TRUST AND HEALTH COMMUNICATION
An annotated bibliography

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Boston University Center on Emerging Infectious Diseases
Research powering policy and action.

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1. Introduction

This document is aimed at providing an annotated bibliography of an intentional selection of recent key reports on trust in health communications including systematic reviews, contributions and discussions from experts, population survey data, and frameworks. It is not a systematic literature review that intends to be comprehensively appraising the current literature. The following documents were selected by searching key terms including health communications, trust, drivers of trust on search platforms Google Scholar, PubMed, and Google. Some documents were found outside of these search parameters by searching directly on the websites including WHO, CDC, Brookings Institute, World Bank and the Northeastern University's Trust Project.

The bibliography is divided into four thematic sections: discussion on trust, trust and health communication based on the peer review literature, population statistics, and communication guidelines and frameworks.

2. Reports On Trust and Health Communication

2.1 Effective Health Communication Within the Current Information Environment and the Role of Federal Government: Proceedings of a Workshop

Effective Health Communication Within the Current Information Environment and the Role of the Federal of a...

NATIONAL ACADEMIES Sciences Engineering Medicine

NATIONAL ACADEMIES PRESS Washington, DC

Effective Health Communication Within the Current Information Environment and the Role of the Federal Government

Erin Hammers Forstag and Holly G. Rhodes, *Rapporteurs*

Board on Science Education

Division of Behavioral and Social Sciences and Education

Proceedings of a Workshop

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Main Points:

- Timeliness and Transparency: Lessons Learned from Covid-19 Real-Time Reporting
  - Establishing systems or guidelines to report real-time data in a crisis beforehand can help establish public trust by allowing for timely decision making.
  - A framework should be established for translating scientific information to policy in a consistent, concise, and transparent way. Consistency will help to build public trust.
    - When people do not understand how or why a decision is made, they are less likely to trust that decision.
  - Increasing trust requires sustained communication between authorities and communities even during periods between disasters.
- The Role of Emotion
  - People typically react emotionally to information first which underscores the need for credibility.
  - If a speaker does not understand what motivates and concerns an audience their message will not get through.
    - Can be hard to do so if speaking to a diverse audience with limited time.
- Key Cross Cutting Challenges and Implications for Federal Health Communication

Objective: To summarize the current information environment, define what effective communication entails from the perspective of the federal government and define the role of the federal government in health communications.	
Methodology: A workshop summary	
Target Audience: Health communication experts	

- Trust in institutions is declining over time and is politically polarized.
- Rapid changes in communications technologies and preferences means new strategies must be considered.
- Science and health have become politicized.

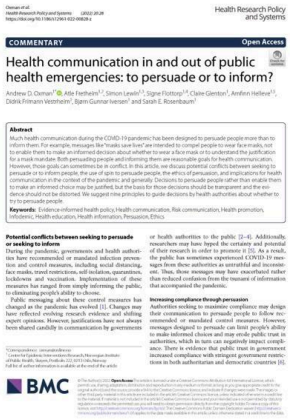
- Investing in Communication Expertise and Infrastructure
  - In developing proactive communication channels agencies need to fund support for eliminating the social drivers of inequality.
- Choosing the right spokespeople
  - Large surveys of trust may not be capturing the nuance between trust in institutions in general (public schools) vs specific institutions (local school districts).
  - When pure science goes up against storytelling and emotion, storytelling often wins because stories matter when engaging audiences.
- Expertise and Human Capital needed for Effective Large-Scale Health Communication Campaigns.
  - These campaigns need to be grounded in models of behavior change, develop an exposure strategy to ensure that the target audience is exposed often enough for the message to be effective and need to be flexible and adapt when necessary.
- Organizational Capacities for Agility
  - Many challenges in federal government stem from a sense of responsibility and risk aversion.
    - Increased agility and reliance on partners may stem this issue.
  - Experts in communication and social sciences are needed.
  - Incorporating feedback loops is a key component of agility.

Key implications for health communications:	Limitations:

- Proactive communication is a necessary precursor to building trust.
- Personal touch matters when communicating.
- The politicization of science downplays the credibility of agencies and experts.
- A lot of data infrastructure will need to be developed for more effective health communication.
- Increased investment in community public health and community partners is necessary to develop long-term relationships and foundational trust.
- Building Relationships to Enhance Effective Health Communication
  ○ Increasing cross-department collaboration is necessary.
  ○ Developing a mechanism for listening to communities is important.
  ○ Additional capacities must be built at the local level to evaluate communication efforts.
  ○ A community listening infrastructure developed during COVID-19 could have future use if it wasn't dissolved after the pandemic.
- Misinformation response unit can monitor trends and develop responses based on behavioral psychology.
	- Although it does combine sources from the literature with the expert panels, the document is focused on a single workshop and its discussions.
	- Even though the document does not present a critical appraisal of evidence, it allows identifying priority areas for research and implementation of interventions.

National Academies of Sciences, Engineering, and Medicine. (2023). Effective Health Communication Within the Current Information Environment and the Role of the Federal Government: Proceedings of a Workshop.

2.2 Health Communication in and out of public health emergencies: to persuade or to inform?



Health Research Policy and Systems

COMMENTARY Open Access

Health communication in and out of public health emergencies: to persuade or to inform?

Abstract

Much health communication during the COVID-19 pandemic has been designed to persuade people more than to inform them. For example, messages like "masks save lives" are intended to compel people to wear face masks, not to enable them to make an informed decision about whether to wear a face mask or to understand the justification for a mask mandate. Both persuading people and informing them are reasonable goals for health communication. However, those goals can sometimes be in conflict. In this article, we discuss potential conflicts between seeking to persuade or to inform people, the use of spin to persuade people, the ethics of persuasion, and implications for health communication in the context of the pandemic and generally. Decisions to persuade people rather than enable them to make an informed choice may be justified, but the basis for those decisions should be transparent and the evidence should not be distorted. We suggest nine principles to guide decisions by health authorities about whether to try to persuade people.

Keywords: Evidence-informed health policy, Health communication, Risk communication, Health promotion, Infodemic, Health education, Health information, Persuasion, Ethics

Potential conflicts between seeking to persuade or seeking to inform

Increasing compliance through persuasion

BMC

Main Points:

- Justifications for new recommendations (evolving science) are not always shared candidly with the public.
- Researchers may hype their research, misconstruing the certainty of their work to promote it.
  - The public has experienced these messages as untruthful and inconsistent.
  - This may have made COVID-19 messaging to be more confusing rather than less.
- Messages designed to persuade the public can limit people's ability to make informed choices and erode public trust.
- Research needed to reduce uncertainties can be difficult to conduct in an environment where those uncertainties are not public.
  - Being open about uncertainties may reduce compliance because people can misinterpret this as reduced effectiveness.
- Spin occurs when reporting practices distort the interpretation of results so they may be viewed in a more positive light.
- Trust may be undermined if health authorities are not transparent or perceived as dishonest by the public.

Objective: To provide principles by which health authorities can decide whether to persuade or inform people.

Methodology: Produced by a group of professionals

Target Audience: Health communication experts

Key implications for health communications:

- There are key choices between persuading and informing people.
- Trust can be heavily influenced by these decisions.

Limitations:

- This is not an experimental or quasi-experimental study design.
- This is a workshop product from professionals in the field.

Oxman, A. D., Fretheim, A., Lewin, S., Flottorp, S., Glenton, C., Helleve, A., ... & Rosenbaum, S. E. (2022). Health communication in and out of public health emergencies: to persuade or to inform? *Health Research Policy and Systems*, *20*(1), 1-9.

2.3 The Science of Trust: Future directions, research gaps, and implications for health and risk communication

JOURNAL OF COMMUNICATION IN HEALTHCARE
2022, VOL. 15, NO. 4, 245–259
https://doi.org/10.1080/17538068.2022.2121199

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ROUNDTABLE PROCEEDINGS

Check for updates

The science of trust: future directions, research gaps, and implications for health and risk communication

Renata Schiavo (Moderator and Roundtable Chair/Organizer)[a,b,c,d], Gil Eyal (Participant)[e], Rafael Obregon (Participant)[f], Sandra C. Quinn (Participant)[g], Helen Riess (Participant)[h,i] and Nikita Boston-Fisher (Co-Organizer)[j,k]

[a]Editor-in-Chief; [b]Department of Sociomedical Sciences, Columbia University Mailman School of Public Health, New York, NY, USA; [c]Health Equity Initiative, New York, NY, USA; [d]Strategies for Equity and Communication Impact (SECI)[NY], New York, NY, USA; [e]Department of Sociology, Columbia University, New York, NY, USA; [f]UNICEF-Paraguay, Asunción, Paraguay; [g]Department of Family Science and Maryland Center for Health Equity, School of Public Health, University of Maryland, College Park, MD, USA; [h]Department of Psychiatry, Harvard Medical Center, Boston, MA, USA; [i]Empathetics, Inc., Boston, MA, USA; [j]Senior Editorial Assistant; [k]McGill University, Faculty of Management, Montreal, Quebec, Canada

ABSTRACT

'Trust is among the most important factors in human life, as it pervades' all domains of society [1] and related decision-making processes. This includes people's trust in science, and in clinical and public health solutions. Unequivocally, community and patient trust are foundational to the adoption and maintenance of health-related behaviors, social norms, and policies. Yet, trust has to be earned and developed over time and through multiple interactions. Trust is about dialogue and human connection. It's about listening and knowing that one interaction will not be enough to build trust. It is also influenced by a variety of social, economic, cultural, and political factors, past experiences, and the history of specific communities and patient groups. It should be at the core of the health and social systems with which people interact. More recently, trust in evidence-based information has also been affected by misinformation, not only on social media but also in a variety of community, institutional, and patient settings. Ultimately, we are in the midst of a global trust crisis that precedes the COVID-19 pandemic and is often rooted in the health, racial, and social inequities many groups experience [2].

