

Vaccine News Quality Questionnaire

Guidelines for Use

The questionnaire is made up of three sections, with a series of questions within each section.

When reading an article, keep in mind the two major aspects:

- The sources of information mentioned in the article
- The major claims the article is making

Answer by marking a "1" under either Y (Yes), N (No), or ? (Not applicable/Don't Know)

Tally the answers to gain a general sense of the quality of the news. The result will fall in one of three groups:

Great: High-quality (majority "Yes" answers)

Fine: Medium-quality (mix of "Yes" and "No")

Not so good: Low-quality (majority "No" answers)

This questionnaire should take less than 10 minutes to complete. For a quicker assessment, focus on first answering the "Key Questions" at the beginning of the sections. If you answer "N" to any of the questions, there are most likely problematic elements to the article.

Tips and hints on how to answer these questions can be found on page 05, and online at <https://artt.cs.washington.edu/>.

Quality Dimensions

The questionnaire was developed to assess the quality of a given news article – vaccine reporting in particular.

Recognizing that specialized topics require more specialized questions to produce actionable analysis, the questionnaire follows a framework that evaluates news quality through three dimensions.

Note: This PDF questionnaire provides an assessment at the **article-level**. For our source-level assessment, please visit <https://artt.cs.washington.edu/artt-evaluations/vaccine-news-quality-questionnaire/>.



GENERAL JOURNALISM QUALITY

FIRST DIMENSION, pg 02

The first dimension assesses the general journalism quality when the piece aims to be journalism.

SCIENCE/HEALTH JOURNALISM QUALITY

SECOND DIMENSION, pg.03

The second dimension assesses the science/health journalism quality when the piece mentions health and/or well-being, and/or makes mention of science or scientific methodology.

VACCINE JOURNALISM QUALITY

THIRD DIMENSION, pg.04

The third dimension assesses the quality of vaccine journalism when the piece is about or discusses vaccines.

We are open to your feedback on all aspects of this questionnaire. If you have questions or comments, please contact us at artt@hackshackers.com with the subject line "Vaccine Questionnaire."

Quality Dimension 1: General Journalism Quality

This category is largely derived from traditional journalistic standards, and can be applied to news of any topic or genre. It represents an integrated approach to quality, emphasizing how the areas of accuracy, transparency, impartiality, reliability of sourcing, and language work together to create high-standard public information.

Questions		Y	N	?
Key Questions	1. Are there NO existing reputable fact-checks on this information that refute the article that you can find?			
	2. Does this piece base itself upon/cite more than one independent source of information (not just itself)?			
	3. Does the piece avoid circularity in sourcing?			
	4. Does the piece substantiate the important claims it makes?			
	5. Is this piece NOT a press release?			
	6. Is this clearly marked as a news report or an opinion piece of journalism?			
	7. Is this a well-written piece?			
	8. Does the title capture the main point of the piece or report?			
	9. Is the title generally neutral (not sensational) in its sentiment?			
SUBTOTAL:				

Quality Dimension 2: Science/Health Journalism Quality

Science and health reporting can be understood broadly as “how society talks about science.” In this type of journalism, it is critical to communicate often-complex scientific information in an accurate yet accessible way. This dimension of quality includes questions regarding subject matter expertise, the inclusion of context, and the handling of uncertainty.

Questions		Y	N	?
Key Questions	1. Does this report refer to an expert in the specific field of scientific study?			
	2. If this report cites or links to an academic preprint, does it treat the reference differently than fully reviewed and longer standing research?			
	3. Does the author have a background on the science beat or in science, or does the outlet/organization have a science editor/reporter?			
	4. If a scientific conclusion is discussed, does the article explain how evidence is built through testing and/or possible uncertainty about results?			
	5. If the report mentions medical/scientific cause(s), are the terms or ideas about data in fact discussing causation correctly (as opposed to correlation)?			
	6. Is the main purpose of this piece to provide scientific research to communities, to educate the public, or to explain something scientific?			
	SUBTOTAL:			

Dimension 3: Vaccine Journalism Quality

Vaccine journalism, as a highly specialized form of science communication, requires additional considerations. This third dimension of quality considers the use of specialized sources, the avoidance of equal presentation of scientifically unequal claims (“false balance”), and the representation of (un)certainty about the strength of scientific evidence for or against a particular risk.

