Public Health Ontario | Santé publique Ontario

Risk Communication and Trust During Respiratory Pathogen Emergencies

Factors, Approaches and Practice Implications for Public Health

Report

May 2026

Public Health Ontario

Public Health Ontario is an agency of the Government of Ontario dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. Public Health Ontario links public health practitioners, frontline health workers and researchers to the best scientific intelligence and knowledge from around the world.

Public Health Ontario provides expert scientific and technical support to government, local public health units and health care providers relating to the following:

- communicable and infectious diseases
- infection prevention and control
- environmental and occupational health
- emergency preparedness
- health promotion, chronic disease and injury prevention
- public health laboratory services

Public Health Ontario's work also includes surveillance, epidemiology, research, professional development and knowledge services. For more information, visit publichealthontario.ca.

How to cite this document:

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Risk communication and trust during respiratory pathogen emergencies: factors, approaches and practice implications for public health. Toronto, ON: King's Printer for Ontario; 2026.

ISBN: 978-1-4868-9849-7

Acknowledgements

The authors extend their sincere appreciation to colleagues in Public Health Ontario's Library Services for their support with the literature searches that informed this rapid evidence synthesis. We also thank the subject matter experts, including members of the Ontario Public Health Emergencies Science Advisory Committee (OPHESAC), whose insights and perspectives helped strengthen this report.

Disclaimer

Contents

Executive Summary

This report summarizes the findings from an evidence synthesis on approaches and strategies for fostering public trust in public health messages and messengers through risk communication during respiratory pathogen emergencies with pandemic or epidemic potential. The findings can be used to support public health and communications professionals with practice-based considerations for effective risk communication during public health emergencies. To reflect the evolving public health landscape, this report expands on a past synthesis published by Public Health Ontario (PHO) in May 2023 on risk communication and trust in public health during the COVID-19 pandemic.

A rapid evidence review of indexed and grey literature was conducted to identify risk communication strategies and approaches aimed at building, rebuilding or sustaining trust with the public and used in public health emergency response settings with relevance to Ontario. A total of 46 records (38 indexed, 8 sourced from grey literature) were included, with most focusing on evidence gathered during the COVID-19 pandemic.

Available evidence supports that health equity-related factors can influence public trust during respiratory pathogen emergencies. Intersecting social identities, lived experiences, and structural factors, such as longstanding discrimination within institutions and health systems, can shape trust in public health messaging and messengers. Levels of trust were also identified to vary by sociodemographic characteristics, including age, gender, education and ideological factors, such as satisfaction with government officials, leadership behaviour, and political ideology.

Multiple characteristics of effective risk communication messages emerged from the literature as influencers of public trust during public health crises, including:

- **Transparency:** Openly sharing information, including risks, benefits and uncertainties.
- **Clarity:** Using simple, unambiguous language that is easy for the public to understand.
- **Evidence-informed**: Basing messages on the best available science and data.
- **Action-oriented:** Specifying instructional preventative and protective actions that can be taken.
- **Timely:** Being the first to deliver information related to the evolving health emergency.

The evidence reviewed identified several strategies and approaches that can be considered to build or maintain trust during respiratory pathogen emergencies, including:

- Leveraging trusted messengers, such as health care professionals and community leaders, as spokespersons.
- Selecting appropriate channels to reach diverse communities and counter misinformation.
- Incorporating empathy and compassion into risk communication messages.
- Tailoring message content, format, and delivery channels to reflect cultural, linguistic, demographic, literacy and situational factors.

- Engaging in two-way communication between public health authorities and the public.

The literature offered practical implications for public health professionals, decision-makers and other individuals involved in public health emergency risk communication that can be integrated into emergency preparedness and response efforts. Key preparedness initiatives to implement in-advance of emergencies include:

- Devoting time to building and sustaining relationships with communities, community-based organizations and the media.
- Incorporating strategies in pandemic plans that support direct, accessible and approachable communications with the public and media.
- Strengthening trusted messengers' skills in clear, empathetic risk communication.

Practical implications to foster and sustain trust-building during an emergency response include:

- Allocating dedicated resources, personnel and time for two-way communication.
- Applying an equity-informed, action-oriented approach to message development and dissemination.
- Monitoring, evaluating and adapting risk communication strategies, while sharing lessons learned as trust evolves throughout an emergency.

The findings of this synthesis highlight the complex and dynamic nature of trust, affirming the sustained investment of time and resources towards strengthening relationships with communities, health system partners and the media. The strategies and approaches presented can be adapted by public health agencies to guide the design and delivery of effective and equity-informed risk communication strategies before and during respiratory pathogen emergencies.

Background

Risk communication involves the sharing of information, guidance, and perspectives between experts or government officials and the public during times of uncertainty.[1] Effective risk communication enables the public to better understand health threats, make informed decisions to reduce potential risks and adopt protective and preventive actions.[2] This is particularly critical during respiratory pathogen emergencies, which have greater pandemic and epidemic potential due to increased transmissibility. In these dynamic contexts, public health professionals are often tasked with developing and communicating timely, accessible, coordinated and evidence-informed guidance.[2] Central to effective risk communication is the exchange of messages that foster and sustain public trust.[3-5]

Lessons from past respiratory pathogen emergencies, including the Coronavirus Disease 2019 (COVID-19) pandemic and the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak, reveal how gaps in risk communication efforts can undermine trust and slow containment efforts.[2] A decline in public trust can create barriers to effective risk communication, reducing the likelihood of adherence to public health measures and negatively impacting population health outcomes.[6,7] Conversely, strong public trust and social cohesion are associated with greater uptake of public health preventive measures such as wearing a well-fitted mask, practicing physical distancing and vaccination.[6] While public trust during public health emergencies is complex, dynamic and influenced by many factors, these lessons underscore that building trust with affected populations is central to risk communication efforts during periods of heightened unpredictability, urgency and rapid change.[2] Risk communication's role in effective emergency preparedness and response is demonstrated in its prominence as a component of many international frameworks such as the World Health Organization's (WHO) *Pandemic Influenza Preparedness Framewo*rk as well within federal and provincial pandemic preparedness plans.[5,8]

Drawing on these experiences, it is vital to integrate emerging evidence on trust-building as a key component of effective risk communication, to better prepare for and respond to future respiratory pathogen emergencies. To reflect the evolving public health landscape, this report expands on a past evidence synthesis published by Public Health Ontario (PHO) in May 2023 on risk communication and trust in public health during the COVID-19 pandemic.[9] The current report aims to explore approaches and strategies for fostering public trust in public health messaging and messengers through risk communication during all types of respiratory pathogen emergencies with pandemic or epidemic potential. While trust-building is a continuous process that occurs throughout the emergency management cycle, this report focuses on risk communication strategies that strengthen trust in public health during the emergency response phase. The findings can support public health and communications professionals with practice-based considerations for effective and equitable risk communication and decision-making during response periods, when time or resources are often limited.

