

One Health Communication Guidelines for Rwanda

PREAMBLE

Recognizing the interconnectedness of human, animal, and environmental health, and the critical role of accurate and ethical journalism in informing and educating the public, the following guidelines have been developed to guide journalists and scientists in communicating One Health issues effectively.

In an era where misinformation and sensationalism can undermine public understanding and response to health crises, these guidelines emphasize the importance of credible, balanced, ethical, and inclusive reporting. Adherence to these principles could contribute to a well-informed public capable of taking meaningful action to address the complex challenges of One Health. One Health issues include emerging, re-emerging, and endemic zoonotic diseases, neglected tropical diseases, vector-borne diseases, antimicrobial resistance (1), food safety (2) and food security, environmental contamination, climate change and other health threats shared by people, animals, and the environment (3). A One Health approach offers a promising framework for tackling health threats stemming from the interface between animals, humans, and the environment (4).

These guidelines are designed to ensure that all communication about One Health is conducted with the highest standards of accuracy, ethical consideration, and inclusivity. They provide a framework for crafting compelling narratives, utilizing data responsibly, and integrating diverse expert perspectives. Furthermore, they aim to highlight the successes and ongoing challenges in One Health initiatives, fostering a transparent and comprehensive dialogue with the public. Given the proliferation of social media as go-to platforms for information, social media communicators and influencers are encouraged to apply the recommendations from these guidelines and verify One Health information by consulting expert opinions before sharing. This helps ensure accuracy, build public trust, and strengthen the impact of One Health messages.

These guidelines serve as an official commitment to enhancing the quality and impact of One Health reporting. The examples used here are for illustrative purposes only and do not represent real-life cases or actual events.

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DEFINITIONS

- 1. One Health: "One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes that the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent. The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development." One Health High Level Expert Panel (OHHLEP).
- 2. Antimicrobials Antimicrobial Resistance Antimicrobial use: Antimicrobials including antibiotics, antivirals, antifungals, and antiparasitics are medicines used to prevent and treat infectious diseases in humans, animals and plants. Antimicrobial Resistance (AMR) occurs when bacteria, viruses, fungi and parasites no longer respond to antimicrobial medicines. As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective and infections become difficult or impossible to treat, increasing the risk of disease spread, severe illness, disability and death. AMR is a natural process that happens over time through genetic changes in pathogens. Its emergence and spread is accelerated by human activity, mainly the misuse and overuse of antimicrobials to treat, prevent or control infections in humans, animals, and plants (5).
- **3. Zoonotic disease or zoonosis (Pl. zoonoses):** is any disease or infection that is naturally transmissible from vertebrate animals to humans or humans to vertebrate animals (6).

- 4. False balance: happens when the media gives equal weight to two opposing views, even when the evidence and expert consensus clearly support only one side. Within the One Health framework, false balance can weaken efforts to tackle zoonotic and emerging infectious diseases, among other One Health challenges. When media or communicators give disproportionate attention to unqualified views or positions that conflict with established science, it can lead to public misunderstanding, slow down necessary responses, and diminish trust in One Health authorities.
- 5. One Health success story: A success story in the One Health context is a real-world example that illustrates how collaborative efforts across human, animal, and environmental health sectors have effectively addressed a shared health challenge. It highlights the problem, the integrated actions taken, measurable outcomes achieved, and the lessons learned, serving as evidence of the value and impact of the One Health approach. An example of a success story may include reporting how Rwanda has been able to successfully contain Marburg virus outbreak with a remarkably low fatality rate.
- 6. Neglected Tropical diseases: These are a group of 20 infectious diseases that primarily affect impoverished populations in tropical and subtropical regions. These diseases are "neglected" because they receive relatively little attention and funding compared to other major public health concerns, despite affecting over 1.65 billion people globally (7).

- **7. Vector Borne diseases:** Vector-borne diseases are human illnesses caused by parasites, viruses, and bacteria that are transmitted by vectors (8).
- **8. Food safety:** Food safety is a science-based discipline, process or action that prevents food from containing substances that could harm a person's health. Food safety aims to have food that is safe to eat (9).
- **9. Food security:** Based on the 1996 World Food Summit, food security is defined when all people, always, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (10).
- **10. Environmental contamination:** Environmental contamination refers to the introduction of harmful substances into the natural environment, leading to adverse effects on ecosystems, human health, and the balance of natural processes. These contaminants can be chemical, biological, or physical and often result from human activities like industrial processes, agriculture, and urbanization (11).
- **11. Climate change:** Climate change refers to long-term shifts in temperatures and weather patterns. Such shifts can be natural, due to changes in the sun's activity or large volcanic eruptions. But since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas (12).

