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Best Practices and Resources for Environmental Health Departments During a Public Health Emergency

The COVID-19 pandemic was an extremely challenging period for public health agencies throughout the world and it highlighted serious flaws in our ability to respond to community needs and promote public health in the U.S. All local health departments were significantly impacted by the COVID-19 pandemic. According to a recent NACCHO survey, 80% of LHDs reassigned staff from regular programmatic duties to support the agency's pandemic response activities, with the most commonly affected program being environmental health, with two in three LHDs reassigning staff from this area.[16] While some agencies managed to maintain a portion of their normal regulatory duties, many experienced a disruption of these activities because of reduced staffing, shifting focus towards COVID-19 response and complaint investigations, and changing priorities to provide support for relief efforts like vaccination clinics.[1] Some changes in jurisdictional policy and public behavior specifically impacted retail food regulatory efforts at the local level. For example, institutional settings closing doors due to increased risk of infection and mortality[2,3], restaurants shutting down operations due to local ordinances and staff shortage[4], and mixed acceptance of virtual inspections made it extremely difficult for LHDs to conduct routine food inspections. In the face of these external factors, environmental health managers had to balance the risk of exposing sanitarians to COVID-19 during in-person inspections with the reward of protecting the public from foodborne pathogens.

Issues within LHDs During the COVID-19 Pandemic

1. Distrust of public health practitioners

The COVID-19 pandemic has eroded confidence in federal, state, and local public health agencies. While most of the U.S. population believes that public health agencies are doing important work, approval of the public health system has declined from 43% to 34% between 2009 and 2021.[7] A national survey conducted in 2021 found that 44% of the U.S. population trusts the recommendations of LHDs a great deal, while 18% do not trust information from LHDs.[7] Additionally, more than one in five adults feel that the information provided by LHDs is unreliable, creating even more stress for public-facing public health practitioners.[7] Systemic racism has also had a detrimental effect on trust in the public health infrastructure and has exacerbated health disparities.[11] Distrust in LHDs creates a hostile environment for sanitarians who are in the field every day working with individuals from the community and has the potential to significantly reduce the impact of retail food regulatory programs in preventing foodborne illness outbreaks. Furthermore, accumulating distrust of public health practitioners will likely have the greatest detrimental effect on the U.S. public health infrastructure as LHDs attempt to resume routine public health activities.

2. Inspectors facing threats and harassment

A national survey conducted by NACCHO and a team of public health policy researchers and practitioners found that there was a high level of harassment directed at public health officials from March 2020 to January 2021. Among 583 LHD survey respondents, 335 departments reported a total of 1499 incidents of harassment.[14] Additionally, 222 public health officials reported leaving their positions and 36% of these departures occurred alongside reports of harassment.[14] Public health officials described experiencing threats, intimidation, and resulting stress intolerance and mental health conditions. However, a substantial portion of public health officials who experienced personal threats

or harassment did not resign. Despite staying in their jobs, public health officials described the feeling that their work was underrecognized and underappreciated and how they experienced a loss of meaningfulness in their work.[14]

Within retail food regulatory agencies, NACCHO members have described stories of inspectors being threatened and harassed when attempting to perform routine retail food inspections, as food service operators blamed them for restaurant closures and COVID-19 mandates in the community. Though they were not the individuals who created COVID-19 mandates, there were several instances of sanitarians being blamed and confronted by members of the public because the onus of enforcement fell on their shoulders. Issues with being the face of public health in the community becomes significantly more difficult when a majority of those community members are confused about vital public health recommendations.[8]

3. Challenges with contact tracing and tracing foodborne illness outbreaks

Like the struggles experienced while trying to gather accurate information during COVID-19 contact tracing efforts[5], LHDs struggled to trace foodborne illness outbreaks during the pandemic. Crucial food safety practices like contact tracing during foodborne illness outbreaks were significantly more challenging. Contact tracing was a key part in mitigating the spread of COVID-19, yet, amid the height of the pandemic, 41% of individuals surveyed responded that they would not participate, or would not be likely to participate in, contact tracing activities if called by a LHD representative.[5]

4. Difficulty prioritizing routine food safety activities

With staff being pulled for pandemic response activities and COVID-related absences in LHDs, NACCHO members found it very difficult to prioritize needs that were not directly related to emergency response. Even when staff were available, some retail food regulatory programs still found it difficult to prioritize which establishments should be inspected first to maximize the impact on public health.

5. Challenges with conducting virtual inspections

Some jurisdictions adopted virtual inspections to limit staff exposure to the coronavirus[6] but, in some instances, legislatures refused to accept virtual inspections for regulatory purposes. While technology allows for LHDs to connect with food service operators without the risk of disease transmission, concerns about losing signal during an inspection, seeing all activities in the establishment, and increasing risk by taking time away from an operator who is likely short-staffed, led many NACCHO members to shy away from using virtual methods in lieu of on-site inspections. Some hesitancy in adoption of virtual inspections stems from the lack of proof-of-concepts for evaluating the feasibility of using remote inspections.[12] These challenges made completing routine food safety activities extremely difficult during the COVID-19 pandemic, and some of these challenges have created tensions in the public health infrastructure that may limit the success of LHDs long after the COVID-19 pandemic has been contained.