Trust has many different forms and meanings with no objective standard, as it is experienced and interpreted subjectively.[10,11] For the purposes of this evidence synthesis, trust is defined as the belief from the public that a message is true and reliable and that the messenger (individually or institutionally) is trustworthy through their demonstration of personal and structural characteristics of trust, including competence, honesty, integrity and civic-mindedness.[10,11]

Methods

A rapid evidence review was conducted in June 2025 to collect evidence from indexed and grey literature. Records identified were eligible for inclusion if they examined communication strategies, tools, tactics, and/or approaches with evidence of effectiveness or impact on public trust in one or more Organisation for Economic Co-operation and Development (OECD) countries. Records were included if they addressed risk communication related to measures, policies and event updates intended to inform the public or to protect and promote population health during emergency response phases. Since public health messages are developed and exchanged through many channels and messengers, this review considered several messengers in scope, including government and elected officials (e.g., politicians and policy makers), public health experts, traditional and social media (e.g., journalists), community-based organizations and partners, and frontline health care providers. Evidence was out of scope if it focused solely on trust-building in routine or non-emergency settings or on populations made vulnerable due to biological factors. Records on vaccine uptake during non-emergencies, as a behaviour impacted by trust, were also excluded, along with commentaries, editorials, abstracts, conference presentations, books, protocols and pre-prints. The review was augmented with hand-searched sources. Please see Appendix A for additional methods details.

Main Findings

Search Results

The indexed search yielded a total of 997 records, with an additional seven records identified through focused handsearching. Thirty-six indexed records from the 2023 evidence synthesis were also retrieved, resulting in a total of 1,040 indexed records screened. After title, abstract, and full-text assessment, 28 studies from the current search and 10 studies from the 2023 evidence synthesis were included for data extraction. The grey literature search identified 1,131 records, after which eight records were identified for extraction. A total of 46 records were included in the final set (38 indexed records, 8 grey literature sources).

Of the 38 included indexed records, 17 (45%) employed a cross-sectional study design, seven (18%) were randomized controlled trials and six (16%) were reviews. Across indexed and grey literature records, most focused on public health communication in the context of COVID-19 (n=42, 91%), though some discussed strategies for general respiratory pathogens (n=3, 7%) and influenza (n=1, 2%). Government and/or elected officials were the most cited messengers of risk communication (either alone or in combination with other messengers) (n=32, 70%), followed by public health experts, officials or agencies (n=13, 28%). Most records reported on communication at the national level (n=32, 70%) and approximately one-third (n=14) included reference to equity considerations. Table B1 in Appendix B summarizes the general characteristics of included records.

The results of this evidence synthesis are summarized according to three themes: contextual factors influencing trust; message characteristics that foster trust; and risk communication strategies and approaches for fostering trust.

Contextual Factors Influencing Trust

Several health equity-related and ideological contextual factors that influence public trust in public health messaging and institutions during respiratory pathogen emergencies were outlined in the literature. These contextual factors, summarized to support an equity-informed and asset-based understanding of this synthesis, are considered throughout the remainder of the findings and help guide the application of message characteristics and risk communication strategies presented in subsequent sections.

Health Equity-Related Contexts

The literature outlined that existing health and social inequities can lead to disproportionate impacts of pandemics and epidemics on groups experiencing marginalization and shape how groups experience, perceive and place trust in public health messaging and institutions.[2,12-23] Populations that have been historically marginalized due to systemic inequities, including racialized communities,[15,18,20,24,25] Indigenous Peoples,[15,24,26,27] people with disabilities,[25] linguistically diverse and newcomer populations,[19,24] may experience mistrust in risk communications. This mistrust often stems from or is exacerbated by historical and contextual factors, including longstanding discrimination that has shaped experiences with institutions and health systems.[15,19,20,24] The evidence emphasized the importance of

identifying opportunities to take an equity-informed approach to developing risk communication, as institutional mistrust can contribute to or worsen the inequitable impacts of public health emergencies.[19,20,24]

Records also noted that levels of trust in information sources and messages may differ across sociodemographic factors,[28] including sex,[28,29] age,[14,22,28,30] education,[14] and socioeconomic status.[21,28] Evidence indicated that, in some populations, females may have higher trust levels than males,[28,29] older individuals may be more trusting than younger individuals,[14,22,28,30] and those with higher educational attainment may be more trusting than those with lower educational attainment.[14] While advancing health equity requires broader system-level action, evidence supports fostering continuous, active trust-building with communities and community-based organizations to better understand risk communication preferences, tailoring risk communication across contexts and abilities and (re)building relationships with trusted partners who can share or verify health information.[15-18,20] The use of relational approaches in risk communication, such as relationship building, two-way communication, and message tailoring is explored further in the below section on risk communication strategies and approaches.

Ideological Contexts

The literature noted that ideological contexts, including satisfaction with and perception of the government and institutions, pre-existing trust levels, and political ideology may affect trust in risk communications during emergencies. Low satisfaction with government officials early in the COVID-19 pandemic was associated with lower levels of trust in officials' pandemic response efforts.[31-33] Further, individuals who observed their politicians model appropriate behaviours were more inclined to trust their government and, in turn, follow public health directives.[34] Building on findings suggesting that the degree of trust varies across populations and groups, risk communication strategies may be more successful in communities where trust in institutions is already high,[35,36] and may be influenced by pre-emergency reputation or credibility.[36,37] Pre-existing trust levels influenced whether the public deemed crisis information as credible, underscoring the need to establish strong relationships with the public outside of pandemic periods.[38]

The literature noted that an individual's political ideology can also influence trust in health messaging.[23,29,39] Records from the United States during respiratory pathogen pandemics found that individuals with conservative political viewpoints tended to express less trust in medical countermeasures and faced more barriers to adopting protective public health behaviours, even if they perceived government communications to be trustworthy, compared to those with liberal political ideologies.[23,39] Trust in the messenger, shaped by political ideology, can thus influence how individuals interpret risk and respond to public health guidance.[23]

Message Characteristics for Fostering Trust

Several characteristics of effective risk communication messages emerged as influencers of public trust during public health crises. While these characteristics are presented separately, their effectiveness in fostering public trust depends on their combined application[13,40] and on the strategies and approaches described in the subsequent section.

- **Transparent:**[2,13,16,19,21-27,35-37,40-45] Transparent messaging approaches identified included open and honest information disclosure, highlighting the risks and benefits of preventative measures, explaining decision-making, sharing all possibilities and outcomes, outlining gaps in knowledge, conveying uncertainty, and reporting any changes or updates in recommendations.[16,24-27,42-44]

- **Clear and unambiguous:**[2,16,21,24,35,39,42-44,46] Evidence indicated that the use of clear, straightforward, unambiguous language that is easily understood, fostered public trust in government and spokespersons.[16,21,24,35,42-44,46] Using plain language, analogies and avoiding technical jargon could be part of a strategy to build confidence (i.e. the level of trust in effectiveness) in public health interventions, increase pandemic-specific knowledge, willingness to adopt protective health measures and trust and confidence in health decision-making.[2,24,39]

- **Evidence-informed:**[2,14,16,19,21,26,27,32,45-50] Literature recognized that evidence-informed messaging worked to build and sustain trust by grounding communication and decisions on the best available scientific knowledge,[14,16,32,47] embedding data into messages,[14,32] and providing the public with reliable information to support decision-making.[14] Approaches that may foster credibility or trust, particularly for surprising or complex data include using multiple presentation modalities,[49] colours and visuals,[26] narrative visualizations,[50] positive visual aids,[26] presenting data on a linear scale,[26] and recognisable logos from trusted sources.[21] Evidence-informed messaging was also reported as a means to prevent and manage misinformation (the sharing of false information without intentional harm) by correcting false narratives and displacing misinformation with accurate information. Misinformation commonly occurs in contexts where information is rapidly disseminated and, if overlooked, was reported to weaken trust in science and health experts.[15,48]

- **Action-oriented:**[16,19,22,25,35,40,43,51,52] Action-oriented messaging was shown to support trust-building by providing the public with clear, practical instructions on actions they could take during a public health emergency.[40,51] Evidence suggested that imbalanced communication tactics emphasizing situational awareness rather than actionable guidance may contribute to public mistrust,[40,51] underscoring the importance of pairing risk information with concrete prevention or mitigation measures.

