

UNITED SAFETY SOLUTIONS

P: 715.254.0638
F: 715.254.0630



826 Bloom Rd
Eagle River, WI 54521

AGRICULTURAL SAFETY

OSHA Agriculture Safety
Course 15 Hours Instruction
Hours: Class Room
Hours: Field Instruction

Regulation CFR 1928
Prerequisites:
Fee:
CE Credits:

Farming creates an environment conducive to injuries and illnesses and presents safety problems not found in most other industries. The home and worksite are the same location for most farm operators. Farmers and their family members experience the potential for greater exposure to hazards associated with animals, machinery, tools, and chemicals as work is usually performed in an erratic tempo dictated by weather, season, and climate. During planting and harvesting periods, farmers (family members, hired laborers, especially production laborers) may work long hours, experience fatigue, and may be less cautious while operating equipment and handling livestock. With little formal training, farmers and farm laborers often work alone and / or far from assistance should an injury occur and emergency services may be quite a distance from the farm and may not be equipped to handle more severe farm injuries

The Federal government has laws covering the working conditions of hired farm workers. (1) **The Fair Labor Standards Act** is the primary legislation controlling the employment and well being of child labor. (2) **The Occupation Safety and Health Act** covers a wide range of safety issues in all work places, but has some farm-related exemptions. (3) **The Federal Insecticide, Fungicide, and Rodenticide Act** covers a wide range of pesticide related issues.

Although farm operators and family members are exempt from coverage under most Federal safety laws and regulations relating to agriculture, they should be aware of both prohibited and recommended practices that apply to their operations. Keeping operators informed on legislative changes is one challenge for farm safety specialists.

Agricultural workers perform tasks related to the cultivation and harvesting of plants on farms or in greenhouses, nurseries, or forests. These workers include anyone employed for any type of compensation (including self-employed) doing tasks –such as carrying nursery stock, repotting plants, or watering – related to the production of agricultural plants on an agricultural establishment.

The Federal government has enacted legislation and promulgated regulations that protect most nonfarm workers, but provide only limited protection for hired farm workers and almost no protection for farm operators and their family members. Farm operators, their family members, and hired workers can be exposed to activities and agents that can cause fatal, permanent, long-term, or short-term injuries and illnesses. They sometimes work under conditions that may limit their awareness of the dangers of operating equipment and handling livestock and are exposed to

UNITED SAFETY SOLUTIONS

P: 715.254.0638
F: 715.254.0630



826 Bloom Rd
Eagle River, WI 54521

numerous safety, health, environmental, biological, and respiratory hazards. Common hazards include, but are not limited to, vehicle rollovers, heat exposure, falls, musculoskeletal injuries, hazardous equipment, grain bins, unsanitary conditions and pesticides.

Who Should Take This Course:

Owners, operators, contractors, supervisors and workers on American farms, including migrant and seasonal farm workers who are exposed to the wide variety of hazards from farm livestock, vehicles, tractors, farm machinery, falls, electrocution, confined spaces, chemicals and organic dust.

Course Objectives:

The program focuses on improving recognition, avoidance, and prevention of hazards for workers in high-hazard industries To train and educate owners, operators, contractors, supervisors, workers and employers about agricultural safety standards and health hazards in their workplaces; their rights and responsibilities under the OSH Act; comply with record keeping and other reporting responsibilities.

A partial list of hazards follows:

- **Heat Illness** can be deadly, but preventable (water, rest and shade_.
- **Ladders & Falls**
- **Musculoskeletal Injuries** result typically from the use repetitive motions in awkward positions, forceful, or prolonged exertions of the hands; frequent or heavy lifting, pushing, pulling, or carrying of heavy objects; and prolonged awkward postures. Vibration and cold may intensify these conditions.
- **Ergonomic Protections**. Proper tools, padding to reduce vibration, and fewer activities with high repetition are some methods for reducing musculoskeletal injuries..
- **Hazardous Equipment And Machinery**- Farm workers routinely use knives, hoes, and other cutting tools. They work on ladders or use machinery in their shops and these simple tools can be hazardous with the potential for causing severe injuries.
- **Grain Bins And Silos** pose many dangers, including suffocation or engulfment hazards when working with grain bins and silos, as well as grain dust exposures and explosions.
- **Unsanitary Conditions** includes the lack of clean drinking water, sanitation facilities and / or hand washing facilities. Farm workers may suffer heat stroke / exhaustion, urinary tract infections, agricultural poisoning, and infectious and other communicable diseases from microbial and parasitic exposures.
- **Pesticides And Other Chemicals** pose risks of short- and long- term illness to farm workers and their families. Workers who mix, load or apply pesticides (known as pesticide handlers) can be exposed to toxic pesticides due to spills and splashes, defective, missing or inadequate protective equipment, direct spray, or drift. Workers may be exposed to pesticides in various ways.

