantined upon leaving the ship and did not offer a strong framework for member countries, with the result that different countries have adopted markedly different protocols — and have already begun shifting them. In Britain, hospital workers [don't appear](#) to be working with up-to-date guidance about the way the disease spreads. In the Netherlands, health care workers have made errors in protocol handling blood draws and urine disposal.

In the United States, for instance, only two passengers have been placed in hospital biocontainment units, and asymptomatic Americans returning from the cruise ship are apparently being given the option to isolate and self-monitor at home if they remain asymptomatic. There is a kind of vacuum of public-health leadership in America at the moment, with Marty Makary resigning as the Food and Drug Administration commissioner on Tuesday and no permanent head of the Centers for Disease Control and Prevention or surgeon general in place. And over the weekend, Dr. Jay Bhattacharya — the head of the National Institutes of Health and the acting head of the C.D.C. — suggested that no new protocols were necessary to prevent the spread of the disease. Perhaps it should not surprise us. It was just this past fall that he was arguing that the country should scrap its pandemic playbook, [declaring](#) that “the best pandemic preparedness playbook for the United States is making America healthy again.”

But it's not just ideologically driven Americans who seem focused on downplaying risks, even at the cost of enabling further spread. In their presentations over the past week, world health leaders characterized the disease in such incomplete terms that the International Hantavirus Society was compelled to publish a corrective, challenging prevailing guidance about transmission before symptom onset, the long incubation period and the required proximity to pass the disease from one person to another. The W.H.O. has since modified some of that guidance, but on Sunday it

defended passengers who had failed to properly wear masks. “Many of these passengers are elderly, and you can imagine how uncomfortable it could be,” the director general of the W.H.O. said, as though the discomfort of 150 passengers should override worries about the spread of an essentially untreatable and terrifyingly lethal disease.

This remains a tiny outbreak, by global standards: so far, 11 cases in total. Most experts do not expect prolific spread from here, thank God. But that relatively slow growth should also make it much more easily contained. No one is proposing large-scale lockdowns or national mask mandates. But 150 people traveling on a single ship is a containment challenge of a much more manageable scale. Or should be.