- **Timely:**[2,16,19,22,28,30,35,40,43] The timely exchange of information and advice from practitioners and spokespersons was highlighted as especially important in evolving public health emergency contexts as trust was observed to change over time, varying across different stages of health crises.[28,30] The literature noted that delivering transparent risk communication early in a pandemic, even as information remains uncertain or is rapidly evolving, is an important factor in sustaining public trust.[2,40]

Risk Communication Strategies and Approaches for Fostering Trust

To foster trust in public health risk communications, findings suggest that 'how' messages are delivered should be considered alongside 'what' characteristics shape their content, as described in the message characteristics section above. Strategies and approaches for communicating with the public about

respiratory pathogen emergencies are summarized below. Recognizing that public health agencies vary in terms of resources and operational contexts, these strategies can be scaled or adapted to align with available supports and abilities.

Using Trusted Messengers

Trust in public health risk communication is shaped by both the messenger (who delivers the message) and the message source (where the information originates). These elements, sometimes used interchangeably, were discussed in most included literature, underscoring their central role in shaping public trust during health crises.

Across the literature, frontline healthcare professionals (e.g., physicians and nurses) were most frequently cited as trusted messengers and sources, in addition to scientists and universities.[12,14,15,21,25,26,28,30,32,38,49,53,54] Public health institutions (e.g., public health units or agencies) and official spokespersons representing them (e.g., physicians or medical officers of health) were also among the most trusted messengers.[14,22,28,30,32,38] Some evidence suggested that public health officials are more trusted the closer they were to the intended audience (i.e., an individual's local public health unit compared to a federal health agency).[38,55] However, in an environment saturated with public health messaging from various sources, such as the COVID-19 pandemic, the public health system's level of messenger or source may not matter.[55]

Although the most trusted, healthcare professionals were not always the most consulted source.[14,30] Traditional media outlets (e.g., television, online news, and newspaper) and their representatives were reported as a primary messenger or source across many public settings, as they are generally accessible and can be relied upon for timely coverage and updates. However, traditional media was often mistrusted due to perceptions of exaggeration and/or sensationalism, which conveyed a sense of misalignment between its goals (e.g., attracting viewership) and those of public health institutions, based on the type of information, opinions and stories the media chose to forefront.[12,51] This dichotomy, where the most trusted sources were not the most frequently used was noted across several studies and may be attributed to the greater accessibility and frequency of updates from non-governmental and informal sources (e.g., social networks and media).[12,49,56]

Personal networks played a notable role in shaping trust, especially among newcomer, Black, older adult, and linguistically diverse populations.[e.g.,15, 17,21] Evidence supported that using trusted voices gives credibility to risk communication messages, counters lack of trust and misinformation and improves timeliness, uptake and engagement.[19-21] For communities with historical or systemic distrust of government and healthcare systems, such as Black and newcomer communities, trusted community leaders, faith groups and community influencers were essential to engender trust in public health messaging.[15,19,27] Community-based organizations (CBOs), local emergency services and news outlets were also cited as trusted messengers for public health messaging, particularly in rural and underserved areas.[2,17]

Generally, politicians were not among the most trusted messengers, especially if messaging appeared politically motivated, lacked transparency or if there was a perceived lack of shared partisan beliefs.[29,32] Research found that public health experts (e.g., medical officers of health) were highly trusted and desired as messengers compared to an elected official, who was more likely to be viewed with skepticism due to perceived hidden or political agendas.[12,26,32]

Additionally, diverse, multi-level (i.e., local, regional and national) and consistent messenger approaches were found to be important to pandemic risk communication strategies. Misalignment in messaging across messengers and conflicting information from different levels of government or between governments and authorities were reported to undermine trust.[16,43] The coordination of message development and release of information among institutions, health officials and international organizations was viewed as critical to avoid confusion that can erode public trust in the message.[43,44]

Selecting Appropriate Communication Channels

The literature examined how communication channels, or delivery platforms, related to public trust. Digital platforms (e.g., social media, YouTube, email and text) were the most frequently discussed channels, with many studies noting their central role in COVID-19 pandemic communication, and as a novel platform with growing management needs compared to past pandemics (e.g., the 2009 swine flu/influenza A (H1N1) pandemic [H1N1]).[51] Despite being widely used by health authorities, and among the most accessed by the public, evidence supports that social media and messaging communication platforms (e.g., Facebook, Twitter, WhatsApp) are not necessarily the most trusted, and this is true across demographics.[14,16,22,30] One study found that YouTube was a major source of COVID-19 misinformation, and official health videos had comparatively low engagement, raising concerns about the effectiveness of this channel as a risk communication medium at a population level.[49]

However, government, local and international health authority websites (e.g., Centers for Disease Control and Prevention [CDC] and WHO) were repeatedly cited as trusted channels for official guidance, including among community leaders who were relied upon to be lay-health educators for their communities.[15,26,49] Several studies also reported on the impact of infodemics emerging in tandem with public health crises. Infodemics occur when large quantities of information, including false or misleading information, spread during a public health emergency,[35] and were partially fuelled and mediated through digital channels, which eroded trust and created confusion during the COVID-19 pandemic.[12,15] Even with these challenges, social media and online platforms were reported as useful to monitor public perceptions of information shared, disseminate facts and address misinformation.[48]

Traditional media outlets (e.g., television, online news, and newspaper) were a dominant communication channel, even if they or their spokespersons (e.g., journalists) are not perceived as trustworthy.[12,14,22,30,49,51] Public health officials in Canada have emphasized that proactively working with media outlets can help mitigate problematic framing of public health measures and messages that might otherwise decrease public trust.[51]

Face-to-face communication (e.g., public health professional outreach) was noted as one of the most effective channels for building trust, in part because it ensures a dialogue is being had with the intended audience, particularly in rural and underserved communities and for populations at risk of exclusion from digital communication.[2,21] Various dissemination methods were identified to best reach populations that may have limited access to technology, including distributing flyers, home visits and using faith-based and senior centres.[15]

Several studies reported that preferred or trusted communication channels varied over time and across demographic factors such as age, sex, race, religion, and political affiliation.[21,26,28,29] Younger individuals leaned toward social media, while older adults might rely on television and print media.[14] Further, individuals used multiple communication channels.[15,49] As such, several studies emphasized that risk

communication strategies should occur through multiple channels and formats to build trust.[16,26] This approach was seen as essential for ensuring a broad reach and more equitable access as no single communication channel consistently fosters trust across populations or contexts, underscoring the importance of coordinated, multi-channel approaches.

