

COMMUNICATING RISK AND SCIENCE DURING DISEASE OUTBREAK

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Are you planning to go on a
cruise ship trip anytime soon?

RISK ASSESSMENT

Rapid risk assessment, acute event of potential public health concern



Hantavirus outbreak caused by Andes virus

Date and version of current assessment: 15 May 2026, v2

Date(s) and version(s) of previous assessment(s): 5 May 2026, v1

Overall risk and confidence (based on information available at time of assessment)

Overall risk
Global
Low

Confidence in available information
Global
Moderate

RISK PERCEPTION



A screenshot of a tweet and its reply. The tweet is from a user with a profile picture of a person in a yellow protective suit. The tweet text is "I say this with a heavy heart but **sink tnat ship**". The reply is from "Outbreak Updates" (@outbreakupdates) and contains the text "Human-to-human transmission suspected on board hantavirus cruise ship" and "-WHO". The tweet has 133 replies, 2.8K retweets, 48K likes, and 1.6M views.

o.31r1ordvoientaiaakl1rouisine fare irp1rot Hurmpieida | May 5

I say this with a heavy heart but **sink tnat ship**

Outbreak Updates @outbreakupdates · May 5

Human-to-human transmission suspected on board hantavirus cruise ship

-WHO

133 2.8K 48K 1.6M

RISK PERCEPTION

THE SUBJECTIVE JUDGMENT THAT PEOPLE MAKE ABOUT THE CHARACTERISTICS AND SEVERITY OF RISK

Combination of knowledge and emotion

Often not in agreement with actual risk

Basis for much of how we act

SCIENCE BEHIND

- The pathogen is not new
- Serious infection but low public health threat
- Human-to-human transmission is rare
- Long incubation period

CHALLENGES

- The pathogen is not new most people never heard of it
- Serious infection but low public health threat what?
- Human-to-human transmission is rare people are getting sick
- Long incubation period we might see more cases

MYTH & FALSE INFO

- This is a new pandemic
- False treatments
- Side effect of COVID-19 vaccine
- Staged crisis



World Health
Organization

European Region

The Hantavirus Outbreak Is Resurrecting Covid-Era Misinformation Tactics

Experts say A.I. tools have made it even easier for influencers and others to spread false messages online.

Listen · 5:52 min

Share full article



AP Images

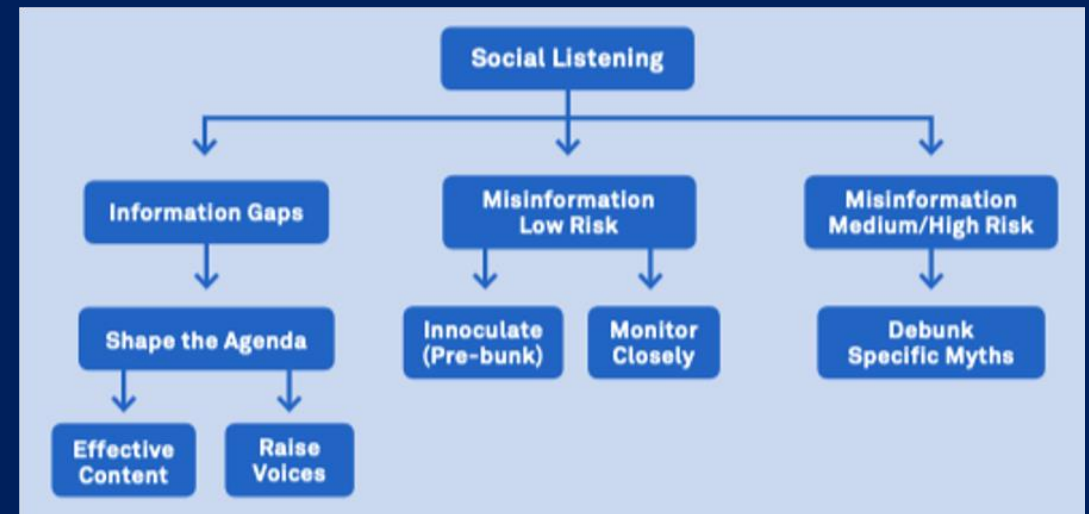
HOW DO WE KNOW ALL THIS?