56 I am because we are, and since we are, therefore I am. Ubuntu

Calls to Action and Ethical Considerations

Article 1: Crafting Compelling Calls to Action

- I. Use real-life stories that the audience can relate to, making the issue more personal and the call to action more compelling.
- II. Use straightforward language that clearly communicates what actions the audience can take.
- III. Ensure that all calls to action are supported by credible and reliable sources to maintain trust.
- IV. Use an active voice to engage directly with the audience, making the call to action more dynamic and urgent.
- V. Provide actionable advice or steps that people can realistically take, making the news directly useful to the audience.

Effective Example

"Last month in Rusizi District, 38-year-old market vendor Beatrice was hospitalized with a high fever and severe muscle pain. Doctors diagnosed her with Rift Valley Fever, a disease transmitted from infected animals to humans, likely from handling raw goat meat without gloves. Beatrice had no idea that sick animals could make her sick too. 'I thought it was just a cold,' she says.

To prevent similar cases, the Rwanda Biomedical Centre urges anyone handling livestock or raw meat to wear gloves, use protective clothing, and report sick animals to local veterinary officers. These simple steps can protect you and your family, especially during the rainy season, when disease risks increase."

Ineffective Example

"Diseases like Rift Valley Fever are spreading in the Rusizi area. It's a big problem because many people don't know what to do. Be careful when buying meat, and don't trust everything you hear at the market. Some say it came from goats. It's unclear, but people should probably stay away from them for now."

Article 2: Ethical Considerations

- I. Maintain a balance between engaging storytelling and ethical journalism, ensuring that the narrative does not mislead or sensationalize.
- II. Always protect the privacy of individuals and organizations that do not wish to disclose certain information without proper consent.
- III. Safeguard the identities and information of sources who may face risk or retribution.
- IV. Be aware of and sensitive to the cultural and religious contexts of the stories and the audiences.
- V. Rigorously check all facts, especially when they are used to support a call to action.

Effective Example

"A local farmer in the Eastern Province, who asked not to be named, shared how he lost half his livestock during the Rift Valley Fever outbreak. He now uses insect-repellent netting in animal shelters, as recommended by veterinary experts."



Ineffective Example

"Farmer Emmanuel Rukundo of Nyagatare District says he lost 20 goats to RVF, something that many blame on his poor hygiene practices."

Why this fails ethically: Violates privacy and assigns blame publicly without consent or full context.

Data Use, Statistics, and Visuals



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Article 3: Effective Use of Data and Statistics

- I. Collaborate with experts to accurately interpret and present data related to One Health.
- II. Use data to clearly illustrate the scale of health issues and the impact of interventions, helping the audience grasp the severity and urgency.
- III. Show how data can inform and improve the allocation of resources to address health issues effectively.
- IV. Use available and updated data sources e.g. the epidemic intelligence from open sources & emergency and disaster risk calendar to alert the public.

Effective Example

"Between January and March 2025, Rwanda recorded 67 confirmed anthrax cases in Nyagatare and Gatsibo districts, according to data from the Rwanda Biomedical Centre. Experts from the Ministry of Agriculture and Animal Resources explained that many cases were linked to the unsafe disposal of animals that had died suddenly. In these areas, environmental health officers found high levels of anthrax-causing germs in the soil, especially in grazing fields near flood-prone zones. These conditions created a perfect storm for the disease to spread to both animals and people. Thanks to quick action—including emergency vaccination, safe burial of animal carcasses, and public alerts shared through the Emergency and Disaster Risk Calendar—new cases dropped by 60% in April. Authorities now urge farmers to report dead animals immediately, use protective gear when handling livestock, and avoid grazing animals in high-risk areas."

Ineffective Example

"There have been a lot of anthrax cases in some parts of the country recently. The government says it's handling the situation. People are advised to be careful with animals and avoid touching dead ones."

Article 4: Pitfalls to Avoid

- I. Avoid complex language and present data in a clear, understandable format.
- II. Ensure that all data come from reputable sources, such as government institutions or accredited research bodies.
- III. Seek expert help to interpret complex data and ensure accurate presentation.

Effective Example

"According to the Rwanda Meteorology Agency, rainfall in Eastern Province was 30% higher than normal in April 2025. Experts from the Rwanda Environment Management Authority explain that these heavy rains caused floodwaters to mix with waste from open animal markets, increasing the risk of waterborne diseases like leptospirosis. The Ministry of Health is monitoring the situation and urges residents to boil drinking water, avoid swimming in floodwaters, and report symptoms such as fever and muscle pain to the nearest health center."

