






Face Coverings vs. Respirators

Use of respirators in the work environment is regulated by the Occupational Safety and Health Administration (OSHA). OSHA requirements for respirator use include a hazard/exposure assessment, training, fit testing, and inclusion in the ISU Occupational Medicine Program. EH&S coordinates the respiratory protection program for ISU and will determine whether an occupational exposure risk exists for employees.

Face coverings are not considered respirators and are not covered by OSHA requirements. Face coverings are recommended by the CDC as a way to mitigate the spread of COVID-19. Wearing a face covering protects the community from you, while others wearing their face coverings protects you.

Face Coverings*			Respirators**	
Cloth Face Coverings (handmade, gators, non-medical disposables, etc.) 	Disposable 3-ply Masks 	KN95, KF94 	Filtering Facepiece (dust mask, N95, etc.) 	Cartridge Air Purifying Respirator (half face, full face and PAPR) 
Not Regulated	ASTM F2100, Level I, II, or III (U.S.A.) YY0469 (China)	Chinese or Korean standard, are not NIOSH approved	NIOSH and OSHA approved	NIOSH and OSHA approved
Uses: Infection control, limit spread of breathed particles	Uses: Infection control, limit spread of breathed particles, and liquid splatters	Uses: Infection control, limit spread of breathed particles. Not approved in U.S. for occupational exposures	Uses: occupational exposures to hazardous dust and particles, including biologicals	Uses: occupational exposures to hazardous dust and chemical vapors
Efficacy varies with design, materials used, construction	3.0 microns: $\geq 95\%$	Efficacy affected by high degree of counterfeits, product quality issues, & poor quantitative testing results	0.3 microns: $\geq 95\%$	0.3 microns: $\geq 95\%$, 99% or 99.97%
No medical surveillance	No medical surveillance	No medical surveillance	Medical surveillance	Medical surveillance
No EH&S training and fit test	No EH&S training and fit test	No EH&S training and fit test	Formal training and fit test by EH&S	No, when worn voluntarily*** No fit test, must read "Information for Dust Mask Respirator Users"

* Face coverings are NOT respirators—they do NOT meet NIOSH or other U.S. performance requirements for occupational exposures.

** Respirators having NIOSH certification are designed and tested to meet performance requirements to assure protection. To wear a respirator for occupational exposure, a risk/exposure assessment must be completed, along with OSHA required training, fit-testing, and inclusion in the ISU Occupational Medicine Program.

*** In certain situations, filtering face pieces (N95) can be used on a “voluntary” basis when occupational exposure levels/risks are elevated but remain below regulatory limits. In these situations, employees may wear a filtering face piece with the understanding of the limits of the device, along with proper care and use considerations. [In the COVID environment, these scenarios are severely restricted due to limited supply of NIOSH-approved N95s. The existing supplies remain reserved for healthcare and first responders. As supply chain improves for these products, restrictions will be lessened and eventually removed.]

Guidance on Purchase of N95 Respirators

The list below outlines the general design criteria that must be considered prior to purchase of N95 respirators intended for occupational exposure risks. For assistance with product review, please consult Environmental Health and Safety at remccol@iastate.edu or (515) 294-9561 prior to purchase.

- NIOSH approval with an assigned "TC-XXXX-XXXX" number, this information must be marked on the respirator or packaging
- Two head straps (No ear loops)
- Rated at the N95 protection level or above (N99 or N100)
- Moldable nose band
- No exhalation valves
- Sizes to fit small to large faces