Guiding with Empathy

Trust was typically higher when communication was clear, empathetic and framed around actionable guidance rather than fear, blame or political ideology.[49] Political leaders who used strategies that aim to improve emotional well-being and positive engagement during COVID-19 were perceived as more trustworthy.[33] Conversely, approaches that alarmed or heightened negative affect, such as anxiety, could ultimately decrease trust.[33,47,51] For example, during the H1N1 pandemic, media coverage that exaggerated risk, victim-focused narratives and dramatic tone, was reported to decrease the public's trust in pandemic messaging and response activities. [51]

The style of spokesperson communication substantially influenced trust. Evidence suggested that the most trusted spokespersons communicate compassionately, acknowledging hardships and uncertainties,[24,26] while a condescending communication style, marked by evasion, blame-shifting, politicization and promotion, decreased trust and confidence.[22,32] Framing that avoided judgment and blame was critical, particularly to gain trust among those who may distrust certain messages or institutions.[24,26] Feeling cared for and a sense of community was also noted as a means to improve trust and an individual's desire to seek health information.[25] Conversely, perceived attacks on personal values created negative experiences and further distanced individuals, while non-judgemental listening approaches created safe spaces and fostered trust.[24,26]

Incorporating Relational Approaches to Risk Communication

Relational approaches to risk communication encompass relationship-building, shared understanding, and dialogue between public health authorities and communities, rather than one-way information dissemination. Active engagement with trusted voices, community leaders (e.g., Elders and Indigenous physicians) and CBOs supported public health institutions to better understand strengths and needs at a local level, and, to (re)build relationships with partners who are trusted to disseminate or verify health information on behalf of their community.[15-18,20] Building relationships with community partners also helped to understand and define the unique differences between groups, ensuring that health messages reflected the distinct aspects of identity and experience.[20] Proactively building and sustaining trust with community partners outside of pandemic periods was cited as effective to fighting mis- and dis-information and building trust more generally.[15,17,20,24] Beyond community leaders and CBOs, specific strategies that engaged with the public to improve trust included tailoring messages and two-way communications.

TAILORING MESSAGES TO AUDIENCES AND CONTEXTS

Studies reported how tailoring messages and communication approaches to specific audiences and contexts influenced trust in public health, largely within the COVID-19 pandemic context.[2,12,13,15-18,21,24,26,42,48,49] Tailoring refers to adapting message content, format and delivery channels to reflect cultural, linguistic, demographic, literacy and situational factors. Among culturally diverse communities, evidence supports that tailored, culturally responsive health communication prevents the spread of misinformation and mistrust in the message.[20]

Several sources emphasized that generic, mass messaging can be inequitable and even detrimental to underserved populations during health crises.[12] For example, one review cited an example from a H1N1 risk messages study with First Nations and Métis Peoples in Manitoba, Canada, where risk messages' linguistic formats and channels were modified but messaging failed to foster behaviour change and did not foster trust in the government, as the audience did not understand why they were prioritised for vaccines or perceived the language used to describe priority groups as discriminatory.[49,57] Identified as a best practice to improve reach and effectiveness, adapting both message and channel is important, alongside sustained community partnerships and mechanisms to design and implement communication strategies.[16,24,26,42]

Tailoring strategies reported in the literature included: language adaptation and translation for populations with limited English proficiency;[17] cultural framing of messages to align with community values and historical experiences of mistrust;[2,15,18,49] using trusted messengers to deliver adapted content;[26,42] communication channel and format adjustments, such as flyers with large fonts and images for older adults, print or community radio materials for internet-limited populations, and infographics for social media sharing;[12,16,24] and adapting technical information to improve comprehension and reduce uncertainty based on health literacy or population-specific health needs.[13,21,24]

Tailoring strategies alone are not sufficient to build trust. For example, an examination of New Zealand public health and government communications during the COVID-19 pandemic found that, while officials were praised for their use of te reo Māori in public health briefings, this alone likely did little to build trust.[27] Foregrounding Māori voices is recognized as a key trust-building strategy; however, Māori health experts or leaders were noticeably absent from briefings.[27] Two-way communication and community-based partnership is a key strategy to ensure 'tailored' messages are indeed relevant and reaching the right audiences. As such, there was considerable overlap in literature covering these two topics, and a notable portion of qualitative, community-based methodologies to conduct research in local or regional contexts.[2,15,17,18]

ENGAGING IN TWO-WAY COMMUNICATION

Several studies underscored the importance of public health messaging being dynamic and responsive to feedback from intended audiences.[2,12,16-18,41,42,51] Two-way, or bidirectional, communication refers to strategies that enable dialogue between public health authorities and the public, rather than relying solely on top-down, one-way dissemination. Two-way communication practices have been shown to elicit trust and confidence in institutions and improve accessibility, acceptability, and uptake of messages.[16,41]

Studies reported various mechanisms for enabling two-way communication, to be adapted to the needs of and resources available to communities. Social media was frequently cited as a channel that allows health authorities to deliver information directly to the public and has interactive features for monitoring perceptions and addressing misinformation in real time.[47,51] Unlike one-way communication, the public can ask questions, clarify understanding, and apply information to their personal risk context, factors that enhance perceptions of credibility and honesty which are both critical for trust-building.[12] The WHO similarly recognized that trust can be built through strategic communication incorporating social listening and maintaining community feedback mechanisms.[42]

Beyond direct interactions, the literature also emphasized the role of proactive two-way partnerships with trusted CBOs and public health officials. Interviews with state and local health departments and CBOs during COVID-19 found that formal structures such as steering committees and regular conference calls supported effective collaboration.[17,18] Of note, these practices are not without their challenges. Two-way communication requires substantial resource investment, infrastructure and attention during crises to be successfully implemented.[17]

Public Health Practice Implications

This synthesis outlines key insights on risk communication for respiratory pathogen emergencies that may help build, maintain or restore trust in public health. The following section offers practical implications for public health practitioners, decision-makers and other individuals involved in public health emergency risk communication. The practice implications are organized by actions that can be taken as part of emergency preparedness and response efforts.

