



Planning for the low-infection-risk workplace

There is a way to get people back to the workplace and organizations up and running--without exposing individuals to a high risk of infection

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America faces the challenge of containing the spread and preventing mass resurgences of COVID-19. Yet at the same time, the country is experiencing an increasingly urgent need to reopen shops, offices, factories, and other workplaces. There is a common belief that these two goals are at sharp odds, and that bringing people back into work environments will greatly raise risks of infection there and beyond.

But in fact it's possible to quickly and inexpensively refashion most workplaces into a high-employment environment where essential face-to-face interaction is routine, and productivity remains near pre-COVID-19 levels--even while the risk of workplace infection is brought to extremely low levels, and any instances of exposure are immediately contained without extended disruption to the business.

The blueprint for a safer yet fully productive workplace has been developed and validated by a Leidos business unit ("Leidos") which for nearly four decades has been performing independent medical examinations and associated case management activities. During the early spread of COVID-19 Leidos developed a plan as it needed to maintain essential operations and keep the work environment open. The plan evolved real-time to produce a workplace design and associated processes that greatly minimize exposure risk to Leidos personnel and examinees. In late February and early March 2020, when limited guidance was available on how to safely operate in an office and clinic environment, Leidos enacted practical solutions created by staff and a team of medical professionals based on the simple premise of what would the office environment look like and how would physical interaction need to be restricted if we simply assumed that every individual was exposed and every commonly used surface was contaminated.

Early adoption of CDC and WHO standards, in combination with the dynamic adoption of the increasing scientific knowledge and clinical best practices, has profoundly reduced exposure risk. And the plan can be readily and cost-effectively implemented by most businesses and organizations of almost any type to highly protect personnel while restoring employment and productivity. To be sure, Leidos has had the advantage of being able to draw on executive leadership with extensive medical credentials and experience, as well as a large network of physicians in our business units and clinics. That expertise was critical in formulating, testing and fine-tuning the plan, and now other organizations can adopt the plan and adjust accordingly for their specific work environment.

The safe-workplace plan has four elements: Prevention, Monitor, Response, and Recovery. And to be most effective, the physical workspace needs to be optimized to create an environment to reduce risk of infection.



The safe-workplace plan was built on several basic premises about COVID-19:

How COVID-19 Spreads Infection

- Virus spreads primarily from person to person through respiratory droplets from the nose or mouth, which are expelled when a person with COVID-19 breathes, coughs, sneezes, or speaks
- A person with COVID-19 can be symptomatic or asymptomatic
- COVID-19 virus can survive for up to 72 hours on certain surfaces
- A person can get COVID-19 by touching a contaminated surface or object and then touching their own mouth, nose, or possibly their eyes

Actions that Lower the Risk of Spreading Infection

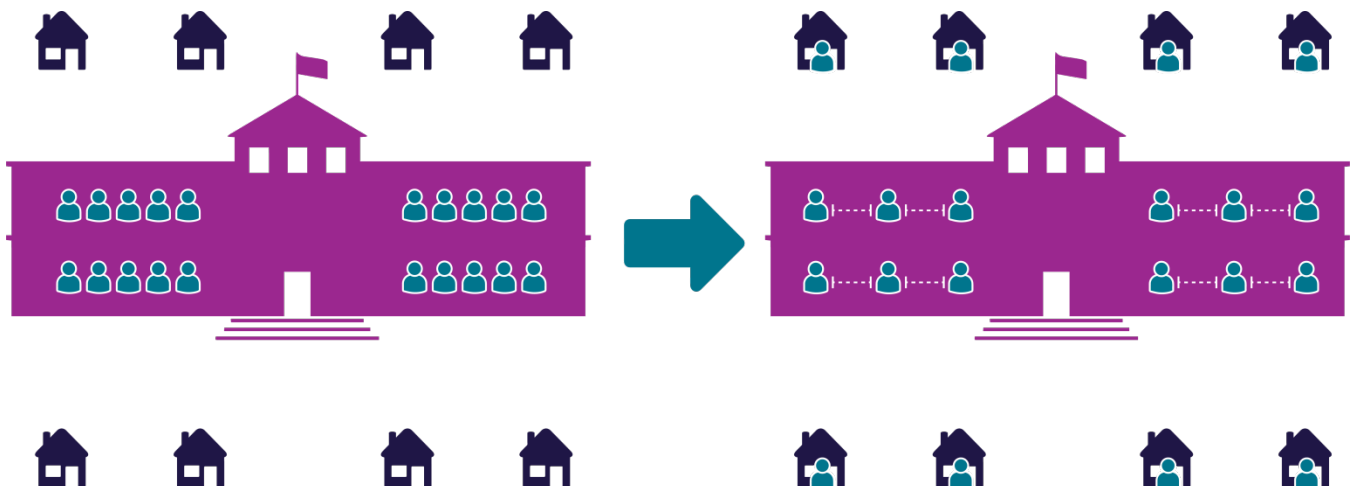
- Washing hands with soap and water or use of hand sanitizer to kill the virus
- Disinfecting surfaces to kill the virus
- Social/physical distancing of at least six feet to allow the droplets to settle so they are less likely to be inhaled
- Wearing a mask covering nose and mouth to reduce spread of respiratory droplets, especially when six feet of separation is not possible
- “No bare hand touch” approach on common surfaces, especially door handles and break room equipment through the placement of tissue dispensers near any commonly touched surfaces

