Not All Protective Measures Are Created Equal

A global pandemic has recently become our reality as we have been introduced to SARS-CoV-2, which is the virus that causes COVID-19, also known as coronavirus. Employers and employees alike are having to adapt to a new norm in which social distancing of at least 6 feet and emphasizing basic hand hygiene has become critical to saving lives. While there are many resources we can use to better understand how to protect ourselves, it can also be challenging to understand what applies to Northwestern employees versus the general public.

Occupational risk of exposure to SARS-CoV-2 during an outbreak varies dramatically depending on the industry type, need for contact within 6 feet of people known to be, or suspected of being, infected with SARS-CoV-2, or repeated or extended contact with persons known to be, or suspected of being, infected with SARS-CoV-2.

The Occupational Safety and Health Administration (OSHA) has divided job tasks into 4 exposure risk levels in the shape of a pyramid (see image to the right) to represent probable distribution of risk. Most American workers, including at Northwestern, will likely fall in the lower exposure risk level, which are are jobs that do not require contact with people known to be, or suspected of being, infected with SARS-CoV-2.

Since COVID-19 is a respiratory disease, some people may falsely assume that respiratory protection would be our greatest defense against SARS-CoV-2. After all, respirators, including filtering facepieces such as N95s, are essential forms of personal protective equipment (PPE) as they protect workers against environments in which hazardous atmospheres are present, such as gases, fumes, and biological agents, including SARS-CoV-2.

Northwestern staff and faculty working with COVID-19 patients or specimens, animal care workers, and trades, such as painters, have been identified as required respirator users per our Respiratory Protection Program to protect against hazardous airborne contaminants, such as biological agents or organic vapors. Employees deemed required to wear a respirator must be medically evaluated by a licensed medical professional, trained on respiratory protection, and fit tested to ensure the proper fit of one’s respirator. Though some of these groups may be required to use N95 respirators, OSHA is requiring employers to decrease the use of N95s and consider other controls in light of this unprecedented pandemic and worldwide N95 shortage.

Understanding the Differences

According to OSHA, those working in jobs considered lower exposure risk to SARS-CoV-2, additional PPE is not recommended – workers should continue to use the PPE, if any, that they would ordinarily use for other job tasks. Furthermore, OSHA and Centers for Disease Control & Prevention (CDC) do not recommend that the general public wear N95s or surgical masks to protect themselves from respiratory diseases, such as COVID-19. This type of respiratory protection is crucial for healthcare workers and other people who are taking care of someone infected with, or suspected of having, COVID-19. It is important to note that facemasks are not considered a type of respiratory protection, but rather a barrier for large droplets or sprays of bodily or other hazardous fluids. In an effort to reduce transmission of COVID-19, Northwestern essential staff will follow CDC cloth face covering guidance in circumstances where social distancing measures are difficult to maintain. According to the federal government and CDC, this is considered a voluntary protective measure on this rapidly changing topic.

According to OSHA and CDC, the best protection against COVID-19 transmission is to implement good hygiene and infection control practices, including:

- Promote frequent and thorough hand washing, including by providing workers with a place to do so.
- If soap and running water are not available, provide alcohol-based hand rubs containing at least 60% alcohol.
- Practice social distancing – stay at least 6 feet from other people, even if you are wearing a cloth face covering.
- Follow respiratory etiquette, including covering coughs and sneezes – please note that if you or your team members are feeling sick, stay home.

Additionally, due to the current pandemic conditions, illegitimate PPE, including respiratory protection, is being mass produced and sold online – these masks have not been approved by the National Institute of Occupational Safety and Health (NIOSH) like N95s or have not been cleared by U.S. Food and Drug Administration (FDA) like surgical masks. Without this approval, they are not proven to effectively protect against biological agents or otherwise. As such, Northwestern Risk Management only recommends legitimate and approved PPE, including N95s and surgical masks, to those deemed required.

Along with those on the frontlines of this pandemic, we also can do our part to slow the spread of the virus and protect our communities. Remember frequent and thorough hand washing, practice social distancing of at least 6 feet, and stay home if you feel sick.

For greater clarity on COVID-19 exposure prevention, reference these helpful resources:

- Workers & businesses – OSHA
- Families & communities – CDC
- Northwestern community

For Additional Information: Contact Gwen Butler, Director, Environmental Health & Safety, at 847.491.4936.