

# What Face Mask is Right for the Job?

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Fact Sheet No. 01.001



UNIVERSITY of MARYLAND  
EASTERN SHORE  
**EXTENSION**  
SCHOOL of AGRICULTURAL AND NATURAL SCIENCES

June 2020

In the course of their job, poultry growers face many different environmental situations - from dusty barns and biosecurity protocols to mixing chemicals for fieldwork. Each situation requires a different level of respiratory protection. When determining what type of respiratory protection a grower needs, consider the following mask descriptions.

## Masks for Everyday Use (Dust/Particulate)

Growers work in their chicken houses multiple times each day. When the houses are ventilated properly, dust and dander are their main concerns. In that case, a simple “nuisance” dust mask (Figure 1) is all that is needed. Nuisance dust masks are not respirators and are not approved by the National Institute of Occupational Safety and Health (NIOSH). The mask will have one strap to secure it over the mouth and nose and guards against large dust particles. It is not intended to protect against hazardous dust, gases, or vapors from pesticides. In addition, it is inexpensive and can be purchased from local farm supply stores.

If a dust mask is not available, tie a bandana around the face or make one at home with scrap material from other sewing projects. Simple designs are available online. Some may be found at <https://www.cdc.gov/coro-navirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>. Wash masks daily and reuse.

Dust masks need to fit snugly but comfortably against the side of the face and around the nose.

They should be secured with elastic or ties and should allow for breathing without restriction. Homemade masks can also be made with ear loops to secure them but can become uncomfortable when worn for extended periods.

## Disposable Respirators

The disposable particulate respirator (Figure 2) is commonly referred to as a dust mask, but should not be confused with a nuisance dust mask. Disposable particulate respirators have two straps and are NIOSH approved. The approval label should be printed on the box or the mask or both. The respirators are categorized by the type of filter and rated by their efficiency in reducing the user’s exposure to dust, mists, and fumes. The N95 disposable respirator (“N” filter) is 95% efficient against particulate aerosols free of oil. Other codes used for non-powered respirators are R, which means the filter in the mask is resistant to oil, and P, which means the unit is oil proof. All three types of filters are available in efficiency levels of 95%, 99%, and 99.7%.

The main uses for the disposable particulate respirator include protection from dusts and mists. Disinfectants, pesticides, or litter amendments are safe if the manufacturer’s guidelines are followed. Always follow the manufacturer’s protection recommendations.

A description of non-disposable respirators and their use can be found on the National Ag Safety website at <https://nasdonline.org/197/d000146/respiratory-health-on-the-poultry-farm.html>.



**Figure 1.** Dust “nuisance” mask (Photo credit: <https://ehs.msu.edu/occ/respirator/dustmask-vs-resp.html>):



**Figure 2.** Typical N95 Respirator (Photo credit: <https://ehs.msu.edu/occ/respirator/dustmask-vs-resp.html>)

Other sources for mask information:

<https://agn.memberclicks.net/assets/docs/RespiratoryResources/respirator%20decision%20guide.pdf>

<https://nasdonline.org/197/d000146/respiratory-health-on-the-poultry-farm.html>

## References

Jester RC, Malone, GW. [date unknown]. Respiratory health on the poultry farm. National Ag Safety Database; [accessed 2020 Jun 29]. <https://nasdonline.org/197/d000146/respiratory-health-on-the-poultry-farm.html>

Respiratory protection for the farm and ranch. 2012. Farm and Ranch eXtension in Safety and Health (FReSH) Community of Practice; [accessed 2020 Jun 29]. <https://ag-safety.extension.org/respiratory-protection-on-the-farm-and-ranch/>

## Quick Facts:

- When dust and dander are the main concern, a simple nuisance dust mask is all that is needed.
- Nuisance dust masks are not intended to protect from hazardous dusts, gases, or vapors from pesticides.
- Dust masks need to fit snugly but comfortably against the side of the face and around the nose.
- The N95 disposable respirator is 95% efficient against particulate aerosols free of oil.
- Always follow the manufacturer’s protection recommendations when using disinfectants, pesticides, or litter amendments with N95 masks.