KEYWORDS
Science of trust; trust; health communication; risk communication; social and behavior change; health equity; healthcare; global health; public health; medicine

As part of this *Journal's Science of Trust* Initiative [3], this roundtable discussion took place on 14 July 2022, and convened experts from a variety of health, behavioral, and social sciences disciplines to advance research scholarship on the 'science of trust', discuss the role of communication in building and restoring trust at the individual, community and population levels, and identify research gaps and promising strategies. Several themes, action steps, and recommendations emerged from this interdisciplinary discussion, and have implications for health and risk communication across research, policy and practice, and multiple professional fields.

Roundtable discussion

Dr. Renata Schiavo: Welcome everyone. Thank you for your interest and efforts on advancing our understanding of the science of trust, one of the most important topics of our time. It's my privilege to greet you today on behalf of *the Journal of Communication in Healthcare: Strategies, Media, and Engagement in Global Health*, a peer-reviewed publication, which publishes innovative research, interventions, and perspectives on health communication in all areas of healthcare, public health, global health, and medicine.

At the Journal, we also recognize the intersecting nature of health and community development and try to bring this perspective to our work. Finally, we are strongly committed to equity, diversity, and inclusion. We are also committed to explore the role of communication in advancing health equity and other human rights issues.

Trust is one of the most important factors in human life and affects all of the different domains of our society. We believe in the role of communication, research, policy, and practice in building or restoring trust in science, health, and other information.

We launched the *Journal's The Science of Trust* [3] Initiative in 2021 as part of a series of dedicated pieces, including an interview with Dr. Mike Ryan and Melinda Frost of the World Health Organization [4]. This is not a new topic in the Journal! Over the years, we have been exploring the role of trust and mistrust

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Objective: To outline factors influencing trust, identify future research objectives and current
gaps

Main Points:

- Trust must be earned and developed over time and through multiple interactions.
  - Trust is about dialogue and human connectedness.
  - One interaction will not be enough to build trust.
- Trust invites greater collaboration.
  - Enables greater sharing of materials and information.
- Lack of trust and empathic connection are among the most common factors leading people to disregard recommendations.
- Building the trust and capacity of community health workers (and other trusted people, e.g., barbers beauticians, pastors) takes time and sustained engagement
  - Building their capacity
  - Long-term relationships and community engagement relationships are important.
- With the ending of COVID-related funding there is a fear / growing gaps that some hospital systems may close or lose interesting community clinics.
  - Some hospitals may not have the resources to maintain these clinics.
  - This could damage trust built over long periods of time.
- You cannot secure trust by analyzing and confronting mistrust only.
- The only way to understand and to build trust is to, "be there for the long haul and to be interested in people."
  - Part of the science of trust is to learn from community members and to devise good ways of learning from them.

<table>
<tr><td>Methodology: Roundtable discussion of professionals</td><td rowspan="2">- For future research we should raise the level of importance of interventions that are focused on building trust & making them a key component of the public health system.
- Community health workers (or intermediaries in general) are important but are not typically valued.
- Researchers should take training to develop listening skills and promote more effective methods for interactions.
- A main question in communication is how we effectively communicate science to people with diverse educational backgrounds.
- In the U.S. there is a tendency to favor quick fixes, but building trust is a long-term exercise.
○ There is an important distinction between blind faith and responsible trust, and we must give people tools so they may convince themselves.
- If we do not set up community-based platforms that contribute to ongoing dialogue, we will see this research repeated.
○ To set these up, we must think about going where people are and assessing their desire and preference for a platform to communicate.</td></tr>
<tr><td>Target Audience: Researchers and health communication experts</td></tr>
<tr><td>Key implications for health communications:
- The future of trust and trust building is in communities.
- It takes a long time and a lot of effort to build trust.
- The repeal of COVID-19 funding and projects may worsen mistrust.</td><td>Limitations:
- This is a round-table discussion and not an experimental study.</td></tr>
<tr><td colspan="2">Schiavo, Eyal, G., Obregon, R., Quinn, S. C., Riess, H., & Boston-Fisher, N. (2022). The science of trust: future directions, research gaps, and implications for health and risk communication. Journal of Communication in Healthcare, 15(4), 245–259.https://doi.org/10.1080/17538068.2022.2121199</td></tr>
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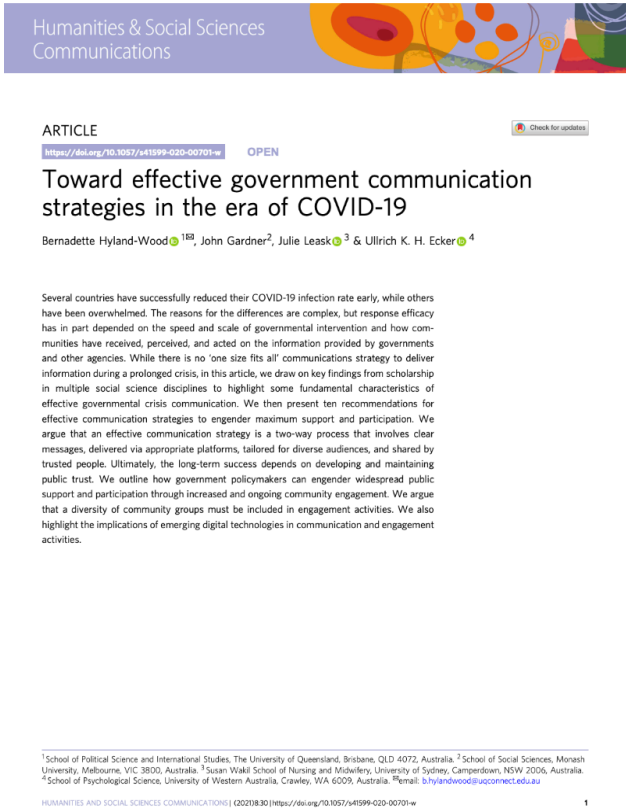
2.4 Toward effective government communication strategies in the era of COVID-19



Humanities & Social Sciences Communications

ARTICLE

https://doi.org/10.1057/s41599-020-00701-w OPEN

Toward effective government communication strategies in the era of COVID-19

Bernadette Hyland-Wood[1✉], John Gardner[2], Julie Leask[3] & Ullrich K. H. Ecker[4]

Several countries have successfully reduced their COVID-19 infection rate early, while others have been overwhelmed. The reasons for the differences are complex, but response efficacy has in part depended on the speed and scale of governmental intervention and how communities have received, perceived, and acted on the information provided by governments and other agencies. While there is no 'one size fits all' communications strategy to deliver information during a prolonged crisis, in this article, we draw on key findings from scholarship in multiple social science disciplines to highlight some fundamental characteristics of effective governmental crisis communication. We then present ten recommendations for effective communication strategies to engender maximum support and participation. We argue that an effective communication strategy is a two-way process that involves clear messages, delivered via appropriate platforms, tailored for diverse audiences, and shared by trusted people. Ultimately, the long-term success depends on developing and maintaining public trust. We outline how government policymakers can engender widespread public support and participation through increased and ongoing community engagement. We argue that a diversity of community groups must be included in engagement activities. We also highlight the implications of emerging digital technologies in communication and engagement activities.

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Objective: To highlight the fundamentals of effective governmental crisis communication and present ten recommendations for effective communications strategies.

Main Points:

- Effective communication is an interactive process of exchange of information and opinions among individuals, groups, and institutions.
    - Involves multiple messages that express concerns, opinions, or reactions to risk messages or legal arrangements for risk management.
- Communicators should anticipate disagreement due to contestation of the legitimacy of expertise, especially when messaging crosses policy and disciplinary boundaries and draws on competing values.
- People's engagement with and response to public health messaging depends on various demographic and social factors as well as access to resources.
    - These factors influence people's preferred modes of communication as well as who and what they perceive as a trustworthy authority.
    - Also informs their capacity to act and respond to information.
- Societal factors must be considered when developing messaging and messaging should be sensitive to the concerns and values of the diverse public.
    - Messaging should also work with different modes of information sharing to meet the needs of the diverse public.
- The establishment of trust requires civic engagement and transparency.
    - Transparency failures can undermine trust in institutions.

