COVID-19: PERSONAL PROTECTIVE EQUIPMENT FOR THE MANUFACTURING SECTOR

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PPE BEST PRACTICES

IN THE MANUFACTURING WORKPLACE

As sectors from healthcare to retail to manufacturing have seen over the past months, our personal protective equipment (PPE) supply chains are facing unprecedented stress. The pandemic has created an incredible demand for PPE while reminding us that proper sourcing, fitting, policies and procedures are critical to keeping employees safe from COVID-19 as well as a myriad of other occupational health risks and diseases.

FACTORS TO CONSIDER WHEN SELECTING PPE

The supply chains that provide us with access to the respiratory protection, gloves, safety glasses and face shields that manufacturers need to protect workers are facing pressure like never before. The unfortunate truth in the midst of the pandemic is that manufacturers will be forced to make difficult decisions; sometimes making do with supplies and stock levels that are less than ideal. Accordingly, the ability to prioritize needs is key.

Here are five things to consider when we are selecting PPE within the current climate:

- Hazard identification
- Level of protection needed
- PPE availability
- Burn rate and disposal
- Fit

HAZARD IDENTIFICATION

Each piece of equipment should be evaluated to ensure that it is the most effective and comfortable gear for the hazards that that workers face within a given manufacturing operation. To do so, each manufacturer must first understand which hazards it is protecting its people from. For some manufacturers this may mean dust, fumes or aerosols. For others, it may mean noise levels. The list goes on and no two facilities are alike. What’s more, each hazard will then have specific considerations that must be evaluated. What is the safe exposure limit and how much exposure is in each facility? Are there limitations on the PPE based on your environment (oily atmosphere, heat, sparks, open flames, etc.)?

COVID-19 has introduced a new occupational hazard, but the same threat identification and risk mitigation principles apply. CME has created many resources to assist manufacturers. Whether disinfectant procedures and the identification of high-touch areas, identifying safe ways to handle imported goods and shipments or social distancing, PPE is an appropriate step once it has been determined that the risk cannot be eliminated through other, less intrusive means first.

LEVEL OF PROTECTION NEEDED

Once the hazard is understood, match the level of protection to the exposure. In other words, don’t go hunting mosquitos with a shotgun. The CSA standard for the Selection, Care, and Use of Respirators asks that you identify the hazard ratio for your respiratory dangers and match that with a respirator that has the right assigned protection factor. This assessment will help you identify the minimum level of protection required and gives you the opportunity to select alternative PPE as a back up if your preferred respiratory protection becomes unavailable.
While some of the standards surrounding medical respiratory protection equipment use in healthcare settings have been adjusted to allow for equivalent equipment from other jurisdictions to be used, the CSA Standard still applies to protecting manufacturing workers from industrial hazards.

SARS-CoV-2 – the virus that causes COVID-19 – is a novel (new) Coronavirus, and up until several months ago had never before been seen in humans. Consequently, there is still much we don’t know. There is evidence to suggest the pre-symptomatic carriers, asymptomatic carriers and those with minor symptoms may be able to pass the infection on. In the absence of clinical studies to prove or disprove, and in the interest of prudence, many manufacturers are moving to encourage all employees to consider face masks in the workplace, regardless of specific direction through public health orders. Manufacturers should stress that N95 or other medical grade masks are not required. Unless the employees’ tasks include activities for which additional hazard protection is required, a simple cloth covering will do. CME recommends face coverings for all employees who must work within six feet of one another for any prolonged periods.

**PPE AVAILABILITY**

Manufacturers should work with their vendors to identify which products they have the strongest supply chain for and ensure that they have fit tested their people on specific equipment or that they have the ability to perform that fit testing quickly.

COVID-19 related PPE may be available through alternative supply chains, such as face masks produced by local community members or businesses who have temporarily retooled. Be mindful of the requirements of your employees. Will employees be responsible for bring their masks to work each day? Will the employer provide a supply to each employee and if so, how many? How frequently should the face coverings be laundered and by whom? Be sure to have a plan and policies in place and clearly communicate to all impacted employees. Communication should include not just amended policies, but also updating signage at the entrances and throughout your facilities. Keep in mind the “total cost of ownership” for your current and back up PPE stocks. Shipping times and costs, availability, comfort and wearability all impact the actual cost of the product to your organization and need to be factored in.

**BURN RATE & DISPOSAL**

Understanding how much PPE you are consuming will also help you identify how much of a safety stock may be required, as well as any opportunities to improve operational practices regarding equipment use. The below resources offer helpful guidance to calculate burn rate in your facility.

- Respirators (CAN/CSA Z94.4-02 Selection, Use, and Care of Respirators)
- Face Covering Masks
- Eye and Face protection (CAN/CSA Z94.3-02 Eye and Face Protectors, CSA Z94.3-02 Protective Eyewear: A User’s Guide)

Control of PPE supply involves two important factors: ensuring PPE is still readily available to those who need it and that the organization is conforming to proper PPE lifespan use. Once you understand your burn rate, calculate how much PPE your operation requires on a daily basis. Ensure that you are prioritizing the equipment in your operation so that you mission critical processes will always have the equipment needed.

During COVID-19, many manufacturers have reported shortages with PPE. Employees may mistakenly believe that certain PPE items offer greater protection against COVID-19 or may feel that “more is better” for personal safety. These misconceptions can in fact harm employees. In fact, the now well-known adage “my mask protects you, your mask protects me” counters the faulty line of thinking that masks improve personal health and safety.

Creating a culture where each person is accountable for fulfilling their safety responsibilities is key. Supervisors, safety and health professionals, and the use of audit teams can all support this culture and encourage the appropriate use of PPE on the job at all times. Rather than reprimanding or criticizing employees who may not understand why additional measures are critical during COVID-19, it can helpful to coach individuals who are not wearing PPE, wearing it incorrectly, or may be using more than necessary. Regardless, manufacturers should clearly communicate their policies and expectations and follow progressive coaching to ensure compliance.
In all jurisdictions, third-party waste disposal companies handle biohazardous and medical wastes, which is what potentially contaminated respirators are. These should not be considered as standard hazardous or subject waste. Contact your hazardous waste disposal company for directions on how to properly handle this waste in your facility for transport, decontamination, and disposal.

FIT (FITMENT)

We’ve all seen the photos of health care workers with bruising, cuts, and swelling in the areas where their PPE sits; rug-burn behind the ears from wearing surgical masks for a full 12-hour shift, or bruised faces from masks pulled too tight by “ear saver” devices. These workplace injuries are a result of improperly fitted PPE. Mask straps are designed to be looped behind the ear and altering the fit means the mask is pulled an extra 4-5 inches back through an ear saving device, creating a new set of injuries and highlighting an important point. Comfort and wearability are key to PPE being worn by ANY worker. Contact a PPE expert, Made Safe or other, in your area to help identify and overcome the specific issues with your equipment.

PPE POLICY

USING OR AMENDING EXISTING GUIDANCE

Update PPE policies to include when you will require masks or face coverings to protect against the virus in your facilities. Situations where social distancing can’t be fully effective should be examined for risk, including on the job training, customer facing roles, multiple trade trouble shooting, and more. Make sure you are amending your existing policies or developing new ones in consultation with your safety committee or representative(s). Any new policies should include the specific social distancing procedures that are in place at your facility.

ACCESS TO EXPERTS

CME AND MADE SAFE ARE HERE TO HELP

Our team is dedicated to helping manufacturers through the COVID-19 pandemic; with resources that run the gamut from national advocacy to local shop floor solutions.

Contact our team of health and safety experts for manufacturing-specific insights and supports:

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