

Guarding Against the Next National Supply Chain Crisis:

Lessons Learned from COVID-19 for America's
Critical Infrastructure and Essential Workforce



APRIL 2021

Background

The ongoing global pandemic has highlighted the essential role the nation's critical infrastructure supply chain plays in national security. The just-in-time supply chain depends upon precisely coordinated logistics across multiple industries. Thousands of public and private stakeholders form a web of vendors and government agencies that must work closely to ensure that food and products reach consumers every day. The interruption of any one of those components can result in huge ripples across the supply chain and could quickly impact consumers. During times of national emergency these interruptions can have dramatic and life-threatening consequences. While the current crisis will subside, continued coordination and information sharing is vital to the ability to respond to future crises.

CISCC Executive Committee



Executive Summary

The COVID-19 pandemic has disrupted life and commerce across the United States and around the world. It has also shone a spotlight on the critical nature of the supply chain, elevating it from an unseen business function to kitchen table conversation. Its new visibility creates the opportunity and impetus to strengthen America's supply chain foundation, linking the shippers, manufacturers, retailers and transportation providers that move the U.S. economy forward. It also shows the consequences of inaction should the country face another national supply chain crisis, whether one on the national scale of a pandemic or the regional impact of a hurricane.

The pandemic's lessons must inform how policymakers maintain America's critical infrastructure and protect its essential workers in times of crisis.

Industries across the supply chain mobilized last year to form CISCC, a coalition of organizations seeking clear and uniform guidance from the government to ensure an uninterrupted supply chain. Building on the approach set forth in the initial critical infrastructure guidance from the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency, CISCC encouraged state level adoption of CISA's definitions and guidelines and sought to be a bridge between governors and federal leaders to help protect Americans' access to critical products and services.

The recommendations in this report are based on CISCC meetings with dozens of stakeholders in key industry sectors, state and local officials and senior representatives from DHS and CISA.

Conduct Review of CISA Guidelines and Implementation

CISA's guidelines have established a roadmap for state, local and private sector supply chain stakeholders. In addition to encouraging broad adoption of these guidelines, recommendations include reviewing the roles of critical infrastructure workers and assessing the safety and availability of resources for that workforce. As the pandemic has made clear, in a crisis situation, triaging the most critical workers and having the appropriate equipment and safety protocols keep the supply chain running and the workforce protected.

Harmonize Interstate Supply Chain Guidelines and Policies at the National Level

Inconsistent guidelines, protocols and policies across state jurisdictions create confusion and hamper the ability to distribute goods and services in a time of crisis. CISCC endorses an approach based on national frameworks and guidelines that would provide government leaders across federal, state and local agencies an effective playbook in future crises.

Ensure Access to Critical Materials from the International Supply Chain


Global restrictions on operations and essential personnel reduce access to critical materials from international trading partners. CISCC recommends that the U.S. government work with its international counterparts to achieve alignment and, specifically, the proactive development of best practices for the movement of goods across borders. Further, ensuring that individual country restrictions do not hamper critical imports and exports is necessary in a global crisis.

Develop Credentialing for Essential Workers

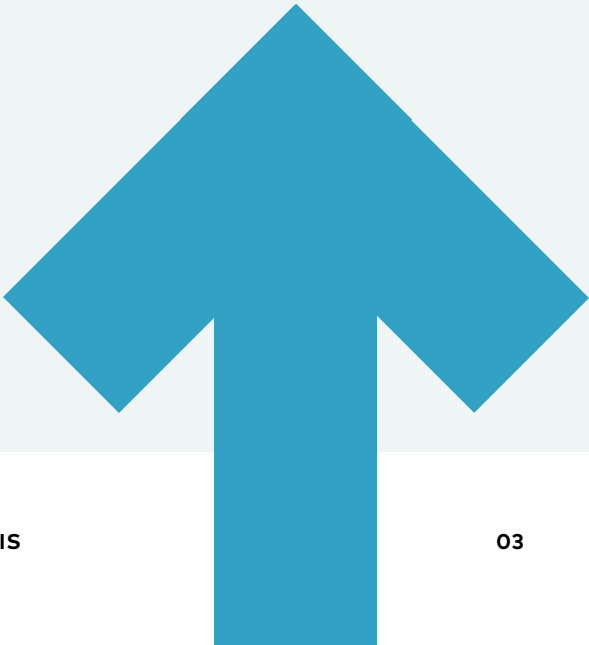
While the CISA definition of essential critical workers has served as a baseline, the disparity of state credentialing guidance has left the private sector confused or reliant on do-it-yourself solutions, hampering production and delivery of needed products and services. CISCC proposes creating a working group of federal, state and private sector stakeholders to assess credentialing options and guard against inhibiting the movement of critical workers in future crises.

