

HEICO

Coronavirus (COVID-19) Protocol

March 2020



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Managing Your Company

Managing Your Company for COVID-19 Risks and Possible Outbreaks

The severity of illness, or how many people will fall ill from COVID-19, is unknown at this time. We may be fortunate to avoid serious impact, but the vectors for the spread of this virus are not well known, this disease does appear to be highly contagious and infected parties may be asymptomatic making it difficult to contain.

Your proactive actions now should be done in such a way as to reduce rumors and misinformation and unwarranted team member fear and anxiety.

Each HEICO facility should evaluate how best to decrease the risk of the spread of acute respiratory illness and lower the possible impact of COVID-19 to your workplaces and to your team. Therefore, we encourage that you consider implementing mechanisms to:

- (a) reduce and restrict travel consistent with guidance of official health authorities and good judgment;
- (b) reduce the risks of transmission of respiratory diseases in your workplace;
- (c) ensure your organization has an individual or individuals who are responsible for implementing your safety measures and monitoring local conditions;
- (d) plan and prepare to maintain business operations where allowed with increased team member absenteeism, customer and supply chain interruptions
- (e) Ensure you have backup implementations for critical systems and personnel (e.g. IT oversight, etc.).

We encourage you to review, and where appropriate reinforce the practice of protective measures against disease exposure and transmission:

Reduce Exposure and Travel Risks

Ensure that Team Members are aware of the risks of any travel to areas that have been or may likely become locations for elevated risk of COVID-19 exposure or quarantine. At present, the World Health Organization, the US Centers for Disease Control and Prevention and major corporations are restricting business travel to and through China, Iran, South Korea and Northern Italy. This list is likely to expand, so consult the websites of US Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) (www.cdc.gov/ or www.who.org). COVID-19 seems to spread very easily, especially in homes, hospitals, churches, cruise ships and other confined spaces and there is a greater risk of contagion at conventions or large meetings. We strongly recommend that you find alternatives to travel into or through any geography or location known to have a greater risk. We also recommend you counsel your Team Members to avoid high risk environments.

We refer you to the current CDC and WHO guidance for any Team Member who has recently traveled to such areas, or become aware of having contact with someone who has traveled to these areas which is currently that the Team Member should self-quarantine.

Managing Your Company, Cont'd

Ensure You Have Designated Someone Within Your Organization With Responsibility to Monitor and Manage Each of Your Locations

Designate someone within your organization to remain knowledgeable on the latest guidance from WHO and CDC and update your policies. Monitoring of local conditions and coordination with local health officials is also strongly encouraged at all units so that timely and accurate information can guide your actions.

This person, or persons, should be aware of each Team Member who reports to the company symptoms of respiratory illness, has recently been in a high-risk area, or may have reason to believe they've been exposed to COVID-19. Further, your designee should closely monitor all absences or work-from-home status (in the case of self-quarantine) as well as assess if there are patterns of absence or reason to suspect that Team Member may have exposed others while at work.

Reinforce the Barriers to Disease Transmission Within Your Workplace

The following is based on current WHO and CDC guidance:

1. Team Members who have symptoms of respiratory illness are recommended to stay home and not come to work until they are free of fever (100.4° F [37.8° C] or greater using an oral thermometer), signs of a fever, and any other symptoms for at least 24 hours, without the use of fever-reducing or other symptom-altering medicines (e.g. cough suppressants). Further, refer such Team Members to medical assistance and further screening consistent with local health guidance.
2. Ensure that sinks for hand-washing are stocked with ample cleansers, tissues and towels and no-touch covered waste bins.
3. Make sanitizer (with at least 60% alcohol content) readily available to Team Members for use at touch-points (door handles, keypads) and make sure you have covered no-touch waste bins for discarded wipes.
4. The CDC issued cautions about close contact, which includes contact with infectious secretions, which includes exposure to droplets from coughs or breathing. We encourage Team Members to minimize physical or close contact, such as shaking hands, etc., until the contagion is better controlled.
5. Have cleaning staff increase the frequency of disinfection of shared areas (handwashing and toilet areas, lunch counters, break rooms, door handles, keypads, etc.).
6. Place posters that encourage [identification of COVID-19 symptoms](#), [staying home when sick, cough and sneeze etiquette](#), and [hand hygiene](#) in locations will be seen and taken seriously. The CDC recommends that Team Members who appear to have acute respiratory illness symptoms (i.e. fever, cough, shortness of breath) upon arrival to work or become sick during the day should be separated from other Team Members and be sent home or to medical care immediately. Sick Team Members should cover their noses and mouths with a tissue when coughing or sneezing (or an elbow or shoulder if no tissue is available).
7. Set up authorities, triggers, and procedures for activating and terminating an infectious disease outbreak response plan, altering business operations (e.g., possibly changing or closing operations in affected areas), and transferring business knowledge to key Team Members. Work closely with your local health officials to identify these triggers.

