

Risk communication in global emerging health crises: Lessons from COVID-19 for hantavirus and ebola

Comunicación de riesgos en crisis sanitarias emergentes globales: Lecciones del COVID-19 para el hantavirus y el ébola

In May 2026, the world faced two worrying threats: new hantavirus outbreaks and a resurgence of ebola. After years of relative calm since the COVID-19 pandemic, these 2026 outbreaks remind us that health crises occur periodically. Both diseases highlight the same lesson: without rapid, transparent, and community-engaged risk communication, such events can quickly move from biological crises into social chaos and institutional crises.

The COVID-19 pandemic reminded the world that public health emergencies are battled not only in laboratories and hospitals, but also in the public sphere. When authorities speak too late, too vaguely, or too confidently, confusion spreads, and so does fear, mistrust, and bad decision-making. This is why risk communication is not an accessory to crisis management anymore, now it is one of its core pillars.

The lessons learned from COVID-19 are highly relevant for future outbreaks to shape how the world prepares for other emerging threats such as hantavirus and ebola. These infections may differ in scale, geography, and transmission, but they all reveal the same vulnerability: if people do not understand the risk, they cannot respond effectively.

Health crises and outbreaks are not managed only through tests, vaccines, and surveillance. They are managed through trust, clarity, and the ability to turn information into action

The infodemic problem: 2026 brings the same trends than 2020

COVID-19 exposed both the power and the fragility of health communication. In the early stages of the pandemic, authorities around the world struggled to explain an evolving situation in which evidence changed quickly. Some messages were inconsistent, some were too optimistic, and others failed to acknowledge uncertainty. At the same time, misinformation spread faster than the virus itself in many settings, feeding confusion, polarization, and distrust. Rumors, false cures, political noise, and contradictory messages made a difficult crisis even harder to manage (Kisa & Kisa, 2024). People were not only asking what the virus was doing, but also whom they could

believe. That is the real danger of a health emergency: once trust begins to erode, every message becomes harder to receive. These same dynamics are starting to reappear in 2026 with hantavirus and Ebola.

In May 2026, the MV Hondius cruise ship docked in the Canary Islands with a hantavirus outbreak. As passengers evacuated in hazmat suits, social media exploded with suspicion. A photo showed a cameraman filming health workers with an isolation pod. «Crisis actors» thousands claimed «Staged hoax». But that photo was from an Ebola drill in Almería (2025), not the Hondius. A real outbreak unfolded, yet the internet chose a mislabeled old image. Then an AI-generated video (likely Sora 2) showed rats falling from a truck, captioned: «Deliberate release of infected rodents». Fact-checkers flagged it as synthetic media, but not before it spread thousands of times. The narrative of orchestrated crisis calcified in millions of minds. Most damaging: Moderna had been developing an mRNA hantavirus vaccine since 2024. Social media called it «proof of a pre-planned plandemic». They omitted that Korea University partnered with Moderna for a long-neglected pathogen that has infected people for decades. Meanwhile, in DR

Congo, May 2026, the Bundibugyo Ebola strain (no approved vaccine) became a global health emergency. Cases neared 700, deaths 170. In Bunia, a cocoa seller told CNN: «Ebola is real. People need to stop deluding themselves». Denial turned violent when a young footballer died of Ebola in Ituri. His family rejected the diagnosis. When officials refused to release the body for traditional burial, protesters burned ebola treatment tents at Rwampara Hospital. This is not ignorance, this is the terminal stage of eroded trust. After years of conflicting COVID messages, some communities stopped believing authorities altogether.

Public health communication must therefore be transparent about what is known, what is not yet known, and what actions are being taken. This is why risk communication must be honest about uncertainty. Public health authorities do not lose credibility by admitting what they do not yet know. They lose credibility when they pretend to know more than they do. In fast-moving outbreaks, transparency is not a weakness. It is the only way to keep trust alive. Silence or overconfidence can damage legitimacy just as much as false information.

In a crisis, empathy can be as vital as medicine

A second lesson from COVID-19 is that risk communication must be built around empathy. During the pandemic, many people were not only concerned about infection, but also about isolation, jobs, family responsibilities, and emotional fatigue. Messages that ignored these realities were often less effective than those that acknowledged them (Yi et al, 2021). This matters for future crises because risk communication is not just about warning people, it is about helping them act. Effective messages are specific, actionable, and realistic. They tell people what to do, why it matters, and how it fits into their daily lives. That principle applies directly to hantavirus, where prevention often depends on simple but essential behaviors such as avoiding exposure to rodent-infested areas, improving environmental sanitation, and understanding local transmission risks.

Hantavirus needs clarity and dialogue

Hantavirus may not attract the same global attention as COVID-19, but that does not make it a minor threat. Communicating about hantavirus requires a very targeted approach because outbreaks are usually limited to specific areas and closely linked to environmental conditions and people's daily behaviors. Unlike a global pandemic such as COVID-19, hantavirus often affects particular rural or semi-rural communities, so messages must be adapted to their local context instead of repeated as generic national campaigns. In the 2026 hantavirus outbreak on the MV Hondius ship, the lack of clear, localized messaging has already exposed gaps in communication preparedness, especially on ships and in remote areas where people were unsure how to protect themselves (Sathasivam et al., 2026).

Preventing hantavirus depends on very simple actions: avoiding contact with rodent infested areas, improving sanitation, and understanding local exposure risks. This means communication must be practical, local, and easy to understand. A general national campaign is not enough. At risk communities need messages that fit their real life, their language, and their everyday habits. If people are expected to change their behavior, they need more than warnings. They need clear guidance they can actually use. Public health authorities should use simple language, work through trusted local channels, and focus on practical prevention. In these settings, communication should not just be one way warnings. It should also include dialogue with communities, schools, local leaders, and occupational groups that may be at higher risk.

