



Nebraska Rural Health & Safety Coalition

## Respiratory Diseases Related to Work on the Farm<sup>1</sup>

Nebraska Rural Health & Safety Coalition<sup>2</sup>

### CHRONIC BRONCHITIS

Inflammation of the bronchial tubes of the lung, leading to cough productive of phlegm. In order for this to be considered chronic bronchitis, it must be present for at least several months of the year. This is more common in farmers than persons who do not work on a farm. In the population as a whole, smoking is the main risk factor for this disorder.

### ACUTE BRONCHITIS

Inflammation of the bronchial tubes that lasts for several days or weeks. This causes cough and mild chest tightness in some people. Heavy exposure to grain dust is one thing that causes this condition.

### ORGANIC DUST TOXIC SYNDROME

This syndrome consists of fever, chills and a flu-like feeling which begins 4-6 hours after heavy exposure to organic dust. The most common causes include breathing large amounts of grain dust or being exposed to mold spores when uncapping a silo. Wearing a dust mask helps prevent this.

### FARMER'S LUNG

This is an allergic reaction in the lung to spores from molds, to some bacteria that grow in spoiled hay or to poultry feathers (rarely). Symptoms include a fever, dry cough and severe fatigue which begin 4-6 hours after the exposure. This problem is uncommon but can cause severe disability if not recognized and treated.

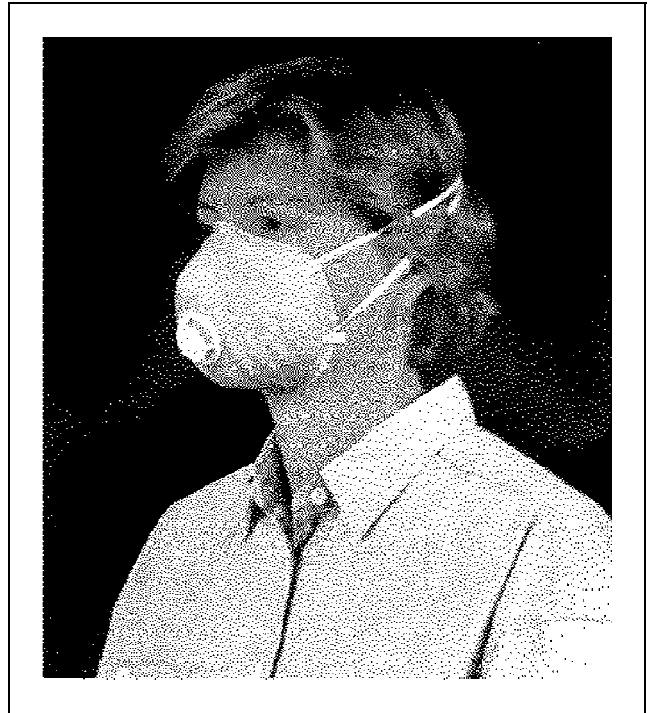


Figure 1. Two-strap mask with exhalation valve

### ASTHMA

Spasm and inflammation of the bronchial tubes cause cough, wheezing, chest tightness and shortness of breath in asthma. A variety of exposures to dust and fumes can worsen asthma in farmers. Wearing a dust mask and regular use of medications can help prevent symptoms.

---

1. This document was produced by the Nebraska Rural Health and Safety Coalition. Funded in part by a grant from the W.K. Kellogg Foundation.  
2. Nebraska Rural Health and Safety Coalition, University of Nebraska Medical Center, 600 South 42nd Street, Omaha, Nebraska 68198-5300. Phone: (402) 559-7397. FAX: (402) 559-8210.