Managing Your Company, Cont'd

In addition, we offer the following guidance pending further guidance:

1. This may be a good time to consider videoconferences and telephone communications in lieu of travel.
2. We realize there are shortages of soaps, tissues, sanitizer, etc., and encourage you now to obtain adequate supplies for your facility.
3. Attached are electronic copies of posters that you may print and post.
4. If you have reason to believe that your workplace has been contaminated, seek guidance and support from your local health authorities and contact your superior.

Identify and Create Redundancies to Maintain the Integrity of Your Operation

The following are best-practice suggestions:

1. Cross-train personnel to perform essential functions so that the workplace is able to operate even if key staff members are absent.
2. Assess your essential functions and the reliance that others and the community have on your services or products. Be prepared to change your business practices if needed to maintain critical operations (e.g., identify alternative suppliers, prioritize customers, or temporarily suspend some of your operations if needed).
3. Talk with companies that provide your business with contract or temporary staff or services about the importance of sick Team Members staying home and encourage them to develop non-punitive leave policies.
4. Explore whether you can establish policies and practices, such as flexible worksites (e.g., telecommuting) and flexible work hours (e.g., staggered shifts), so that you are prepared to increase the physical distance among Team Members and between Team Members and others should it be recommended by your local health authorities, WHO or CDC.
5. Identify essential business functions, essential jobs or roles, and critical elements within your supply chains (e.g., raw materials, suppliers, subcontractor services/products, and logistics) required to maintain business operations. Plan for how your business will operate if there is increasing absenteeism or these supply chains are interrupted.
6. In some communities, early childhood programs and K-12 schools may be dismissed, particularly if COVID-19 worsens. Determine how you will operate if absenteeism spikes from increases in sick Team Members, those who stay home to care for sick family members, and those who must stay home to watch their children if dismissed from school.
7. Have a plan such that if public health officials call for social distancing, you can minimize exposure between Team Members and also between Team Members and visitors to your facility.
8. Local conditions will influence the decisions that public health officials make regarding community-level strategies; team leaders should take the time now to learn about plans in place in each community where they have a business.
9. Please ensure your Team Members are aware that travel restrictions or quarantines may be enacted while Team Members are on personal or business travel which may limit their ability to return home or to our workplace if they become sick or quarantined.

We realize that much is unknown about this disease and our teams need to understand their responsibility in protecting their own health as well as our teams. Where you have questions regarding personnel policy or material operational changes, contact your superior. With respect to best practices, please contact Elizabeth Letendre at 954-744-7555 (office) or 954-554-6234 (cell).

Symptoms

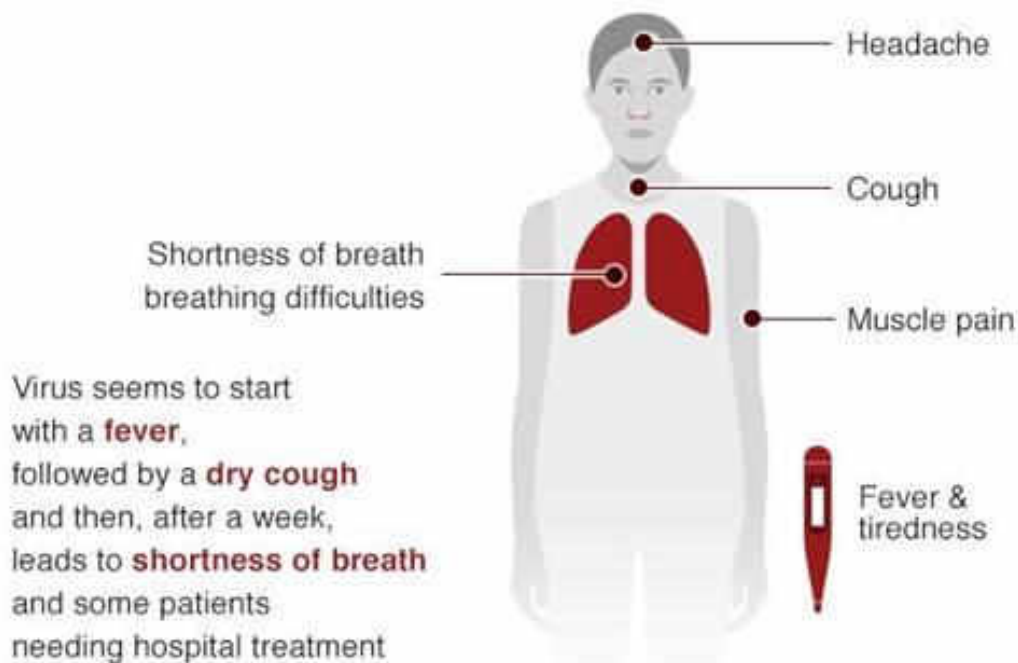
For confirmed coronavirus disease 2019 (COVID-19) cases, reported illnesses have ranged from mild symptoms to severe illness and death. Symptoms can include:

