



TACTICAL RESPONSES TO MDM

SUMMARY

There is a growing recognition that the spread of mis-, dis-, and malinformation (MDM) is likely to be an ongoing challenge associated with disasters and disaster response. Accordingly, the need to harness research to identify interventions that emergency managers can use to reduce the spread of disinformation is increasingly pressing.¹ The spread of disinformation can be tackled through either preventative (sometimes referred to as “prophylactic”) or reactive (sometimes referred to as “therapeutic”) measures. The last paper in this series focused on the former, whereas this paper will focus on the latter. The interventions discussed in this paper, **fact-checking** and **debunking**, are useful tools for emergency managers and responders once disaster strikes and disinformation has begun to circulate. Effective use of these interventions to reduce the spread of disinformation will minimize confusion, help survivors access resources in a timely manner, and potentially preserve trust between the public and emergency responders and managers.

INTRODUCTION

As recovery efforts continue after hurricanes Helene and Milton, the significant volume of disinformation about the storm itself and the government response has drawn renewed focus to the issue of disinformation and its implications for emergency management. Disinformation narratives include false claims about weather manipulation technology, the Federal Emergency Management Agency’s (FEMA’s) budget and disaster aid, and the intentional destruction of disaster aid by unmarked federal helicopters. Posts on X have also linked these narratives to other weather events, including the October 2024 flood emergency in Roswell, New Mexico, and the September–November 2024 Elk and Pack Trail fires in Wyoming. This false content is having a serious effect on recovery efforts by increasing risk to responders, disrupting the delivery of critical services, reducing trust in the government, and creating a space for adversaries to exploit chaos and disorder to undermine the democratic process. As a result, we must improve our ability to stem the tide of disinformation.

It is important to note that the interventions discussed in this paper are not designed to change opinions, attitudes, views, or voting preferences. Nor is the goal to eradicate disinformation completely, as this is

¹ Misinformation and disinformation are distinguished from each other by the intent of the content’s creator. However, from the viewer’s perspective, there is no practical distinction between the two because most viewers are not aware of the content creator’s intent. Malinformation is true content circulated with malicious intentions, so it is distinct from misinformation and disinformation because the content is accurate. Therefore, for the purposes of accessibility and practical application, we use the term *disinformation* to refer to both disinformation and misinformation which are the primary subjects of this paper.

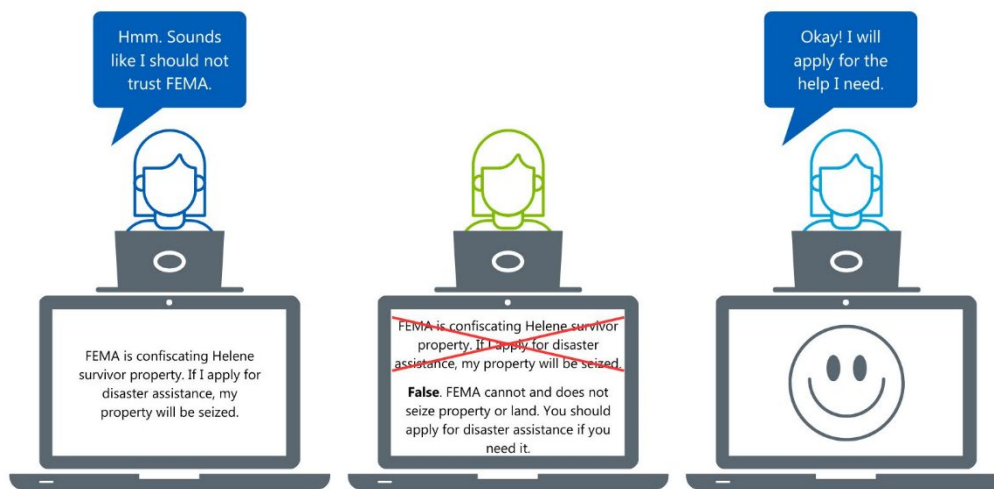


impractical and potentially impossible. The goal of these interventions is narrow, yet effective: **to decrease the likelihood that people will believe and share false content when they see it.**²

FACT-CHECKING

Fact-checking refers to the process of checking that all facts in a piece of content are correct.³ It is typically conducted by journalists and uses empirical evidence from neutral or unimpeachable sources to correct specific instances of inaccurate information. Ideally, when an individual is presented with false information and a subsequent correction, they will choose to believe the corrected and true information. For example, suppose an X user saw a post claiming that “Hurricane Helene was the product of weather control!” The intervention here would be a corrective statement (fact-check) stating that there is no evidence of weather manipulation nor is this technically possible. Without a fact-check, a new user would encounter the false information only and might come to believe something that is not true. The presence of a fact-check, however, ensures that future users are provided with accurate information. Figure 1 illustrates this process.

