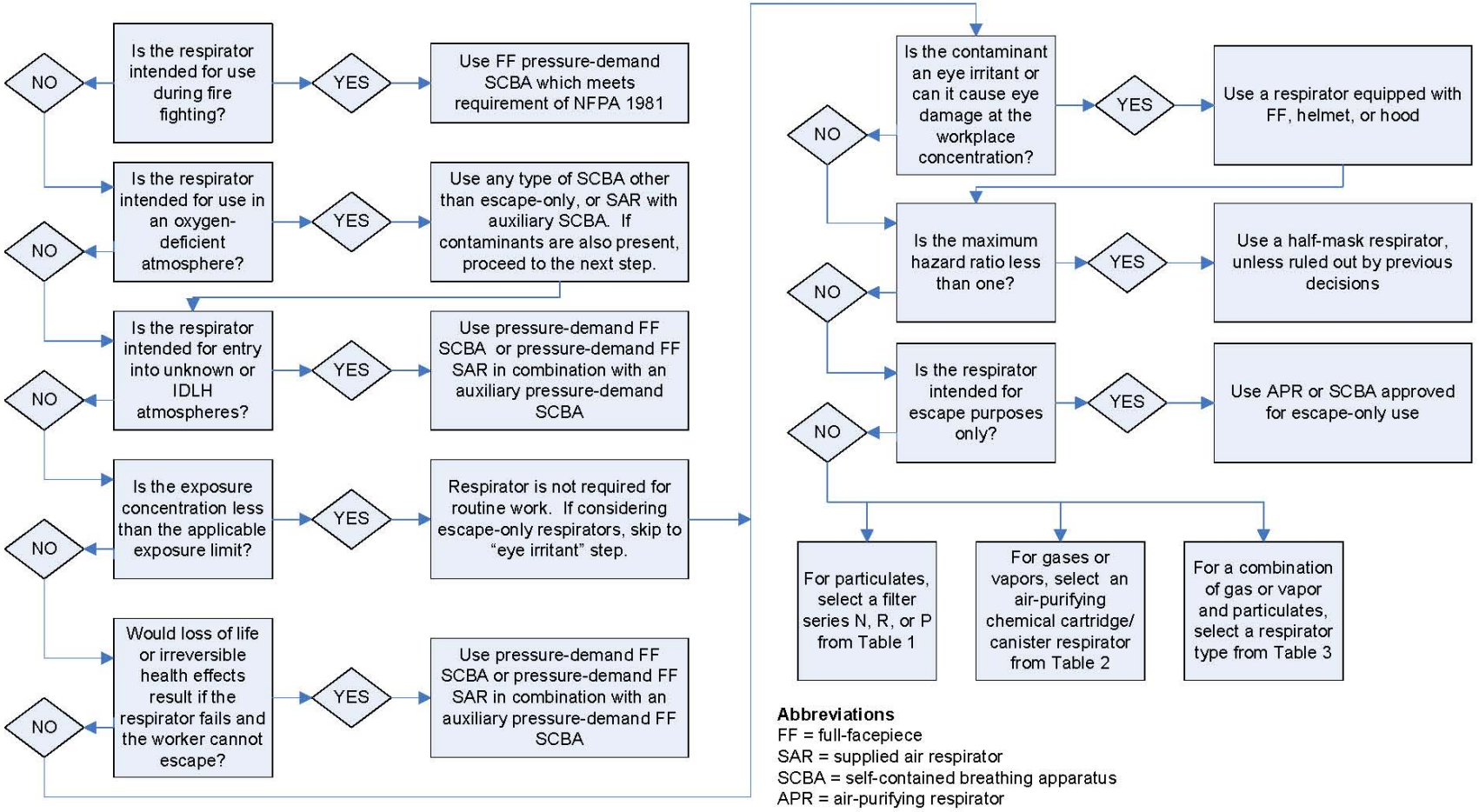
Respirator Selection



Adapted from *NIOSH Respirator Selection Logic 2004*
http://www.cdc.gov/niosh/docs/2005-100/chapter3.html

Table 1. Particulate Respirators

Assigned protection[1] factor	Type of Respirator
5	Quarter mask respirator
10	Any air-purifying elastomeric half-mask respirator equipped with appropriate type of particulate filter.[2] Appropriate filtering facepiece respirator.[2,3] Any air-purifying full facepiece respirator equipped with appropriate type of particulate filter.[2] Any negative pressure (demand) supplied-air respirator equipped with a half-mask.
25	Any powered air-purifying respirator equipped with a hood or helmet and a high efficiency (HEPA) filter. Any continuous flow supplied-air respirator equipped with a hood or helmet.
50	Any air-purifying full facepiece respirator equipped with N-100, R-100, or P-100 filter(s). Any powered air-purifying respirator equipped with a tight-fitting facepiece (half or full facepiece) and a high-efficiency filter. Any negative pressure (demand) supplied-air respirator equipped with a full facepiece. Any continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full facepiece). Any negative pressure (demand) self-contained respirator equipped with a full facepiece.
1,000	Any pressure-demand supplied-air respirator equipped with a half-mask.
2,000	Any pressure-demand supplied-air respirator equipped with a full facepiece.
10,000	Any pressure-demand self-contained respirator equipped with a full facepiece.