Ineffective Example

"Leptospirosis (a bacterial disease spread through contact with the urine of infected animals, like rodents, cattle, ,pigs, and dogs) outbreaks may soon occur due to increased hydrological flows in the Eastern ecozones. This zoonotic transmission vector is expected to spike unless intervention thresholds are met. The data is preliminary and taken from internet reports."

Inclusive Storytelling and Success Stories



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Article 5: Inclusive Reporting

- I. Engage with experts from various fields relevant to One Health (e.g., veterinary medicine, environmental science, public health) to provide a comprehensive view.
- II. Actively seek out and include diverse voices, especially those from underrepresented or impacted communities, to ensure a full spectrum of perspectives.
- III. Be cautious to the possibilities of false balance when reporting on complex One Health issues that may misinform the public yet not scientifically supported.

Effective Example

"In Bugesera District, rising temperatures and water scarcity are forcing small-scale farmers to move their cattle closer to wetlands, increasing the risk of disease transmission. Dr. Mugisha, a veterinary epidemiologist, explains that such environmental changes are linked to a higher risk of tick-borne illnesses like East Coast Fever.

Nyirabukara, a local farmer, shares how her family lost two cows in a month due to disease and now relies on the district animal health officer for regular checkups. The Rwanda Environment Management Authority confirms that wetland encroachment is rising due to climate stress. Experts warn that while farmers are adapting out of necessity, coordinated action is needed to protect both livelihoods and ecosystems."

The effective example integrates insights from multiple One Health experts, veterinary, environmental, and local, to provide a well-rounded, accurate understanding of the issue. It amplifies the voice of a directly affected community member while avoiding false balance by not giving equal weight to unsupported or misleading claims. This kind of inclusive reporting brings scientific credibility, lived experience, and policy relevance together, empowering the audience with both empathy and evidence.

Ineffective Example

"Some say cows are getting sick because farmers are moving into wetlands. Others think it's just bad luck. We spoke to one resident who believes the problem is witchcraft, while another blames over-vaccination. The truth is probably somewhere in between."

Article 6: Success Story Criteria

- I. Choose stories where tangible improvements can be demonstrated through clear, scientific data.
- II. Ensure the story clearly illustrates the interconnectedness of human, animal, and environmental health.
- III. Highlight initiatives that can be scaled up or replicated in other regions or contexts.
- IV. Focus on cases where novel methods or interdisciplinary collaborations have led to successful outcomes.
- V. Select stories that involve community participation or benefit local populations directly.
- VI. Include initiatives that are endorsed or supported by credible experts in the field.

Effective Example

"In Nyagatare District, a cross-sectoral pilot project has significantly reduced human cases of waterborne diseases by addressing livestock waste management. Launched in 2022 by the Ministry of Agriculture and the Rwanda Environment Management Authority, the initiative trained local farmers to construct biogas units that convert animal waste into clean energy. Over 300 households now use biogas for cooking, reducing reliance on firewood and improving indoor air quality. Health officials report a 50% drop in diarrhea cases linked to contaminated water sources, while agricultural officers note improved pasture health due to safer waste disposal. The project, endorsed by the University of Global Health Equity, is being reviewed for national rollout in similar agroecological zones."

Ineffective Example

"There is a new farming project in Nyagatare that is helping communities to use biogas for clean energy. Some say they are getting sick less, and others like that it saves them time. We were told it might expand to other areas, but there are no details yet."

Article 7: Reporting on Success Stories

- Provide specific, measurable data, such as health outcomes, policy changes, or behavioral shifts, and make it clear how the successes are connected to animal and environmental health.
- II. Include personal stories or testimonials from a range of stakeholders—such as farmers, health workers, or community leaders to humanize the impact and deepen audience engagement.
- III. Always reference credible sources and crosssector experts, ensuring the information is trustworthy and verifiable

Effective Example

"In 2024, the district of Rutsiro launched a joint One Health initiative to reduce brucellosis (a bacterial disease that is spread from animals to humans, mostly from consuming dairy products that are not pasteurized and getting into contact with infected animal)in both humans and livestock. Led by the Rwanda Biomedical Centre in collaboration with the Rwanda Meteorology Agency and local veterinary officers, the project combined cattle vaccination with community health education and proper waste disposal practices. Within one year, infection rates dropped by 70%, according to district health records. Environmental officers also reported improved water quality in nearby streams, previously contaminated by animal waste. The program, supported by local cooperatives and endorsed by the University of Global Health Equity, is now being piloted in two neighboring districts as a scalable model for integrated rural health solutions."