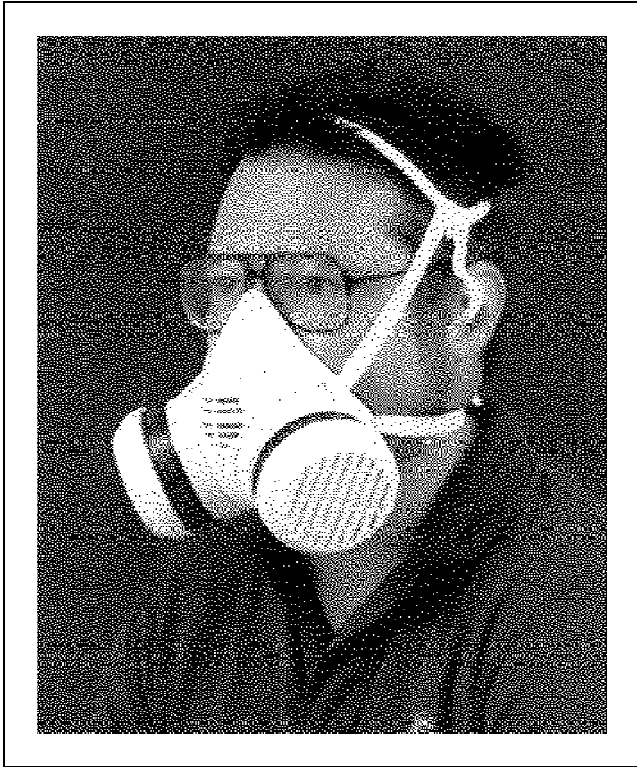


Figure 2. Half-face mask with replaceable cartridge

### IRRITATION OF THE NOSE AND SINUSES

These problems are caused by gases such as ammonia (found in animal confinement units) as well as by grain dust. They can be made less severe by good ventilation and use of respiratory protective devices. Some people with nasal and eye symptoms have allergies. They should discuss possible use of medication for the allergy with their physician.

### TIPS ON MASKS

- Make sure all workers have access to masks when needed.

- Discard disposable masks when they become soiled on the inside or become clogged.
- Disposable masks should have two straps for better fit.
- Disposable masks worn in dusty environments should be NIOSH approved for use in dusts and mists.
- Look for these kinds of respiratory protective devices in your local farm supply store and supply catalogs.

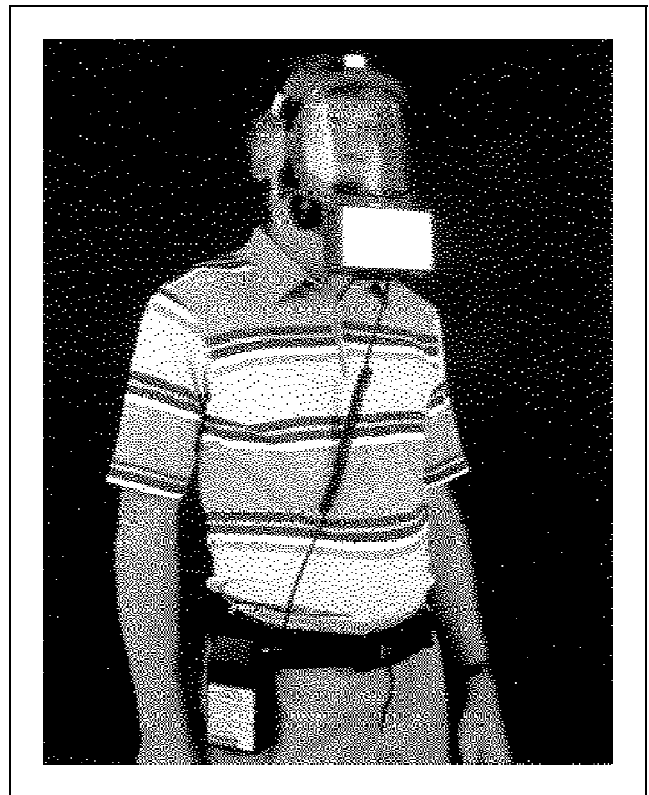


Figure 3. Powered air purifying respirator