Safety and Health in the Construction Industry Post-COVID-19: Challenges and Innovations

Key Takeaways

Tepa Companies had major successes during the pandemic, including no shutdowns on ongoing projects and no cases of workplace COVID-19 transmission confirmed through their detailed infection tracking protocols. They implemented an Infectious Disease Outbreak Control Program, which remains in place to help them stay ahead of emerging threats. They also implemented a program to enhance communication and supervisor engagement with direct reports, which has contributed to a culture of transparent communication and decreased turnover.

Background

The COVID-19 pandemic brought unprecedented challenges to industries worldwide, and the construction sector is no exception. The sudden onset of the virus necessitated immediate and significant changes to safety protocols, health measures and operational procedures to protect workers and ensure business continuity. As a critical industry that cannot operate remotely, construction faced unique difficulties in adapting to the new normal while maintaining productivity and safeguarding the wellbeing of its workforce.

This case study aims to explore the multifaceted impact of the COVID-19 pandemic on the construction industry, with a particular focus on worker mental health and wellbeing and the evolution of safety policies. The findings presented are based on the experiences and insights of a senior safety and health leader at a large construction company, providing a detailed perspective on how this company navigated the crisis and what lasting changes have emerged.

Understanding the impact of the COVID-19 pandemic on the construction industry is crucial for several reasons:

- **Worker Safety and Health:** Ensuring the safety and health of workers is a fundamental priority. Lessons learned from the pandemic can help improve existing practices and better prepare organizations for future health crises.

- **Operational Continuity:** Identifying effective strategies and policies that allowed for continued operations during the pandemic can inform best practices for handling similar disruptions in the future.

- **Mental Health Awareness:** The pandemic has highlighted the importance of mental health in the workplace. Understanding how the pandemic has affected worker wellbeing can lead to better support systems and a healthier workforce.

- **Policy and Protocol Development:** Insights gained from this study can guide the development of robust safety and health policies that are resilient to future challenges.

This report presents the findings of the case study, offering analysis of the immediate and long-term impacts of COVID-19 on safety and health practices in the construction industry. Through this study, we aim to contribute knowledge that can help the industry better navigate future crises and enhance the overall safety and wellbeing of its workforce.

Company Profile

Tepa Companies is an American Indian-owned company that operates in over 30 U.S. states, as well as some international locations. They employ over 500 full-time employees. On some projects, they staff the entire project with employees, while on others, they operate as the prime contractor.

Impact of COVID-19 on Safety Policies

Initial Response

Tepa developed and deployed an Infectious Disease Outbreak Control Program to coordinate their pandemic response. Their rapid response allowed the program to be implemented within one week of beginning the initial planning. The senior leader met weekly with a representative from each site, and updated protocols based on information from reliable sources such as research hospitals. The program was a hub for contact tracing and ensuring all employees and contractors were trained on hygiene protocols.

Enhanced hygiene protocols such as wash stations for handwashing allowed field workers to continue working on projects throughout the pandemic, while remote work arrangements kept office operations running smoothly. Hybrid and remote work protocols required an investment in virtual meeting equipment and software to allow greater bandwidth for virtual collaboration.

Once COVID-19 vaccines became widely available, management required employees to be vaccinated, which was unusual in construction compared to other industries.[1] The requirement was well received by employees, with fewer than 1% requesting an exemption.

Long-Term Changes to Safety Policies

While many emergency measures implemented during the early stages of the pandemic were temporary, some have become permanent fixtures in workplace safety culture. Based on the insights provided by our participant for this case study, several key long-term changes have been identified in both safety policies and workforce training.

Permanent Changes in Safety Policies

One of the most significant long-term safety initiatives adopted by the company is the establishment of an Infectious Disease Outbreak Control Program. Initially implemented as an emergency response measure, this program has now been formalized as a permanent component of the company's safety framework. It is updated at least annually, ensuring that policies remain aligned with the most current health recommendations.