UNITED SAFETY SOLUTIONS

P: 715.254.0638
F: 715.254.0630



826 Bloom Rd
Eagle River, WI 54521

- **Respiratory Distress And Respiratory Hazards** exist in barns, manure pits, machinery and silos and range from acute to chronic air contaminants. The most common respiratory hazards are bioaerosols, (organic dusts, microorganisms, and endotoxins and chemical toxicants from the breakdown of grain and animal waste). Inorganic dust, from silicates in harvesting and tilling, is prevalent but less significant.
- **Zoonotic Infections & Related Hazards** are infectious diseases common to both animals and humans. More recent types of these infections include avian flu, methicillin-resistant Staphylococcus aureus (MRSA) and West Nile virus.
- **Noise** results in preventable hearing loss due to high workplace noise levels, including *tractors, forage harvesters, silage blowers, chain saws, skid-steer loaders, grain dryers, squealing pigs and guns*. Hearing loss is not as dramatic nor as sudden as an injury from a tractor overturn or machine entanglement, but it is permanent.
- **Other Outdoor Hazards** include vector-borne diseases, venomous wildlife and insects, and poisonous plants.
- Extreme Cold, Lightning, Ultraviolet Radiation, Confined Space, Grain storage, Manure pits, Flat storage buildings,
- Tanks, Skin Disorders, Electrical Hazards

United Safety Solutions Course Covers:

- Awareness and identification of hazards
- Specific preventative measures in agricultural situations to reduce harm to workers
- Explanation of hazards which are broken down into three broad categories.

(1) Safety and Physical Agents:

Commodity storage & transfer

Electricity

Ergonomics

- Back injury
- Lifting
- Repetitive trauma

Farm machinery

- Balers
- Chain Saws
- Combines
- Power take-off (PTO)
- Roll-Over Protection
- Safety Guards
- Tractors

Fire

Fuel Storage (Leaks and Fires)

Illumination (Poor Lighting)

Lightning (Shock and Fire)

Liquefied Propane [LP] Gas

Liquefied Anhydrous Ammonia

Livestock handling injuries

Physical / Environmental Hazards

- Noise
- Thermal (heat and cold)
- Ultraviolet (sun light)
- Vibration
- Psychological stress
- Sanitation (field)
- Transportation (on & off road)
- Welding

UNITED SAFETY SOLUTIONS

P: 715.254.0638
F: 715.254.0630



826 Bloom Rd
Eagle River, WI 54521

(2) Biological and Chemical Agents

Asphyxiation / Suffocation

- Confined Space
- Entrapment (See commodity s.&t.)
- Fumigation
- Carbon Monoxide (Combustion)
- Silo gases (NO₂ and CO₂)

Detergents

Diesel exhaust

Disinfectants including

- Chlorine
- Quaternary ammonia compounds
- Organic iodides
- Cresol-based compounds
- Formaldehyde emitters

Dusts (Inorganic Aerosols)

Hydrogen Sulfide (A Key Manure Gas)

Microbiologic Organisms

- Infectious Microbes
- Mold Spores (Mycotoxins)
- Noninfectious Bioaerosols
- Parasites

Nitrogen Dioxide (Silos & Welding)

Organic dusts - e.g.

- Cotton Dust
- Endotoxin (On Many Organic d.)
- Grain Dust
- Sugar Cane (Bagassosis)
- Wood Dust

Pesticides (Including Application and Harvest Activities)

Certification:

Successful completion requires 80% on both classroom and practical skills.

Upon successful completion, participants receive a wallet card, documentation to satisfy OSHA.

(3) Agricultural Diseases

Arthritis Dermatoses - Caused By

- Heat
- Irritant chemicals
- Infectious microbes
- Insects
- Sensitizing chemicals
- Sunlight

Noise Induced Hearing Loss

Immunologic diseases

- Allergic rhinitis
- Asthma
- Dermatoses

Noninfectious diseases

- Cancer (Is Actually a Low Risk)
- Hypertension and Heart
- Respiratory Diseases
- Asthma (also Immunologic dis.)
- Bagassosis (From Sugar Cane)
- Bronchitis
- Byssinosis (From Cotton Dust)
- Farmer's Lung (see also HP below)
- Hypersensitivity Pneumonitis
- Organic Dust Toxic Syndrome (ODTS)
- Pneumoconiosis (e.g. Silicosis)
- Silo filler's disease (See Also NO₂)

Organophosphate Poisoning and Sequelae

Silo Unloader's Disease

Zoonotic Diseases