

Reusable Masks Require Maintenance

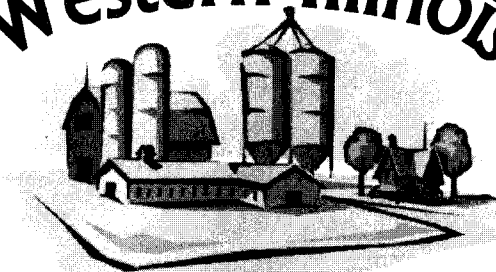
- Replace cartridges when needed
- Change batteries often if present
- Check for cracks, tears, and missing parts
- Store in a clean place out of temperature extremes
- Wash respirators with clean hands
- Store cartridges in a sealed container
- Never modify a respirator
- Cartridges are not interchangeable between brands
- Replace mask if hard to breathe, odors penetrate, or bad taste

Special Considerations

- Eyes and skin often need additional protection especially when applying anhydrous ammonia or when welding
- Follow application and product recommendations for type of respirator and other protective gear when applying pesticides, herbicides, insecticides, etc.
- Have adequate ventilation in animal confinement buildings that are subject to ammonia build-up
- Ventilate welding areas

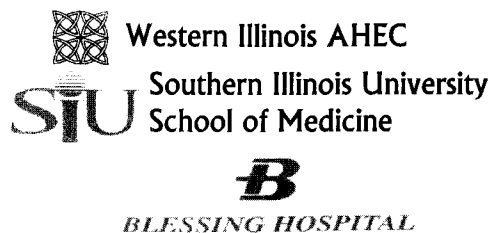
This brochure is for educational purposes only. Proper choice and use of respirators depends on chemical and particulate exposure, reading of directions, proper application, proper fit and proper maintenance.

Western Illinois



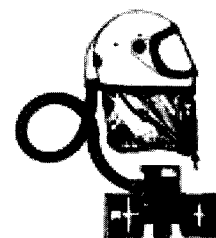
Agri-Health Program

Support for this program provided by:



Located at:
East Adams County Rural
Health Clinic
102 Prairie Mills Road
Golden, IL 62339
(217) 696-4446

Selecting A Respirator



What is a Respirator?

Respirators, commonly referred to as masks, are devices that filter the air we breathe and greatly reduce the number of specific particles that can damage the lungs.

Why use a Respirator?

Exposure to dust, sprays, molds and gases are common on the farm. Even exposure to small amounts over time can cause long-term lung damage.

Choosing an Effective Respirator

- 1) Respirators must be chosen based on the specific kind of exposure you wish to avoid.
- 2) Dusts and molds can be filtered out using a particle mask or a High Efficiency Particulate Air (HEPA) mask.
- 3) Respirators are labeled with letters and numbers indicating appropriate use and efficiency of the mask. Masks labeled with **N**, **R**, or **P** indicate **N**ot to be used with oil, **R**esistant to oils, and "Oil **P**roof" respectively. A number such as 95 indicates that the mask filters out 95% of airborne particles.
- 4) Some respirators protect against inhalation of dangerous gases and are equipped with special cartridges. The type of gaseous protection is indicated by the color of the cartridge:

Magenta – General filter (not for toxic gases) that is a High Efficiency Particulate Air (HEPA) filter

White – Acid gas

Black – Organic vapors

Yellow – Either acid gas or organic vapors

Olive Green – Multiple types of gas

Other respirators include: 1) the PAPR (Powered Air Purifying Respirator) that blows air in the face and is helpful for those with a lot of facial hair and 2) the SCBA (Self-Contained Breathing Apparatus) used in hazardous environments and only by people with special training and medical clearance.

Types of Respirators or Masks



These masks are commonly used, but offers almost no protection in any environment. Use only one strap and are not recommended.

These are particle masks and can be used when working in grain dust, dust from animals and may be either disposable or reusable.

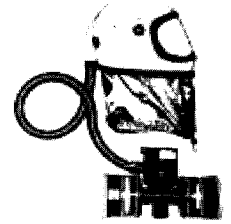


They will have various ratings of **N**, **R** or **P** and range from 95 to 100. **R** rated masks can be used less than 8 hours with pesticides in oil base, but not for vapors. **P** rated masks last more than 8 hours. A mask with a valve, for exhaled air, may be more comfortable.



This is a half mask that uses cartridges. It needs to be worn with eyewear protection. These masks may use a prefilter to protect against particulates. It may need to be replaced before the cartridge does.

This is PAPR and blows filtered air into a face piece. They are cooler due to the air flow. They do not require a tight seal. Can be used in dusty grain or livestock facilities.



This worker is wearing a SCBA and carries a breathable supply of oxygen. This is used for any atmosphere that is immediately dangerous to life and health. One must have special training and medical clearance to use a SCBA.

Only a trained person using a self contained breathing apparatus should enter a confined and potentially life threatening environment such as silos and manure pits which may have high concentrations of carbon dioxide, carbon monoxide, hydrogen sulfide, nitrogen oxides and methane.

Proper Fit is Essential

The mask should have two strong straps, not one. The seal between the mask and face should allow no gaps. Most respirators have two or three sizes. Read the fitting instructions included with the respirator.

The mask should be snug, but not bind or pinch the wearer's face. Comfort is increased if the wearer is clean shaven. Silicon or rubber face pieces usually feel more comfortable on skin than the fibrous materials from which many disposable are made. Breathing is easier with the PAPR helmet type respirator than with close fitting masks, which require the wearer to inhale air through the filter. Some devices have valves to let exhaled air escape. Inhaled air comes in through the cartridges or the mask material.