Methodology: The recommendations come from the literature, but analysis was done by authors' expertise in the subject field and synthesis of literature.	- Civic engagement (community engagement) is necessary to identify shared values and enable communities and social networks to be involved in situations that will affect them.
	- Recommendations
	  ○ Engage in clear communication.
	  ■ Building trust can be enhanced by communicating regularly and across many channels.
	  ○ Strive for maximum credibility.
	  ■ Strategies for maximum credibility include leveraging trust, and authoritative intermediaries such as medical or public-health experts to communicate key messages.
	  ○ Communicate with empathy.
	  ○ Communicate with openness, frankness, and honesty.
	  ■ Explain why particular actions are essential, helpful, problematic, and the basis on which decisions are being made.
	  ○ Recognize that uncertainty is inevitable.
	  ■ Recognize that risks exist, and uncertainty and ambiguity are inevitable, and proceed from that common ground.
	  ■ When new evidence emerges, acknowledge uncertainties and emphasize the conflict between old and new information.
	  ● This can facilitate knowledge revisions.
	  ○ Account for levels of health literacy and numeracy.
	  ■ Communicators should use both quantitative and qualitative estimates of risk.
	  ● Quantitative estimates of risk should be expressed as simple frequencies.
	  ○ Empower people to act.

Target Audience: Researchers and health communication experts	

	■ Communicators and policymakers must consider barriers to desired behaviors and people must have the capacity, opportunity, and motivation to act. ■ A common threat can elicit a sense of togetherness, encourage people to look beyond their differences, and foster a heightened sense of collective responsibility. ● Governments should appeal to public solidarity and resilience. ○ Appeal to social norms. ■ Promoting desirable social norms, both descriptive norms and injunctive norms, can promote desirable behaviors. ○ Consider diverse community needs. ○ Be proactive in combating misinformation. ■ When misinformation reaches a certain amount of traction, governments should scrutinize it and point out the motivations behind its spread and the logical fallacy used. - Community reference groups ○ These groups can be consulted on an ongoing basis to represent the social-cultural diversity of respective communities. ○ These groups are best at guiding lived experiences and perspectives of key groups that affect how people respond to messages.
Key implications for health communications: - Public health officials should anticipate pushback to their messaging. - Public health officials should work closely with communities to determine	**Limitations:** - This was not a systematic literature review but based on individual authors' synthesis of their respective fields.

who should deliver their message, how they should deliver it, and to what population. - Public health messaging should be transparent, and decision-making and science should be clearly explained.	
Hyland-Wood, Gardner, J., Leask, J., & Ecker, U. K. H. (2021). Toward effective government communication strategies in the era of COVID-19. Humanities & Social Sciences Communications, 8(1), 1–11. https://doi.org/10.1057/s41599-020-00701-w	

3. Trust and health communication based on the peer-review literature

3.1 Barriers and Gaps in Effective Health Communication at Both Public Health and Healthcare Delivery Levels During Epidemics and Pandemics; Systematic Review

Disaster Medicine and Public Health Preparedness

www.cambridge.org/dmp

Systematic Review

Cite this article: Bauder L, Giangobbe R, Asgary R. Barriers and gaps in effective health communication at both public health and healthcare delivery levels during epidemics and pandemics; systematic review. *Disaster Med Public Health Prep.* 2023;[illegible]:1–6. doi: https://doi.org/10.1017/dmp.2023.61.

Keywords:
health communication; information dissemination; misinformation; mass media; social media; pandemics; epidemics; health emergencies; health promotion

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Barriers and Gaps in Effective Health Communication at Both Public Health and Healthcare Delivery Levels During Epidemics and Pandemics; Systematic Review

Leah Bauder MPH[1], Katrina Giangobbe MPH[2] and Ramin Asgary MD, MPH[1,2]

[1]Department of Global Health, Milken Institute School of Public Health, George Washington University, Washington DC, USA and [2]Icahn School of Medicine at Mount Sinai, New York, NY, USA

Abstract

Objective: To assess gaps and barriers to effective health communication during epidemics, pandemics, and mass health emergencies.

Methods: A systematic literature review was conducted in PubMed (National Library of Medicine), SCOPUS (Elsevier, Amsterdam, Netherlands), Cochrane (Cochrane, London, UK), and grey literature between 2000 to 2021.

Results: 16043 of 16539 identified citations were eliminated through title/ abstracts screening, 437 through full-text review and 95 articles were assessed qualitatively. Key barriers to effective health communication included misinformation, distrust, limited collaboration, and messaging inconsistency. Lack of information/ research was not the primary challenge. Major gaps were in mass and social media strategies, characteristics of messages, sociocultural contexts, digital communication, rapid response, providers' attitude and perception, and information source characteristics. Health messaging should be adaptable to information outlets and tailored for the most vulnerable. Denigration of individuals with inaccurate beliefs increases misinformation and baseline knowledge differences and fears should be addressed without polarization. Involving frontline providers in health communication strategies is crucial.

Conclusions: Primary reason for misinformation is the failure of health sector to convincingly convey accurate information. With input from all stakeholders, especially trusted members of communities and providers, health communication should include retrenchment in methods, multidimensional and multidisciplinary approaches, consistent frameworks, improved social media usage, clear, simple, and targeted messaging, and addressing systematic disinformation and misinformation with intention.

Introduction

Multiple epidemics and pandemics during the 21st century have challenged health systems to effectively communicate health concerns to populations.[1] In addition to the SARS-CoV2 pandemic, outbreaks of preventable diseases continue worldwide, even though scientific evidence regarding efficacious containment, control strategies, and/ or treatments exist.[2] Vaccine-preventable diseases continue to propagate in many countries regardless of resources, capacities, and available guidelines.[3] Health communication is an essential part of healthcare provision and effective information delivery is critical for related agencies and health professionals to prevent the spread of diseases. In the era of rapidly disseminating information, it is crucial that scientists and healthcare providers can seamlessly communicate accurate health messages.[4] At the individual level, communication is vital to establishing a trustful relationship between patients and providers.[5] Studies have shown that inadequate medical care communication is a leading cause of preventable death and is responsible for a significant amount of mortality.[6] However, despite numerous communication and strategic evaluation methods, the accuracy or veracity of presented health information is increasingly being challenged in healthcare fields.[7] Information from health professionals is undermined by other sources despite established evidence for epidemic and pandemic control across resource-diverse countries.[8]

Health communication faces unprecedented challenges and the efficacy of previously utilized tools and methods has been decreasing in the current era.[9] Disinformation, misinformation, and the strategies by which these ideas propagate to the public threaten effective information delivery and its acceptance by the public.[7] While misinformation is spread without intent, disinformation is part of a concentrated effort to spread false information, and both contribute to the concept of an infodemic, that needs be addressed.[9] Communication strategies have been developed during the recent epidemics to overcome this phenomenon (vaccine campaigns, awareness and poster campaigns, and content labels), but an evaluation of these strategies is equally

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SDMPH
SOCIETY FOR DISASTER MEDICINE & PUBLIC HEALTH

https://doi.org/10.1017/dmp.2023.61 Published online by Cambridge University Press

Objective: To assess gaps and barriers to effective health communication during epidemics, pandemics, and mass health emergencies

Methodology: Systematic literature review in Pubmed, SCOPUS, Cochrane and grey literature

Target Audience: Public health professionals

Main Points:

- Political controversies are a barrier to dissemination and access to information.
- Misinformation and disinformation were the most frequently cited barriers.
- Key strategies to break through barriers include the development of a centralized messaging framework with localized risk communication.
- Public health officials must make better use of plain language to avoid misinterpretation.
- More use needs to be made of community members in delivering public health messaging, especially among groups who are already distrustful of the government.

Key implications for health communications:

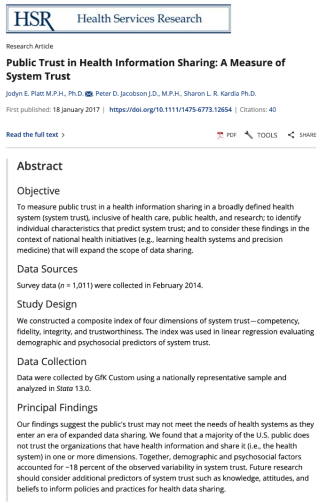
- While this article does not specifically mention trust, many of the barriers discussed in this publication can be connected to the erosion of trust or show how people may turn to sources they simply trust more than health communications.

Limitations:

- Most of the papers in this study focused specifically on communications during the COVID-19 and H1N1 pandemics.
- The wide variety of communication methods and non-specificity of avenues or platforms made comparisons of efficiency difficult.