Questions		Y	N	?
Key Questions	1. Does the article/report express confidence in the overall efficacy of vaccines? If the answer to this question is "N," mark the "N" and then skip the rest of the questions in this section.			
	2. If discussing vaccine risks, does the article/report contextualize them appropriately (including risk of disease)?			
	3. Does the article/report reference at least one of the WHO’s Vaccine Safety Net (VSN) list of vetted websites as a trusted source of vaccine information?			
	SUBTOTAL:			

Dimension 1: General Journalism Quality	Dimension 2: Science/Health Journalism Quality	Dimension 3: Vaccine Journalism Quality	Total:

ASSESSMENT RUBRIC:

- Great:** High-quality (majority “Yes” answers)
- Fine:** Medium-quality (mix of “Yes” and “No”)
- Not so good:** Low-quality (majority “No” answers)

Question Hints and Tips

Dimension 1: General Journalism Quality:

1. Search "fact check" and the URL of the article or video. Examples of reputable fact check are often conducted by member organizations of the International Fact Checking Network (IFCN), which has standards.
2. To answer this question, focus on the articles or studies referenced. Then, do a quick check to see if any of these sources are directly connected to each other by being at the same organization.
3. To answer this question, check the source list to see if there are times where it looks like two different sources are being cited, but they are really the same source.
4. Is there at least one source that you noted above that is connected to a major point the article is making?
5. Some organizations directly put terms such as "press release," "media release," "for immediate release," in the document. A press release might for example announce a recent scientific discovery made by a faculty member in a university, but is not required to double check or verify the discovery itself with external reviewers.
6. Look around the page or in the URL of the piece and see if you can find the words "opinion" or "news." Even if you don't see a clear label on the piece, look at the outlet to see if this falls under a news section. One way to look for this is also to see if you can find a clear opinion section, or clearly marked opinion pieces.
7. Typos? Convoluted? Hard to follow? If it overall reads clearly and contains no significant typos, grammatical errors, feel free to mark it as yes.
8. Does the title reflect the most important claim(s)?
9. Tip: Check the text with an online sentiment analysis

Dimension 2: Science/Health Journalism Quality:

1. For example, an article on vaccines should cite a vaccinologist, infectious disease, or directly related specialists, either directly or through cited references (and not rely on the word of a different kind of doctor.) In a similar vein, an article on the Holocaust should refer to experts in modern European history rather than a different era or location.
2. Are any references within places such as arxiv.org, biorxiv.org or other places that collect pre-prints. A reference to a preprint should mention this fact and/or that its results have yet to be vetted by a peer community. Readers/listeners should understand that any conclusions need to be taken with some caution.
3. Look at the description of the reporter and also other reporters of science articles at the outlet/organization. Science reporting is complicated, and good reporting takes a combination of skill and experience. If the outlet/organization has a science editor or reporter that can review, guide, and/or edit pieces, this can also be helpful in producing quality scientific reporting.
4. Absolute certainty in science is very difficult, as it depends on the consensus of many participants who are reviewing results over and over again. This is why some conclusions can be overturned in the future.
5. Explanations of causation need to make sure that evidence is greater than mere chance, and against the possibility that there are other factors influencing the results.
6. The central purpose of the article should be public-oriented missions of science reporting to benefit the public and public health, rather than entertainment.

Dimension 3: Vaccine Journalism Quality:

1. "False balance" in reporting can occur when unsupported, minority, or implausible views are given an equal voice in journalistic reporting with expert consensus and credible information. So, an article is problematic if it questions whether vaccines overall have been shown to work (there is broad, overwhelming scientific and medical consensus over the efficacy of vaccines), or portrays those who have concerns over the general efficacy of vaccines as possessing equivalent evidence that supports their doubts.
2. If this piece mentions risk, based on this piece, do you find yourself worried about taking a vaccine?
3. Look to see what organizations are referenced in the article. Check to see if one of these organizations is referenced/mentioned as a VSN member.