	Any pressure-demand supplied-air respirator equipped with a full facepiece in combination with an auxiliary pressure-demand self-contained breathing apparatus.

[1] The protection offered by a given respirator is contingent upon (1) the respirator user adhering to complete program requirements (such as the ones required by OSHA in 29CFR1910.134), (2) the use of NIOSH-certified respirators in their approved configuration, and (3) individual fit testing to rule out those respirators that cannot achieve a good fit on individual workers.

[2] Appropriate means that the filter medium will provide protection against the particulate in question.

[3] An APF of 10 can only be achieved if the respirator is qualitatively or quantitatively fit tested on individual workers.

Table 2. Gas/Vapor Respirators

Assigned protection[1] factor	Type of Respirator
10	Any air-purifying half mask respirator equipped with appropriate gas/vapor cartridges.[2] Any negative pressure (demand) supplied-air respirator equipped with a half mask.
25	Any powered air-purifying respirator with a loose-fitting hood or helmet equipped with appropriate gas/vapor cartridges.[2] Any continuous flow supplied-air respirator equipped with a hood or helmet.
50	Any air-purifying full facepiece respirator equipped with appropriate gas/vapor cartridges[2] or gas mask (canister respirator).[2] Any powered air-purifying respirator equipped with a tight-fitting facepiece (half or full facepiece) and appropriate gas/vapor cartridges or canisters.[2] Any negative pressure (demand) supplied-air respirator equipped with a full facepiece. Any continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full facepiece). Any negative pressure (demand) self-contained respirator equipped with a full facepiece.
1,000	Any pressure-demand supplied-air respirator equipped with a half-mask.
2,000	Any pressure-demand supplied-air respirator equipped with a full facepiece.
10,000	Any pressure-demand self-contained respirator equipped with a full facepiece. Any pressure-demand supplied-air respirator equipped with a full facepiece in combination with an auxiliary pressure-demand self-contained breathing apparatus.

[1] The protection offered by a given respirator is contingent upon (1) the respirator user adhering to complete program requirements (such as the ones required by OSHA in 29CFR1910.134), (2) the use of NIOSH-certified respirators in their approved configuration, and (3) individual fit testing to rule out those respirators that cannot achieve a good fit on individual workers.

[2] Select a cartridge/canister certified to be used for the specific class of chemicals or the specific gas/vapor found in your workplace.

Table 3. Combination Gas/Vapor and Particulate Respirators

Assigned protection[1] factor	Type of Respirator
10	Any air-purifying half-mask respirator equipped with appropriate gas/vapor cartridges[2] in combination with appropriate type of particulate filter.[3] Any full facepiece respirator with appropriate gas/vapor cartridges[2] in combination with appropriate type of particulate filter.[3] Any negative pressure (demand) supplied-air respirator equipped with a half-mask.
25	Any powered air-purifying respirator with a loose-fitting hood or helmet that is equipped with an appropriate gas/vapor cartridge[2] in combination with a high-efficiency particulate filter. Any continuous flow supplied-air respirator equipped with a hood or helmet.
50	Any air-purifying full facepiece respirator equipped with appropriate gas/vapor cartridges[2] in combination with an N-100, R-100 or P-100 filter or an appropriate canister[2] incorporating an N-100, P-100 or R-100 filter. Any powered air-purifying respirator with a tight-fitting facepiece (half or full facepiece) equipped with appropriate gas/vapor cartridges[2] in combination with a high-efficiency filter or an appropriate canister[2] incorporating a high-efficiency filter. Any negative pressure (demand) supplied-air respirator equipped with a full facepiece. Any continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full facepiece). Any negative pressure (demand) self-contained respirator equipped with a full facepiece.
1,000	Any pressure-demand supplied-air respirator equipped with a half-mask.
2,000	Any pressure-demand supplied-air respirator equipped with a full facepiece.
10,000	Any pressure-demand self-contained respirator equipped with a full facepiece. Any pressure-demand supplied-air respirator equipped with a full facepiece in combination with an auxiliary

	pressure-demand self-contained breathing apparatus.

[1] The protection offered by a given respirator is contingent upon (1) the respirator user adhering to complete program requirements (such as the ones required by OSHA in 29CFR1910.134), (2) the use of NIOSH-certified respirators in their approved configuration, and (3) individual fit testing to rule out those respirators that cannot achieve a good fit on individual workers.

[2] Select a cartridge/canister certified to be used for the specific class of chemicals or the specific gas/vapor found in your workplace.

[3] Appropriate means that the filter medium will provide protection against the particulate in question.