- In times of emergency health communications, politics, a lack of emphasis on engaging community stakeholders, and fragmented messaging from state to state consistently turned people away from public health communications.	- Little info on physician-to-physician communication. - Majority of studies rely on qualitative data.
Bauder, Giangobbe, K., & Asgary, R. (2023). Barriers and Gaps in Effective Health Communication at Both Public Health and Healthcare Delivery Levels During Epidemics and Pandemics; Systematic Review. Disaster Medicine and Public Health Preparedness, 17, e395–e395. https://doi.org/10.1017/dmp.2023.61	

3.2 Public Trust in Health Information Sharing: A Measure of System Trust



HSR Health Services Research

Research Article

Public Trust in Health Information Sharing: A Measure of System Trust

Jodyn E. Platt M.P.H., Ph.D. Peter D. Jacobson J.D., M.P.H., Sharon L. R. Kardia Ph.D.

First published: 18 January 2017 | https://doi.org/10.1111/1475-6773.12654 | Citations: 40

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Abstract

Objective

To measure public trust in a health information sharing in a broadly defined health system (system trust), inclusive of health care, public health, and research; to identify individual characteristics that predict system trust; and to consider these findings in the context of national health initiatives (e.g., learning health systems and precision medicine) that will expand the scope of data sharing.

Data Sources

Survey data (n = 1,011) were collected in February 2014.

Study Design

We constructed a composite index of four dimensions of system trust—competency, fidelity, integrity, and trustworthiness. The index was used in linear regression evaluating demographic and psychosocial predictors of system trust.

Data Collection

Data were collected by GfK Custom using a nationally representative sample and analyzed in *Stata* 13.0.

Principal Findings

Our findings suggest the public's trust may not meet the needs of health systems as they enter an era of expanded data sharing. We found that a majority of the U.S. public does not trust the organizations that have health information and share it (i.e., the health system) in one or more dimensions. Together, demographic and psychosocial factors accounted for ~18 percent of the observed variability in system trust. Future research should consider additional predictors of system trust such as knowledge, attitudes, and beliefs to inform policies and practices for health data sharing.

Objective: To measure public trust in health information sharing in a broadly defined health
system (system trust) inclusive of health care, public health, and research. To identify individual
characteristics that predict system trust; and to consider these findings in the context of national health initiatives that will expand the scope of data sharing.

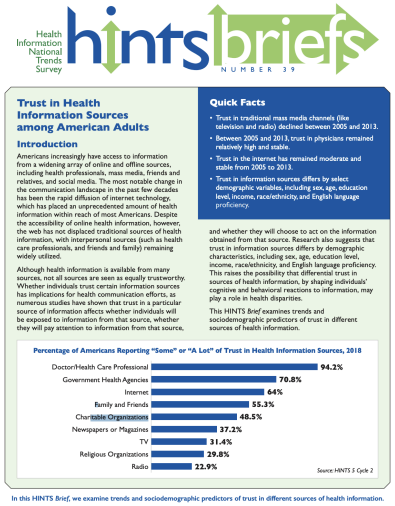
Methodology: Constructed an index of four dimensions of trust and used survey data. The index
was used in a linear regression evaluating demographic and psychosocial predictors of system

Main Points:

- Trust is defined as a multidimensional dynamic between two parties characterized by an expectation or willingness to impart authority and accept vulnerability to another in fulfilling a set of given tasks.
- Four aspects of trust
  - **Fidelity:** organizations that share health information will value and prioritize the needs of the public whose information they are sharing
  - **Integrity:** honesty or following principles of nondeception by not hiding mistakes or being fair in the treatment of people.
  - **Competency:** having the ability and expertise to minimize errors and achieve goals.
  - **Trustworthiness:** an individual's intuition rather than his or her rational or calculative basis for trust.
- Of the four aspects of trust defined in the paper, the public views the health system as competent and as having their best interest at heart.
- However, the public in the U.S. also appears to think that the system lacks integrity and is not trustworthy.
- Transparency that does not merely present information but that involves two-way dialogue is necessary to build trust when starting from a state of mistrust.
- Most demographic factors were not associated with trust (exceptions: being Hispanic and being self-employed were both associated with mistrust).
- The study found that how individuals view the general quality of life and how they view other people were the best psychosocial indicators of system trust.

trust. The survey included a short video outlining how information is shared in the health system. **Target Audience:** Public health professionals	- The study found that trust may decline with distance from the health system regardless of perceived personal health, i.e., those involved with the system have higher levels of trust. - Demographic and psychosocial factors account for only 18% of variability in system trust.
Key implications for health communications: - Since some part of the population comes from a place of mistrust, transparency with the intention of two-way dialogue will be imperative in building trust in the system. - Demographic and psychosocial factors are not that influential over an individual's trust in the system, and other factors should be considered such as knowledge or experience. - Proximity to the system is influential over trust, and the USA has a cost-prohibitive system that discourages interaction.	**Limitations:** - The results may be affected by participation and non-response bias. - The study extrapolates from hypothetical situations and the average person may not have the same knowledge of how health information is shared.
Platt, Jacobson, P. D., & Kardia, S. L. R. (2018). Public Trust in Health Information Sharing: A Measure of System Trust. Health Services Research, 53(2), 824–845. https://doi.org/10.1111/1475-6773.12654	

3.3 HINTS Survey Cancer Information Service: Trust in Health Information Sources among American Adults



Health Information National Trends Survey **hintsbriefs** NUMBER 39

Trust in Health Information Sources among American Adults

Introduction

Americans increasingly have access to information from a widening array of online and offline sources, including health professionals, mass media, friends and relatives, and social media. The most notable change in the communication landscape in the past few decades has been the rapid diffusion of internet technology, which has placed an unprecedented amount of health information within reach of most Americans. Despite the accessibility of online health information, however, the web has not displaced traditional sources of health information, with interpersonal sources (such as health care professionals, and friends and family) remaining widely utilized.

Although health information is available from many sources, not all sources are seen as equally trustworthy. Whether individuals trust certain information sources has implications for health communication efforts, as numerous studies have shown that trust in a particular source of information affects whether individuals will be exposed to information from that source, whether they will pay attention to information from that source, and whether they will choose to act on the information obtained from that source. Research also suggests that trust in information sources differs by demographic characteristics, including sex, age, education level, income, race/ethnicity, and English language proficiency. This raises the possibility that differential trust in sources of health information, by shaping individuals' cognitive and behavioral reactions to information, may play a role in health disparities.

This HINTS *Brief* examines trends and sociodemographic predictors of trust in different sources of health information.

Quick Facts

- Trust in traditional mass media channels (like television and radio) declined between 2005 and 2013.
- Between 2005 and 2013, trust in physicians remained relatively high and stable.
- Trust in the internet has remained moderate and stable from 2005 to 2013.
- Trust in information sources differs by select demographic variables, including sex, age, education level, income, race/ethnicity, and English language proficiency.

Percentage of Americans Reporting "Some" or "A Lot" of Trust in Health Information Sources, 2018

Doctor/Health Care Professional	94.2%
Government Health Agencies	70.8%
Internet	64%
Family and Friends	55.3%
Charitable Organizations	48.5%
Newspapers or Magazines	37.2%
TV	31.4%
Religious Organizations	29.8%
Radio	22.9%

Source: HINTS 5 Cycle 2

In this HINTS *Brief*, we examine trends and sociodemographic predictors of trust in different sources of health information.

Objective: To help public health practitioners create more effective health communications

Methodology: Health Information National Trends Survey – descriptive statistics write-up

Target Audience: Practitioners creating health communications.

Main Points:

- The internet has not displaced traditional sources of health information.
  - Interpersonal communications are still the most common.
- Not all sources are trusted equally.
- Differential trust in available health communication avenues may contribute to health disparities.
- Trust in TV and radio sources has declined significantly since 2005.

Key implications for health communications:

- Different health communication sources and outlets should be considered when developing new communications.
- Data suggests that because physicians are so highly trusted, their presence when delivering communications may help spur trust.
- Trust in sources varies across demographics.

Limitations:

- Very short two-page summary.

National Cancer Institute. (2019, May). HINTS Briefs: Trust in Health Information Sources among American Adults.

4. Population Statistics

4.1 Americans' Trust in Scientists, Other Groups Declines

Pew Research Center

FOR RELEASE FEBRUARY 15, 2022

Americans' Trust in Scientists, Other Groups Declines

Republicans' confidence in medical scientists down sharply since early in the coronavirus outbreak

BY *Brian Kennedy, Alec Tyson and Cary Funk*

FOR MEDIA OR OTHER INQUIRIES:

Cary Funk, Director, Science and Society Research
Alec Tyson, Associate Director
Haley Nolan, Communications Associate
202.419.4372
www.pewresearch.org

RECOMMENDED CITATION
Pew Research Center, Feb 2022, "Americans' Trust in Scientists, Other Groups Declines"

Objective: To produce descriptive statistics on Americans' trust in scientists and other groups

Methodology: A nationally representative survey was recruited through random sampling of addresses.