Emergency Preparedness

While this synthesis focuses on risk communication approaches during emergency response, the evidence underscores the importance of ongoing trust-building efforts during non-emergency periods to support effective communication when emergencies occur. The included literature reinforced the importance of using the time between/in-advance of emergencies for trust-building efforts given that resources, time, capacity and infrastructure are often limited in the event of an emergency:

- **Devote time to building and sustaining relationships with communities, CBOs and the media in non-emergency periods.** Emergencies place significant strain on public health systems and the public. Recognizing that trust is ongoing and dynamic, relationships should be built and sustained in non-emergency times, with important considerations for equity-denied groups, including First Nations, Inuit, and Métis communities. This continuous investment in trust-building and relationships supports both routine public health work and effective communication when emergencies do occur.[16] Both formal processes, such as establishing community steering committees or creating CBO funding opportunities, and informal processes, such as inviting ongoing feedback and adjusting activities, can demonstrate public health's commitment to collaboration and help sustain these relationships prior to emergencies.[17]

- **Include strategies in risk communication and pandemic plans that promote direct, accessible and approachable communications with the public and media.** Local, provincial and federal pandemic plans can outline approaches that support clear, timely communication with the public and media, and ensure government information is easy to find, understand and use.[51] These plans can also address how messages are developed, coordinated, and released across different levels of government and within the public health sector.[43,44] Strengthening mechanisms to counteract misinformation, coupled with efforts to enhance media literacy among the public, was identified as essential to ensuring risk communication is both trustworthy and useful.[47]

- **Identify trusted messengers and equip them with risk communication skills, including communicating clearly and with empathy.** To foster trustworthiness in messengers, risk communication strategies should include messengers shown to be the most trusted across the literature (e.g., healthcare professionals, community partners).[e.g.,12, 14,28,32] Further, selected messengers can be provided with a toolbox of risk and crisis communication skills to enhance their ability to connect with and reassure the public, including the proficient use of nonverbal cues, empathy and clarity.[32]

Emergency Response

Risk communication is typically among the first and most essential public health interventions in the event of a public health crisis. The literature reinforced several implications to foster and sustain trust-building to support risk communication efforts during emergency response:

- **Implement context-specific two-way communication strategies.** Dedicated resources, personnel and time are required for effective two-way communication and the approach selected should reflect the needs and resources of affected communities. Practical examples during response include listening sessions or feedback mechanisms that inform real-time message adaptation, as well as including CBOs or community representatives into emergency response mechanisms or advisory committees where feasible.[2,17]

- **Apply an equity-informed and action-oriented lens to support message development and dissemination.** Trusted messengers alone are not sufficient to build and sustain trust. Risk communication messages should be equity-informed, actionable and relevant to affected communities to sustain trust. Where applicable, public health professionals and agencies can demonstrate a commitment to equitable approaches by ensuring public health information and recommendations are grounded within communities' social and environmental realities.[58]

- **Monitor, evaluate and adapt risk communications during emergencies**. Trust levels shift over the course of public health emergencies, in accordance with changing evidence, evolving circumstances, and differing needs across population groups.[29,31] Monitoring public reception of messaging helps determine if risk communication plans and strategies are indeed fostering trust and/or require changes while allowing authorities to demonstrate responsiveness and further strengthen public perceptions of trust. Methods of evaluation may include passive strategies, such as monitoring traditional and social media and web-content engagement,[35] as well as more active two-way communication that gathers feedback from the media and public.[42]

Limitations and Strengths

This evidence synthesis was strengthened by a comprehensive peer-reviewed and grey literature search strategy developed in collaboration with Library Information Specialists. Though the search identified a sufficiently large volume of literature for review, it is still possible that relevant articles may have been missed due to limits on databases searched, year, language and type of publication. The involvement of multiple authors in study selection, screening and data extraction ensured consistency and accuracy of results within resource and time constraints. Additionally, supporting evidence in the form of primary research studies most often employed a cross-sectional study design; care should be taken to interpret these results as correlational versus causal and may be prone to bias.

Variations in the definition and measurement of trust in the literature introduced challenges when comparing findings across studies. Authors identified a standard definition of trust that resonated with this work and referred to it for consistency whenever possible. For records with outcome measures related to trust-building through the preparation or dissemination of public health messages, authors accepted this as an appropriate surrogate for outcome measures around improving trust in public health and public health messaging more broadly.

Few records reported on general respiratory pathogens, which may limit the applicability and generalizability of these findings beyond the COVID-19 context. Further, findings from primary studies conducted in a select region or subset of the population may be context-specific and not generalizable to other regions or populations. Lastly, limited records focused on building trust in risk communications with First Nation, Inuit, and Métis populations, and even fewer incorporated Indigenous concepts of trust and relational accountability. This highlights a gap and an opportunity to engage with Indigenous-driven initiatives, such as the National Framework for Indigenous Pandemic Preparedness.[59]

Despite these limitations, this synthesis furthers the 2023 evidence brief on risk communication and trust in public health during the COVID-19 pandemic to provide more commentary on impact measures and clear implications for public health, reflecting the evolving post-COVID public health landscape in Ontario and attentive to the needs and experiences of equity-denied groups.

Discussion and Conclusions

Risk communication about respiratory pathogens with pandemic and epidemic potential can foster public trust, when delivered in a timely, clear and evidence-based manner through trusted messengers and communication channels, credible sources, and in ways that are empathetic and relevant to the lived contexts of affected populations. While public trust is built from sustained, coordinated actions across messengers and institutions, the available literature offers a range of strategies and approaches for fostering trust in risk communication, as well as message characteristics that can influence trust. The main themes and findings of this report align with existing evidence-informed risk communication models and frameworks that go beyond respiratory pathogen emergencies, including the CDC's Crisis and Risk Communication model,[60] reinforcing the proposed strategies and approaches as core tenets of fostering trust.

The application of these strategies requires reflection on a wide range of health equity and ideological factors that influence trust, including meaningfully addressing differences across population groups on how a message is received, processed and acted upon.[4] Intersecting social identities can shape perceptions of the values and motivations of messengers.[60,51] This implies that trust in information may be interpreted through a lens of local knowledge, cultural context and institutional relationships.[51] An individual's capacity to trust and engage with recommended preventative behaviours also exists within a larger historical, social, economic, and environmental context.[58] This interplay between individual and structural determinants underscores the importance of addressing systemic equity challenges and the perceived trustworthiness of messengers and institutions.[6,25,58]

Public health professionals and institutions have a responsibility to meaningfully inform and build relationships with communities about health issues during pandemics.[58] Building trust can include strengthening community participation, prioritizing meaningful engagement and incorporating lived experiences and local knowledge to co-develop preparedness and response actions with those affected by proposed policies and progamming.[6,61] A notable example from the COVID-19 pandemic is the City of Hamilton's use of ambassador programs, which effectively engaged Black, Indigenous and racialized community members to share relevant information on COVID-19 vaccination, address community concerns, bridge language barriers and provide culturally informed support to foster trust.[62]

Levels of trust evolve over the course of public health emergencies, in response to shifting information and evolving public health needs across groups, as observed over the multi-year COVID-19 pandemic.[28,30] Monitoring progress in developing trust-conducive conditions is fundamental to understanding strengths and weaknesses in public trust and public health and government officials' trustworthiness.[61] Further, the exchange of data, evaluations, lessons learned and models of trust-building strategies among public health professionals and organizations is essential for supporting colleagues pursuing similar objectives.[62]

The findings of this synthesis underscore that trust is ongoing, dynamic and renewed over time, reinforcing the importance of sustained relationship-building with communities, health system partners and the media beyond pandemic and epidemic periods. The various strategies and approaches presented may be adapted to various contexts to guide the design and delivery of effective and equity-informed risk communication during respiratory pathogen emergencies.