The plan can be enacted in stages with components of each element and changes to the physical workspace. None of these elements are especially burdensome to either individuals or the organization, but together are highly effective at sharply reducing infection risk. For maximum impact, the change to the physical workspace and population density should be completed as the key first step. The plan then ensures continuous implementation of the four key elements of infection safety: prevention, monitoring, response, and recovery.

In short, the Leidos safe-workplace plan could be seen as a blueprint for getting corporate America safely back to work.

Optimize Physical Workspace and Population Density

The foundation, and first step, of the plan is to decrease the population density in the workplace and create an in-facility distancing environment.



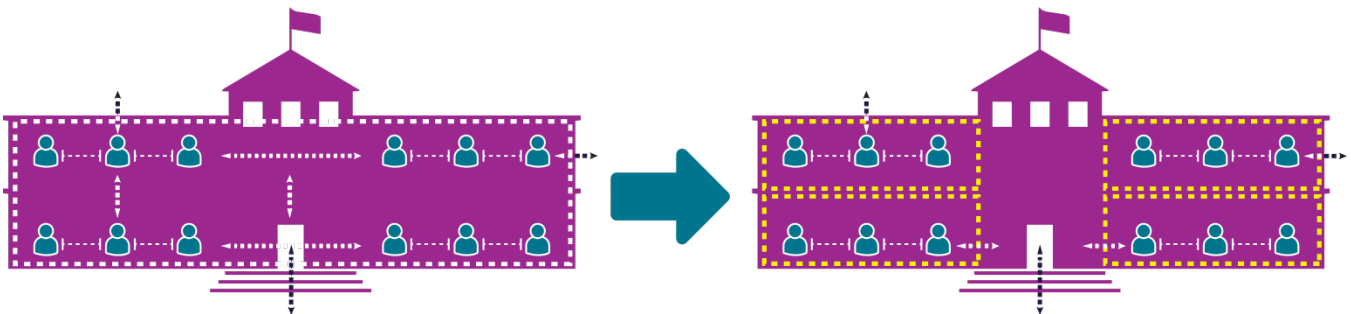
Selective remote operations

Selective operations that can be performed remotely are identified and support for telework from home is provided to establish secure communications. Workflows and job descriptions are adjusted to increase the number of employees who can work at home immediately, reducing employee counts at the facility and thereby making distancing easier. Schedules to alternate work locations from the workplace and in-home to decrease the office population density were also used. Leidos is on an ongoing basis adjusting work processes, expanding data communications infrastructure, and enhancing work-from-home guidelines with the goal of supporting the necessary number of employees who can work outside the main facilities. The overall goal of this action is to reduce the total population in the office workspace to achieve the desired physical separation, while a sufficient number of employees are still physically present because their job function requires it which also retains the corporate culture which cannot be achieved through a predominantly remote workforce

In-facility distancing

In the office workspace, as much as possible no person is to come within six feet of another person at any time, especially without some type of physical barrier. Chairs, desks and tables in all rooms are separated from one another by at least that distance, and where possible are placed to face the wall to further reduce the risk of air transmission of the virus. Conference rooms are closed as only virtual meetings are used if adequate spacing cannot be achieved. Common area furniture is also rearranged and lunch tables are spaced apart as much as possible with one chair/one person per table seated facing the same way and/or to the wall. Tables are also labeled and a written log can be created for contact tracing. The training and equipment needed to establish personal hygiene and protection protocols are put into place. Employees are also trained in distancing, minimal inter-compartmental movement, containment processes, and new workflows related to screening and safe exam procedures.