Target Audience: Public and public health professionals in particular.

Main Points:
- Republicans' confidence in medical scientists has sharply decreased since the start of COVID-19.
- Americans' confidence in groups and institutions has decreased from one year ago.
- Race, education, and partisan affiliation shape confidence in medical scientists.
- Party lines affect the degree of trust in medical scientists.
- Education affects the level of trust in medical scientists.

Key implications for health communications:
- A seminal publication that provides a quantitative overview of the percentage U.S. population responding to key questions on trust in science, scientists, and U.S. institutions
- Demographic factors can inform who people are inclined to trust.

Limitations:
- Cross-sectional survey data and descriptive statistics only.

Kennedy, B., Tyson, A., & Funk, C. (2022, February 15). Americans' trust in scientists, other groups declines. Pew Research Center Science & Society. https://www.pewresearch.org/science/2022/02/15/americans-trust-in-scientists-other-groups-declines/

4.2 Trust in US Federal, State, and Local Public Health Agencies During COVID-10: Responses and Policy Implications

RESEARCH ARTICLE | PUBLIC HEALTH

HEALTH AFFAIRS > VOL. 42, NO. 3 : PUBLIC HEALTH DURING COVID-19 & MORE

Trust In US Federal, State, And Local Public Health Agencies During COVID-19: Responses And Policy Implications

Gillian K. SteelFisher, Mary G. Findling, Hannah L. Caporello, Keri M. Lubell, Kathleen G. Vidoloff Melville, Lindsay Lane, Alyssa A. Boyea, ... See all authors

AFFILIATIONS

PUBLISHED: MARCH 2023 No Access https://doi.org/10.1377/hlthaff.2022.01204

PERMISSIONS SHARE TOOLS

Public health agencies' ability to protect health in the wake of COVID-19 largely depends on public trust. In February 2022 we conducted a first-of-its-kind nationally representative survey of 4,208 US adults to learn the public's reported reasons for trust in federal, state, and local public health agencies. Among respondents who expressed a "great deal" of trust, that trust was not related primarily to agencies' ability to control the spread of COVID-19 but, rather, to beliefs that those agencies made clear, science-based recommendations and provided protective resources. Scientific expertise was a more commonly reported reason for "a great deal" of trust at the federal level, whereas perceptions of hard work, compassionate policy, and direct services were emphasized more at the state and local levels. Although trust in public health agencies was not especially high, few respondents indicated that they had no trust. Lower trust was related primarily to respondents' beliefs that health recommendations were politically influenced and inconsistent. The least trusting respondents also endorsed concerns about private-sector influence and excessive restrictions and had low trust in government overall. Our findings suggest the need to support a robust federal, state, and local public health communications infrastructure; ensure agencies' authority to make science-based recommendations; and develop strategies for engaging different segments of the public.

TOPICS

PUBLIC HEALTH | COVID-19 | COMMUNICATIONS | DISEASES | VACCINES

Objective: To learn the public's reported reasons for trust in federal, state, and local public health agencies.

Methodology: Cross-sectional survey

Main Points:

- Public trust in sources of health information among U.S. adults; doctors and nurses are the most important sources of health information
- Top reported reasons for trust among adults with high trust in the CDC
    - Scientific expertise and following scientifically valid research.
    - Having given clear recommendations for people to protect themselves.
    - Having made vaccines and testing widely available.
- Top reported reasons for high trust in state and local public health
    - Following scientifically valid research.
    - Vaccines and testing were widely available.
    - Clear recommendations for people to protect themselves.
    - Reasons relating to compassion, or a hands-on approach were more common for local and state public health officials.
- Reasons for lower trust across agencies (reasoning is similar across federal state and local agencies)
    - Political influence on recommendations
    - Private-sector influence on policies and recommendations
    - Conflicting recommendations (most common for CDC)
- Public trust in agencies is related to beliefs that agencies follow scientific evidence in developing policies; have made appropriate resources and give clear recommendations.
- Public mistrust in agencies is rooted in the idea there are other motives for their recommendations or that their recommendations are inconsistent.

Target Audience: Public health specialists	○ Tailored communication approaches might be needed for each different reason for mistrust.
Key implications for health communications: - The reasons for trust and mistrust are not directly inverse of each other. - Communicators should be more clear and transparent about the uncertainty of and reliance on scientific evidence	**Limitations:** - Cross-sectional design - Risk of nonresponse bias - Self-reported data - Social desirability bias
SteelFisher, Findling, M. G., Caporello, H. L., Lubell, K. M., Vidoloff Melville, K. G., Lane, L., Boyea, A. A., Schafer, T. J., & Ben-Porath, E. N. (2023). Trust In US Federal, State, And Local Public Health Agencies During COVID-19: Responses And Policy Implications. Health Affairs, 42(3), 328–337. https://doi.org/10.1377/hlthaff.2022.01204	

4.3 Wellcome Global Monitor: How Covid-19 affected people's lives and their views about science

Objective: To explore how the pandemic shaped people's lives and changed their views about science.

Methodology: Cross-sectional survey data

Target Audience: Policymakers, health communicators, researchers & funders, public
engagement practitioners, and anyone interested in the impact of COVID-19

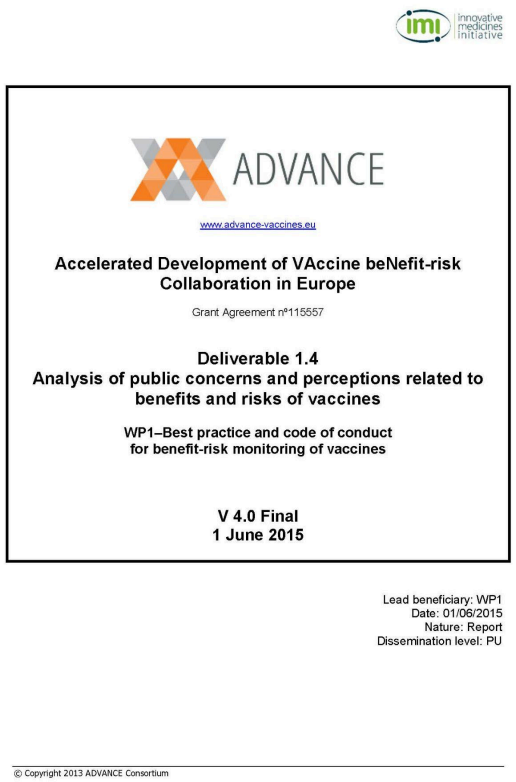
Main Points:

- Summary of Key Findings
  - Globally, people were more likely to express high trust in science and scientists than they were in 2018 (a ten-point increase and 9 points increase respectively)
  - Eastern Asia, Latin America, and Eastern Europe saw the biggest increases.
  - Two areas where trust went down during this period were Russia/Central Asia and Sub-Saharan Africa.
  - Trust rose most amongst people who had some knowledge of science and those who knew not much or nothing at all.
  - Trust in science and scientists is influenced by a myriad of factors at individual and country levels.
    - The highest effect is science education (how much people think they know about science).
    - People who had confidence in their national government were more likely to have confidence in science and scientists than those who did not.
  - Doctors and nurses were seen as more likely to base decisions on science compared to WHO or governments.
  - Globally only ¼ of people said their government values the opinions and expertise of scientists a lot.
  - Around half of people said that their government should spend to fight disease, no matter where the disease is in the world.
  - There was a strong correlation between the belief that your government-based coronavirus-related decisions on scientific advice and your level of confidence in government (R=.74)

Key implications for health communications: - More perceived knowledge of science is associated with a greater trust placed in science and scientists. - There are large differences across the world in terms of confidence in government and whether you believe your government's decisions are informed by science. - Consistent with the literature doctors and nurses garner the most trust from the public that they are following scientific evidence.	**Limitations:** - Cross-sectional survey design except for some questions that were asked at a 2-year interval.
Bell, P., Dear, M., Essing, P., Sillito, L., Persand, I., Pentelow, L., Palmer, E., Kindell, R.,& Freeman, T. (2021, November 29). Wellcome Global Monitor: How Covid-19 affected people's lives and their views about science. Wellcome Global Monitor.	

5. Communication Guides & Frameworks

5.1 Accelerated Development of Vaccine benefit-risk Collaboration in Europe: Developing Communication Strategies on Vaccine Benefits and Risks: Guidance for public-private Collaborations



www.advance-vaccines.eu

Accelerated Development of VAccine beNefit-risk Collaboration in Europe

Grant Agreement n°115557

Deliverable 1.4
Analysis of public concerns and perceptions related to benefits and risks of vaccines

WP1–Best practice and code of conduct for benefit-risk monitoring of vaccines

V 4.0 Final
1 June 2015

Lead beneficiary: WP1
Date: 01/06/2015
Nature: Report
Dissemination level: PU

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Main Points:

- Subsection: Introduction
  - With the rise of vaccine hesitancy a new model for vaccine risk communication is needed, envisioning communication as an ongoing process for trust-building and managing of vaccine-related risks and risk perception.
  - Communication strategies need a system in place to facilitate high-quality, professional development and implementation of the strategy (including monitoring and evaluation). This includes a team of communication experts.
  - Communication is an iterative process that does not solely consist of messaging but also engaging with and listening to the audience.
  - Messaging activities should be designed with an understanding of the audience's needs and expectations in mind.
  - This document describes a framework for the vaccine benefit-risk communication process. A key component of this framework is listening to the feedback of the target audience.
  - Limited literature on perceptions of Private-Public Collaboration (PPC).
    - Literature on pharmaceutical companies suggests a state of distrust.