Improve Communications Between Government and Private Sectors

The communication loops that have developed organically throughout the pandemic response have been necessary to reduce potentially dangerous points of confusion and friction. Designated supply chain leadership via a White House position and a working group that can review and promote best practices and establish protocols would help create a foundation of strong communication at the outset of a crisis, not in response to one.



Taken together, these recommendations would build supply chain resiliency for future crisis response. CISCC stands ready to support federal and state decision-makers in their efforts to minimize supply chain disruptions and protect Americans' access to critical products and services. CISCC intends for this report to be a living document for government and private sector supply chain stakeholders so that they can begin laying a foundation for critical infrastructure together.



THE COVID-19 CRISIS

Formed in March 2020, CISCC was made necessary by the clear threat the COVID-19 pandemic posed to the global supply chain of essential goods and services at home and abroad.

The experience during the pandemic has taught us that the difference between a disaster and a catastrophe is the ability to deliver critical supplies and services to the affected population. Without those supplies, the effects of a disaster are significantly compounded.

The pandemic has presented the first truly global disaster to hit the modern world and has served as a critical trial for the resiliency and efficacy of the national and global supply chains.

Prior to COVID-19, supply chains were invisible to consumers. The vast majority of the time, they operate smoothly, integrating thousands of public and private entities to ensure that Americans have core utilities and services and access to food, water and other critical supplies. The system is the very embodiment of a public-private partnership, driven by technologies that enable delivery of essential items to every American in every community every day.

It has taken a global pandemic to truly test this system, but the supply chain has predominantly passed the test.

Considering the scope of the pandemic — effectively shutting down much of the world's economy overnight — it is notable that consumer goods and essential services have continued to be delivered across the country and around the world, guarding against the civil unrest that would doubtlessly follow real shortages. CISCC contends that the success of supply chains can be best measured by what hasn't happened.

The reason that this has worked is a tribute in part to industry's partners in government, but more so to the women and men who appreciate the importance of their roles and have shown up every day despite the unknowns about the pandemic. Those critical workers have kept families fed, essential services provided, lights on, water flowing and people's health cared for. There have been challenges, risks, failures and mistakes and there is still much to learn. Regardless, we owe gratitude to the people who have worked tirelessly to keep the supply chain running.

The staff at the Department of Homeland Security and, specifically, DHS' Cybersecurity and Infrastructure Security Agency, deserve special thanks and recognition for their leadership as the pandemic has unfolded. The nation's governors and state emergency managers deserve equal praise. Consistency and collaboration are critical to the success of the supply chain, and governors — working with the National Governors Association — have provided the leadership where and when needed to ensure that distribution systems can continue to work. When problems have arisen, our partners at DHS and in the states have responded quickly, working with the private sector to resolve the problems. As a result, the negative impacts of the pandemic on the supply chain have been relatively minor compared with the scope and severity of the challenge.

That said, there have been specific instances where problems with the distribution of COVID-19 safety supplies have had immediate and negative impacts on the supply chain and, ultimately, on consumers.

Those instances are important to assess to better respond in the future.

For example, major food producers and processors struggled early in the pandemic to obtain the personal protective equipment needed to continue operations. As was documented in the press, states and industries were occasionally pitted against each other in the scramble to acquire needed PPE. We know of several critical food processing plants that were forced to cease operations as a result of not having sufficient PPE. The problem was resolved as PPE distribution caught up with demand, but as we look to the future, these shortages can and must be avoided.

Today, CISCC is working with partners at the federal, state and local levels to plan for the future. We know this will not be the last national or global emergency. We need to take the time now to assess what has worked well and where there have been breakdowns or friction points in the supply chain so we can determine how to avoid those problems in the future.

Working with partners in state and federal governments, CISCC seeks to:

- 1** Conduct an overview/assessment of what has worked well during the pandemic.
- 2** Highlight best-practices based on what has worked well.
- 3** Identify points of friction and areas that need improvement.
- 4** Establish recommendations for improved communications channels between public and private stakeholders.
- 5** Promote the flexibility states need coupled with the consistency industry needs.