References

1. World Health Organization (WHO). Risk communications [Internet]. Geneva: WHO; 2025 [cited 2025 Nov 10]. Available from: https://www.who.int/emergencies/risk-communications

2. Leslie A, Woods EK, van den Broek-Altenburg EM, Stein GS, Carney JK. Lessons learned: enhancing rural risk communication for future health crises through the PHERCC framework. Front Public Health. 2025;13:1594833. Available from: https://doi.org/10.3389/fpubh.2025.1594833

3. National Collaborating Centres for Public Health (NCCPH). Core competencies for public health in Canada: Release 2.0. Ottawa, ON: Public Health Agency of Canada; 2025. Available from: https://nccph.ca/projects/core-competencies-for-public-health-in-canada/

4. European Centre for Disease Prevention and Control (ECDC). Public health emergency preparedness - core competencies for EU member states. Stockholm: ECDC; 2017. Available from: https://www.ecdc.europa.eu/sites/default/files/documents/public-health-emergency-preparedness-core-competencies-eu-member-states.pdf

5. Pan-Canadian Public Health Network. Canadian pandemic influenza preparedness: planning guidance for the health sector. Ottawa, ON: Public Health Agency of Canada; 2018. Available from: https://www.canada.ca/content/dam/phac-aspc/migration/phac-aspc/cpip-pclcpi/assets/pdf/report-rapport-02-2018-eng.pdf

6. Public Health Agency of Canada. Chief Public Health Officer of Canada's report on the state of public health in Canada 2023: creating the conditions for resilient communities: a public health approach to emergencies. Ottawa, ON: Public Health Agency of Canada; 2023. Available from: https://www.canada.ca/content/dam/phac-aspc/documents/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/state-public-health-canada-2023/report/report.pdf

7. MacKay M, Colangeli T, Thaivalappil A, Del Bianco A, McWhirter J, Papadopoulos A. A review and analysis of the literature on public health emergency communication practices. J Community Health. 2022;47(1):150-62. Available from: https://doi.org/10.1007/s10900-021-01032-w

8. World Health Organization (WHO). Risk communication saves lives and livelihoods: pandemic influenza preparedness framework [Internet]. Geneva: WHO; 2015 [cited 2026 Apr 23]. Available from: https://www.who.int/publications/i/item/pip-risk-comms-saves-lives-livelihoods

9. Ontario Agency for Health Protection and Promotion (Public Health Ontario). Evidence brief: risk communication and trust in public health during the COVID-19 pandemic. Toronto, ON: King's Printer for Ontario; 2023.

10. O'Doherty KC. Trust, trustworthiness, and relationships: ontological reflections on public trust in science. J Respons Innovat. 2023;10(1):2091311. Available from: https://doi.org/10.1080/23299460.2022.2091311

11. Law SF, Le AT. A systematic review of empirical studies on trust between universities and society. J Higher Educ Pol Manag. 2023;45(4):393-408. Available from: https://doi.org/10.1080/1360080X.2023.2176598

12. Coombs N, Porter J, Barbagallo M. An exploration of the influencing factors for effective public health messaging during disasters: a scoping review. Public Health. 2024;228:73-81. Available from: https://www.doi.org/10.1016/j.puhe.2023.12.023

13. Diviani N, Fiordelli M, Rubinelli S. Understanding public response: government communication during the COVID-19 crisis through the eyes of the Swiss public. PEC Innov. 2024;5:100349. Available from: https://www.doi.org/10.1016/j.pecinn.2024.100349

14. Fiordelli M, Rubinelli S, Diviani N. Acceptance of public health measures during the COVID-19 pandemic: a cross-sectional study of the Swiss population's beliefs, attitudes, trust, and information-seeking behavior. Int J Public Health. 2023;68:1605982. Available from: https://www.doi.org/10.3389/ijph.2023.1605982

15. Githinji P, MacMillan Uribe AL, Szeszulski J, Rethorst CD, Luong V, Xin L, et al. Public health communication during the COVID-19 health crisis: sustainable pathways to improve health information access and reach among underserved communities. Hum Soc Sci Comm. 2024;11(2024):1218. Available from: https://www.doi.org/10.1057/s41599-024-03718-7

16. Ryan RE, Silke C, Parkhill A, Virgona A, Merner B, Hurley S, et al. Communication to promote and support physical distancing for COVID-19 prevention and control. Cochrane Database Syst Rev. 2023;10(10):CD015144. Available from: https://www.doi.org/10.1002/14651858.CD015144

17. SteelFisher GK, Caporello HL, Stein RI, Lubell KM, Lane L, Moharam Ali S, et al. Developing infectious disease outbreak emergency communications for populations with limited English proficiency: insights to sustain collaborations between local health departments and community-based organizations. Am J Health Promot. 2025;39(2):274-82. Available from: https://www.doi.org/10.1177/08901171241273349

18. Washington R, Weis JA, Monger M, Burse N, Melvin SC, Omondi AA, et al. Adaptation of a bidirectional crisis and emergency risk communication framework by community-engaged research partnerships in rural Mississippi during the COVID-19 pandemic. J Clin Translat Sci. 2023;7(1):e79. Available from: https://www.doi.org/10.1017/cts.2023.15

19. Independent Pandemic Management Advisory Committee. Review of COVID-19 communications in Victoria. Melbourne: State Government of Victoria; 2022. Available from: https://www.health.vic.gov.au/sites/default/files/2022-09/review-COVID-19-communications-in-victoria-ipmac.pdf

20. Government of United Kingdom, Scientific Pandemic Influenza Group on Behaviours (SPI-B). Public health messaging for communities from different cultural backgrounds [Internet]. London: Crown copyright; 2020 [cited 2026 Apr 23]. Available from: https://assets.publishing.service.gov.uk/media/5f5223a7e90e071ec25d3724/s0649-public-health-messaging-bame-communities.pdf

21. University of Antwerp; Inclusive COVID-19 Crisis Communication (ICC) Project Consortium. Towards an inclusive COVID-19 crisis communication policy in Belgium [Internet]. Antwerp; University of Antwerp; 2022 [cited 2026 Apr 23]. Available from: https://medialibrary.uantwerpen.be/files/159019/6b86ff6e-bfb5-457e-a0f8-f63fda6d2443.pdf

22. Kim S. Dimensions of effective government pandemic-crisis communication in the context of COVID-19: a public-centric perspective. J Contingencies Crisis Manage. 2023;31(3):320–37. Available from: https://www.doi.org/10.1111/1468-5973.12441

23. Li J, Lee Y. Predicting public cooperation toward government actions in the early stages of an influenza pandemic in the United States: the role of authentic governmental communication and relational quality. Communic Res. 2023;50(2):230–57. Available from: https://www.doi.org/10.1177/00936502221096659

24. Public Health Agency of Canada. Addressing vaccine hesitancy in the context of COVID-19: a primer for health care providers [Internet]. Ottawa, ON: Government of Canada; 2021 [cited 2025 Nov 1]. Available from: https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/vaccines/vaccine-hesitancy-primer.html

25. Porat T, Nyrup R, Calvo RA, Paudyal P, Ford E. Public health and risk communication during COVID-19—enhancing psychological needs to promote sustainable behavior change. Front Public Health. 2020;8:573397. Available from: https://doi.org/10.3389/fpubh.2020.573397