Objective: To develop communication strategies on vaccine benefits and risks: guidance for public-private collaborations	
Methodology: This deliverable is based on a systematic literature review as well as media monitoring and analysis. Three literature reviews were done in total.	
Target Audience: Organizations interested in developing communication strategies on vaccines benefits and risks; health communication specialists	

- Public perception is defined as the difference between absolute truth based on facts and virtual truth shaped by popular opinion.
- Building trust in vaccine-related PPC will be difficult because of this state of mistrust.
- PPCs may invoke better public perception than pharma companies working on their own.
- The support of healthcare professionals will be important in building this trust.
    - Attention will need to be paid to the level of trust of practitioners in results from a PPC.
- Building trust requires transparency.
    - Must find a balance between the protection of an individual's medical data and denying the public access to data which can foster a sense of mistrust.
    - Sharing data must be done in a way to avoid confusion which can further a sense of mistrust.
- Benefits and risks of PPC.
    - Benefits (B) include opportunities for knowledge and resource sharing.
    - Risks (R) include perceptions of loss of scientific integrity, a slowed down the decision-making process, conflicts between organizations, damage to reputations if collaboration is unsuccessful, and loss of public trust.

- STEP 1: Defining the goal and objectives of the communication strategy.
    - Should answer the following:
        - What the target audience should know and wants to know after reading the information about the benefits and risks (BR) of vaccines.
        - How they should act or behave and why this is important.

	○ Each institution's goals will reflect its available resources, budget timeframe, and overarching goals. ○ Patient organizations are the main bridge between healthcare regulators & professions and the general public / specific social groups. ■ Can also include the bridge between pharma companies and patients (general public). ○ One of the most important communication goals for public health institutes (PHI) is to be transparent. ■ Through this goal, trust can be increased. ■ To be transparent it is important to outline each stakeholder's role during the assessment of vaccines – to avoid the public perception of conflicts of interest which can increase mistrust. ○ Internationally defined objectives for regulatory vaccine safety communication: ■ Understanding knowledge, attitudes, practices, and related concerns and information needs of the audience. ■ Providing accurate and full information about the safety profiles and BR balances of vaccine products to support informed decision-making of individuals and policymakers. ■ Facilitating changes to healthcare practices for safe and effective handling and use as well as prevention of harm. ■ To demonstrate the trustworthiness of the vaccine safety surveillance system for trust building. ■ Preventing and managing crises due to safety concerns over vaccines. - STEP 2: Mapping stakeholders involved in communication strategy and development

	○ A stakeholder is defined as anyone with an interest in BR of vaccines. ○ Stakeholders involved in the development of a communication strategy should be regarded as a flexible process to allow for: ■ Adequate and fluid exchange of information between stakeholders directly involved in BR monitoring. ■ Multi-channel, external flow of knowledge and experiences resulting from the BR monitoring. ○ Four main interest groups related to PPC in the area of vaccine BR studies: ■ Project Consortium ■ Project Partners ■ External Partners ■ Project Beneficiaries ○ Communication strategies should be developed collaboratively between all possible stakeholders involved in the project internally and externally. ■ Stakeholder involvement can be mapped in two ways: A continuous process or step by step process. - STEP 3: Identifying the content of the communication ○ Three main situations where communication should be considered: ■ Is the communication intended to assist healthcare professionals, individuals, or policymakers in decision-making about vaccine BR? ■ Does the communication need to convey study results that involve risks to the public or provoke public concerns? ■ Is the communication intended to inform about ongoing investigations?

	○ In the context of healthcare professionals: ■ The objective of the communication to healthcare professionals may be to help make the most appropriate decision (to recommend a vaccine for example) or alter existing perceptions. ○ In the context of the general public: ■ A key aspect is transparency in communications to the public. ■ Clear statements and explanations based on scientific data and their interpretation should be provided. ■ The communication should make the public feel they can trust that the recommendation is based on an objective interpretation of the data & that no information has been hidden. ■ The public should have a clear understanding of the available evidence and any unresolved uncertainties. ○ Communicating Benefits and Risks: ■ How frequent and how severe is the disease to be prevented? ■ What is the risk for the population that is not vaccinated? ■ How frequent and how severe is the risk induced by the vaccine? ■ What is the aim of the vaccination? ■ Data on risks is often available earlier than data on benefits. ■ Effectiveness information may fail if it is not based on strong evidence for the following reasons: ● It may raise additional concerns in the vaccine BR if a safety issue has been

	identified in individuals but effectiveness has not been firmly established. ● It may affect trust in the communicating organization if it is perceived to hide uncertainties. ■ Benefits and risks lack a common unit of assessment, leading to the risk-risk concept. ● The benefits of vaccination can be understood as avoiding harm and adverse experiences of a disease. ■ Advantages of the risk-risk approach: ● Disease epidemiology may be better known than vaccine effectiveness and stronger evidence can be provided. ● Many vaccine-preventable diseases have low incidence rates nowadays – signs and symptoms are not known to younger people & risk-risk communication can communicate these. ■ Risk-risk approach is not universally applicable as vaccination rates change the risks of vaccine-preventable diseases. ■ When communicating BR there needs to be an understanding that statistics may not reflect individual experience. ● Therefore, when expressing risk communicators should use individual risk expressed as a frequency or percentage as opposed to incidence density (2.6 per 1000 people). ○ Communicating Uncertainty ■ Regulators or PH professionals may be reluctant to convey uncertainty because they feel the public

	may confuse uncertainty with a lack of knowledge or that it may undermine their credibility. ● This may underestimate the public's ability to understand uncertainties. ■ Communicating uncertainty can lend credibility to an organization and increase its trustworthiness. ■ The first step is to identify and characterize gaps in knowledge to provide fair and factual information. ● If possible additional access to documents like assessment reports and meeting minutes should be provided to allow the public to understand the process of decision-making. ○ Communicating about PPCs ■ Must communicate the justification for the partnership, as well as the benefits and risks. ■ Also, the measures taken to ensure the validity and credibility of results. ○ General Considerations ■ A minimum degree of health literacy and numeracy are necessary to understand health information and make informed decisions. ■ Verbal descriptions may be limited in their ability to communicate accurate information – and should be supplemented by numeric info and additional context. ■ Words to describe uncertainty may have different meanings to different people and should be quantified as much as possible. ■ Literature indicates that the percent format of numeric information gave a better understanding to stakeholders than natural frequencies.

	■ There is a large variation in the ability to understand graphs and this can be predicted based on numerical literacy. ● Pictographs are best for communicating small numerators and bar charts are for larger ones (100/1000). ○ Communication Channels ■ Three general categories of communication channels: interpersonal, community-based, and mass media. ■ Channels should be selected based on: ● Channel's strengths and limitations. ● Audience habits and preferences ● Message specificities ● Available resources and accessible communication environment ● Channels other organizations are using for similar communications. ○ Principles of good messages: ■ Holds one main idea. ■ Short and simple messages/graphics are easier to understand and remember. ■ Language should be accessible, non-judgmental, persuasive, and jargon-free with a suitable tone ■ Based on the audience's state of change, address their values, norms, & beliefs, as well as needs and priorities. ■ Clear messages and rationales for advice in case of significant side effects ■ Communicators should be transparent and provide clear and explicit information. - STEP 4: Developing an implementation and monitoring plan

	○ Monitoring strategies should assess adherence to the implementation plan and strategy. ○ Monitoring strategies should evaluate the environment and impact of the evaluation. ■ Both with the view of whether an adaptation of the implementation is needed to achieve the communication objectives. ○ Monitoring is part of managing the implementation which focuses on logistics and immediate impact. ○ The monitoring and evaluation plan needs to define: ■ Performance indicators. ■ Methods. ■ Responsible person and resources. ■ Timings. ■ Mechanism for notifying findings and recommendations to those responsible for follow-up actions.
Key implications for health communications: - PPCs can be a great tool for public health officials if implemented correctly. - Transparency is key to the success of these collaborations. - The goal is to share information, including uncertainties, on the best channel and manner to reach the target audience. - Considering your audience, how you will reach them, and how you will communicate your message are important factors for successful communication.	**Limitations:** - The literature comes from 3 systematic literature reviews and 2 case studies but not experimental trials. - This document is produced considering European markets and may take some adaptation to fit in other contexts, e.g. within the U.S model of PPCs, population trust, and U.S audiences.