This report provides an overview of credentialing of essential workers as experienced during the economic shutdowns caused by COVID-19. It also examines potential alternatives to consider for future shutdowns in five key areas:

- 1** Review of CISA guidelines and implementation
- 2** Impacts of COVID-19 on the interstate supply chain
- 3** Impacts of COVID-19 on the international supply chain
- 4** Credentialing in times of crisis
- 5** Ensuring effective communications going forward

SECTION 1:

Review of CISA *Essential Critical Infrastructure Worker* Guidance

OVERVIEW

The pandemic has demonstrated how serious business interruptions can have a reverberating effect across multiple industries, especially given the interwoven nature of supply chains. COVID-19 will not be the world's last health emergency and there is an urgent need for preparedness to deal with the next crisis of this magnitude. With the public's continued high demand for essential products, it is important for government and industry stakeholders to work together and arrive at solutions that avoid exacerbating existing challenges. We hope this report offers some thoughts on the importance of CISA's "Essential Critical Infrastructure Worker" guidance.

This report highlights two related issues of note amid the pandemic:

- **Restrictions on critical business operations and on the movement on employees**
- **Safety concerns around COVID-19 within essential business infrastructure**

Each section of the report provides brief summaries of what has happened, actions taken to mitigate the negative impacts on U.S. industry, and further recommendations.



LESSONS LEARNED

Section 1: Restrictions on operations and on the movement of employees

What happened: During the first months of the pandemic, much of the country began to face “shelter-in-place” orders imposed by state and local governments. Despite their well-intentioned nature, the shutdown orders contributed to temporary product shortages and further exposed vulnerabilities in U.S. supply chains and essential services.

Actions taken: In response, DHS developed a framework to help define the nation’s core essential critical infrastructure. With input from stakeholders, CISA released the first iteration of its Essential Critical Infrastructure Worker guidance in March 2020. That guidance included a comprehensive list of worker responsibilities supporting crucial supply chains and enabling the functions for critical infrastructure. Industries currently represented in the evolving guidance include, but are not limited to, medical and healthcare, telecommunications, IT systems, defense, food and agriculture, transportation and logistics, energy, water and wastewater, law enforcement and public works.

Federal officials, along with industry partners, continue to encourage state and local officials to adopt the CISA guidance to create alignment across all jurisdictions. The latest version, known as CISA 4.0, helps essential businesses and their employees avoid interruptions or penalties while meeting the demands of the public health emergency.



RECOMMENDATIONS



- Continue to encourage state and local jurisdictions to adopt the latest CISA guidance so essential businesses can continue to safely operate.
- Urge key trading partners to adopt similar guidance on the definition of critical businesses between countries.
- Add, reorganize or modify the types of essential critical infrastructure workers included in the CISA guidelines as needed.

Section 2: Safety concerns around COVID-19 within essential business infrastructure

What happened: As the economy has gone through cycles of shutdowns and reopenings with each wave of the pandemic, some essential workers have been reticent to return to work out of fear of contracting the coronavirus. Essential employers must find ways to safely address health concerns among employees as possible new waves of the coronavirus or its variants occur.

Actions taken: In each subsequent version of the CISA guidelines, DHS has expanded the Considerations for Government and Business section to include the latest safety recommendations from experts at the Centers for Disease Control and Prevention and the Occupational Safety and Health Administration. This section continues to be readily accessible and frequently referred to for guidance by officials and employers.

Additionally, CISA 4.0 recommends that critical infrastructure employers adopt a multi-faceted risk mitigation strategy to help ensure the safety of their workforces. This strategic assessment, unique to this latest version, includes:

- Creating a risk categorization methodology for worker safety (considerations should include indoor vs. outdoor workplace settings; physical proximity of fellow workers to one another; the type, duration and amount of contact between workers; high-risk factors affecting individual employees; whether screening protocols are in place to protect workers and customers from interactions with contagious people, and the frequency of workplace cleaning and disinfecting efforts)
- Identifying workers able to potentially transition to working from home given the learned lessons from those already working remotely

- Assessing the criticality, uniqueness or specialty of a worker's role as part of an effort to limit the number employees working onsite or working together in close proximity
- Examining the allocation of scarce resources for workers based on the availability of PPE, testing, vaccines and other resources

Earlier versions of CISA guidance were intended to help identify essential work functions and allow employees access to their workplaces amid stay-at-home orders across the country. With CISA 4.0, jurisdictions and critical infrastructure owners are encouraged to use the latest guidance to help plan the allocation of scarce resources used in protecting workers against COVID-19.