- Fever
- Cough
- Shortness of breath

CDC believes at this time that symptoms of COVID-19 may appear in as few as 2 days or as long as 14 days after exposure. This is based on what has been seen previously as the incubation period of [MERS-CoV](#) viruses.



Symptoms of coronavirus (Covid-19)



Source: WHO

BBC

How COVID-19 Spreads

Current understanding about how the virus that causes coronavirus disease 2019 (COVID-19) spreads is largely based on what is known about similar coronaviruses. COVID-19 is a new disease and there is more to learn about how it spreads, the severity of illness it causes, and to what extent it may spread in the United States.

Person-to-person spread

The virus is thought to spread mainly from person-to-person.

- Between people who are in close contact with one another (within about 6 feet).
- Through respiratory droplets produced when an infected person coughs or sneezes.

These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

Spread from contact with infected surfaces or objects

It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.

Can someone spread the virus without being sick?

- People are thought to be most contagious when they are most symptomatic (the sickest).
- Some spread might be possible before people show symptoms; there have been reports of this occurring with this new coronavirus, but this is not thought to be the main way the virus spreads.

How easily does the virus spread?

How easily a virus spreads from person-to-person can vary. Some viruses are highly contagious (spread easily), like measles, while other viruses do not spread as easily.

Another factor is whether the spread is sustained.

The virus that causes COVID-19 seems to be spreading easily and sustainably in the community (“community spread”) in some affected geographic areas. Community spread means people have been infected with the virus in an area, including some who are not sure how or where they became infected.

Supply Chain Preparedness

OPERATIONS MANAGEMENT

Prepare Your Supply Chain for Coronavirus

by

James B. Rice, Jr.

February 27, 2020



Kira-Yan/Getty Images

Developing a cogent supply chain response to the coronavirus outbreak is extremely challenging, given the scale of the crisis and the rate at which it is evolving.

The best response, of course, is to be ready before such a crisis hits, since options become more limited when a disruption is in full swing. However, there are measures that can be taken now even if you're not fully prepared. And although its long-term consequences have yet to fully play out, the coronavirus outbreak already provides some lessons about how you can better prepare your company to deal with future large-scale crises.

What You Can Do Now

Let's first look at some actions that can be taken to mitigate the impacts of the crisis on supply chains.

Supply Chain Preparedness, Cont'd

Start with your people. The welfare of employees is paramount, and obviously people are a critical resource. The companies that recovered the fastest after Hurricane Katrina in 2005 were those that tracked down all their employees who dispersed across the southeastern United States. Procter & Gamble even went so far as to create a local employee village on high ground with housing, foodstuffs, and cash advances for employees and their families.

It may be necessary to rethink work practices. When an ice storm shut down Louisville, Kentucky, in 2009, local workers could not get to UPS's sorting hub. But workers could still travel by air, so the company flew in personnel from other cities to keep the hub running. This interchangeability depended on job and equipment standardization.

Maintain a healthy skepticism. Accurate information is a rare commodity in the early stages of emerging disasters, especially when governments are incentivized to keep the population and business community calm to avoid panic. Impact reports tend to be somewhat rose-tinted. However, local people can be a valuable and more reliable source of information, so try to maintain local contacts.

Run outage scenarios to assess the possibility of unforeseen impacts. Expect the unexpected, especially when core suppliers are in the front line of disruptions. In the case of the coronavirus crisis, China's influence is so wide-ranging that there will almost inevitably be unexpected consequences. Inventory levels are not high enough to cover short-term material outages, so expect cause widespread runs on common core components and materials.