- Constant communication with the target audience is important to build trust. - While this guide refers to PPCs specifically communicating about vaccine BR it may be applied to other health communications.	
Larson, H., Karafillakis, E., Yiangou, A., Fogd, J., Kurz, X., Swierzewski, R., Bauchau, V., Derrough, T., Plebani, G., Nohynek, H., Mollema, L., Sturkenboom, M., Htar Myint, T. T., & Perez Gomez, J. (2017, October 4). Accelerated Development of Vaccine benefit-risk Collaboration in Europe: Deliverable 1.12 Developing communication strategies on vaccine benefits and risks: Guidance for public-private collaborations. ADVANCE.	

5.2 WHO Strategic Communications Framework

Objective: To describe a strategic approach for effectively communicating WHO information, advice and guidance across a broad range of health issues: from chronic health issues to emerging and novel risks.

Methodology: Developed using input from WHO communicators across WHO's country, regional, and headquarters offices.

Main Points:

- Goals and key audiences
  - To provide information, advice, and guidance to decision-makers (key audiences) to prompt action that will protect the health of individuals, families, communities, and nations.
  - Audiences as health decision-makers:
    - Individuals
    - Healthcare providers
    - Policy-makers
    - Communities
    - International organizations and stakeholders
    - WHO staff
  - Principles for effective communications
    - Accessible
    - Actionable
    - Credible and trusted
    - Relevant
    - Timely
    - Understandable
- Subsection: Accessibility
  - What channels do audiences have access to and what channels do they prefer for seeking and receiving information?
  - What channels encourage two-way engagement with audiences?
  - Which set of channels best supports communication objectives?
  - What resources are required to develop the products needed for specific channels?
  - Communication avenues fall into three main areas:

Target Audience: WHO communications teams.	■ Mass Media ■ Organization and Community ■ Interpersonal ○ Identifying Effective Channels ■ Along with the three above also consider non-traditional channels (e.g., report ozone alert days through transportation ministries). ○ Make information available online. ■ Online information is often a passive source of information (people must seek it out). ■ Place information consistently and purposefully ● Strategic placement can increase the user's ability to find relevant information. ● Establish a hierarchy of importance for content. ● Create highly visible locations for the most used information. ● Include fact sheets for users to understand topics quickly. ● Highlight easy-to-understand info. ● Provide links for more information. ■ Consider how audiences use the website. ■ Create emergency-specific web pages. ○ Ensure people with disabilities can find and use the information they need. ■ Design compatible content. ■ Consider individuals with low vision. - Subsection: Actionable ○ Planning to ensure communications are actionable. ■ What is the behavior or action we want audiences to take? ■ Is there a behavior or action we want to discourage?

	■ Do audiences perceive the health problem is relevant to them? Are they personally engaged? ■ Do audiences understand the benefits of adopting the recommended behavior or policy, and/or the consequences of not? ■ What barriers are preventing adoption? ■ What social norms exist that could positively or negatively influence adopting the recommended action? ■ How confident are decision-makers in their ability to endorse behaviors or pass policies that promote health? ■ Is the target audience able to act independently? ● If they need help does the message describe what support might be available to them? ○ Increase awareness ■ Increase the level of understanding of health risks and promote steps that protect people's health. ■ Widely disseminate messages that are simple/ easy to recall using mass media or social media. ● If using, social media messages should be easy to share. ■ Compete for attention using credible media sources. ○ Support appropriate understanding of risk. ■ Create a connection to the issue at the personal or community level. ■ Show health problem's effect on people like the target audience. ■ Create a sense of urgency. ■ Direct media attention to an incident that the audience can relate to.

	■ Use messages to show health threats are close to home by highlighting affected community members. ■ Consider the target audience's perspective on the risk when planning messages on health threats. ○ Promote Knowledge of Solutions ■ Support audiences' implementation of protective measures by describing the desired action and where to find relevant information. ■ Consider which sources the audience trusts as experts. ■ Use interpersonal channels to enhance the learning of protective skills. ■ Encourage interactive conversations to allow the audience to ask questions. ■ Take into consideration that people learn in different ways and have different levels of education. ○ Instill the confidence to act. ■ Use stories or organizations that model desired behavior. ■ Use well-known strategies to influence audiences' confidence. ■ Have a clear call to action that uses simple steps. ■ Teach skills if necessary. ■ Create opportunities for practice. ■ Enhance confidence and control by showing people what they can do individually. ■ Show that taking action will make a difference. ○ Influence social norms. ■ Encourage trusted influences and messengers to act as models. ■ Identify where the audience feels pressure to conform to norms that contradict your message.

	■ Increase credibility by promoting trusted messengers who changed their actions to align with recommendations. ■ Create messages that describe how organizations or people support the recommendations. ○ Reinforce benefits to overcome barriers. ■ Increase confidence in institutional support for recommendations + lower barriers to adoption. ■ Design messages at individual and community levels to address barriers. ■ Reduce the time between adoption and reward. ■ Focus communications on midpoint milestones to reduce the time gap between adoption and reward. ■ Promote all benefits from recommended behavior, even those not related to health. ○ Involve partners early in the campaign. ○ Use trusted messengers. ○ Ensure the availability of community resources. - Encourage action during a health emergency. ○ Emphasize what is being done to control emergencies and consider the communication environment. ■ Evaluate the audience's concern or fear. ■ Direct special attention to those who may be more vulnerable. ■ Provide frequent updates. ○ Use a consistent planning process that incorporates effective risk communication. ■ Analyze changing communication needs. ■ Build media monitoring into communication planning. ■ Create and share talking points and answers to FAQs. ■ Develop message banks for information retrieval.

	■ Coordinate communication planning/ execution with partners. ■ Develop proactive messages for news and social media. ■ Sequence messaging to ensure rapid release of key details. ○ Support Community engagement. - Subsection: Credible and Trusted ○ Planning questions to ensure communications are trusted. ■ What organizations are perceived by audiences as trusted? ■ Who is the best spokesperson for this issue? ■ Are there reputational risks related to the issue? ○ Demonstrate the following: ■ Competence ■ Openness and honesty ■ Dependability ■ Commitment and caring ○ Ensure technical accuracy. ■ Clear and Cross-check contents. ■ Keep fact sheets up to date. ■ Maintain version control. ○ Be transparent. ■ Make information available quickly. ■ Acknowledge uncertainty. ■ Address errors. ○ Communicate relationships with non-state actors. ■ Outline principles of engagement. ■ Risk and benefits. ■ Types of interaction. ○ Coordinate with partners. ■ Access more channels for dissemination. ■ Joint publications.

	○ Meet with technical teams regularly. ○ Prepare and support spokespeople. - Subsection: Relevant ○ Planning questions to ensure communications are relevant. ■ What socio-demographic characteristics of the audience can inform message design & dissemination plans? ■ Do individuals perceive they are at risk, and does that perception correspond to the actual degree of risk? ■ Does the audience have a previous or similar experience with the health issue? ■ Does the audience feel there are steps they can take to reduce risk to their health? ■ What is the audience hearing from other sources? ■ What values related to the health topic could be associated with the need to act? ○ Background ■ Understand the characteristics of the target audience. ■ Create messages/materials that include examples from or references to the audience's community or other points of identity. ■ Listen to the audience and stakeholders who work with the audience to identify how to address their concerns. ■ Tailor content and messages to meet the needs of the audience. ■ Design messages based on the audience's readiness to take action. ○ Know the audience.

	■ Understand socio-demographic and cultural characteristics. ■ Determine communication preferences. ■ Recognize attitudes towards the risk. ○ Listen to the audience. ■ Learn by listening. ● Determine interest in the issue. ● Perceptions and attitudes about the topic. ● Current positions of the audience. ● How media portrays the issue. ● Audience concerns. ● Inaccurate coverage or misinformation. ■ Listen to public opinion. ■ Listen to inquiries. ■ Listen to conversations. ● Local radio for example. ■ Listen to partner organizations. ○ Tailor the message. ■ Customize messages. ● Should be relevant to a specific audience. ● Address barriers. ● Use preferred communication channels. ● Incorporate cultural symbols. ■ Focus on the outcome. ○ Motivate the Audience. ■ Build awareness. ■ Explain or increase personal relevance. ■ Promote knowledge of solutions. ■ Instill confidence. ■ Influence social norms. ■ Promote benefits. - Subsection: Timely ○ Planning questions

	■ When health threats are urgent, what are the best methods to engage the audience quickly? ■ When are audiences likely to be faced with a health-related decision for themselves or others? ■ How can messages be delivered so audiences have enough time to understand and act? ■ How can an organization best engage with the press to get messages to the public quickly? ■ Are there times when a health message will be crowded out by competing concerns? ■ Is there a way to deliver a sequence of messages over time that could increase effectiveness? ■ How can an organization support partners so there is timely and consistent dissemination of information? ○ Background ■ Making information available to the audience as quickly as possible. ■ Timing communications to when the audience needs to know and take action. ■ Sequencing messages to build conversation over time. ○ Communicate what your organization knows early. ■ Use social media. ■ Engage the media. ● Hold in-person and virtual press conferences. ● Create press releases. ● Expedite message clearance. ○ Use precleared templates and talking points. ■ Enhance emergency communications.