RECOMMENDATIONS



- Update in real time the latest version of CISA's Considerations for Government and Business section with any relevant COVID-related guidance from the CDC and OSHA that is applicable to essential businesses (such as CDC's employer recommendations on contract tracing and case investigation or CDC's latest guidance around mask use).

Considering the continued risks posed by COVID-19 and the potential for new local restrictions, CISA's Essential Critical Infrastructure Worker guidance remains a relevant reference for employers and officials. CISCC is ready to provide further assistance and input in the development of future versions based on the changing environment and challenges posed by the pandemic.

SECTION 2:

Interstate Transfer Issues

GOALS AND OBJECTIVES

This section outlines how federal and state authorities might approach the delicate balance of protecting localized decision-making authority while ensuring greater uniformity in emergency response and supply chain operations across the country. A state-by-state, municipality-by-municipality patchwork of guidance and policies hampers supply chain performance and at worst might pose unintended harm to those who rely on essential supply chains.

Endorsing a framework-based and guideline-based approach is critical to maintaining operations that are as normal as possible, providing government leaders with an effective playbook for promoting health and minimizing the impact of crises such as COVID-19. Harmonizing interstate policy issues effectively bolsters the ability of emergency response and resilience officials to counter disruptions while helping protect the availability, affordability and accessibility of everyday products.

OVERVIEW

The complexity of modern supply chains has been nearly matched during the coronavirus crisis by the hundreds of federal, state, local and municipal policies issued during the pandemic. These emergency regulations and sets of guidance, while well-intentioned, have at times been conflicting and competing, and have failed to account for the interconnected nature of supply chains. The policies – stretching far beyond who may be defined as “essential” and coupled with the churn of new policy responses and subsequent updates – have caused confusion and in some cases even had ripple effects like a change in transportation dynamics in and out of New York City (which in turn spiked transportation costs in the impacted geographic region).



LESSONS LEARNED

Faced with this patchwork of regulations and requirements, the private sector sought to preserve supply chain continuity and prevent business disruption through efforts such as CISCC and [numerous attempts at cataloging state and local policies](#). No listing is truly exhaustive, but even a cursory examination highlights the intricate nature of the guidance and raises obvious questions about how to ensure compliance for businesses and supply chains, which are not geographically bounded. The deployment of additional resources that was needed to document, understand and comply with the rules should not be underestimated, and the work required detracted from many essential industries' mandate to ensure the timely manufacture and distribution of goods and services in a time of national need.

Balancing the sovereignty of states and municipalities with the need for more uniform standards in keeping with interstate supply chains is no easy task. Arguments for and against national approaches bring to mind past discussions such as issues in the trucking industry highlighted by the former Interstate Commerce Commission in the 1940s. While both federal and state governments have come a long way since state-by-state truck weight limits imposed an undue burden on supply chains, the discrepancies of regulation and approach to COVID-19 prompt a conversation on how to ensure business continuity during future national emergencies and promote resiliency through standard-setting and harmonization.



RECOMMENDATIONS

With input from its private sector membership, CISCC offers three main recommendations for resolving interstate transfer issues during future national emergency responses:

1. Reduce Complexity and Promote Uniformity

Two examples of state guidance and policy issued during the COVID-19 response – one in New York and the other in New Mexico – offer insight into the complex, often challenging landscape of varying approaches encountered by the private sector. In full acknowledgement, each of these policies, like those before and after, were issued in good faith and with the intent to protect consumers from an unprecedented global disease. This is not intended to take anything away from the efficacy of those decisions, but rather to prompt additional consideration about how to increasingly standardize and streamline the approaches that government takes in the future.

In the first example, one revision of New York State quarantine rules and travel restrictions (below) provides a basis for examining the complexity of future guidance. The top-line directives are challenging enough to follow – and that's just one state, not considering municipal or county-level variations in states across the country. It undoubtedly would behoove both federal officials and especially state officials to aspire to simplified and standardized emergency response language. Interstate supply chains – which include nearly every supply chain in an era of international supply chains – are not equipped for significant local policy variations. In fact, they rely on uniformity to form the basis for efficient supply networks and to empower third-party suppliers, shippers, technicians and other support functions that might not even be located in a particular state.