The next steps are to create additional physical or virtual barriers between individuals and restrain movement between establish work areas to further reduce risk of infection. In more densely populated environments where six feet of physical separation was not possible, Leidos leveraged cubicles to create physical barriers between staff.



Workspace compartmentalization

The Leidos facilities have been subdivided as much as possible into smaller spaces through walls, screens or restricted use guidelines. The intent of these smaller compartments is to reduce the number of people in a shared space at any time, in order to make it easier to maintain distance. And in the case of an infection, to reduce the numbers of people who are exposed to it and ensure those who are exposed are more easily identified.

Restricting movement

Through adjusted work processes and equipment rearrangement, additional constraints on movement between compartments can be put into place without impinging on employees' ability to perform all their job functions. Movement between compartments is kept to a minimum, and when movement is unavoidable care is taken to maintain distancing and minimize the number of compartments that are transited. No physical group meetings of

any type take place in any of the facilities. All facilities should be sanitized at a high frequency, and specific compartments and areas that see closer contact between individuals should be sanitized more often.

The four elements of the safe-workplace plan – Prevention, Monitor, Response, and Recovery – are implemented within the optimized workspace.

Prevention

Activities are focused on reducing and eliminating the potential for contact with the virus. Corresponding policies, procedures, and training were created to clearly communicate the plan along with virtual leadership and town hall sessions. Note that compliance with the Prevention activities is required for all individuals accessing the facility including employees and cleaning staff.

Employee protocols

Most of the personal hygiene and protection protocols are familiar to much of the population, though at Leidos these precautions were implemented weeks earlier and are more rigorous than is typical. Screening questions are used prior to building entry and employees self-screen and if they are symptomatic they are directed to remain at home. The screening questions are posted at the building entry and everyone is required to wear a face mask prior to entering. Masks must be worn when moving around in common areas and when speaking to another person without physical barrier separation (e.g. glass cubicle partition). Personal hygiene reminders are posted throughout the facility and social/physical distancing is enforced. Leidos restricted movement across separation zones (except authorized personnel) as described in workspace compartmentalization and individuals are not to enter cubicles/offices that are not their own. And all meetings are required to take place virtually even if participants are present in the same office.

Physical contact with common surfaces

The workspace is further customized to remove the need to touch common surfaces, with door handles being the highest priority. Leidos enhanced its approach for sanitation to clean and disinfect frequently touched surfaces. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks. Non-security doors are propped open and bathroom door latches are disabled to eliminate the need to touch door handles. In circumstances where door handles must be used to open a door, Leidos installed tissue dispensers and placed trash cans by doors which need to be kept closed due to facility security. The tissues are used as protection when opening the door and are disposed of after use. The approach effectively eliminated all bare hand contact with any common use surface as an additive precaution given that no amount of high frequency cleaning/sanitizing can assure that the common surfaces would always remain free of the virus. Hand sanitizers are also placed next to common use office equipment such as printers where hand washing is not practical. Signage is used to reinforce pushing doors open and to identify restricted areas. .

Monitor

Adherence to safety protocols is monitored to ensure all individuals in the workspace comply with physical distancing, mask/PPE usage, and building movement restrictions. Areas that need reinforcement or additional communication are identified to enhance the employee's understanding of the basis and value of the protocol in reducing the risk of infection. The required items needed to support the protocols, such as PPE and sanitizing products, requires oversight and supply chain management to maintain an inventory from multiple sources.

Monitoring activities also establish the foundation for contact tracing should there be an infection incident. Leidos used a quick, low tech option for a framework for contact tracing in common use areas by numbering tables so employees can easily identify their previous locations. The use of cameras, badges, and QR code scanners in common areas can also be used to monitor employee movement. Employee infection status monitoring (uninfected, infected, recovered) and monitoring of the community public infection rate and risk stratification inform leadership of the localized risk level and release of any new COVID-19 guidance which is used to iterate

the Plan. Leidos ceased business travel and required notification of any personal travel to support its monitoring activities. If a company continues business travel, the trip details would also need to be captured.