Ineffective Example

"In Rutsiro district, people and animals are no longer getting sick thanks to a new program. Some say it's because of better hygiene and others think it's just luck. We couldn't verify any figures, but locals seem happy with the changes."

Article 8: Balancing with Challenges

- I. In each report, while highlighting the successes, also discuss the remaining challenges or areas needing improvement.
- II. Use factual information to show both the progress made and the gaps that still exist.

Effective Example

"Since launching the Rabies Elimination Campaign in Kigali in 2023, over 85% of domestic dogs in urban neighborhoods have been vaccinated, according to the Rwanda Agriculture and Animal Resources Development Board. Cases of dog bites dropped by 40% in city clinics, and no human rabies deaths have been recorded in the last 12 months. However, the program faces ongoing challenges in peri-urban and rural areas, where vaccine access is limited and roaming dog populations are harder to manage. Health workers also report a need for more public awareness campaigns in local languages to dispel myths about rabies. Officials say scaling up mobile vaccination units and community education is the next step to closing the urban-rural gap."

Ineffective Example

"The rabies campaign in Rwanda has been a complete success, and now the disease is no longer a problem. Officials say everyone has received the vaccine, and the situation is under control."

Community Voices and Expert Perspectives



- I. Include the perspectives of local community members who live with One Health issues daily.
- II. Discuss how these health initiatives have changed everyday life for the better and what areas still require attention.

Effective Example

"In Gicumbi District, community members say the new livestock-waste management project has changed their daily lives. 'Before, we used to get sick often, especially the children, because runoff from the cowshed would mix with our drinking water,' says Jeanette Mukamana, a mother of four. With support from the district veterinary office and local health workers, families were trained to build simple drainage systems and compost pits. Jeanette notes fewer illness cases in her home, but adds that some neighbors still lack materials to implement the changes. Health officials are now exploring group purchasing models to help more families benefit."



Ineffective Example

"A livestock-waste project is underway in Gicumbi. Officials say it's going well. People in the community are said to be healthier now, and the government is expected to expand the program soon."

Article 10: Highlighting Ongoing Research and Future Plans

- I. Mention any ongoing research or future initiatives aimed at addressing the unresolved issues.
- II. End reports with a discussion on what needs to be done next, potentially including ways the public can help or participate.
- III. Acknowledgetraditionalknowledge and products that are approved by relevant regulatory bodies.

Effective Example

"Researchers at the University of Global Health Equity are currently studying the effectiveness of a new locally produced tick repellent made from eucalyptus and neem, plants traditionally used by herders in Eastern Province. Preliminary trials in Kayonza show promising results, with farmers reporting fewer ticks on their cattle. The product is undergoing safety and efficacy review by the Rwanda Food and Drugs Authority. Dr. Uwase, who leads the study, says the next step is testing the product across different ecological zones. She encourages farmers to participate in future trials and attend the upcoming district awareness forums. Experts stress that while traditional knowledge holds value, regulatory approval remains critical to ensuring safety for humans, animals, and the environment."



"Locals are using herbs to treat tick problems in cows. Some believe it works, others are unsure. Research led by the University of Global Health Equity is ongoing but no clear conclusions yet. Meanwhile, farmers are being told to keep doing what works for them."

Article 11 : Expert Contributions

- I. When incorporating expert opinions, translate complex scientific terms and jargon into language that is accessible to the general public.
- II. Experts should be encouraged to explain complex concepts using analogies or metaphors that relate to everyday experiences.
- III. Focus on the essential insights from experts that directly contribute to understanding the One Health issues being reported.
- IV. Ensure accuracy of the story by counter checking facts & figures with experts

Effective Example

"Dr. Habimana, an infectious disease specialist at the Rwanda Biomedical Centre, explains that Rift Valley Fever can spread from infected animals to humans through contact with blood or raw milk. 'Think of it like a leaking roof,' he says. 'If you don't patch it, the water doesn't just stay in one room, it spreads. The same happens when we don't control animal infections, they can spill over to humans.' He adds that outbreaks often follow heavy rains, which increase mosquito populations that transmit the virus. He urges farmers to wear gloves when handling sick animals and to avoid consuming raw animal products. According to the Ministry of Agriculture, over 200,000 livestock have been vaccinated this year to contain the risk."



Ineffective Example

"According to experts, Rift Valley Fever is a zoonotic vector-borne disease with high morbidity rates in ruminants, potentially leading to hemorrhagic manifestations in human hosts. The virus is transmitted via mosquitos and peaks following heavy rains."