Beyond the sheer complexity of state and local guidance, it can also be important to consider the degree to which such policies deviate from established norms or at least from those issued elsewhere. Again, recognizing the important role of states in a federal system, there is a point of deviation where the localized approach may start to impede the full functioning of supply chains in other jurisdictions.

New Mexico provides the second example, showing how the whole supply chain can be forced to adapt and account for a change when policies evolve in highly specific or unique ways. In that state, enforcement decisions at one point led to the closure of essential businesses within the supply chain for 14 days following four positive COVID-19 rapid test results within

a two-week period. Members of the CISCC subsequently expressed concern that this policy threatened the availability of goods critical to sustaining safety and the basic needs of the public and essential to the operation of critical infrastructure including healthcare, first responders and the COVID-19 vaccination campaign.

While respecting individual state decisions and encouraging local leaders to take prompt action to address COVID-19 concerns, we believe there is ample evidence that consumers are served best when there is greater uniformity throughout the system. Uniformity allows more for the restoration of "normal" functioning of critical interstate supply chains, which is a stated goal of federal best practices for emergency response and resilience officials.

2. Rely on National Approach Frameworks

A drive toward greater uniformity and business continuity does not need to come at the expense of states' rights or independent authority. Rather, CISCC believes instead that there is a need for further development and refinement of national approach frameworks that can be leveraged by state, county and municipal authorities in times of crisis. Doing so would create a more standardized approach – even a template – for emergency response, allowing for localized flexibility while retaining crucial commonalities. Such an approach would also expedite emergency response and allow for

more nimble decision-making, creating a library of potential guidance and actions that could be taken during a time of crisis and providing common language and definitions for use at all levels of government.

3. Talk to Each Other

As addressed in the Ensuring Effective Communications section of this report, CISCC encourages states – especially those with common borders – to talk to each other, and that federal government officials talk to states about how to coordinate and align emergency response efforts. Collaboration is clearly key to driving optimal outcomes and reducing instances of confusion or contradiction.

We encourage both federal and state officials to lead with vision and to articulate their goals and measurements of success while asking, "What is the intent of any policy shift?" The policy approach should stem from that goal-based approach, and federal and state approaches should share a common understanding of the importance of maintaining uninterrupted supply chain operations. The more that stakeholders understand what each is trying to achieve and the more they leverage mutually available resources to glean best practices and rely on national frameworks, the more streamlined and effective those crisis responses can be while minimizing unintended supply chain consequences.



SECTION 3:

International Challenges

GOALS AND OBJECTIVES

The vast majority of key industry and service sectors rely on an intricate web of global supply chain logistics and just-in-time delivery. This section seeks to address the challenges a global crisis such as the COVID-19 pandemic present to this critical global supply chain and to mitigate negative impacts on the free flow of critical people, goods and services across international borders. To that end, the following examines two sets of related international challenges amid the pandemic:

- Global restrictions on the operation of critical businesses and access to critical materials
- U.S. restrictions on the issuance of visas for essential workers

The following is a brief summary of what has happened, actions taken to mitigate the negative impacts on U.S. industry and a series of recommendations.

OVERVIEW

The COVID-19 crisis has revealed the extent to which the United States depends on a global economy, including the movement of both goods and essential workers from countries around the world. The interruption of any one component can quickly affect the ability of industries in the United States to provide critical materials and services.

The next crisis that threatens the movement of goods and people could be another global pandemic – or an incident such as biowarfare. It is critical that we consider what we have learned from the COVID-19 pandemic and how we can ensure that we are better prepared for the next crisis.



LESSONS LEARNED

Section 1: Global restrictions on the operation of critical businesses and access to critical materials

What happened: During the first wave of COVID-19 in 2020, governments around the world put in place restrictions on what industries were permitted to operate, in some cases forcing shutdowns of certain industries considered essential under CISA guidelines and allowed to operate in the United States. The shutdowns were conducted out of an abundance of caution, but nonetheless exposed the global nature of supply chains and the challenges of conflicting regulations.

Furthermore, in response to the first wave of COVID-19, multiple countries enacted restrictions on the export of base materials, chemicals, medical supplies and ingredients.

Additionally, the COVID-19 crisis resulted in a number of supply chain disruptions that have led to shipment delays, including shortages of containers, safety protocols such as sanitizing containers at U.S. ports and fluctuations in wait times for truck drivers to enter and exit ports.