	● If announcements are delayed people may overreact or use misinformation. ● Reassure people. ● Respond to media requests. ● Deploy communicators. ■ Leverage partners. ○ Communicate at the right time. ■ Leverage health awareness days. ■ Plan the timing of messages to the risk ○ Build the conversation. ■ Use media and social media. ■ Synchronize messaging with Partners. ■ Time stories to show momentum. ■ Schedule webinars or social media hangouts. - Subsection: Understandable ○ Planning questions to ensure communications are understandable. ■ How familiar is your audience with the topic? Do they have previous experience with health topics, or do you need to cover basics? ■ What is your most important message and how can you highlight it? ■ Does your message clearly state the action you want your audience to take? ■ Can you use photos or illustrations to provide visual reinforcement? ■ Are you using language familiar to your audience? ■ Can you test your message with audience members to ensure the meaning is clear? ○ Background ■ Use clear and plain language to explain issues and guidance.

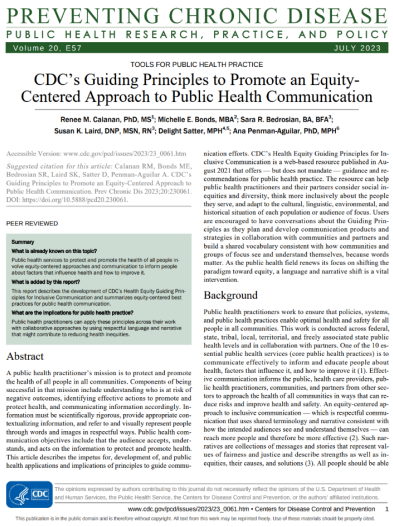
	■ Tell stories with a human dimension to make issues real to those at risk. ■ Incorporate visual components that enhance content. ■ Communicate in multiple languages. ■ Be clear about the desired outcome. ■ Get to the point quickly. ■ Know what the audience wants/needs. ○ Use plain language. ■ Use familiar words. ■ Practice good writing. ● Most important points first. ● Single overarching communication outcome ● Break up long and complicated information into smaller pieces. ● Format documents with lots of white space so they are easy to read. ■ Ensure fact sheets are clear. ■ Adapt content for the web. ○ Tell real stories. ■ Use real stories to help audiences relate to the health information provided. ● Photo stories ● Web feature stories ■ Include anecdotes in presentations. ○ Make it visual. ■ Leverage YouTube's reach. ■ Use infographics, graphics, and GIFs. ■ Enhance storytelling with photos. ■ Provide B-roll footage. ■ Capture attention with creative print materials ○ Use familiar languages. ■ Distribute messages in relevant languages.

	■ Support translation in emergencies. ● All emergency messages. ● Emergency preparedness response team publications. ● Technical information. ● Outbreak news if relevant. ● Social mobilization or community engagement materials ● Feature stories. ● Infographics. ● Audio and visual products - Subsections: Evaluation (Image 28 and Image 29) ○ Regular assessments of communication messages, materials, and audience engagements allow analysis of various trends. ○ Determine how and to what extent activities and products are making a difference for the targeted audiences. ■ What impact are the communications having on awareness, attitudes, behaviors, positions, or policies? ○ Inform decision-making about future communications initiatives and outreach. ○ Demonstrate the value of communication interventions. ○ Types of evaluation ■ Formative evaluations are carried out before projects are implemented. ■ Mid-point evaluations are conducted as the project progresses. ■ Summative evaluations are conducted at the end of a project to compare outputs and outcomes with baseline measures found during formative evaluations.

Key implications for health communications:
- This communication framework provides 6 principles of effective communication:
  ○ Accessible
  ○ Actionable
  ○ Credible
  ○ Relevant
  ○ Timely
  ○ Understandable
- The communications lifecycle (design to summative evaluation) should involve the audience.
- Messages should be tailored using the appropriate channels, language, and knowledge.
	Limitations:
	- Many of the points in this document are only relevant to WHO communications officers, but some points are more broadly applicable.

World Health Organization. (2023). WHO Strategic Communications Framework . World Health Organization. https://cdn.who.int/media/docs/default-source/documents/communicating-for-health/framework-at-a-glance-slides.pdf?sfvrsn=436f459c_2	

5.3 CDC's Guiding Principles to Promote an Equity-Centered Approach to Public Health Communication



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TOOLS FOR PUBLIC HEALTH PRACTICE

CDC's Guiding Principles to Promote an Equity-Centered Approach to Public Health Communication

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PEER REVIEWED

Summary

What is already known on this topic?

Public health services to protect and promote the health of all people involve equity-centered approaches and communication to inform people about factors that influence health and how to improve it.

What is added by this report?

This report describes the development of CDC's Health Equity Guiding Principles for Inclusive Communication and summarizes equity-centered best practices for public health communication.

What are the implications for public health practice?

Public health practitioners can apply these principles across their work with collaborative approaches by using respectful language and narrative that might contribute to reducing health inequities.

Abstract

A public health practitioner's mission is to protect and promote the health of all people in all communities. Components of being successful in that mission include understanding who is at risk of negative outcomes, identifying effective actions to promote and protect health, and communicating information accordingly. Information must be scientifically rigorous, provide appropriate contextualizing information, and refer to and visually represent people through words and images in respectful ways. Public health communication objectives include that the audience accepts, understands, and acts on the information to protect and promote health. This article describes the impetus for, development of, and public health applications and implications of principles to guide communication efforts. CDC's Health Equity Guiding Principles for Inclusive Communication is a web-based resource published in August 2021 that offers — but does not mandate — guidance and recommendations for public health practice. The resource can help public health practitioners and their partners consider social inequities and diversity, think more inclusively about the people they serve, and adapt to the cultural, linguistic, environmental, and historical situation of each population or audience of focus. Users are encouraged to have conversations about the Guiding Principles as they plan and develop communication products and strategies in collaboration with communities and partners and build a shared vocabulary consistent with how communities and groups of focus see and understand themselves, because words matter. As the public health field renews its focus on shifting the paradigm toward equity, a language and narrative shift is a vital intervention.

Background

Public health practitioners work to ensure that policies, systems, and public health practices enable optimal health and safety for all people in all communities. This work is conducted across federal, state, tribal, local, territorial, and freely associated state public health levels and in collaboration with partners. One of the 10 essential public health services (core public health practices) is to communicate effectively to inform and educate people about health, factors that influence it, and how to improve it (1). Effective communication informs the public, health care providers, public health practitioners, communities, and partners from other sectors to approach the health of all communities in ways that can reduce risks and improve health and safety. An equity-centered approach to inclusive communication — which is respectful communication that uses shared terminology and narrative consistent with how the intended audiences see and understand themselves — can reach more people and therefore be more effective (2). Such narratives are collections of messages and stories that represent values of fairness and justice and describe strengths as well as inequities, their causes, and solutions (3). All people should be able

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Objective: To provide a resource for public health officials to center diversity, equity, and inclusion in the development and dissemination of their communication

Methodology:
Two-phase approach: Establishment of Chief Health Equity Officer (CHEO) who reviewed the literature on communications to address stigma and implicit bias.
Second was the establishment of a work group to review the content, and literature, and collaborate with community members in the development of the guide.

Main Points:

- Equity should be a central focus of public health communications and communications that center on equity have better results.
- The need for collaboration with specific communities in the development of materials is essential.
- Outlining drivers of inequity in communications is important so desired messages aren't misconstrued.
- Centering equity, the history of, and social factors surrounding the priority population is an effective method for building trust through health communications.

<table>
<tr><td></td><td>Target Audience:
Public health officials.</td><td></td></tr>
<tr><td colspan="2">Key implications for health communications:
- This resource should be considered in the development of health communications to promote health equity and a better understanding of factors across the SEM and how they impact health.
- Centering the experiences of communities of priority populations can be an effective method for garnering trust in populations that are distrustful of the government.</td><td>Limitations:
- This document can be misinterpreted as a direct style guide
- Language is highly situational so some terms or phrases might not always be appropriate and are heavily dependent on potential audience.
- The document has not yet been evaluated for effectiveness.</td></tr>
<tr><td colspan="3">Calanan RM, Bonds ME, Bedrosian SR, Laird SK, Satter D, Penman-Aguilar A. CDC’s Guiding Principles to Promote an Equity-Centered Approach to Public Health Communication. Prev Chronic Dis 2023;20:230061. DOI: http://dx.doi.org/10.5888/pcd20.230061.</td></tr>
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