



Field Sanitation — OSHA Standard 1928.110¹

Carol J. Lehtola, Charles M. Brown, and William J. Becker²

The Impact of Safety on Florida Agriculture

Florida agriculture, including forestry and fishing, made an annual economic impact of \$98 billion in 2004. More than 390,000 workers are directly employed in these industries in Florida, and another 380,000 people are employed in activities related to agriculture (Hodges 2006). The state's agricultural enterprises range from large citrus, vegetable and cattle operations to small family-operated farms.

In spite of the popular images of agriculture, it is a highly mechanized, industrial profession with one of the highest injury and death rates among U.S. industries. The last study of death rates in Florida agriculture (Liller 2000) found 240 deaths from 1989 to 1998. In 2005, the Bureau of Labor Statistics (BLS 2005a), reported that death due to injury in agriculture was 31.4 deaths per 100,000 full-time workers, which was the highest rate among all major occupational groups and an increase of 14% over 2004. Also in 2005, the Bureau of Labor Statistics reported 6,100 injuries per 100,000 full-time workers (BLS 2005b).

Safety in Florida agriculture is challenging because:

- the state's agricultural enterprises are diverse,
- safety knowledge among workers varies,
- manual labor is used extensively,
- the climate creates year-round heat stress.

Therefore, it is vital to assist the public in learning about OSHA documents related to agriculture. More information about the OSHA Standards and agricultural safety is available at the following Web sites:

- Florida AgSafe: <http://www.flagsafe.ufl.edu>
- OSHA Regulations: <http://www.osha.gov/comp-links.html>
- National Agricultural Safety Database: <http://www.cdc.gov/nasd>

Overview

This document is a condensation of Section 1928.110 of the Occupational Safety and Health Act (29 CFR). It is not intended to be totally inclusive but rather to

1. This document is ABE132, one of a series of the Agricultural and Biological Engineering Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. First published December 2000. Reviewed September 2007. Please visit the EDIS Web site at <http://edis.ifas.ufl.edu>.

2. Carol J. Lehtola, Associate Professor and Extension Agricultural Safety Specialist; Charles M. Brown, Coordinator for Information and Publication Services; William J. Becker, Professor Emeritus; Agricultural and Biological Engineering Department, Institute of Food and Agricultural Sciences, University of Florida, Gainesville 32611.

highlight the information and requirements in the complete OSHA standard that owners and managers of all agricultural businesses should understand. Refer to the OSHA Web site given above for the complete standard and for court interpretations of the standard.

Contents of OSHA Standard 1928.110

- Section 1928.110(a) — Scope
- Section 1928.110(b) — Definitions
- Section 1928.110(c) — Requirements
- Section 1928.110(d) — Dates

NOTE: Some sections of OSHA standards are labeled "Reserved." This label implies either that information has been deleted from the previous version of the standard or that additions to the standard are anticipated. Because standards often reference other standards, it is important that paragraph numbers remain consistent.

Section 1928.110(a) — Scope

This section shall apply to any agricultural establishment where eleven (11) or more employees are engaged on any given day in hand-labor operations in the field.

Section 1928.110(b) — Definitions

Agricultural employer — Any person, corporation, association, or other legal entity that:

- [i] Owns or operates an agricultural establishment;
- [ii] Contracts with the owner or operator of an agricultural establishment in advance of production for the purchase of a crop and exercises substantial control over production; or
- [iii] Recruits and supervises employees or is responsible for the management and condition of an agricultural establishment.

Agricultural establishment — A business operation that uses paid employees in the production of food,

fiber, or other materials such as seed, seedlings, plants, or parts of plants.

Hand-labor operations — Agricultural activities or agricultural operations performed by hand or with hand tools. Except for purposes of paragraph (c)(2)(iii) of this section, "hand labor operations" also include other activities or operations performed in conjunction with hand labor in the field. Some examples of "hand labor operations" are the hand-cultivation, hand-weeding, hand-planting and hand-harvesting of vegetables, nuts, fruits, seedlings, or other crops, including mushrooms, and the hand packing of produce into containers, whether done on the ground, on a moving machine or in a temporary packing shed located in the field. "Hand-labor" does not include such activities as logging operations, the care or feeding of livestock, or hand-labor operations in permanent structures (e.g., canning facilities or packing houses).