Response

A structured execution of predefined Response activities following notification of a confirmed positive infection in the workplace is based on public health best practices limits the potential exposure and lowers the infection risk.

Practice the response plan

Leidos drafted its response plan at the start of COVID-19 national emergency and practiced it to learn and identify additional components that would help limit business disruptions and the scope of Response and Recovery. Key elements include the identification of the response team and their roles and responsibilities. Infection incident notification drills were done to bring the plan to life and gain experience in executing the necessary tasks. Leidos understands that regardless of all the safety protocols, an infection incident may occur as an individual can come into the facility after being infected outside of Leidos. The Monitoring activities will identify the situation, such as an employee failed the screening and is denied building entry, and trigger the execution of the response plan.

Exposure identification and containment

All Leidos employees are directed to stay at home if they are ill or symptomatic, and discussions are held with anyone exhibiting symptoms in the workplace and it is very likely that they will be sent home. Upon identification of a possible infection incident, the steps practiced in our drills are executed. The presumed contaminated areas are evacuated in a pre-arranged, orderly and safe fashion, while maintaining distance at all times, and then closed and thoroughly disinfected. Contact tracing is performed and all individuals identified as having close contact with the possibly infected individual are instructed to self-quarantine at home for the appropriate period of time.

Recovery

Activities focus on returning the impacted workspace to pre-incident conditions and managing displaced and exposed employees. The facility compartments that may have been exposed to the virus are sanitized. Leidos uses certified cleaning services to sanitize and perform a deep clean leveraging CDC and NIH guidelines. And, based on the premise the COVID-19 virus can survive for up to 72 hours on certain surfaces, not using the workspace for three days also contributes to the reduction of infection risk.

The displaced employees are given work instructions and support for an alternate site such as in-home or another facility workspace. Quarantined personnel are checked to determine their health status and to retain contact should they require additional support until cleared to return to work. Communications and updates are provided to the impacted location employees including the notification of authorization to reenter the facility and return to work.

Proven results

Leidos has used the safe-workplace plan with positive results. In two separate Leidos locations, one in California and another in Pennsylvania, each with over 70 employees after applying workplace compartmentalization and low population density, there were infection incidents where an employee was sent home after exhibiting symptoms, then later notified Leidos that they tested positive for COVID-19. Applying the steps practiced in our response drills, all closely exposed employees were quickly identified through contact tracing and combined; both locations placed over 35 employees in home quarantine and all came out of the 14 day quarantine without an infection, i.e. no transmission of infection.

Leidos Clinics and Examinations

The safe-workplace plan was enhanced for support of the Leidos clinic operations which requires individuals to be in close proximity and in physical contact to perform independent medical examinations. The additional activities of the safe-workforce plan for the clinics are outlined below.

No one, including the examinee, the provider, or supporting personnel can enter a Leidos facility without first being screened multiple times for possible infection, exposure, or risk of high vulnerability. Examinees who are scheduled for an exam receive an automated phone call prior in order to identify possible symptoms of infection or exposure to an infected individual or hotspot. Anyone so identified is instructed to reschedule the appointment at a later date. Employees, too, are continually queried about symptoms, exposures or risks.

Upon arrival at a facility, examinees are again asked to respond to screening questions, and are observed for any signs of possible symptoms, before gaining admittance. Upon entry, the examinee proceeds directly to a washing station for a thorough hand-washing or asked to apply hand-sanitizer, and must don a protective mask. All examinees and employees, including providers wear masks at all times throughout the facility, and are directed to repeatedly rewash their hands after appropriate intervals and events. And the clinic facilities are sanitized at high frequencies, and after every exam we immediately sanitize the area where the exam took place.

During March 2020 in the heightened awareness of COVID-19, all Leidos clinics remained operational and performed over tens of thousands of exams with no instance of transmission reported among examinees, employees, and providers.

Going forward

As time goes on, we will learn more about COVID-19 and how best to contain it and respond to the various challenges it poses. The question of how much and what sort of isolation is necessary and justifiable will likely evolve as more is known, as the numbers of new cases rises and falls, as more of the population gains immunity, and as the economic and other consequences, and our responses to them, play out across the nation. All of these changing factors will likely call for ongoing adjustments to any plan intended to reduce risk and mitigate the impact of the virus.

But we believe the Leidos safe-workplace plan is the best possible approach at the moment for opening up America's workplaces with the lowest possible risks to the public and to employees