WAC 296-307-60205 Select and provide appropriate respirators.

IMPORTANT:

See WAC 296-307-624 Scope, for:

1. Hazard evaluation requirements. Evaluation results are necessary for respirator selection.

2. A list of substance-specific rules that may also apply. Those listed rules have additional respirator selection requirements.

The employer must select and provide, at no cost to employees, appropriate respirators for routine use, infrequent use, and reasonably foreseeable emergencies (such as escape, emergency, and spill response situations) by completing the following process:

Respirator Selection Process

Step 1: If the only respirator use is for escape, skip to **Step 8** to select appropriate respirators.

Step 2: If the respiratory hazard is a biological aerosol, such as TB (tuberculosis), anthrax, psittacosis (parrot fever), or hanta virus, select a respirator appropriate for **nonemergency** activities recognized to present a health risk to workers AND skip to **Step 8.**

(a) If respirator use will occur during **emergencies**, skip to **Step 8** and document the analysis used to select the appropriate respirator.

(b) Use Centers for Disease Control (CDC) selection guidance for exposures to specific biological agents when this guidance exists. Visit https://www.cdc.gov.

Step 3: If the respiratory hazard is a pesticide, follow the respirator specification on the pesticide label AND skip to **Step 9.**

Step 4: Determine the expected exposure concentration for each respiratory hazard of concern. Use the results from the evaluation required by WAC 296-307-624, Respiratory hazards.

Step 5: Determine if the respiratory hazard is classified as IDLH; if it is NOT IDLH skip to **Step 7.**

The respiratory hazard **IS** classified as IDLH if:

(a) The atmosphere is oxygen deficient or oxygen enriched;

OR

(b) The employer CANNOT measure or estimate expected exposure concentration;

OR

(c) The measured or estimated expected exposure concentration is greater or equal to the IDLH value in the NIOSH *Pocket Guide to Chemical Hazards*.

Notes: 1. WISHA uses the IDLH values in the 1990 edition of the NIOSH *Pocket Guide to Hazardous Chemicals* to determine the existence of IDLH conditions. The employer may use more recent editions of this guide. Visit www.cdc.gov/niosh for more information.
2. If your measured or estimated expected exposure concentration is below NIOSH's IDLH values, proceed to **Step 7**.

Step 6: Select an appropriate respirator from one of the following respirators for IDLH conditions and skip to **Step 8:**

(a) Full-facepiece, pressure demand, self-contained breathing apparatus (SCBA) certified by NIOSH for a minimum service life of thirty minutes;

OR

(b) Full-facepiece, pressure demand air-line respirator equipped with an auxiliary self-contained air supply.

Exception: If the respiratory hazard is oxygen deficiency AND the employer can show oxygen concentrations can be controlled within the ranges listed in Table 4 under ALL foreseeable conditions, the employer is allowed to select **ANY** type of SCBA or air-line respirator.

Table 4
Concentration Ranges for Oxygen Deficiency

Altitude (as ft. above sea level)	Oxygen Concentration Range (as percent oxygen)
Below 3,001	16.0 - 19.5
3,001 - 4,000	16.4 - 19.5
4,001 - 5,000	17.1 - 19.5
5,001 - 6,000	17.8 - 19.5
6,001 - 8,000	19.3 - 19.5
Above 8,000 feet the exception does not apply.	

Step 7: Identify respirator types with assigned protection factors (APFs) from Table 5 that are appropriate to protect employees from the expected exposure concentration.

Step 8: Consider hazards that could require selection of specific respirator types. For example, select full-facepiece respirators to prevent eye irritation or abrasive blasting helmets to provide particle rebound protection.

Step 9: Evaluate user and workplace factors that might compromise respirator performance, reliability or safety.

If the respiratory hazard is a pesticide, follow the requirements on the pesticide label and skip to **Step 11.**

Examples:

(a) High humidity or temperature extremes in the workplace.

(b) Necessary voice communication.

(c) High traffic areas and moving machinery.

(d) Time or distance for escape.

Step 10: Follow Table 6 requirements to select an air-purifying respirator.

If Table 6 requirements cannot be met, the employer must select an air-line respirator or an SCBA.

Step 11: Make sure respirators the employer selects are certified by the National Institute for Occupational Safety and Health (NIOSH).

To maintain certification, make sure the respirator is used according to cautions and limitations specified on the NIOSH approval label.

Note: While selecting respirators, the employer will need to select a sufficient number of types, models or sizes to provide for fit testing. The employer can also consider other respirator use issues, such as accommodating facial hair with a loose fitting respirator.

Use Table 5 to identify the assigned protection factor for different types of respirators.

Table 5
Assigned Protection Factors (APF) for Respirator Types

If the respirator is a(n) . . .	Then the APF is . . .
Air-purifying respirator with a:	
• Half-facepiece	10
• Full-facepiece	100
Note: Half-facepiece includes 1/4 masks, filtering facepieces, and elastomeric facepieces.	
Powered air-purifying respirator (PAPR) with a:	
• Loose-fitting facepiece	25
• Half-facepiece	50

If the respirator is a(n) . . .	Then the APF is . . .
• Full-facepiece, equipped with HEPA filters, chemical cartridges or canisters	1000
• Hood or helmet, equipped with HEPA filters, chemical cartridges or canisters	1000
Air-line respirator with a:	
• Half-facepiece and designed to operate in demand mode	10
• Loose-fitting facepiece and designed to operate in continuous flow mode	25
• Half-facepiece and designed to operate in continuous-flow, or pressure-demand mode	50
• Full-facepiece and designed to operate in demand mode	100
• Full-facepiece and designed to operate in continuous-flow OR pressure-demand mode	1000
• Helmet or hood and designed to operate in continuous-flow mode	1000
Self-contained breathing apparatus (SCBA) with a tight fitting:	
• Half-facepiece and designed to operate in demand mode	10
• Full-facepiece and designed to operate in demand mode	100
• Full-facepiece and designed to operate in pressure-demand mode	10,000
Combination respirators:	
• Find the APF for each type of respirator in the combination.	The lowest value
• Use the lower APF to represent the combination.	

Use Table 6 to select air-purifying respirators for particle, vapor, or gas contaminants.

Table 6
Requirements for Selecting Any Air-purifying Respirator

If the contaminant is a . . .	Then . . .
• Gas OR vapor	• Provide a respirator with canisters or cartridges equipped with a NIOSH-certified, end-of-service-life indicator (ESLI) **OR**

If the contaminant is a . . .	Then . . .
	• If a canister or cartridge with an ESLI is NOT available, develop a cartridge change schedule to make sure the canisters or cartridges are replaced before they are no longer effective **OR** • Select an atmosphere-supplying respirator
• Particle, such as a dust, spray, mist, fog, fume, or aerosol	• Select respirators with filters certified to be at least 95% efficient by NIOSH – For example, N95s, R99s, P100s, or High Efficiency Particulate Air filters (HEPA) **OR** • The employer may select respirators NIOSH certified as "dust and mist," "dust, fume, or mist," OR "pesticides." The employer can only use these respirators if particles primarily have a mass median aerodynamic diameter of at least two micrometers. **Note:** These respirators are no longer sold for occupational use.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 20-21-091, § 296-307-60205, filed 10/20/20, effective 11/20/20; WSR 05-01-166, § 296-307-60205, filed 12/21/04, effective 4/2/05.]