Handwashing facility — A facility providing either a basin, container, or outlet with an adequate supply of potable water, soap and single-use towels.

Potable water — Water that meets the standards for drinking purposes of the state or local authority having jurisdiction or water that meets the quality standards prescribed by the U.S. Environmental Protection Agency's National Interim Primary Drinking Water Regulations, published in 40 CFR Part 141.

Toilet facility — A fixed or portable facility designed for the purpose of adequate collection and containment of the products of both defecation and urination which is supplied with toilet paper adequate to employee needs. Toilet facility includes biological, chemical, flush and combustion toilets, and sanitary privies.

Section 1928.110(c) — Requirements

Agricultural employers shall provide the following for employees engaged in hand-labor operations in the field, without cost to the employee:

1928.110(c)(1) — Potable Drinking Water

(i) — Potable water shall be provided and placed in locations readily accessible to all employees.

(ii) — The water shall be suitably cool and in sufficient amounts, taking into account the air temperature, humidity and the nature of the work performed, to meet the needs of all employees.

(iii) — The water shall be dispensed in single-use drinking cups or by fountains. The use of common drinking cups or dippers is prohibited.

1928.110(c)(2) — Toilet and Handwashing Facilities

(i) — One toilet facility and one handwashing facility shall be provided for each (20) employees or fraction thereof, except as stated in paragraph (c)(2)(v) of this section.

(ii) — Toilet facilities shall be adequately ventilated, appropriately screened, have self-closing doors that can be closed and latched from the inside, and shall be constructed to insure privacy.

(iii) — Toilet and handwashing facilities shall be accessibly located and in close proximity to each other. The facilities shall be located within a one-quarter-mile walk of each hand laborer's place of work in the field.

(iv) — Where due to terrain it is not feasible to locate facilities as required above, the facilities shall be located at the point of closest vehicular access.

(v) — Toilet and handwashing facilities are not required for employees who perform field work for a period of three (3) hours or less (including transportation time to and from the field) during the day.

1928.110(c)(3) — Maintenance. Potable drinking water and toilet and handwashing facilities shall be maintained in accordance with appropriate public health sanitation practices, including the following:

(i) — Drinking water containers shall be constructed of materials that maintain water quality, shall be refilled daily or more often as necessary, shall be kept covered and shall be regularly cleaned.

(ii) — Toilet facilities shall be operational and maintained in clean and sanitary condition.

(iii) — Handwashing facilities shall be refilled with potable water as necessary to ensure an adequate supply and shall be maintained in a clean and sanitary condition.

(iv) — Disposal of wastes from facilities shall not cause unsanitary conditions.

1928.110(c)(4) — Reasonable Use. The employer shall notify each employee of the location of the sanitation facilities and water and shall allow each employee reasonable opportunities during the workday to use them. The employer also shall inform each employee of the importance of each of the following good hygiene practices to minimize exposure to the hazards in the field of heat, communicable diseases, retention of urine and agrichemical residues.

(i) — Use the water and facilities provided for drinking, handwashing, and elimination.

(ii) — Drink water frequently and especially on hot days.

(iii) — Urinate as frequently as necessary.

(iv) — Wash hands both before and after using the toilet.

(v) — Wash hands before eating and smoking.

References

Bureau of Labor Statistics. 2005(a). "Workplace Injuries and Illnesses in 2005." Washington, D.C.: United States Department of Labor. *News*, October 19, 2006. USDL 06-1816.

Bureau of Labor Statistics. 2005(b). "Census of Fatal Occupational Injuries Summary, 2005." Washington, D.C.: United States Department of Labor. *News*, August 10, 2006. USDL 06-1364.

Hodges, Alan W., Mohammad Rahmani, and W. David Mulkey. 2006. "Economic Impacts of Agricultural, Food, and Natural Resources Industries in Florida in 2004." Gainesville, Florida: Florida

Cooperative Extension Service. IFAS

Publication FE680

<http://edis.ifas.ufl.edu/FE680>.

Liller, Karen D., V. Noland, and Carol J. Lehtola.

2000. An Analysis of Injury Deaths on Florida Farms for Years 1989 through 1998. *Journal of Agricultural Safety and Health* 6 (2): 131–140.