Figure 1. Fact-checking: an example



Source: Adapted from a CNA figure in McBride et al. (2024), *Evidence-Based Techniques for Countering Mis-/Dis-/Mal-information*.

In the US, fact-checking is primarily conducted by journalists and news organizations using several unique scales. For example, PolitiFact's Truth-O-Meter rating reflects the relative accuracy of the statement,

² Unless otherwise cited, the information in this report is condensed from a longer discussion available in Megan K. McBride et al., *Evidence-Based Techniques for Countering Mis-/Dis-/Mal-information*, CNA, DIM-2023-U-035081-Final, 2024.

³ James Pamment and Anneli Kimber Lindwall, *Fact-Checking and Debunking: A Best Practice Guide to Dealing with Disinformation*, NATO Strategic Communications Centre of Excellence, 2021, https://stratcomcoe.org/cuploads/pfiles/nato_stratcom_coe_fact-checking_and_debunking_02-02-2021-1.pdf.



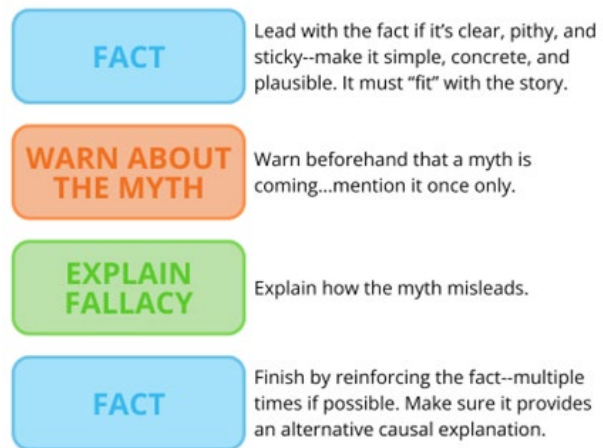
ranging from true (accurate) to pants on fire (not accurate, makes a ridiculous claim).⁴ Similarly, the *Washington Post*'s Fact Checker ratings range from one Pinocchio (some shading of the facts) to four Pinocchios (completely false) and also offers a Geppetto checkmark for completely true statements and the bottomless Pinocchio for false claims repeated at least 20 times.⁵

DEBUNKING

One does not need to be a journalist or a news outlet to respond tactically to the spread of disinformation. *Debunking* is the use of a concise correction to disinformation that demonstrates the prior message or messaging campaign was inaccurate. Although significant practical overlap between debunking and fact-checking exists, debunking is distinguished in that it is not necessarily impartial, targeted at a specific actor or topic, and strategic. The goals of debunking are also slightly different. Instead of checking that all verifiable facts in a speech, news article, or text are correct, it seeks to assert the truth, develop a public record of false information that is being spread, and educate the public about the tactics, techniques, and procedures of disinformation.⁶

The Debunking Handbook (2020) argues that debunks should lead with the fact, warn about the myth, explain how the myth or false claim misleads, and finish by reinforcing the fact (see Figure 2).⁷ For example, a frequent claim about Hurricane Helene is that it was the product of government weather manipulation. A debunk of this claim might look like this: *No technology exists that can create, destroy, modify, strengthen, or steer hurricanes in any way, shape, or form. There is a common myth that the government is creating, strengthening, or steering hurricanes into specific communities. This argument ignores ample scientific evidence that extremely warm ocean temperatures across the Gulf of Mexico caused Helene and Milton to carry more moisture—therefore dumping higher*

Figure 2. How to debunk



Source: Adapted from Lewandowsky et al., *The Debunking Handbook (2020)*, <https://www.climatechangecommunication.org/all/handbook/the-debunking-handbook-2020/>.