In 2005, Hurricane Rita struck Houston and western Louisiana, causing widespread shutdowns of oil refining assets located in the region. What came as a surprise to consumer-packaged-goods firms some six months later was that petroleum-based packaging was in short supply because of Rita's impact on supplies of the raw materials needed to make these materials. Many firms scrambled to redesign packaging using old-style paper and cardboard.

Supply Chain Preparedness, Cont'd

Create a comprehensive, emergency operations center. Most organizations today have some semblance of an emergency operations center (EOC), but in our studies we've observed that these EOCs tend to exist only at the corporate or business unit level. That's not good enough — a deeper, more detailed EOC structure and process is necessary. EOCs should exist at the plant level, with predetermined action plans for communication and coordination, designated roles for functional representatives, protocols for communications and decision making, and emergency action plans that involve customers and suppliers.

Designing for response

The coronavirus story will undoubtedly add to our knowledge about dealing with large-scale supply chain disruptions. Even at this relatively early stage, we can draw important lessons about managing crises of this nature that should be applied down the road.

Know all your suppliers. Map your upstream suppliers several tiers back. Companies that fail to do this are less able to respond or estimate likely impacts when a crisis erupts. After the 2011 Sendai earthquake in Japan, it took weeks for many companies to understand their exposure to the disaster because they were unfamiliar with upstream suppliers. At that point any available capacity was gone. Similarly, develop relationships in advance with key resources — it's too late after the disruption has erupted.

Understand your critical vulnerabilities and take action to spread the risk. Many supply chains have dependencies that put firms at risk. An example is when an enterprise is dependent on a supplier that has a single facility with a large share of the global market. The Sendai disaster highlighted this type of exposure. For example, Hitachi manufactured approximately 60% of the global supply of airflow sensors, a critical component for auto manufacturers. The anticipated shortage of these items forced some automotive original-equipment manufacturers (OEMs) to ration the remaining airflow sensors to their highest margin product lines. The coronavirus outbreak has exposed Apple's and many auto OEMs' dependency on sourcing from China.

Supply Chain Preparedness, Cont'd

Create business continuity plans. These plans should pinpoint contingencies in critical areas and include backup plans for transportation, communications, supply, and cash flow. Involve your suppliers and customers in developing these plans.

Don't forget your people. A backup plan is needed for people too. The plan may include contingencies for more automation, remote-working arrangements, or other flexible human resourcing in response to personnel constraints.

Revisit Your Supply Chain's Design

Until very recently, most global companies could base their supply chain designs on the assumption that materials flow freely globally, enabling them to source, produce, and distribute products at the lowest-cost locations around the world. U.S.-China trade policy whiplash, Brexit, and now the coronavirus crisis have challenged the validity of this fundamental assumption. Specifically, the coronavirus illustrates the vulnerability of having so many sources located in one spot — and a spot that is far away from critical markets in North America, Europe, and Latin America.

We believe that a new kind of design is needed that enables companies to rapidly reconfigure their supply chains and be ultra-agile and responsive to rapidly changing global trade policies, supply dynamics, and disruptions. Therefore, the question is: How should companies design their supply chains to operate effectively in a highly volatile world where consumers are intolerant of tardy responses? There are many options, and each one involves tradeoffs between the level of risk that the enterprises can tolerate and the amount of operational flexibility it wants to achieve. Here are two examples:

Supply Chain Preparedness, Cont'd

Redesign with second sources. This supply-chain design provides backup capacity for supply, production, and distribution outages. The backup capacity spreads the risk of a disruption across two sources (as long as the disruption does not also affect the second source location). Consequently, it is better to have a second source outside the primary source region. Although this supply chain design lowers risk levels, it incurs higher administrative, quality monitoring, and unit costs. Also, economies of scale vary according to the amount of supply allocated to each supply source.

Redesign to source locally. This design calls for a company to have production facilities with local sources of supply in each of its major markets. Like the above option, it spreads the risk. Since these sources are dispersed, the economies of scale are lower and the capital costs are higher, but the transportation costs are lower.

These are gross simplifications of many design options that the firm can take to reduce risk and ensure response capacity. A more detailed analysis and assessment is necessary. Obviously, in selecting a design, companies have to weigh the costs of each and how it will affect their ability to serve their customers and compete against other firms. Deciding which design is optimal is not a one-time process. Firms should regularly revisit and challenge their design choices and the strategies that underpin them.

It's impossible to anticipate the arrival of global crises such as the coronavirus outbreak, but firms can mitigate their impacts by taking supply chain preparedness to a higher level. They should act before a disruption occurs and adjust and execute new plans afterward rather than starting from scratch every time they are plunged into a new crisis.



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