The safety of pharmacy personnel is a top priority during the COVID-19 pandemic. Personal Protective Equipment (PPE) is defined by OSHA as “specialized clothing or equipment is worn by an employee for protection against infectious material.” Because there is no cure currently available for COVID-19 (SARS-CoV-2), prevention is the best measure of containing the infection.

PPE is currently in limited supply, and use should be determined by the facility based on the likelihood of exposure to COVID-19 patients. Each health care worker should become familiar with facility-specific and state-specific guidance on PPE use, putting on and taking off (donning and doffing), and conservation, as the availability of PPE may necessitate alternative guidance to protect health care workers and patients.

Consider implementing what engineering controls are available to your facility to reduce risk of exposure for your personnel beyond that of PPE. The CDC provides a list of approaches that may work in your environment, including use of physical barriers (glass/plastic windows) and properly maintained ventilation systems (air movement). Further CDC guidance is available for considerations for pharmacies during the COVID-19 pandemic.

Keep Informed by Knowing the Facts about PPE.

What is PPE?
Personal protective equipment, commonly referred to as “PPE,” is equipment worn to minimize exposure to hazards that cause serious workplace injuries and illnesses. These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.

How is PPE put on or taken off properly?
Properly putting on and taking off PPE, also known as donning and doffing, is critical to the safety and effectiveness of the equipment. Errors in the use of PPE can result in touch contamination. Refer to the CDC video on how to don and doff PPE for coronavirus. Errors in the use of PPE can result in touch contamination. Refer to the CDC infographic on the sequence for putting on and safely removing PPE or follow your facility-specific guidelines. The CDC has a library of training videos for donning and doffing (the key part to be sure to get correct) that likely include your facility’s materials. While these videos were originally intended for Ebola, the principles are the same.

Who should be wearing a face mask?
Pharmacists and pharmacy technicians should be wearing a face mask while they are in the pharmacy for source control. CDC has advised that everyone entering the pharmacy should wear a facemask regardless of symptoms except for children under age 2, anyone who has trouble breathing, unconscious, incapacitated or unable to remove the mask without assistance.
**Is there a difference between an N95 respirator and a surgical mask?**

The N95 mask filters out 95% of airborne particles including large and small particles. In contrast, a surgical facemask does not protect the wearer against smaller airborne particles. See this infographic to learn the difference between an N95 mask and a surgical mask.

**What is respirator fit testing, and why is it needed?**

Respirator fit testing is needed for N95 masks to ensure that the mask is properly fitted to the individual to filter out respiratory droplets. An infographic to help your staff understand WHO needs to get fitted and HOW to get tested.

**If no facemasks are available, can homemade facemasks be used?**

In settings where facemasks are not available, homemade masks (e.g., bandana, scarf) for care of patients with COVID-19 have been used as a last resort. However, homemade masks are not considered PPE, because their capability to protect individuals from the transmission of the virus is unknown. Caution should be exercised when considering this option. Homemade masks should ideally be used in combination with a face shield that covers the entire front (that extends to the chin or below) and sides of the face. As facemasks remain in limited supply, the CDC has guidance and a tutorial on how to use cloth face coverings to help slow the spread of COVID-19.

**Can facemasks be reused?**

Generally, the reuse of facemasks is not recommended. However, under certain circumstances and conditions, the limited reuse of facemasks may be an option. Check the latest guidance from CDC on the reuse of facemasks. The potential contribution of contact transmission for COVID-19 is unknown. Care should be taken to ensure that users do not touch the outer surfaces of the mask during care, and that mask removal and replacement be done carefully and deliberately. Even so, the facemask should be discarded if it is soiled, damaged, or hard to breathe.

**Can the facemask be used beyond the manufacturer-designated shelf life for patient care activities?**

Facemasks are being used beyond the manufacturer-designated shelf life due to the limited supply of PPE. If there is no date available on the facemask label or packaging, facilities should contact the manufacturer. The user should visually inspect the product before use and, if there are concerns, such as degraded materials or visible tears, discard the product.

**What makes a facemask effective in protection against COVID-19?**

Masks are effective only when used in combination with frequent hand-cleaning with alcohol-based hand rub or soap and water. Users must also know how to properly use it and dispose of it properly to prevent contamination of surfaces and transmission of the virus to themselves or to others.
**Do members of the public need to use facemasks?**
The CDC recommends that patients only need to wear a mask if the individual is caring for a person with the suspected or confirmed COVID-19 infection. Additionally, masks should be worn by patients if they are coughing or sneezing.

**Can expired medical gloves be used?**
The FDA states that medical gloves “serve as protective barriers and may offer some protection even when used past the manufacturer’s designated shelf life or expiration date.” If the gloves do not have “discoloration, visible holes, or tears” it can be reused, considering the PPE shortage.

**Are there concerns about counterfeit PPE from other countries?**
The FDA and the CDC are actively monitoring supply from other countries and monitoring counterfeit products. Work directly with your supervisor to obtain PPE. Do not respond to individual messages on social media from other countries for purchasing PPE. Review the COVID-19 resource on fraudulent medical products and scams.

**What are CDC’s recommended strategies for optimizing supply for specific types of PPE?**
Because of the rapidly changing situation with the COVID-19 epidemic and the short supply of PPE, the recommendations for conserving PPE are being updated regularly. Access this CDC website for the latest information on Eye Protection, Facemasks and N95 Respirators.

**Where is additional information available on PPE?**
Information related to the use of PPE during the COVID-19 crisis is continuously changing. The CDC website is being updated regularly as the pandemic continues. CDC is maintaining an FAQ document for Personal Protective Equipment. Additionally, a review of the full guidance on PPE use in COVID-19 can be found there as well.

**Reference:**

**Disclaimer:** Information related to the COVID-19 pandemic is changing rapidly and continuously. The material and information contained in this publication is believed to be current as of the date included on this document. The American Pharmacists Association assumes no responsibility for the accuracy, timeliness, errors or omission contained herein. Links to any sources do not constitute any endorsement of, validity, or warranty of the information contained on any site. The user of these materials should not under any circumstances solely rely on, or act based on this publication. Pharmacy professionals retain the responsibility for using their own professional judgment and practicing in accordance with all rules, regulations, and laws governing the pharmacy practice within their jurisdiction.