⁴ Angie Drobnic Holan, "The Principles of the Truth-O-Meter: PolitiFact's Methodology for Independent Fact-Checking," PolitiFact, Jan. 12, 2024, <https://www.politifact.com/article/2018/feb/12/principles-truth-o-meter-politifact-methodology-i/#Truth-O-Meter%20ratings>.

⁵ Glenn Kessler, "About the Fact Checker," *Washington Post*, Jan. 1, 2017, <https://www.washingtonpost.com/politics/2019/01/07/about-fact-checker/>.

⁶ Pammet and Lindwall, *Fact-Checking and Debunking*.

⁷ Stephan Lewandowsky et al., *The Debunking Handbook (2020)*, <https://sks.to/db2020>.



amount of rain—and that natural steering currents in the upper atmosphere determine a storm’s path. All hurricanes, including Helene and Milton, are natural phenomena that form on their own due to aligning conditions of the ocean and atmosphere.⁸

Researchers were concerned that repeating disinformation within a correction might inadvertently reinforce or amplify the disinformation. The “truth sandwich” approach shown in Figure 2 was designed to avoid this issue. However, current research indicates that providing a correction—regardless of format—is far more important than how it is presented. As one debunking expert put it, “Corrections are wildly effective.”⁹

PRACTICAL IMPLICATIONS FOR EMERGENCY MANAGEMENT

Disinformation is a clear and present threat that is actively undermining natural disaster response efforts. Responding quickly to stem the flow of false information online is critical. The evidence-based interventions discussed in this paper have implications for how emergency managers should plan and prepare for disaster response and offer emergency managers several options for reducing the spread of disinformation:

1. **Anticipate disinformation.** Planners should be aware that disinformation is a threat that poses serious risks to disaster response. Be prepared to combat the spread of false information. Monitor social media for false claims and act quickly to debunk claims that may gain traction and harm disaster response operations. If possible, partner with your local fusion center to assist with monitoring efforts for potential disinformation, particularly around large events.
2. **Use social media to provide corrective messaging** (see Figure 3). Well-designed,

Figure 3. Example corrective messaging post



Source: FEMA, <https://x.com/fema/status/1850616843326595414>.

⁸ “Fact Check: Debunking Weather Modification Claims,” NOAA, Oct. 23, 2024, <https://www.noaa.gov/news/fact-check-debunking-weather-modification-claims>.

⁹ McBride et al., *Evidence-Based Techniques*.



detailed, fact-based, and timely corrections are the most effective in reducing misinformation promotion. Think about what *types* of false narratives that are most likely to occur (e.g., false stories suggesting that citizenship status is being checked at shelters are common in the wake of disasters) and have prepared messages and graphics for quick distribution.

3. **Build and leverage partnerships.**¹⁰ Work with trusted community partners to help address disinformation when it occurs. Coordinate with partner agencies to monitor for disinformation and jointly respond; using consistent language across government helps to build trust.
4. **Develop trust under blue skies.**¹¹ Engage with the community regularly throughout the year to establish a reputation as a reliable source of up-to-date information before, during, and after a crisis.
5. **Be prepared but adaptive.** Having prepared messaging and graphics is important. However, in a rapidly changing information environment and social media landscape, being prepared to shift to a new platform, message, or type of media is critical.
6. **Share information readily but note when it may be subject to change.**¹² During a crisis, delays in information sharing from a trusted voice may provide room for disinformation to grow. Provide information to the public proactively as it is learned, noting that this information is preliminary and subject to change (e.g., "Here is what we know right now. This is an evolving situation that can change rapidly, so keep checking back for the latest news."). Date your social media posts to prevent stale, outdated, or no longer accurate information from circulating and feeding disinformation.

¹⁰ Jamie Biglow and Heather Marshall, *Best Practices in Social Media Crisis Communications for State and Local Emergency Management Agencies*, CNA, IIM-2023-U-036795, 2023.

¹¹ Biglow and Marshall, *Best Practices in Social Media Crisis Communications*.

¹² Biglow and Marshall, *Best Practices in Social Media Crisis Communications*.



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