Additionally, the company has expanded its workplace health policies beyond COVID-19 to include guidelines for all infectious illnesses. Employees are now required to remain home until they are

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[1] A 2022 *SAFER* survey of full-time workers found that only 8% of those working in construction had been required to be vaccinated compared to 30% of those working in all other industries. For more information, see the *SAFER* annual report, COVID-19 Lessons Learned and Future Actions.

symptom-free without medication, reinforcing a culture that prioritizes health and prevents the spread of illness in the workplace. To support this initiative, the company has:

- Expanded sick leave policies to ensure employees can take the necessary time off without financial hardship
- Maintained remote work options for roles that can be performed remotely, allowing employees to work from home when experiencing mild symptoms instead of coming to a job site

These changes reflect a shift toward proactive health management, emphasizing not only job site safety but also overall worker wellbeing.

Ongoing Monitoring and Adaptation

Leadership within the company continues to monitor health and safety developments through reliable sources such as the Centers for Disease Control and Prevention, Johns Hopkins University and other hospital-based research institutions. The Infectious Disease Outbreak Control Program is updated as necessary based on evolving best practices and emerging health threats.

This commitment to staying informed and adapting policies accordingly highlights a shift in how construction companies approach safety, moving beyond traditional occupational hazards to incorporate broader public health considerations into workplace policies.

Psychological Safety Initiative

The safety and health executive we interviewed for this case study developed a program to improve communication and connection between supervisors and direct reports called CARE, which stands for Connect, Achieve, Recognize, Engage.

The CARE program fosters an environment of psychological safety and encourages employees to feel comfortable opening up about personal challenges. Since its implementation, turnover has decreased, and instances of near-miss and hazard reporting have increased by approximately 15%.

The program involves training supervisors to use the following principles to foster communication and connection with their direct reports:

- **Connect:** Learn about direct reports' families, interests and hobbies, creating an environment where employees can be comfortable sharing personal information
- **Achieve:** Empower employees to set and meet professional goals. Engage them in one-on-one quarterly meetings to discuss progress and lend them support and advice. Make sure every employee knows they won't be stuck in a lower position at the company if they want to earn certifications or promotions.

- **Recognize:** Publicly praise employees' achievements, including career advancements and engagement in safety practices such as hazard identification.
- **Engage:** Include employees in supervisory work processes, such as safety walk-throughs, so they have a higher-level understanding of the overall processes and big-picture safety issues.

While the program doesn't directly focus on mental health or psychological safety, he noted that employees felt more comfortable bringing up personal issues affecting their work, and they were more likely to ask their supervisors about company resources like the employee assistance program to help them navigate personal challenges.

By not directly bringing up topics such as mental health or psychological safety, topics he said construction workers tend to avoid, the CARE framework fostered connection and a sense of belonging. It empowers them to point out safety issues, lets them know they will be listened to and at the same time creates a personal connection with supervisors.

Supervisor Training Boosted Safety Culture and Retention

Tepa developed in-house a program of supervisor training uniquely tailored to their employees, which fostered communication and connection, empowered employees to bring up safety issues or personal challenges affecting their work, encouraged career growth and fostered an environment of psychological safety. Following implementation of the program, the company saw a decrease in turnover as well as an increase in near-miss reporting of approximately 15%.

Assessment of Company Response

Tepa views its response to the COVID-19 pandemic as highly effective, citing its ability to maintain operations without any shutdowns and no confirmed cases of workplace transmission. These outcomes were achieved through proactive planning, stringent health and safety measures, and continuous monitoring of infection risks. The company's structured approach not only safeguarded workers but also ensured business continuity, setting a strong precedent for future crisis management.

Strengths and Successes
Several key strategies contributed to the company's success in mitigating the impact of the pandemic while maintaining operational efficiency:

- **Enhanced Hygiene Protocols:** Strengthened sanitation and hygiene measures enabled field workers to continue staffing and completing construction projects safely.

- **Hybrid and Remote Work Adaptations:** The company established hybrid and remote work protocols for office-based employees, reducing on-site workforce density while maintaining productivity.

- **Technological Enhancements:** Investments in enhanced virtual meeting equipment and increased bandwidth capacity facilitated seamless remote collaboration and improved communication between teams.

- **Development and Deployment of the Infectious Disease Outbreak Control Program:** This comprehensive program included continuous infection tracking and monitoring protocols, allowing leadership to rapidly respond to potential risks and implement necessary interventions.

