

POULTRY DUST HAZARDS

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Several sources of dust exist in most poultry houses, including bird feathers and dander, dried urine and feces, insect parts and feed grains. Dust particles can be particularly threatening during winter months, when poultry houses are likely to be closed more tightly and workers spend more time indoors.

Harmful molds, bacteria, proteins, and endotoxins may attach themselves to tiny, invisible dust particles. Very small particles of dust are often referred to as "respirable dust."

As this term implies, respirable dust is breathed in during normal breathing. Harmful dust breathed deeply into the lungs is also referred to as "toxic dust."

Toxic dust can cause an abrasive irritation to the inside of the lungs, a condition known as "pneumonconiosis." As more dust is inhaled, irritating an already severe condition, the lung's efficiency is reduced. This becomes a chronic or long-term disability, which adversely affects energy and exertion levels. Farmers of any age with this condition may not have the ability to accomplish farm tasks that require an increased level of strength and endurance.

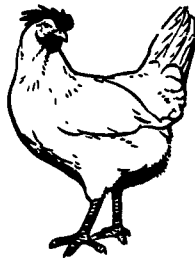
More serious effects from breathing in toxic dust over several years includes organic dust toxic syndrome, or ODOTS. This illness has flu-like symptoms such as fever, headache, and muscular pains. The symptoms usually appear four to six hours after exposure to the dust, and may lead to hospitalization for severe respiratory distress. Studies have revealed that many poultry farmers have excessive dust inhalation symptoms, including burning eyes, runny nose, scratchy throat, abnormal production of sputum and phlegm, and

excessive coughing.

All farmers and farm workers should use personal protective equipment when working in dusty buildings. Use respirators approved by the National Institute of Occupational Safety and Health (NIOSH). If a respirator is approved by NIOSH, you will be able to find a registration number preceded by the prefix "TC" somewhere on the respirator. An easy way to quickly verify that a respirator is approved is to count its straps. All approved respirators have two straps. The single-strap dust mask commonly found in many stores is not approved by NIOSH—nor is it effective at protecting the wearer from respirable dust.

It is always better to prevent respiratory problems than to try and minimize their effects after some damage has been done. Even if you have not experienced symptoms of respirable dust inhalation, you should always use personal protective equipment when working in poultry houses.

Use a properly fitted and maintained respirator. Farmers who have beards or wear glasses should be particularly careful to fit respir-



ators properly. However, if you have extenuating medical conditions such as heart and/or lung problems, including allergies, asthma or high blood pressure, check with your doctor to find out whether you can safely wear a respirator.

One type of respirator that appears to be increasingly popular in poultry houses is the powered air-purifying respirator (PAPR). A PAPR is simply an air-purifying respirator with a motorized blower that forces air through a filtering device. It makes breathing easier for the wearer, so this type of respirator may be recommended by a doctor for someone with a minor respiratory or cardiovascular ailment. They tend to be cooler, too, because they provide a constant stream of air over the wearer's face and head. Many PAPRs have a hard helmet and rigid visor under which the air is blown. There are also half-mask and full-

face models, as well as models with non-rigid helmets.

A PAPR can protect you from dusts, mists, gases, and vapors—provided you equip it with the right filters. The blower is powered by a battery pack strapped onto the wearer's waist or back. Rechargeable or disposable D-cell batteries can be used, and most batteries last 6-8 hours. You also can use a 12V or 24V DC adapter, which will run the blower from a vehicle battery.

Respirator prices vary considerably depending on the type you need. Disposable mechanical filter respirators can be bought for under \$10. Many non-disposable models cost less than \$50. A PAPR may range in price from \$100 to \$500.

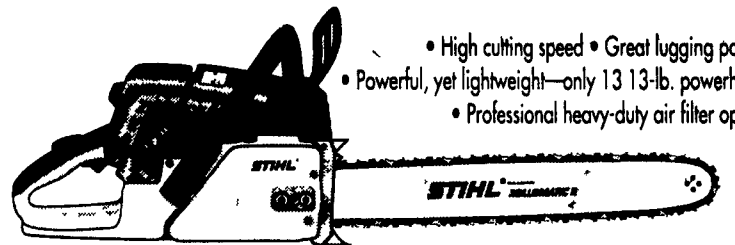
No matter which type of respirator is most appropriate for you, the cost of the respirator is insignificant compared to the cost of medicines, doctor visits, hospital stays, and human suffering caused by respiration ailments.



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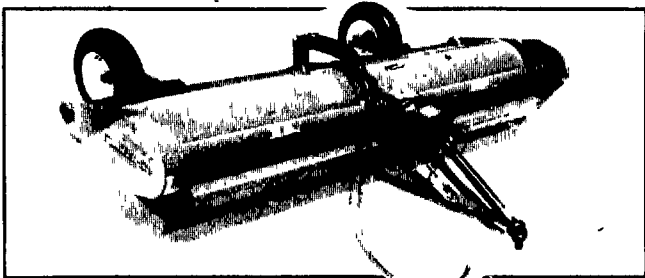
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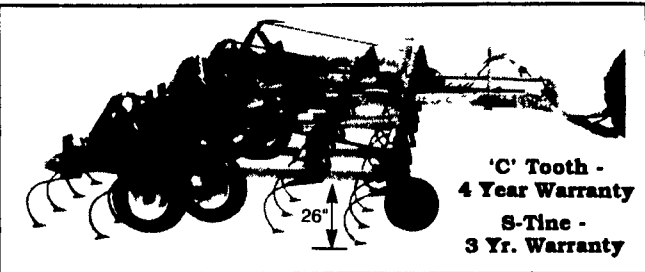
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