Recommendations: How Can Retail Food Regulatory Programs Be Better Prepared for the Next Public Health Emergency?

- **Foster communication and positive relationships between LHDs and food service establishments.** Clear messaging, collaborative relationships, and the inclusion of stakeholders in decision-making are key steps necessary to rebuild trust between public health professionals and the communities they serve. This messaging needs to acknowledge and explain the information being used to make decisions as well as share the work that is being done to fill existing knowledge gaps.[10] Retail food regulatory programs need to have positive relationships with food service operators to ensure that the LHD and the establishments it regulates can work collaboratively to protect public health. An acute focus on rebuilding public understanding and trust will be necessary if we hope to strengthen the public health infrastructure in the U.S. after the COVID-19 pandemic.

- **Consider racial and other social factors in decision-making.** Public health practitioners must make a concerted effort to improve relationships with underserved communities. Establishing an open dialogue between public health practitioners and communities during non-emergency times can help build rapport with vulnerable populations and establish trust prior to a public health emergency. For example, a food regulator can build trust among its operators when instructing food safety practices. Public health practitioners can also build trust with consumers through messaging that targets safe food handling practices and behaviors among low-income and minority populations. This may help contribute to better food safety practices among these vulnerable populations.[15]

This form of relationship building during non-emergency times can help re-establish trust so that these vulnerable populations are receptive to messaging when faced with a public health emergency.

- **Improve methods to conduct effective virtual inspections during public health emergencies.** COVID-19 will likely not be the last public health emergency that prevents regulators from conducting routine inspections in the field. Therefore, improvements in technology that allow for kitchen operations to be observed without the risk of disease transmission would be a critical step towards providing a way for regulators to interact with food service operators safely during an emergency. In preparation for the next emergency, it is important to put a plan of action in place that allows for virtual technology to be used to prevent the spread of foodborne illness. This may include a new form for virtual inspections, updated points of focus during routine inspections, or a complete reframing of the interactions between regulators and food service operators. While it is significantly more difficult to conduct a thorough inspection in a virtual format, wider adoption of risk-based inspections or a shift from regulation to education could help to protect consumers from foodborne illness during an emergency.

- **Use food safety culture to characterize retail food establishments by public health risk.** By identifying "high-risk" establishments, public health agencies will be capable of prioritizing regulatory and education efforts that will have the greatest impact on reducing foodborne illness. The U.S. Food and Drug Administration (FDA) notes the importance of food safety culture in retail food establishments as a core tenant of reducing foodborne illness.[12] In the *New Era for Smarter Food Safety* Blueprint, the FDA suggests that public health practitioners consider how positive food safety culture can be used as a rationale for reduced inspection frequency. The same method could be used to characterize food service operations by their foodborne illness risk and identify those that need to be prioritized during a public health emergency. To do so, characteristics that indicate an establishment's food safety culture need to be standardized and inspectors need to be educated on how to evaluate those characteristics during routine inspections.

- **Create a "hotwash" template for LHDs to evaluate food safety performance following a major event.** It is important for LHDs to conduct a "hotwash," or an immediate evaluation of performance following a major event. A template for LHDs and, more specifically, retail food regulatory programs to conduct a hotwash following the COVID-19 response, should be developed and disseminated to help these agencies identify successes and failures regarding their operations during the pandemic.

- **Develop emergency support structures and funding for public health agencies.** While the Biden administration's $7 billion investment for workforce development and expansion of the local public health infrastructure is certainly welcome, it did not help the public health workforce respond to COVID-19 or maintain routine public health activities during the pandemic.[13] An emergency funding stream that can be accessed to hire additional staff and reduce burnout in the public health workforce could significantly increase our ability to both protect public health from everyday risks as well as respond to a public health emergency.

- **Provide support and resources to address workplace harassment among food safety professionals.** LHDs should develop and implement support structures within the workplace to ensure the personal and professional safety of public health practitioners, especially regulators in the field performing food safety inspections. It is also important to develop more formalized reporting systems to detect, monitor, and report harassment.

When conducting inspections of food service establishments, it is important that LHDs utilize risk-based inspection methods (RBIs) to focus on factors that are directly related to public health. The basis of RBIs is to observe behaviors, practices, and procedures that could lead to poorly managed risk factors and to look at the whole food establishment as a system rather than individual components. However, it may not be possible for these specific tasks of RBI methods to be reasonably conducted within a virtual setting, a challenge that many LHDs experienced during the COVID-19 pandemic. Find out how virtual inspections can provide an opportunity for regulatory activity to continue during a public health emergency at bit.ly/virtualfood-safetyinspections.

As a recent survey by the Centers for Disease Control and Prevention (CDC) illustrates,[17] the pandemic has had an impact on the mental wellbeing of public health workers. That survey found that 52.8% of respondents reported symptoms of at least one mental health condition in the past two weeks. NACCHO appreciates the efforts of the public health workforce and is here to support your health and wellbeing. As such, NACCHO has developed a resource library with tools and trainings to help public health workers build resilience.

Visit naccho.org/programs/our-covid-19-response/public-health-resilience for more information.

Resources

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The mission of the National Association of County and City Health Officials (NACCHO) is to improve the health of communities by strengthening and advocating for local health departments.

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