Actions taken: Throughout 2020, industry in the United States urged foreign governments to recognize CISA guidance as a baseline for the purpose of determining if a manufacturer was designated as essential and critical to the maximum extent possible. Industry in the United States also pressed foreign governments to not impose export restrictions and, where possible, to reverse restrictions that had been put in place.

By doing so, industry was successful in minimizing disruptions to global manufacturing supply chains by ensuring that manufacturers of essential and critical products and components could continue operations in countries around the world and that critical materials could be exported with minimal restrictions.

However, there continue to be significant disruptions from canceled (“blank”) sailings, container shortages and the inability to rotate vessel crews because of air travel restrictions. A surge in imports to meet pent-up consumer demand as the economy has reopened has exacerbated shortages of containers and other equipment while ports have seen labor shortages because of COVID-19 infections. Ports have experienced backups of ships waiting to be unloaded, particularly on the West Coast, and retailers have reported delays in receiving some goods, but most essential products have remained in good supply.

RECOMMENDATIONS



- Align guidelines and definitions of what constitutes an essential business across countries.
- Pursue a multi-pronged engagement approach by the U.S. government with foreign government counterparts, led by cabinet-level engagement by agencies including the State Department, the Office of the U.S. Trade Representative, DHS and the Commerce Department.
- Urge the World Customs Organization to develop “best practices” for ports of export and entry for a pandemic or global disaster under its [Coordinated Border Management](#) guidelines.
- Urge the establishment of uniform baselines for the reopening of facilities around the world that have been shut down.
- Work with key trading partners throughout the world that impose export restrictions to mitigate the harm caused by those restrictions, prevent the implementation of future restrictions and ensure global collaboration in confronting future global crises.

Section 2: Restrictions on the movement of global talent and essential workers

What happened: Beginning in January 2020, the Trump administration issued a series of travel and immigration restrictions that impacted the movement of individuals, including global travel for critical workers. Early travel restrictions on individuals entering the United States from Europe, China and Iran were intended to manage the spread of the virus. A June 22 presidential proclamation suspended the issuance of nonimmigrant visas for broad categories of employees and their family members. The administration said the proclamation was necessary to protect American workers during a period of economic downturn related to COVID-19. Embassy closures around the world also created practical impediments to the processing and issuance of travel and work visas, interrupting travel for many workers.

While the travel and visa restrictions included exceptions for cases that fell within “the national interest,” a lack of clarity on what qualified for an exception and on the process to apply caused uncertainty for individuals and businesses. The sweeping restrictions prevented manufacturers from bringing in technical experts and specialized workers to complete critical work on production lines. They restricted travel necessary for senior executives and business leaders from abroad to carry out functions in the United States, and restricted highly skilled workers from being able to conduct research and development here. Taken together, the restrictions caused uncertainty and stalled planned investments in manufacturing in the United States.

Actions taken: Stakeholders urged the federal government to provide clarity on the scope and process of national interest exceptions. Industry also brought a legal challenge to the presidential proclamation, arguing that the overly broad restrictions failed to account for the economic realities and harmed U.S. businesses. A federal judge agreed and issued an injunction blocking enforcement of the proclamation’s restrictions in October. The visa ban expired at the end of March this year. It is not expected to be renewed by the Biden administration but has yet not been formally revoked.

RECOMMENDATIONS



- Formally revoke the restrictions on nonimmigrant visas and work with Congress to identify ways to ensure that U.S. visa programs continue to provide benefits to American workers and the U.S. economy.
- Ensure that travel restrictions are determined by global health metrics and provide clarity on how the U.S. government will evaluate the continued need for travel restrictions. Avenues should be offered for testing and self-quarantine to accommodate necessary health and safety measures to make travel safe.

SECTION 4:

Credentialing in Times of Crisis

OVERVIEW

The private sector plays a critical role in disaster recovery for communities. Credentialing has largely been managed at the local and state level and through local and state law enforcement. Some states have fairly sophisticated credentialing programs, online registration and placarding.

As states began to shut down in the early weeks of the COVID-19 pandemic, industries deemed essential by CISA clamored for credentials or other proof that would allow their employees to continue to operate. This led to a discussion at the national level about a federal essential

worker credential tied to the CISA critical infrastructure guidance. However, a federal credential never materialized.