SOCIAL LISTENING IS...

...an important tool for understanding people's views, perceptions and concerns and for informing overall emergency response

...an active process of taking in, observing, and interpreting a variety of signals

...the basis of impactful risk communication interventions



RISK COMMUNICATION

EARLY AND TRANSPARENT

do not wait to have all information in place. say what you know now and what you do not know

START WITH LISTENING

we conducted social listening in all affected countries to understand people's concerns, needs and risk perception

MEET YOUR AUDIENCE WHERE THEY ARE

Dr Tedros direct message to the people Tenerife "cut through the noise"

ACCESSIBLE

make information available through the channels your audience uses

RELEVANT

know your audience; target and motivate audiences based on the points of their concerns

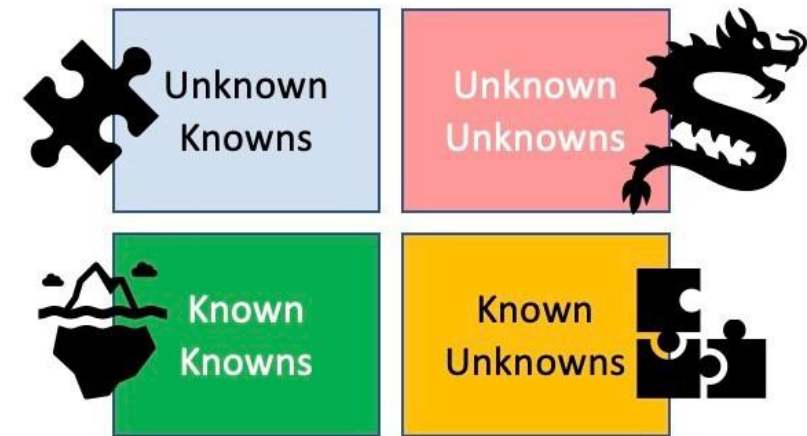
ACTIONABLE

why are you communicating with your audience?
what change in them do you want to see?

The unknown unknowns

“...because as we know, there are **known knowns**; there are things we know we know. We also know there are **known unknowns**; that is to say we know there are some things we do not know. But there are also **unknown unknowns**—the ones we don't know we don't know.”

Donald Rumsfeld



Rumsfeld Ignorance Management Matrix - diagram Michael O'Donnell

ABSOLUTELY CERTAIN STATEMENTS ABOUT RISK
ARE ALMOST BY DEFINITION MISTAKEN. LIKE ANY SCIENTIFIC
STATEMENT, A RISK STATEMENT MUST ALWAYS BE QUALIFIED
IN PRINCIPLE BY THE POSSIBILITY OF NEW DATA -

Peter Sandman



European Region



Uncertainty

Articulate what is known
and what is unknown,
acknowledging the uncertainty.

A study from the Royal Society found that not acknowledging or adequately uncertainty could lead to **unwarranted weight being put on certain pieces of evidence in the process of decision-making**, and that stating uncertainty did not necessarily correlate with reductions in trust

SOURCE

A recent Nuffield Foundation study showed that expressing certain terms of uncertainty such as ‘estimated’, and **communicating a range of possible figures did not negatively affect the reception of data**, and could indeed increase trust

SOURCE

INITIAL EVIDENCE IS WEAK

YOUR GUIDANCE IS BASED ON IT

EVIDENCE EVOLVES

YOUR GUIDANCE CHANGES



CREDIBILITY DROPS DUE TO
PERCEPTION OF INCONSISTENCY

COMMUNICATING UNCERTAINTY

BE HONEST ABOUT WHAT YOU DO NOT KNOW

Label your messages with the caution that it is based on what you know at that point in time.

Current evidence indicates that...
It is expected that...

Don't use absolutes

We are sure that...



COMMUNICATING UNCERTAINTY

BE HONEST ABOUT WHAT YOU DO NOT KNOW

Where appropriate, point out explicitly that you are not confident

Do not speculate about future scenarios that might or might not happen

Say what you are doing to find out about what you do not know.

Show your distress at having to be tentative – and acknowledge people’s desire for certainty

Explain how uncertainty affects precaution-taking

Use conditional instead of future tenses: “it should/might be” instead of “it will”

Thank you

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