



CISA INSIGHTS



Strategies to Protect Our Critical Infrastructure Workforce

November 2021

The Risk to the Essential Critical Infrastructure Workforce

COVID-19 continues to pose a risk to the critical infrastructure workforce, to our [National Critical Functions](#) and to critical infrastructure companies and operations. Exposure of many frontline essential critical infrastructure workers to the SARS-CoV-2 virus has led to [disproportionate illness and death](#) in multiple sectors of critical infrastructure. Healthcare workers, law enforcement officers, firefighters, and workers in the transportation food and agriculture sectors are some of the workers that continue to risk exposure based on the nature of their job. Protecting the health and safety of the critical infrastructure workforce is necessary for the continued operation of our National Critical Functions and critical infrastructure companies and operators. This CISA Insight provides an overview of the risk involved and some strategies that critical infrastructure owners and operators can adopt to protect our frontline workers who are essential to continued critical infrastructure resilience.

Background

As the United States continues to grapple with COVID-19, it remains crucial that the essential critical infrastructure workforce remain healthy to perform jobs safely and with minimal disruption for continued operations and risk mitigation to our National Critical Functions. Data from the *Journal of the American Medical Association (JAMA) Network* show that essential workers are at a higher risk of exposure to COVID-19 than the general population, which may be attributed to increased interactions with the public, close contact with COVID-19-positive patients, and crowded work or living conditions. In addition, JAMA found that as many as 61 percent of essential workers maintain underlying health issues which put them at a greater risk of severe COVID-19. Essential workers have experienced financial strain, mental and physical health consequences, job disruptions, and other occupational risks. It is important to remember that even those who recover from COVID-19 may have long-term health effects, which could lead to functional impacts even post pandemic. Ensuring the safety and well-being of the essential workforce is critical to maintaining the resilience of the nation's critical infrastructure. Although over half of the U.S. population is fully vaccinated, the risk to the essential critical workforce remains until the country achieves a much higher level of immunization. There are, however, tools that government and industry can use to protect the essential critical workforce and the National Critical Functions they support.

Risk Mitigation Strategies

To reduce the negative impact of COVID-19 on the essential critical infrastructure workforce, it is important that employers and industry leaders implement policies to protect the health and well-being of their employees. The following are lessons learned and policies that have been successful in the United States that critical infrastructure owners and operators can implement:

- Institute policies and processes that mandate vaccines in the workplace. According to the [Centers for Disease Control and Prevention](#), vaccines are an effective way to protect workers from illness and long-term complications. The U.S. federal government is requiring that its workforce receive vaccinations, as are many businesses across the country. For more information about how to overcome vaccine hesitancy among frontline workers, see [this CISA Insight](#).
- Encourage vaccine booster shots for those eligible. On September 17th, advisers to the U.S. Food and Drug Administration recommended COVID-19 vaccine booster shots for Americans 65 and older and those at high risk of severe illness. This recommendation also includes healthcare workers and others at high risk of occupational exposure to the virus that causes COVID-19, such as teachers.

- Require unvaccinated individuals to be tested regularly in order to access workplaces or other venues to reduce the chances of infected individuals spreading COVID-19 to their coworkers. The Department of Labor will soon require this for all employers with 100 or more employees. Some U.S. states, businesses, and universities have already adopted this strategy.
- The [Occupational Health and Safety Administration](#) recommends maintaining multiple levels of non-medical interventions, including mask wearing, frequent and thorough handwashing, occupancy limits, social distancing, and proper ventilation, within workplaces for all employees. These interventions are complementary to vaccines, and the best protection for frontline workers can be achieved by combining the two vaccines with these additional protective measures.

Conclusion

The impacts of COVID-19 on the essential infrastructure workforce has been seen on both individual and community levels across the United States. COVID-19 exposure among the essential critical infrastructure workforce can result in staffing shortages, public safety concerns, challenges in delivering medical care, and disruptions to public services across many critical sectors. Implementing risk mitigation strategies that protect the health and well-being of workers will help reduce the strain on our critical infrastructure and therefore promote continuity and efficacy of our National Critical Functions.

CISA'S ROLE TO STRENGTHEN NATIONAL RESILIENCE

Through CISA's efforts to understand and advise on cyber and physical risks to the nation's critical infrastructure, we help partners strengthen their own capabilities. We connect our stakeholders in industry and government to each other and to resources, analyses, and tools to help them build their own cyber, communications, and physical security and resilience, in turn strengthening national resilience.

For more information or to seek additional help, please visit the [CISA COVID-19 Resource Page](#) or contact us at Central@CISA.DHS.GOV.