In the end, most companies deemed essential by CISA developed their own credentials using their official company logos accompanied by the CISA essential workers document. With the exception of a few issues in the early days of the shutdown, this strategy seems to have worked. Attachment A is a model credential created by an essential industry trade association as a guide for its members.



RECOMMENDATIONS

Despite the disorganized nature of the nationwide shutdown, essential workers were rarely prohibited from crossing state lines due to the lack of an acceptable credential. Nevertheless, there is room for improvement.

Option 1: Federal Credential

In the early days of the shutdown, rumors persisted that the federal government was working on a federal credential for essential workers who met the CISA definition. These rumors came very close to becoming reality, with at least one version of a leaked draft credential shared among third-party groups. However, the process ultimately did not result in the release of a federal credential. Concerns over states' rights, fraud and forgery, and a perceived lack of need were the most common reasons cited for not moving forward.

The legal basis for not preparing a federal credential appears to be rooted in the 10th Amendment of the Constitution. This rationale, that powers over who can work in times of emergency have been delegated to the states, is also the reason the CISA essential worker guidance was left as guidance and not made mandatory. There does not appear to be a large body of legal research or analysis dedicated to whether the 10th Amendment prohibits a federal credential. We recommend undertaking this work.

More relevant, however, is the perceived lack of need for a federal credential. In practice, this might be true: there have not been a large number of instances of essential workers being stopped from working due to credentialing reasons. We recommend further investigation by states to determine the true extent of the problem.

Option 2: Increased Coordination

Although the credentialing solution of each company preparing its own documents seemed to work even when the shutdown was at its worst, it is certainly not the most efficient or effective long-term solution. If a federal credential continues to be off the table, we encourage state governments to better coordinate on credentialing requirements so that essential businesses and workers understand what those requirements are and how to satisfy them.

As the COVID-19 pandemic continues, some states are actively coordinating with each other, but more can certainly be done. Unifying groups representing governors, mayors or state emergency response agencies could fill a valuable role by helping states coordinate on uniform credentialing requirements for future pandemics.



Exhibit A – Model Credentials

Employee Travel Related to Critical Infrastructure

- 1 The US Department of Homeland (DHS) security has identified the [industry] as Essential Critical Infrastructure, an industry sector critical to public health and safety, economic and national security.
- 2 In its March 19, 2020 "Memorandum on Identification of Essential Critical Infrastructure Workers During COVID-19 Response," the Agency recognized the [essential industry sector] and its employees as having "a special responsibility to maintain your work schedule." DHS expects the [industry] to continue normal operations, while following CDC workforce and customer protection guidance.
- 3 This document certifies that the individual bearing this document is an employee of, and traveling to or from work in, [essential industry] facility, the continued operation of which is vital for security, national economic security, national public health, and safety.

Certified by:

Company Representative

Employee Name

Shipment of Supplies Related to Critical Infrastructure

- 1 The US Department of Homeland (DHS) security has identified the [industry] as Essential Critical Infrastructure, an industry sector critical to public health and safety, economic and national security.
- 2 In its March 19, 2020 "Memorandum on Identification of Essential Critical Infrastructure Workers During COVID-19 Response," the Agency recognized the [essential industry sector] and its employees as having "a special responsibility to maintain your work schedule." DHS expects the [industry] to continue normal operations, while following CDC workforce and customer protection guidance.
- 3 This document certifies that this vehicle is transporting a shipment of [essential industry] products within a sector that has been designated as critical infrastructure, the continued operation of which is vital for security, national economic security, national public health, and safety.

Certified by:

Shipping company representative

Vehicle license plate or identification number

SECTION 5:

Ensuring Effective Communications

GOALS AND OBJECTIVES

This section seeks to learn lessons from the COVID-19 pandemic that can help the critical infrastructure supply chain and state and federal government partners improve communications between key stakeholders when

future crises occur. With thousands of public and private stakeholders working together to ensure delivery of essential services and products, effective and efficient communications are critical.

OVERVIEW

For decades, the supply chain has been based on business-driven communications, with occasional local or regional disruptions such as a hurricane. In these situations, local and regional authorities often intercede and work closely with private sector partners to ensure the timely delivery of emergency supplies and services. The advent of cellular and internet-based communications enhanced these systems, yet organization and protocols remained largely ad-hoc, informal and situational.

