DIRECT FROM CDC ENVIRONMENTAL HEALTH SERVICES

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Communicating Effectively to Overcome Misinformation

Editor's Note: The National Environmental Health Association (NEHA) strives to provide up-to-date and relevant information on environmental health and to build partnerships in the profession. In pursuit of these goals, NEHA features this column on environmental health services from the Centers for Disease Control and Prevention (CDC) in every issue of the *Journal*.

In these columns, authors from CDC's Water, Food, and Environmental Health Services Branch, as well as guest authors, will share insights and information about environmental health programs, trends, issues, and resources. The conclusions in these columns are those of the author(s) and do not necessarily represent the official position of CDC.

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Introduction

In April 2020, the Centers for Disease Control and Prevention (CDC) and the American Association of Poison Control Centers published a *Morbidity and Mortality Weekly Report* article describing an increase in calls to U.S. poison centers related to exposures to cleaners and disinfectants (Chang et al., 2020). Using data from the National Poison Data System, a near real-time database of calls to poison centers across the country, researchers found that poison centers nationwide received 45,550 calls regarding exposures to cleaners and disinfectants from January–March 2020 (Figure 1). This finding was an increase of approximately 20% from the same time frame in 2019. This increase in exposures coincided with increased media coverage of the COVID-19 pandemic, consumer shortages of cleaning and disinfectant products, and the beginning of local and state stay-at-home orders.

Communicating Safe and Appropriate Use of Cleaners and Disinfectants

The need to post messages about the safe use of cleaning and disinfecting products occurred in March 2020 as part of National Poison Prevention Week. This issue continued to be a concern and the results of the Chang and coauthors (2020) study highlighted the need to continue to communicate safe and appropriate use of cleaners and disinfectants to the general public to prevent potential poisonings and injuries. During this time, we also received inquiries from the general public asking about the use of cleaners and disinfectants, particularly on food and food contact surfaces. We knew it was critical to get information out to the public quickly to address this misinformation and communicate about how to use cleaners and disinfectants safely.

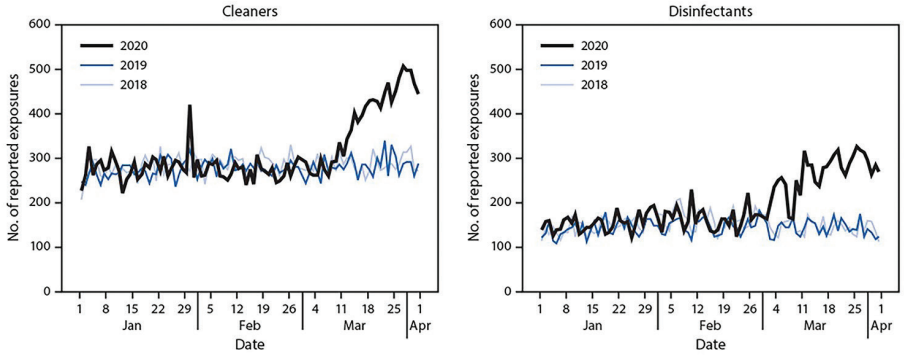
To address this need, we developed several social media messages and posted them to CDC social media accounts in both English and Spanish. The messages focused on various topics, including using cleaning and disinfectant chemicals correctly, taking steps to poison proof one's home, and using alcohol-based hand sanitizers safely.

To help amplify our messages, we coordinated with the U.S. Environmental Protection Agency. We discussed how we could align our messages, amplify each other's outreach, and ensure our communication reached the public. We also worked together to ensure that our guidance materials were easy to find on each other's websites. This collaboration allowed our messages to be in sync, increase public awareness, and reach a wider audience.

Social media metrics demonstrated that people were interested in information regarding safe use of cleaners and disinfectants. Messages related to safe cleaning and disinfecting performed well on the CDC Environmental Health Twitter account and the main CDC Twitter and Facebook handles. These metrics included both high impressions (i.e., how many users saw the message) and engagements (i.e., how many times users interacted with the message by doing retweets, likes, comments, clicks, or shares). These metrics that measure social media impact demonstrate that the public was interested in this topic and wanted to learn more about the dangers of clean-

FIGURE **1**

Daily Exposures to Cleaners and Disinfectants, National Poison Data System, January–March 2020



Source: Chang et al, 2020.

FIGURE **2**

Example of a Food Disinfectant Tweet From the Centers for Disease Control and Prevention

ers and disinfectants, as well as how they could keep themselves and their loved ones safe. In March 2020, messages shared on the CDC Environmental Health Twitter account related to safe cleaning and disinfecting averaged nearly 142,000 impressions and 3,100 engagements. By comparison, March social media messages shared on the CDC Environmental Health Twitter account not related to safe cleaning and disinfecting averaged 21,000 impressions and 387 engagements overall. The message about keeping cleaning and disinfecting chemicals away from kids was the top performing tweet on the CDC Environmental Health Twitter account by impressions (199,000) in April.

Following the sharp increase in calls to poison centers, CDC researched knowledge and practices regarding the use of household cleaners and disinfectants. Researchers conducted a nationally representative survey to identify gaps in knowledge related to cleaning and disinfection (Gharpure et al., 2020). Some of the high-risk behaviors included the use of bleach on food products.

Throughout summer 2020, CDC's Division of Environmental Health Science and Practice continued to share pertinent social media messages to correct misinformation regarding how to properly clean food and food packaging during the COVID-19 pandemic. Figure 2 shows one of our top performing messages in July: "DO NOT use bleach solutions or other disinfecting products on food. Currently, no cases of #COVID19 have been identified where infection was thought to have occurred by touching food, food packaging, or shopping bags. Learn more about food safety: https://bit.ly/2VzvMHW." This message reached more than 260,278 Twitter users (impressions) and received nearly 8,120 engagements (interactions), including 557 likes and 456 retweets. In comparison, social media messages shared on the CDC Environmental Health Twitter account during July averaged 34,317 impressions and 620 engagements overall.

Communicating Effectively in an Information Rich Environment

As a public health agency, one of the main levers of change we have is effective communication. Data and scientific evidence are only as good as how effectively you can communicate them. Public health guidance can help our target audiences only if they are able to understand and implement the recommendations we provide.

We live in an information rich environment and social media has become an engaging source for information, especially if the event is a crisis, is unique, and has its followers' interest. Social media allows people to express their thoughts, opinions, and share information with their friends, family, and others. These social media messages come with content and guidance from different sources. Because misinformation can spread quickly via social media, it is especially important to speak first, communicate first, and engage first with your audience. This process helps prevent rumors and misinformation from being the first items that reach your audience and fill the information gap that they might be experiencing in the absence of messaging from you. Additionally, it is best to stay on message and avoid repeating the misinformation or rumors. When you repeat misinformation or a rumor when addressing it, you end up giving it a second life, confusing your audience and perpetuating the incorrect information.

Social media can be powerful. For some people it is a main source for information. Social media can also be an effective way to get health information out to various audiences quickly.

We are always engaging more than one audience group, which needs to be considered every time we message. We need to consider the people we are trying to reach, the different platforms that are available, and how we can communicate effectively to protect public health as a whole.

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Did You Know?

The NEHA Board of Directors recently approved several updated policy statements that replace previous ones that had reached their sunset dates. The updated statements focus on the following topics: the Food and Drug Administration Voluntary National Retail Food Regulatory Program Standards, climate change, onsite wastewater systems, raw milk, the Model Aquatic Health Code, and cannabis-infused food products. You can access NEHA's policy statements at www.neha.org/publications/position-papers.

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