

DISINFORMATION AND THE CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR (CBRN) SCIENTIFIC AND TECHNICAL (S&T) COMMUNITY



While the S&T community is generally regarded as a source of factual and objective information, its credibility makes it an attractive target for malign actors seeking to manipulate public narratives. By undermining trust in scientific evidence, institutions and experts, such actors can create uncertainty, distort public understanding and make CBRN disinformation* more likely to take hold. Disinformation not only erodes public trust in S&T expertise but can also influence high-stakes diplomatic and policy decisions.

INTERSECTION OF S&T COMMUNITY AND DISINFORMATION

CBRN disinformation can both emerge from within and target the S&T community. The space where non-experts interact with S&T information is the most vulnerable, as accurate information can be distorted or misrepresented, or misinformation can be capitalised upon to propagate disinformation narratives and fuel harmful misconceptions.

Disinformation is spread from within the S&T community



Appeals to authority: The perceived credibility of S&T experts could be leveraged to lend legitimacy to false and misleading claims.

Example: Citing technical experts who are misquoted, taken out of context, or lack relevant expertise.

Academic publishing: Misaligned incentives can encourage the publication of flawed, misleading or deliberately manipulated research, which may subsequently be used to support disinformation.

Example: A research paper containing unverified or poor-quality data can be spread whether the underlying errors are intentional (e.g. manipulated data) or unintentional (e.g. errors in research leading to erroneous results).

Disinformation is spread using the work published by the S&T community



Mischaracterisation of S&T research in the media.

Example: A media outlet selectively quotes research findings and removes key caveats to falsely portray the research as supporting or refuting a predetermined claim.

Mischaracterisation of S&T research in decision-making bodies.

Example: A state actor misrepresents S&T literature in an international disarmament forum to erode trust and increase geopolitical tensions.

* CBRN disinformation is the deliberate creation and spread of false or misleading information about CBRN materials, technologies, capabilities or activities, including both peaceful and military applications. Definitively identifying disinformation can be challenging, as intent and attribution are often unclear. For brevity, this note adopts a broad definition of "disinformation" that includes other information operations, such as misinformation, as they mislead the audience and shape perception and behaviour.

LONG-TERM COUNTERMEASURES

S&T COMMUNITY & RESEARCHERS

Strengthen quality controls

Conduct rigorous peer review, source checking and validation.

Communicate uncertainty clearly

Explain limitations, caveats and confidence levels.

Engage communicators early

Work with media and policy communicators to ensure findings are accurately represented.

Communicate directly

Provide accessible, authoritative explanations of complex or contested research.

Correct the record

Actively publicise retractions, corrections and significant errors.

Address systemic incentives

Recognise pressures that can contribute to poor-quality or misleading research.

Check AI-generated content

Verify AI-assisted research and drafting before publication.

MEDIA & COMMUNICATORS

Verify experts

Assess expertise, affiliations and relevant conflicts of interest.

Use multiple qualified voices

Seek independent perspectives rather than relying on a single source.

Carefully check sources

Verify citations, underlying studies and whether sources have been retracted or discredited.

Contextualise findings

Retain important caveats, uncertainties and limitations.

Avoid sensationalism

Do not overstate findings through headlines or framing.

Correct the record

Clearly report significant corrections and retractions.

ANALYSTS & PRACTITIONERS

Assess the evidence

Evaluate the quality, provenance and limitations of information.

Carefully check sources

Trace secondary claims back to authoritative primary evidence.

Compare interpretations

Consider alternative explanations and competing expert views.

Identify manipulation

Identify selective, decontextualized or misleading use of S&T evidence.

Consult specialists

Seek subject-matter expertise on complex technical claims.

Build S&T literacy

Strengthen capacity to critically interpret S&T information.

DIPLOMATS & IOs

Check technical claims

Assess the evidence, context and provenance of S&T claims.

Seek qualified expertise

Consult relevant technical experts when interpreting complex or high-stakes claims.

Maintain technical expertise

Ensure appropriate S&T expertise is represented in CBRN/WMD discussions.

Challenge unsupported claims

Identify and question misleading or selectively presented evidence.

Build S&T literacy

Develop sufficient understanding to recognise questionable technical claims.

WANT TO LEARN MORE?

Scan the QR codes below to explore more information on countering disinformation:

PRIMER FOR IAEA
GC 2026



EXAMPLE
TACTICS AND
NARRATIVES



BEST PRACTICES
FOR COUNTERING
RN DISINFO



DISINFO BRIEF
FOR IAEA
SECRETARIAT