Another lesson from COVID 19 is that communication strategies must be evaluated, not simply assumed to work. If public messages do not change people's awareness or behavior, the problem is not only epidemiological but also communicative. And just as important, health agencies must know whether their messages are effective, not just whether they have been published or disseminated.

Ebola: Fear kills more than the virus

Ebola presents a different kind of communication challenge. While hantavirus mainly needs clear, local and practical messages, Ebola demands trust, cultural sensitivity, and strong community engagement. If communities feel that health authorities are distant, culturally insensitive, or untrustworthy, they may resist the very measures that are meant to protect them. In this context, communication becomes a matter of survival. Ebola response cannot depend only on top-down instructions (Norbert Soke et al, 2024). It must include local leaders, trusted voices, and culturally aware messaging. People are more likely to listen when the message comes from someone who understands their world and does not just "impose" solutions from outside.

Ebola outbreaks have often been shaped not only by the biology of the virus, but also by fear, stigma, and mistrust of institutions. In some places, people may hide symptoms, avoid health workers, or ignore public health measures if they do not trust the authorities or feel that messages come from outside without respect for their culture. Here, the lesson from COVID-19 is especially relevant: even the most accurate message can fail if it does not have social credibility. Effective Ebola communication must work with community leaders, local health workers, religious figures, and others who speak in culturally appropriate ways. It must respect local customs while clearly explaining why certain behaviors are risky and what safer alternatives look like.

Another important issue is the social impact of fear. During both COVID-19 and Ebola, sensationalism and misinformation have contributed to stigma, panic, and sometimes discrimination. For example, when the media or social media describe entire communities as "dangerous" or "contaminated," this can increase fear and make people hide their symptoms or avoid health services. This is one reason why risk communication should never rely on fear alone. Fear may attract attention, but it does not always lead to long-term protective behavior. In fact, too much alarm can cause denial, rumors, or avoidance. A better approach is to combine urgency with calm, authority with humility, and evidence with empathy. Public health communication should aim to reduce uncertainty without pretending it disappears completely. We must reassure without minimizing the risk and warn without sensationalizing. That balance is difficult, but it is essential.

The forgotten frontline: health journalists in crisis

Behind health message that reaches the public through the legacy media, there is a journalist who interprets, filters, and often decides what is newsworthy. Yet, the COVID-19 pandemic left an uncomfortable legacy for health journalism. According to a recent study (Ugarte Iturrizaga & Catalan-Matamoros, 2025), specialised health journalists have reported a clear pattern of fatigue and marginalisation after the pandemic. Once the acute emergency passed, their articles «lost weight» in generalist newsrooms. They returned to the background, feeling like the «ugly duckling» of journalism, a role they described with visible frustration.

This is important because when diseases like hantavirus or Ebola appear again, the same journalists are asked to report on them. Their names and headlines become important again very quickly. However, the problems in health

journalism are still there. Newsrooms have fewer expert reporters, less time to check information carefully, and they often focus more on new stories than on ongoing issues. Because of this, when the next outbreak happens, the media may not be as ready as it seems, even if some journalists do a very good job.

The lesson for risk communication is clear: public health authorities cannot treat the media as a simple transmitter of messages. Health journalists are not passive channels. They are professional interpreters with their own constraints, pressures, and professional frustrations. Effective crisis communication requires building stable relationships with specialised journalists before the next emergency, not only during it. This means investing in training, providing timely and transparent briefings, and recognising that a demotivated or under-resourced health press corps is a vulnerability for the entire response system.

The 2026 hantavirus and ebola outbreaks show that the media pays attention to health again when there is a new threat. However, waiting for a crisis to focus on health journalism is not a good strategy, because it leads to poor communication. Being prepared should also include strong journalism systems. When people lose trust, the media can either help rebuild that trust or make the situation worse.

Prepared, not improvised

The worst mistake in an outbreak is to improvise communication after the crisis has already exploded. The broader lesson from COVID-19 is that risk communication must become part of preparedness, not something improvised once an outbreak has already begun. Preparedness means developing messages in advance, identifying trusted messengers, building communication channels before a crisis, and training health professionals to speak clearly and consistently. It also means recognizing that communication is two-way. Communities are not passive recipients of orders, they are active participants in the response. Listening to public concerns, local knowledge, and social realities can improve compliance and strengthen trust. This is particularly important in emerging health crises, where the success of technical interventions often depends on the population's willingness to cooperate.

Hantavirus and Ebola are just a rehearsal: the next threat is already on its way

COVID-19 also taught a hard but valuable lesson: the management of emerging infectious diseases is also a management of meaning. People must understand what the risk is, why it matters, and how they can respond. For hantavirus, that means turning prevention into clear local action. For ebola, it means building trust where fear is high and institutions may be fragile. For future global health crises, the challenge will not be only to detect pathogens early, but also to communicate risk early, honestly, and effectively.

The next outbreak will test not just scientific capacity, but our ability to speak to communities in ways that generate trust, understanding, and collective action. The next emerging health crisis will arrive with the same ingredients: uncertainty, anxiety, misinformation, and pressure to act fast. What will matter then is not only scientific readiness, but communicative readiness.

If the world wants to respond better to hantavirus, ebola, and the next unknown threat, it must treat communication as essential infrastructure. Because in the end, outbreaks are not managed only through tests, vaccines, and surveillance. They are managed through trust, clarity, and the ability to turn information into action.

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