The COVID-19 pandemic is the first time these distribution and communications systems have been challenged on a national and global scale. These events have pointed out the fragility of these communications systems and the need for more reliable communications protocols and contingencies.

During COVID-19, the supply chain has generally worked. Notwithstanding serious challenges in key sectors (e.g., meat-production), critical supplies, food and life-saving equipment have made their way to retailers, consumers, and first



responders with very few problems. As a result, the health crisis of the pandemic has not been compounded by shortages of critical supplies or the turmoil that could result.

Credit should be given to DHS and CISA for their extensive outreach and engagement to develop national guidelines to ensure national and community resilience in the face of the pandemic. Likewise, the National Governors Association has played a vital role in helping share information and engage key state government stakeholders across the country. And state emergency managers have moved quickly and consistently to address rapid changes and sudden problems.

Industry and government have worked together to solve problems in real time despite the lack of established protocols, procedures or standards in place. Serious crises have been largely avoided through a combination of quick thinking, collaboration and, perhaps, luck.

For the most part, no one saw the pandemic coming, but that excuse will not be available next time (and many believe it will happen again). Although the current crisis will ultimately subside, continued coordination and information sharing is vital to the ability to respond to future crises.

LESSONS LEARNED

Communications lessons learned from the pandemic can be summarized by the following points:

- 1 The CISA guidelines have worked. Broad adoption has helped avoid confusion across jurisdictions and established a baseline for multi-jurisdictional communications.
- 2 State proclamations of the CISA guidelines have been extremely helpful in establishing continuity with county and local officials.
- 3 Individual companies, industries and trade associations have worked bilaterally with state and local officials to solve problems. That approach should continue.
- 4 Often, individual companies and industries have not had a clear point of contact or established communications channels with state and local leaders to address specific problems.
- 5 Broader industry and multi-industry trade association engagement has been sporadic and inconsistent.
- 6 States have been determined to retain their own flexibility but the more consistency and communication the better.
- 7 Local governments have wanted the flexibility to act but inconsistent definitions and application have created confusion.

RECOMMENDATIONS



1. Ongoing Communications

- Designated points of contact
- NGA as hub
- Email loop
- Quarterly "touch-base" calls
- Rapid response when needed

2. Promote Best Practices

- Continuity
- Communication of state-wide and/or regional designations and guidelines
- Standardization
- Establish protocols

3. Help facilitate bi-lateral problem solving

- Establish key points of contact in each state and industry group

4. Develop forum for crisis management (multi-lateral)

- Designated points of contact
- NGA role
- Established process and protocols

5. Briefings for governors, staffs, and key agencies

- NGA
- DHS

6. Promote model legislation

- Develop with NGA
- Coordinate with the National Council of State Legislatures

7. Map and engage key stakeholders:

- NGA
 - Leadership (chair, vice-chair)
 - Homeland Security Committee (leadership and staff)
 - Economic Development Committee (leadership and staff)
 - Senior staff
 - Center for Best Practices
- NCSL
 - Key committees
 - Senior staff
- DHS
 - CISA
 - Intergovernmental affairs staff
- White House
 - Disaster coordinators
 - Domestic Policy Council staff
 - Office of Intergovernmental Affairs staff
- Key federal agencies
 - Food and Drug Administration
 - Transportation Department
 - Agriculture Department
 - CDC
 - Labor Department

CONCLUSION

The time to act is now. Taken together, these recommendations would build supply chain resiliency for future crisis response. CISCC stands ready to support federal and state decision-makers in their efforts to minimize supply chain disruptions and protect Americans' access to critical products and services. CISCC intends for this report to be a living document for government and private sector supply chain stakeholders so that they can begin laying a foundation for critical infrastructure together.

About the Critical Infrastructure Supply Chain Council

MISSION

The Critical Infrastructure Supply Chain Council (CISCC) was formed with one mission: to anticipate and mitigate disruptions to the supply chain and ensure the timely flow of critical goods.

Our goals are to:

- 1. Share information with federal, state and local officials regarding potential negative impacts on critical supply chains.**
- 2. Leverage our combined government relations resources to engage federal, state and local governments to help identify and address supply chain disruptions for critical infrastructure.**
- 3. Serve as a forum across industries to anticipate and spotlight future issues and challenges before they become crises.**

MEMBERSHIP

CISCC is comprised of nearly 100 national and regional trade associations representing a wide cross-section of the thousands of stakeholders that make up the national and global supply chain.