Returning to Work During COVID-19: An Ergonomics Perspective

As COVID-19 has seriously impacted workforces around the globe, workers have increased, decreased, and relocated their work. In the cases of increased production and shift length, or taking work home, the exposure to ergonomics stressors increased. This has left workers trying to mitigate physical stressors on their own while juggling new or different responsibilities.

On the other hand, workers were sent home to wait for word on when facilities would reopen. During time away from the workplace, many workers have experienced de-conditioning. Once the workplace reopens to workers, employers are faced with teams that may have suffered reduced muscle strength, cardiovascular fitness, endurance, and flexibility. Upon restarting lines and processes, workers could face increased body fatigue and encounter a heightened sensitivity to workplace stressors due to a regression of conditioning levels.

As we return to our workplaces, several controls are being considered. The highest impact on reducing exposure to COVID-19 is continuing to exercise work-from-home policies, with only the critical personnel returning to the facility. However, to begin opening their doors and returning to work, companies are bringing workers back after engineering changes have been made in the facility. The lowest business impact and highest risk of workers not adhering to policy are administrative controls, such as physical distancing, and wearing personal protective equipment (PPE). Despite the risks, companies find themselves heavily reliant on these administrative controls. A multi-faceted control approach will be needed to keep all of us safe. The following include some ergonomics considerations as we welcome our workforces back to our facilities:

ENGINEERING CONTROLS

Physical Distancing Outside the Office

Not all workers can be positioned so there is 6 feet between them and others while working. Dividers between workstations can be used for workstations that are in proximity to one another. Visual guidance can be provided in spacious work areas to provide area visitors guidance on where to stand to maintain physically distancing. In areas where physical distancing is not possible like vehicles, control rooms or during two-person material handling, masks should be used.

Identify Workplace Ergonomics Stressors

As your workforce ramps into the new normal, engage your ergonomics team to keep their fingers on the pulse of force and posture concerns. A potentially unconditioned workforce may feel the effects of tasks more than prior to slowing production. Follow the analysis pathway to identify the highest risks. Brainstorm and implement engineering controls to reduce the risks, taking advantage of slow production times to apply upgrades.

Physical Distancing in an Open Office Environment

In open office settings where cubicle walls are low, consider installing higher panels/shields between workstations. Also, re-orienting workstations so employees don't face one another is recommended. To accommodate six feet of social distancing, start with a detailed floor plan indicating the workstations to be occupied, to determine your maximum capacity per floor or wing. Remove chairs or even monitors to discourage un-occupied workstation use. Seating should remain assigned until the widespread threat of virus transmission has diminished. Another suggestion is to consider alternating work-from-home and office days so that only half your company's office area is populated on any one day, and the space can be cleaned in between.

The Ergonomics Center

NC STATE UNIVERSITY

Returning to Work During COVID-19: An Ergonomics Perspective

Reduce/Eliminate Sharing of Office Tools

Sharing of keyboards, mice and headsets is discouraged due to the possible transmission of COVID-19. In shift settings where multiple people share one workstation, accommodations need to be made for each employee to bring their own technology gear or surfaces should be disinfected before changing users.

Accommodate Remote Workers

To provide ease of transport of office equipment and materials, consider providing a standard set of solutions such as a laptop backpack, travel laptop riser, and an external keyboard and pointing device. Additionally, resources on home office setup and backpack loading could be considered.

Housekeeping for Work Areas

In the office environment, equipment location to minimize physical workplace stressors occasionally takes a back seat to personal items. During enhanced cleaning practices during the COVID-19 response, workers should remove personal items and work items should be put away to allow nightly worksurface cleaning. Office ergonomics guidelines should be revisited to optimize workstation setup.

Repurpose Conference and Training Rooms

For the foreseeable future, use of large conference and training rooms may look different. These spaces may transform into work areas for teams into these spaces by relocating furniture to satisfy social distancing requirements.

In-Person Meeting Guidelines

When an in-person meeting is essential, consider the following guidelines:

- Limit meeting size to 10 in-person attendees, providing a remote attendance option for larger attendance.
- For in-person attendees, move chairs to the outer edge of the room to provide 6 feet of spacing between attendees or leave at least one chair empty between attendees. If appropriate, an outdoor meeting could be considered.
- Skip physical contact, like handshakes between attendees, and encourage hand washing before and after each meeting.
- When possible, encourage talk-only meetings where the attendees take a stroll away from their workstation to encourage circulation, change posture, etc.

ADMINISTRATIVE CONTROLS

Establish or Update Physical Demands Descriptions

As you welcome back higher risk workers, companies may provide additional protection to this population to lower physical contact. Having up-to-date Physical Demands Descriptions can help to place high risk workers.

Maintain Wellness Routines

To preserve workplace conditioning, encourage workers to maintain fitness levels. Additional tools to sustain mindfulness and stress relief can help to manage physical stress levels. For companies with stretching programs, transform larger group participation into smaller groups that rotate through the stretching opportunity.

Returning to Work During COVID-19: An Ergonomics Perspective

Encourage Regular Break Schedules

When workers transitioned from the office to their home offices, exposure to physical stressors changed. Setting up home office workstations is just one piece of the puzzle. Assisting family members for homeschooling or caring for a family member while still completing work tasks adds a level of stress. Additionally, workers many times find themselves putting in more hours due to the segmental nature of the new norm and not being able to walk away from their work. Whether at home workstations or when workers return to the workplace, break schedules will be equally important. Regular breaking from tasks is important for muscle recovery, flexibility, circulation, and eye health.

Extended Shifts and Exposure to Physical Workplace Stressors

It is recommended that overtime hours be limited. Additional exposure time to physical stressors when workers have reduced conditioning can increase their risk of developing discomfort and muscle fatigue, raising the risk of potential injury.

Attend Ergonomics Training

Welcoming workers back to the workplace can increase their likelihood of developing discomfort as production begins to ramp up. Having workers attend general ergonomics awareness training to raise awareness of ergonomics, why it is important, how to apply ergonomics principles, and when to report work-related discomfort. Proactively reporting trends in comfort can help prioritize ergonomics team focus and solution implementation to reduce the risk of a worker developing a musculoskeletal disorder.

Reconsider Job Rotation

From a physical workplace stressor perspective, companies use job rotation to mitigate workers exposure to one or more high risk tasks. However, in response to COVID-19 guidelines, job rotation is likely eliminated or looks different to reduce the common touching surfaces. Depending on the frequency of cleaning procedures, it may not be feasible for lines to rotate. Best practice is to implement engineering controls to reduce or eliminate physical stressors to reduce risk.

In Conclusion

As workers begin returning to their offices and workplaces, a myriad of engineering and administrative controls will be needed to keep everyone safe. COVID-19 has forced all of us to alter the way we conduct business and how we interact with one another in our physical workspaces. Companies that adopt these measures will be most successful in ensuring the safety and well-being of their workers.

Resources

- NSC - SAFER Task Force
- OSHA - Guidance on Preparing Workplaces for COVID-19; OSHA 3990-03 2020
- Harvard Business School - What Makes an Office Building “Healthy”