26. National Collaborating Centre for Methods and Tools. Rapid review update 2: what are best practices for risk communication and strategies to mitigate risk behaviours? [Internet] Hamilton, ON: McMaster University; 2023 [cited 2026 Apr 23]. Available from: https://www.nccmt.ca/covid-19/covid-19-rapid-evidence-service/24

27. Beattie A, Priestley R. Fighting COVID-19 with the team of 5 million: Aotearoa New Zealand government communication during the 2020 lockdown. Soc Sci Humanit Open. 2021;4(1):100209. Available from: https://doi.org/10.1016/j.ssaho.2021.100209

28. Ali SH, Foreman J, Tozan Y, Capasso A, Jones AM, DiClemente RJ. Trends and predictors of COVID-19 information sources and their relationship with knowledge and beliefs related to the pandemic: nationwide cross-sectional study. JMIR Public Health Surveill. 2020;6(4):e21071. Available from: https://doi.org/10.2196/21071

29. Reinhardt M, Findley MB, Countryman RA. Policy liberalism and source of news predict pandemic-related health behaviors and trust in the scientific community. PLoS One. 2021;16(6):e0252670. Available from: https://doi.org/10.1371/journal.pone.0252670

30. Falcone R, Sapienza A. How COVID-19 changed the information needs of Italian citizens. Int J Environ Res Public Health. 2020;17(19):6988. Available from: https://doi.org/10.3390/ijerph17196988

31. Stanulewicz-Buckley N, Cartwright E. Persuasiveness of public health communication during the COVID-19 pandemic: message framing, threat appraisal, and source credibility effects. Int J Environ Res Public Health. 2024;22(1):29. Available from: https://www.doi.org/10.3390/ijerph22010030

32. Capurro G, Maier R, Tustin J, Jardine CG, Driedger SM. The spokesperson matters: evaluating the crisis communication styles of primary spokespersons when presenting COVID-19 modeling data across three jurisdictions in Canada. J Risk Res. 2022;25(11-2):1395-412. Available from: https://www.doi.org/10.1080/13669877.2022.2128391

33. Naughton B, O'Shea D, van der Werff L, Buckley F. Influencing a nation: how a leader's interpersonal emotion regulation influences citizen compliance via trust and emotions during a global pandemic. Emotion. 2024;24(1):196-212. Available from: https://www.doi.org/10.1037/emo0001262

34. Claeys A, De Waele A. From message to messenger: should politicians lead-by-example to increase compliance with public health directives? Health Commun. 2023;38(14):3393-408. Available from: https://www.doi.org/10.1080/10410236.2022.2150806

35. Bollyky T, Bang Petersen M. A practical agenda for incorporating trust into pandemic preparedness and response. Bull World Health Org. 2024;102(6):440–7. Available from: https://doi.org/10.2471/blt.23.289979

36. Crepaz M, Arikan G. Information disclosure and political trust during the COVID-19 crisis: experimental evidence from Ireland. J Elect Public Opin Parties. 2021;31(Suppl 1):96–108. Available from: https://www.doi.org/10.1080/17457289.2021.1924738

37. Hirschfeld G, Thielsch MT. Impact of crisis communication strategies on people's attitudes toward behavioral guidelines regarding COVID-19 and on their trust in local officials. Int J Disaster Risk Sci. 2022;13(4):495–506. Available from: https://www.doi.org/10.1007/s13753-022-00424-3

38. Bickham SB, Francis DB. The public's perceptions of government officials' communication in the wake of the COVID-19 pandemic. J Creat Commun. 2021;16(2):190–202. Available from: https://doi.org/10.1177/09732586211003856

39. Joslyn S, Qin C, Han JH, Savelli S, Agrawal N. Reducing vaccine hesitancy by explaining vaccine science. J Exp Psychol Appl. 2023;29(3):489–528. Available from: https://www.doi.org/10.1037/xap0000464

40. MacKay M, Colangeli T, Gillis D, McWhirter J, Papadopoulos A. Examining social media crisis communication during early COVID-19 from public health and news media for quality, content, and corresponding public sentiment. Int J Environ Res Public Health. 2021;18(15):7986. Available from: https://www.doi.org/10.3390/ijerph18157986

41. Li JY, Lee Y. Predicting public cooperation with face covering at the early phases of COVID-19: building public trust, confidence, knowledge through governmental two-way symmetrical communication. Health Commun. 2024;39(12):2983–96. Available from: https://www.doi.org/10.1080/10410236.2023.2297496

42. World Health Organization (WHO). WHO COVID-19 policy brief: building trust through risk communication and community engagement [Internet]. Geneva: World Health Organization; 2022 [cited 2026 Apr 23]. Available from: https://iris.who.int/server/api/core/bitstreams/bb6e863c-d893-4b09-b234-51e77cd296da/content

43. Pan American Health Organization (PAHO). COVID-19: guidelines for communicating about coronavirus disease 2019. A guide for leaders [Internet]. Washington, DC: PAHO; 2020 [cited 2026 Apr 23]. Available from: https://iris.paho.org/handle/10665.2/52391

44. Moss SM, Sandbakken EM. "Everybody needs to do their part, so we can get this under control." Reactions to the Norwegian government meta-narratives on COVID-19 measures. Polit Psychol. 2021;42(5):881–98. Available from: https://doi.org/10.1111/pops.12727

45. Schneider CR, Freeman ALJ, Spiegelhalter D, van der Linden S. The effects of quality of evidence communication on perception of public health information about COVID-19: two randomised controlled trials. PLoS One. 2021;16(11):e0259048. Available from: https://doi.org/10.1371/journal.pone.0259048

46. Schneider CR, Freeman ALJ, Spiegelhalter D, van der Linden S. The effects of communicating scientific uncertainty on trust and decision making in a public health context. Judgm Decis Mak. 2022;17(4):849–82. Available from: https://www.doi.org/10.1017/s1930297500008962

47. Mohamed Nour M, Kisa A. Political leaders' communication strategies during COVID-19 in highly infected countries: a scoping review. Healthcare. 2024;12(6):607. Available from: https://www.doi.org/10.3390/healthcare12060607

48. Kisa S, Kisa A. A comprehensive analysis of COVID-19 misinformation, public health impacts, and communication strategies: scoping review. J Med Internet Res. 2024;26:e56931. Available from: https://www.doi.org/10.2196/56931

49. Berg SH, O'Hara JK, Shortt MT, Thune H, Bronnick KK, Lungu DA, et al. Health authorities' health risk communication with the public during pandemics: a rapid scoping review. BMC Public Health. 2021;21:1401. Available from: https://www.doi.org/10.1186/s12889-021-11468-3

50. Fansher M, Walls L, Hao C, Subramonyam H, Boduroglu A, Shah P, et al. Narrative visualizations: depicting accumulating risks and increasing trust in data. Cogn Res. 2025;10(1):7. Available from: https://www.doi.org/10.1186/s41235-025-00613-w

51. Driedger M, Maier R, Capurro G, Jardine C. Drawing from the 'bank of credibility': perspectives of health officials and the public on media handling of the H1N1 pandemic. J Risk Res. 2021;24(11):1499–516. Available from: https://www.doi.org/10.1080/13669877.2021.1936604

