

Navigating the PPE shortage during COVID-19

With increased demand for personal protective equipment, or PPE, goggles, faceshields, disposable coveralls, N95 respirators, and other gear that workers wear to protect themselves from pesticides, COVID-19, and other health hazards are in short supply, or temporarily unavailable, as priority is given to health care workers during the pandemic.

In a phone interview, regional distributors of PPE in California expressed uncertainty in the lead times for certain items, pointing to warnings from manufacturers that the availability of certain PPE will be “touch and go” for now. National distributors of PPE servicing landscape, structural, and agricultural sectors, shared less challenges with inventory of certain PPE items than regional distributors. Stocks of cartridge respirators differed among national distributors due to marketplace competition.

Check as many distributors of PPE as possible at the national and regional level to find necessary equipment and conduct proper maintenance of reusable PPE to extend the longevity of its shelf-life.

To reduce the spread of COVID-19, workers may wear homemade face coverings, but for applying pesticides, they must wear the respirator specified on the pesticide product label.

In the meantime, there is alternative PPE that urban pest management professionals can use during the shortage. Pesticide applicators may use gear that is more protective than required by state regulations and the product label. For example, substitute a half- or full-mask respirator for an N95 disposable respirator when not accessible.

Look for lesser-known brands of PPE as opposed to the first tier of choice. The more recognizable Tyvek coverall from Dupont is hard to come by, try seeking out other brands. Reusable cotton coveralls are more available in supply and a good alternative to their disposable equivalent.

Here are some guidelines for how to meet PPE requirements as the shortage continues:

General PPE requirements: Remember, the label is the law. Label and California PPE requirements are not being loosened. Purchase only what you need for the season and choose reusable PPE whenever possible. Clean and maintain reusable PPE to prevent pesticide exposure and extend equipment shelf-life. Operations with excess supplies of PPE should consider coordinating with their local County Agricultural Commissioner’s Office, UC Cooperative Extension advisor, or through other channels to distribute PPE in their area to others in need.

Respirators: If you can't find the respirator required on the label, use an alternative, more-protective respirator. For example, if an N95 is required, you can use a half-mask with N95 particulate filters; these can be stand-alone filters (e.g. P100) or ones that

attach to an organic vapor cartridge. Filters and pre-filters rated “R” or “P” are more protective than “N” and an option. Choose a different pesticide that doesn't require a respirator.

Gloves: Chemical-resistant gloves, usually 14 mil or more in thickness are required for most California pesticide applications and should be worn by mixers, loaders, and applicators. If nitrile gloves are not available, Viton and laminate gloves are universal chemical-resistant materials for most pesticide labels. If the glove material is specified on the label, that instruction must be followed. Disposable gloves less than 14 mil can be worn, but not for more than 15 minutes at a time. Also note that thinner gloves cannot be layered on top of one another.

Coveralls: Coveralls should be worn when required by the pesticide label or when the signal word is “WARNING” or “DANGER,” or as a preventative measure when applying by backpack sprayer or fogger. Coveralls can be made from high-density polyethylene fibers (Tyvek, and other brands), which are disposable, or cotton, which are reusable. If reusable coveralls are worn, the employer must ensure employees are provided clean coveralls.

Goggles/face shields: Face shields are required for mixing and loading pesticides only if it's stated on the label. If a face shield is unavailable, a full-face respirator is an alternative option. Goggles or other protective eyewear should always be worn in California when handling pesticides, regardless of what the label says. The face shield, goggles or safety glasses must provide front, side, and brow protection, and meet the American National Standards Institute Z87.1 standard for impact resistance.

For more information about PPE, see the California Department of Pesticide Regulation's posters at https://www.cdpr.ca.gov/docs/whs/pdf/gloves_for_pesticide_handling.pdf and https://www.cdpr.ca.gov/docs/whs/pdf/n95_alternatives_for_pesticide_handling.pdf.

UC IPM also covers these topics in their pesticide safety webinar series at <http://ipm.ucanr.edu/IPMPROJECT/workshops.html>.

Anna Katrina Hunter, Pesticide Safety Writer and **Lisa Blecker**, Pesticide Safety Education Coordinator
University of California Statewide IPM Program