

P60 : RESPIRATORY PROTECTION AGAINST PESTICIDES

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Although the respiratory (breathing) system tolerates exposure to a limited degree, some chemicals can impair or destroy portions of it. For many pesticides, the respiratory system is the quickest and most direct route into the circulatory system, allowing rapid transport throughout the body. Thus, it is important to follow the pesticide label and follow directions for control of exposure, especially when respiratory protection is specified.

A **respirator** is a safety device covering at least the mouth and nose that protects the wearer. Respiratory protection varies in design, use, and protective capability. There are two major classes of respirators:

(1) **air-purifying respirators** that remove contaminants from the air, and

(2) **air-supplying respirators** that provide clean, breathable air from an uncontaminated source.

Air-purifying devices include dust masks, particulate air filters, gas masks, chemical cartridge respirators, and powered air-purifying respirators.

Air-purifying respirators may be powered or non-powered. A powered air-purifying respirator uses a blower to pass contaminated air through purifying elements. Non-powered air-purifying respirators may be designed for single-use, or with replaceable filters, canisters or cartridges.

Air-purifying respirators do not supply oxygen, and should never be used when oxygen may be limited (<19.5% oxygen by volume), or when an environment is immediately dangerous to life or health (IDLH).

Air-supplying respirators include supplied-air respirators and self-contained breathing apparatus (SCBA). These respirators should be used when oxygen is limited. If, however, the environment is immediately dangerous to life and health 'IDLH', the only types of air-supplying respirators that may be used are either a pressure-demand self-contained breathing apparatus, or an airline respirator with an auxiliary air supply for emergencies.

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