Accessibility, Diversity, and Monitoring



Article 12: Balancing Depth and Accessibility

- I. Use sidebars or info boxes to present deeper dives or more technical details for readers who want more information, keeping the main narrative accessible.
- II. Ask experts to provide summaries of their points in layman's terms at the end of more technical discussions.
- III. Incorporate expert columns or Q&A sessions where complex topics are broken down in a reader-friendly manner.

Article 13: Diversity in Representation

- I. Include experts from various fields relevant to One Health in panel discussions or as sources to provide a holistic view of the issues.
- II. Ensure that experts from different geographical regions, are represented, especially those from areas most affected by the One Health issues being discussed.
- III. Factor in gender equity and social inclusion principles in all reporting.

Article 14: Visual and Interactive Tools

- I. Use visual aids, where applicable to explain complex interactions or data, which can make the information more understandable.
- II. Incorporate video interviews or animated explanations where experts discuss key points, helping to humanize and clarify their contributions.

Article 15: Content Monitoring

- I. In collaboration with media outlets, the Rwanda Media Commission (RMC) will oversee monitoring and evaluating compliance with One Health reporting guidelines, following established media best local practices.
- II. RMC will advise on and lead initiatives to revise and adapt the current guidelines in consultation with relevant stakeholders.
- III. In collaboration with media outlets and stakeholders, RMC will monitor indicators such as percentage of reports accurately reflecting One Health principles, number of articles citing credible, cross-sectoral sources, audience reach and engagement levels as well as frequency of coverage on zoonotic and environmental health topics.

These guidelines were adopted by science journalists and One Health experts in Rwanda, through the support of Capacitating One Health in Eastern and Southern Africa (COHESA) project, implemented in Rwanda by the University of Global Health Equity. The guidelines were developed following several science-media cafes led by ISAAA AfriCenter and the Rwanda Media Commission. We call upon all journalists, scientists, social media communicators and stakeholders to consider using these guidelines in their efforts to inform, educate, and engage the public on One Health.

Together, we can advance the public interest by promoting understanding, encouraging action, and supporting the health and well-being of humans, animals, and the environment.

You can share your feedback, comments or pose a question about these guidelines by registering on the Africa Science Dialogue platform.

REFERENCES

- 1. CDC. Antimicrobial Resistance. 2025 [cited 2025 Jun 16]. Antimicrobial Resistance. Available from: https://www.cdc.gov/ antimicrobial-resistance/index.html
- 2. CDC. Food Safety. 2025 [cited 2025 Jun 16]. Food Safety. Available from: https://www.cdc.gov/food-safety/index.html
- 3. CDC. One Health. 2025 [cited 2025 Jun 16]. About One Health. Available from: https://www.cdc.gov/one-health/about/index.html
- 4. One health joint plan of action (2022-2026): working together for the health of humans, animals, plants and the environment [Internet]. [cited 2025 Jun 16]. Available from: https://www.who.int/publications/i/item/9789240059139
- 5. Antimicrobial resistance [Internet]. [cited 2025 Jun 16]. Available from: https://www.who.int/news-room/fact-sheets/detail/ antimicrobial-resistance
- 6. Zoonotic Diseases | UNDRR [Internet]. 2023 [cited 2025 Jun 16]. Available from: https://www.undrr.org/understanding-disasterrisk/terminology/hips/bi0027
- 7. CDC. Neglected Tropical Diseases. 2024 [cited 2025 Jun 16]. Neglected Tropical Diseases. Available from: https://www.cdc.gov/ neglected-tropical-diseases/index.html
- 8. Vector-borne diseases [Internet]. [cited 2025 Jun 16]. Available from: https://www.who.int/news-room/fact-sheets/detail/vectorborne-diseases
- 9. Q&A on food safety | Food safety and quality | Food and Agriculture Organization of the United Nations [Internet]. [cited 2025 Jun 16]. Available from: https://www.fao.org/food-safety/background/qa-on-food-safety/en/
- 10. World Bank [Internet]. [cited 2025 Jun 16]. What is Food Security? There are Four Dimensions. Available from: https://www. worldbank.org/en/topic/agriculture/brief/food-security-update/what-is-food-security
- 11. Introduction to Environmental Pollution [Internet]. [cited 2025 Jun 16]. Available from: https://appliedscincesheet.uoanbar.edu. iq/English/News_Details.php?ID=1099
- 12. Nations U. United Nations. United Nations; [cited 2025 Jun 16]. What Is Climate Change? Available from: https://www.un.org/en/ climatechange/what-is-climate-change







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