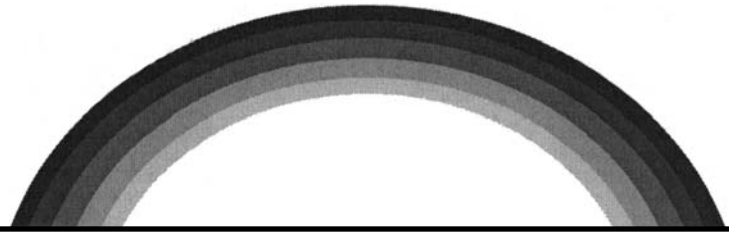


# Disaster Recovery



## Safety and Health

# How to protect yourself from farm dust

Even if you've never been bothered by farm dust in the past, you may need to take special precautions during this year's harvest.

With the wet summer conditions, it is anticipated that there will be more mold spores and toxins on the plants. In addition, standing water or flash flooding may have deposited chemicals, raw sewage, silt or other bacteria on plants and topsoil. When fields are disturbed during harvest activities, this foreign matter is suspended on tiny dust particles and easily can enter the lungs and lead to respiratory problems.

### The effects of dust

Dust in the lungs has both immediate and long-term effects. It can cause you additional physical stress, which results in fatigue or shortness of breath. Long-term exposure to dust can be accompanied by congestion, coughing or wheezing, sensitivity to dust, and frequent respiratory infections such as colds, bronchitis, and pneumonia. Over time, exposure to dust can result in serious respiratory illness, such as farmers lung and other irreversible, incurable ailments.

In general, you are more susceptible to dust if you smoke, have a history of bronchitis, asthma or frequent (more than three per year) respiratory infections or flu-like illness.

It's difficult to determine how much, if any, additional protection you'll need from dust during this year's harvest. It depends on weather conditions during harvest, wind speed and direction, amount of flood debris and damage, and individual health considerations. Consult your doctor if you have questions.

### Selection of respirators

- Always select a respirator that has been approved by the National Institute of Occupational Safety and Health (NIOSH). Choose a respirator tested for use in dust.
- Look for its "protection factor," or PF rating. For farming activities, use a respirator with a PF rating of 10 or above.
- Select the proper kind of respirator.

A two-strap paper dust mask will provide minimum protection. Respirators that use filters or cartridges to mechanically remove dust particles from the air afford more protection than disposable dust masks. Depending upon your sensitivity to dust and toxins, you may need a powered respirator that has its own air supply, such as an air helmet.

- Make sure the respirator forms a good seal with your face. Eyeglasses, clothing, beards, or sideburns can interfere with the seal. Safety professionals can fit test respirators while you wear them.
- Consider the cost and convenience of disposable versus non-disposable respirators.
- Get a physician's approval first. When air is drawn through a filtering mechanism, breathing becomes more difficult and can cause stress for people who have heart conditions or respiratory ailments.

You can buy respirators from mail-order catalogs, implement dealers, or farm supply stores. For more information, contact your local extension office or get a copy of Iowa State University Extension's Lungs need protection from farm dust, Pm-1518b.

On page two you'll find more information from the National Farm Medicine Center, Marshfield, Wisconsin.

# Common illnesses caused by exposure and inhalation of molds/dust

Illness	Symptoms	Causes	Treatment	Prevention Practices
Asthma	<ul style="list-style-type: none"> <li>• Chronic cough</li> <li>• Shortness of breath</li> <li>• Wheezing</li> <li>• Chest tightness</li> </ul> <p>Onset: minutes to hours</p>	<ul style="list-style-type: none"> <li>• Allergies</li> <li>• Viruses</li> <li>• Chemical irritants</li> <li>• Strenuous exercise</li> </ul>	<ul style="list-style-type: none"> <li>• Medical treatment</li> <li>• Behavior adaptation</li> </ul>	<ul style="list-style-type: none"> <li>• Decrease exposure</li> <li>• Use appropriate respirator for necessary exposures</li> <li>• Early recognition and treatment of symptoms</li> </ul>
Chronic Bronchitis	<ul style="list-style-type: none"> <li>• Chronic cough</li> <li>• Unable to "get over colds" easily</li> <li>• Phlegm production</li> </ul> <p>Productive cough gradually becomes daily occurrence Onset: days to years</p>	<ul style="list-style-type: none"> <li>• Cigarette smoke</li> <li>• Air pollution</li> <li>• Dusts</li> </ul>	<ul style="list-style-type: none"> <li>• Antibiotics</li> <li>• Bronchodilators</li> </ul> <p>vaccinations against influenza and pneumococcal pneumonia)</p>	<ul style="list-style-type: none"> <li>• Eliminate sources of irritation and infection in nose, throat, mouth and sinuses by avoiding exposure to people with colds or influenza, smoke, polluted air and dust</li> <li>• Avoid exposure to cigarette smoke and dusty environments</li> <li>• Change exposure within the work environment by wearing appropriate respirators</li> <li>• Improve general health status with good diet, rest and exercise habits</li> <li>• Maintain ideal body weight</li> </ul>
Organic Dust Toxic Syndrome	<ul style="list-style-type: none"> <li>• Cough</li> <li>• Body aches and pain</li> <li>• Fever</li> <li>• Shortness of breath</li> <li>• Chills</li> <li>• Fatigue</li> </ul> <p>Onset: 4-12 hours after exposure to high levels of organic dust Lasts 1-7 days</p>	<ul style="list-style-type: none"> <li>• Inhaling high levels of organic dust from moldy hay, silage and/or grain</li> </ul>	<ul style="list-style-type: none"> <li>• Analgesics</li> <li>• Fluids</li> <li>• Bed rest</li> </ul>	<ul style="list-style-type: none"> <li>• Minimize exposure to dust by good ventilation of barn, silos and other dusty areas before and during work-time</li> <li>• Use NIOSH-approved respirator for toxic dusts/mist appropriate to task, i.e. uncapping or unloading silos, chopping bedding, shoveling grain, combining, or cleaning grain</li> </ul>
Farmer's Lung Disease - a form of Hypersensitivity Pneumonitis	<p>May experience 2 or more of the following:</p> <ul style="list-style-type: none"> <li>• Chills</li> <li>• Chest congestion</li> <li>• Fever</li> <li>• Shortness of breath</li> <li>• Cough</li> </ul> <p>May also experience:</p> <ul style="list-style-type: none"> <li>• Fatigue</li> <li>• Weight loss</li> </ul> <p>Onset: 4-12 hours after exposure to high levels of organic dust Symptoms may be chronic or subacute, leading to chronic bronchitis or chronic obstructive lung disease Lasts 1-7 days</p>	<ul style="list-style-type: none"> <li>• Hypersensitivity Pneumonitis is an immune response to inhalation of moldy forage</li> </ul>	<ul style="list-style-type: none"> <li>• Removal from exposure</li> <li>• Corticosteroids</li> </ul>	<ul style="list-style-type: none"> <li>• Modify farm practices to reduce organic dust by changing outdoor feeding practices, installing good ventilation systems in barns, reducing time spent in the barn, or using less dusty or mold-prone bedding such as recycled newsprint</li> <li>• Use NIOSH-approved respirators appropriate for the task</li> </ul>

Adapted from materials by the National Farm Medicine Center (NFMC). For more information, call the National Farm Medicine Center at 1 (800) 662-6900, or write to 100 North Oak Ave., Marshfield, WI 54449-5790.

**... and justice for all**

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