

## Training Module: Dust and Mold

**Objective:** To be aware of respiratory illnesses associated with organic dust and mold and learn how these illnesses can be prevented.

**Trainer's Note:** Farmers account for more than 30% of all adults who are disabled by respiratory illness. Most of these farmers are nonsmokers, leaving dust and mold to be the major contributors to their illness. Discuss how to avoid inhaling dust and mold on the farm, especially when working in the silo or grain bins.

### Background

Farmer's Lung is a noninfectious allergic disease caused by inhaling dust from moldy hay, straw or grain. This disease occurs when a person's immune system cannot adjust to the invading contaminants. Typical symptoms of exposure are fatigue, chills, shortness of breath, tightness in the chest, headache, irritating cough, and loss of appetite. Organic Dust Toxic Syndrome has similar symptoms, but does not involve the immune system. Bronchitis and asthma are also associated with organic dust exposure.

Mold spores (tiny fungi) attach themselves to airborne dust particles. As the farmer inhales dust particles which may not be extremely hazardous, mold spores, a serious hazard can also be inhaled. Heavy concentrations of mold spores appear as dry, white or gray powder or clouds.

Respiratory symptoms vary depending on the amount and intensity of exposure. After a first reaction, a worker is likely to develop an increased sensitivity to mold exposures, having more severe reactions with fewer exposures. It is possible to develop Chronic Farmer's Lung after one acute attack, but usually it develops slowly, over time after repeated exposure. Contact a doctor if concerns about permanent lung damage arise.

When using respiratory protection, select the appropriate personal protective equipment for the task. The best, most cost-efficient protection is a dust mask. Make sure it fits well. The following precautions can reduce exposure to dust and mold.

- Identify contaminants and hazards in the work environment.
- Minimize the amount and type of contaminants in your work environment.
- Avoid exposure to contaminants, mold spores and dust from decayed grains and forages.
- Limit exposure to all contaminants.
- Operate within a controlled environment whenever possible.
- Use mechanical controls to remove air contaminants.
- Ventilate dusty areas.
- Move work outside whenever possible.
- Avoid dusty work in confined areas.
- Wear respirators, masks or other protective equipment.



## **Review The Following Points**

- Wear a face mask when working with moldy forages and crops.
- Work in a well ventilated area and use exhaust fans when possible.
- Seek medical advise when concerned about exposure.
- Know the warning signs of Farmers Lung.
- Clean mechanical controls (change filters) on a regular schedule.
- Have the face mask fit tested.

**True or False Answer Key**

1. T, 2. T, 3. T, 4. F, 5. T

## **Dust and Mold Quiz**

**True or False**

**Name** \_\_\_\_\_

- |   |   |   |
|---|---|---|
| 1. Dust and mold are major contributors to respiratory illness among farmers.       | T | F |
| 2. Use the appropriate personnel protective equipment for the job.                  | T | F |
| 3. Have as much ventilation as possible when working with grains and hays.          | T | F |
| 4. Farmer's Lung is the only respiratory hazards for farmers.                       | T | F |
| 5. Farmers account for more than 30% of all adults disabled by respiratory illness. | T | F |