52. Lungu DA, Roislien J, Berg SH, Smeets I, Shortt MT, Thune H, et al. Assessing the effect of nonvisual information factors in pandemic-related video communication: randomized controlled between-subjects experiment. J Med Internet Res. 2023;25:e42528. Available from: https://www.doi.org/10.2196/42528

53. Cucchiarini V, Caravona L, Macchi L, Perlino FL, Viale R. Behavioral changes after the COVID-19 lockdown in Italy. Front Psychol. 2021;12:617315. Available from: https://www.doi.org/10.3389/fpsyg.2021.617315

54. Botterill LC, Lake J, Walsh MJ. Factors affecting public responses to health messages during the COVID-19 pandemic in Australia: partisanship, values, and source credibility. Aust J Polit Sci. 2021;56(4):358–75. Available from: https://doi.org/10.1080/10361146.2021.1978389

55. Favero N, Jilke S, Wolfson JA, Xu C, Young MM. Messenger effects in COVID-19 communication: does the level of government matter? Health Policy Open. 2021;2:100027. Available from: https://www.sciencedirect.com/science/article/pii/S2590229620300253

56. King CL, Chow MYK, Wiley KE, Leask J. Much ado about flu: a mixed methods study of parental perceptions, trust and information seeking in a pandemic. Influenza Other Respir Viruses. 2018;12(4):514–21. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111%2Firv.12547

57. Driedger SM, Cooper E, Jardine C, Furgal C, Bartlett J. Communicating risk to Aboriginal Peoples: First Nations and Metis responses to H1N1 risk messages. PLoS One. 2013;8(8):e71106. Available from: https://doi.org/10.1371/journal.pone.0071106

58. Best AL, Fletcher FE, Kadono M, Warren RC. Institutional distrust among African Americans and building trustworthiness in the COVID-19 response: implications for ethical public health practice. J Health Care Poor Underserved. 2021;32(1):90–8. Available from: https://pubmed.ncbi.nlm.nih.gov/33678683/

59. Huyser KR, Mashford-Pringle A, Blackstock S, Robin T, Chavez T, Lin D, et al; CIEDAR (Cluster for Indigenous Engagement, Development, and Research). Developing a national framework for Indigenous Pandemic Preparedness: CIEDAR P2's inaugural workshop: UBC Cluster for Indigenous Engagement, Development, and Research Pandemic Preparedness (CIEDAR P2) [Internet]. Vancouver, BC: CIEDAR; 2024 [cited 2026 Apr 23]. Available from: https://drive.google.com/file/d/1zstfO6AGdOUbOzklQ1hBi-WrkRS0PQsT/view

60. Centers for Disease Control and Prevention (CDC). (CERC) crisis + emergency risk communication: introduction [Internet]. Atlanta, GA: CDC; 2018 [cited 2026 Apr 23]. Available from: https://www.cdc.gov/cerc/media/pdfs/CERC_Introduction.pdf

61. Bærøe K, Árnason V, Jansen M, Yamin AE, Ruano AL, Davis AP. Pandemic and crisis preparedness and response: conceptualizing cultural, social and political drivers of trustworthiness and collective action. Public Health Ethics. 2025;18(2):phaf004. Available from: https://doi.org/10.1093/phe/phaf004

62. City of Hamilton. Vaccine Ambassador pilot program: evaluation report [Internet]. Hamilton, ON: City of Hamilton; 2023 [cited 2026 Apr 23]. Available from: https://pub-hamilton.escribemeetings.com/filestream.ashx?DocumentId=384805

63. Veritas Health Innovation. Covidence systematic review software [Internet]. Melbourne; Veritas Health Innovation; 2025 [cited 2025 Nov 6]. Available from: https://www.covidence.org

Appendix A: Evidence Synthesis Methods

A rapid evidence review of indexed and grey literature was conducted with the support of a Library Information Specialist. The search strategy built upon the 2023 evidence synthesis, broadening the original search from COVID-19 search terms to include all respiratory pathogens with epidemic or pandemic potential. The search was limited to English language resources published from 2020-2025. A Library Information Specialist conducted database searches in MEDLINE on June 18, 2025, and in Embase, CINAHL, PsycINFO, and Scopus on June 24-25, 2025. To avoid duplicate screening and extraction, records from the COVID-19 pandemic period (2020-2022) previously identified through earlier database searches were excluded. A search of three customizable Google search engines (developed to search Canadian and international public health resources) on July 22-23, 2025, identified grey literature sources. The first 100 results of each search string were reviewed. The search was augmented with focused handsearching.

Records identified were eligible for inclusion if they discussed communication strategies, tools, tactics, and/or approaches aimed at the public and used in public health settings in one or more Organisation for Economic Co-operation and Development (OECD) countries. Records were included if they explicitly provided evidence of effectiveness and impact on public trust. Evidence was out of scope if it focused solely on trust-building in routine or non-emergency settings; on populations made vulnerable due to biological factors (e.g., cancer patients, immunocompromised individuals) or if it described trust-related outcomes without indication of impact. Records on vaccine uptake during non-emergencies, as a behaviour impacted by trust, were also excluded, along with commentaries, editorials, abstracts, conference presentations, books, protocols and pre-prints.

Two authors were involved in the screening process, using Covidence for indexed records and a web browser for grey literature.[63] A subset of articles underwent duplicate screening at the title and abstract stage to ensure agreement between authors, with the remaining articles reviewed independently. Full-text articles were retrieved and screened following the same process. Authors reached consensus on the final set of articles through discussion. For continuity, peer-reviewed and grey literature included in the 2023 evidence brief were reviewed against updated inclusion and exclusion criteria. These records were screened independently at both the title and abstract and full-text stages.

Three authors divided the final set of included articles to complete data extraction and thematic analysis. Through an iterative process, themes were identified, relationships between them were mapped and grouped into defined sections. Finally, content reviewers were consulted to validate and enrich the findings. In alignment with rapid evidence review methods, studies were not assessed for methodological quality. Additional details regarding methodology are available upon request.

Appendix B: Characteristics of Included Records

Table B1: Summary of Included Records (n = 46)

Study Characteristics	Count
Year of Publication	
2020	5
2021	13
2022	6
2023	10
2024	9
2025	3
Respiratory Pathogen	
COVID-19	42
General respiratory pathogen	3
Influenza	1
Study Type	
Cross-sectional	17
Randomized controlled trial	7
Review	7
Case	4
Non-randomized	2
Case-control	1
Cohort	1
Not specified or applicable	7
Location	
Europe	15
North America	17
Oceania	3
Multiple continents under review	11
Jurisdictional Level	
National	32
State/Provincial	2

Study Characteristics	Count
Local/Regional	4
Multiple jurisdictional levels under review	8
Messenger[a]	
Government and elected officials (i.e., politicians, policy-makers)	32
Public health experts, officials and agencies	13
Traditional or social media (i.e., journalists)	8
Community or local messengers	8
Healthcare providers, professionals and practitioners	7
Not specified or applicable	3
Equity Considerations	
Yes	14
No	32

Notes. [a] Noting that one study could have more than one messenger of interest and/or under review (thus n >46)

Public Health Ontario
661 University Avenue, Suite 1701
Toronto, Ontario
M5G 1M1
416.235.6556
communications@oahpp.ca
publichealthontario.ca

Ontario