Among these strategies, the Infectious Disease Outbreak Control Program was regarded as the company's most effective tool in protecting workers and maintaining smooth operations. By continuously monitoring for potential infections and ensuring strict adherence to safety protocols, the company minimized the risk of workplace transmission while keeping essential construction activities on schedule.

Challenges and Areas for Improvement

While the company's overall response was highly successful, some job functions presented greater challenges due to frequent public interactions. Employees in public-facing roles had the most difficulty navigating pandemic-related safety protocols, as they were at higher risk of exposure compared to those working in controlled environments. These challenges emphasized the need for adaptive health and safety measures tailored to roles with varying levels of public interaction.

Long-Term Lessons Learned

One of the most significant takeaways from the company's pandemic response was the importance of having a well-structured and regularly updated Infectious Disease Outbreak Control Program. Key components of this program include:

- Comprehensive outbreak control measures to swiftly mitigate infection risks.

- Business contingency planning to prepare for disruptions while ensuring continuity.

- Defined protocols for business operations to maintain efficiency under crisis conditions.

- Leadership commitment to keeping the Infectious Disease Outbreak Control Program active and ensuring it is updated at least annually based on the latest public health guidance. This proactive stance reflects the company's enhanced approach to crisis management, demonstrating a greater level of preparedness for potential future public health emergencies.

Conclusions

The COVID-19 pandemic presented unprecedented challenges for the construction industry, requiring rapid adaptation to ensure worker safety, maintain operations and uphold business continuity. The participating company's response was highly effective, with no confirmed workplace transmission cases and no operational shutdowns throughout the pandemic. These outcomes were made possible by proactive safety measures, enhanced hygiene protocols, remote work adaptations and the implementation of an Infectious Disease Outbreak Control Program.

One of the most significant takeaways from this case study is the long-term shift in workplace health policies beyond COVID-19. The company institutionalized its Infectious Disease Outbreak Control Program, ensuring that health and safety policies remain dynamic and responsive to emerging threats. Other lasting changes include expanded sick leave policies, remote work flexibility and enhanced supervisor training to improve communication and workforce engagement. These efforts have not only mitigated pandemic-related risks but also contributed to lower turnover rates and a stronger safety culture within the organization.

The company's structured and proactive approach to crisis management has positioned it to respond effectively to future public health emergencies. By leveraging real-time data from trusted sources like the CDC, Johns Hopkins University, and other research hospitals and institutes, leadership remains committed to regularly updating safety protocols in response to evolving best practices.

Recommendations

Based on the findings from this case study, several key recommendations can be drawn for other organizations in the construction industry seeking to enhance their crisis preparedness and worker safety initiatives:

1) Maintain and Regularly Update an Infectious Disease Outbreak Control Program
   - Develop a comprehensive outbreak response plan that includes early detection, contact tracing and rapid containment measures.
   - Update protocols at least annually based on guidance from public health agencies and medical institutions.
   - Establish clear communication channels for workers to report symptoms and receive guidance on workplace health policies.
2) Expand Workforce Health and Safety Policies
   - Implement stay-at-home policies for all infectious illnesses, ensuring that workers remain off-site until symptom-free without medication.
   - Provide expanded sick leave benefits to reduce the pressure on employees to return to work prematurely.
   - Maintain remote work flexibility where feasible to prevent unnecessary exposure risks.

3) Strengthen Supervisor Training and Employee Engagement
   - Continue investing in supervisor training programs focused on communication and workforce engagement.
   - Foster a culture in which supervisors are actively involved in addressing employee concerns and promoting safety compliance.
   - Regularly assess the effectiveness of engagement strategies to maintain a positive workplace environment and retain skilled workers.
4) Leverage Real-Time Data for Continuous Improvement
   - Monitor guidance from reputable public health organizations to ensure safety policies remain aligned with the latest scientific insights.
   - Use data-driven decision-making to evaluate the effectiveness of health and safety measures.
   - Establish partnerships with medical and occupational health experts to strengthen workplace safety strategies.
5) Prepare for Future Public Health Emergencies
   - Develop a business contingency plan that accounts for potential disruptions due to health crises.
   - Invest in virtual communication and collaboration tools to facilitate remote work and minimize operational disruptions.
   - Conduct regular crisis management drills to ensure all employees understand response protocols.

Acknowledgements

We would like to thank Tepa Companies for their expertise and contributions to this case study.

Content

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