

# examinetics

## Occupational Health Pathfinder

### Overview

It has often been suggested that one of the most hazardous industries to work in is agriculture. Crop production and animal husbandry expose farm workers and their families (who often share the work) to a wide range of hazards contributing to fatal and non-fatal injuries, respiratory illnesses, noise-induced hearing loss, dermal conditions, sun damage and exposure to chemicals (fertilizers and pesticides). The latest statistics from the National Agricultural Statistics Service reported that in 2001, there were 74,824 work-related agricultural injuries which occurred to adults (aged 20 years or over) who worked on a farm operation. These statistics do not include those injuries sustained by young farm workers. NIOSH estimates that in 2006, "23,100 children and adolescents were injured on farms; 5,800 of these injuries were due to farm work".

### Hazards associated with agriculture

There are many hazards associated with agricultural work. The general nature of the work involves a considerable amount of manual lifting and repetitive movements sometimes resulting in workers with musculo-skeletal disorders such as chronic back pain or repetitive strains. A significant number of fatalities and injuries also occur as a result of machinery used on a farm (eg tractors, balers and combines). For example, 23% of the fatalities of youth workers are as a result of accidents (eg roll-overs, run-overs or collisions) involving tractors. Machinery can also cause noise-induced hearing loss in farmers as they are regularly exposed to noise over Time Weighted Average (TWA) threshold limits (see our [Noise and hearing conservation](#) Pathfinder). Respiratory illnesses (such as [occupational asthma](#), bronchitis and Farmers' lung) are common as a result of airborne contaminants such as fungi spores, chemicals emitted from silos or manure pits, organic and inorganic dusts. Chemical exposure through the use of pesticides and fertilizers present a risk to farmers if preventative measures such as Personal Protective Equipment (PPE) are not being used.

For all of these issues in agricultural health and safety, there are excellent fact-sheets and publications that you can access from the National Agriculture Safety Database (NASD) ([www.cdc.gov/nasd/index.html](http://www.cdc.gov/nasd/index.html)) to discover tools and techniques for minimizing hazards in the farm setting.

### Regulatory issues

There are specific standards (29 CFR 1928) for agriculture, such as those concerning roll-over protective structures, safety for agricultural equipment and general environmental controls, which employers can view by clicking on the following link: [www.osha.gov/SLTC/agriculturaloperations/standards.html](http://www.osha.gov/SLTC/agriculturaloperations/standards.html). Employers and farm operatives must also comply with relevant General Industry standards (29 CFR 1910).

## Agricultural industry

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### KEY BRIEFING POINTS:

- It has been suggested that one of the most hazardous industries to work in is the agricultural industry
- In 2001, there were around 75,000 work-related agricultural injuries in adults alone
- There are many hazards associated with agricultural work contributing to fatal and non-fatal injuries, respiratory illnesses, noise induced hearing loss, dermal conditions, sun damage and exposure to chemicals (pesticides)
- The National Agriculture Safety Database (NASD) provides excellent information on agricultural health and safety issues
- There are specific standards (29 CFR 1928) for agriculture, such as those concerning roll-over protective structures, safety for agricultural equipment and general environmental controls

### FIND OUT MORE...

#### OSHA website

[www.osha.gov/SLTC/agriculturaloperations/index.html](http://www.osha.gov/SLTC/agriculturaloperations/index.html)

#### National Institute for Occupational Safety and Health

[www.cdc.gov/niosh/topics/agriculture/](http://www.cdc.gov/niosh/topics/agriculture/)

#### Environmental Protection Agency

[www.epa.gov/agriculture/index.html](http://www.epa.gov/agriculture/index.html)

#### Business Owner Briefing

OSHA Fact-sheet – farm safety  
[www.osha.gov/OshDoc/data\\_GeneralFacts/FarmFactS2.pdf](http://www.osha.gov/OshDoc/data_GeneralFacts/FarmFactS2.pdf)

#### Medical Director Review

"Research and dissemination needs for ergonomics in agriculture"  
(Estill et al., 2002)  
[www.pubmedcentral.nih.gov/picrender.fcgi?artid=1497464&blobtype=pdf](http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1497464&blobtype=pdf)

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