
Farm Employee Management: Protect Farm Workers from Heat-Related Stress and Illness

Each summer, farm producers and their employees work through days of extreme heat and humidity – starting as early as June and continuing into September. While we certainly need to protect our livestock during these hot days, it is an important time to be conscious of how to protect ourselves and our farm workers during these stressful weather conditions.

Heat can cause illness and sometimes even death. Several years ago, the Occupational Safety and Health Administration (OSHA) established a “Heat Illness Prevention Campaign” to raise awareness and provide education and resources for farm employers and employees. Links to these web-based resources are provided at the end of this fact sheet.

In regard to dairy farm operations, many employees work in conditions where shade, ventilation and perhaps even air conditioning are regularly provided. Nevertheless, during hot and humid weather, dairy workers move in and out of conditions that can cause heat illness if the conditions are not monitored. Activities such as feeding calves, moving cows, participating in hay and silage-chopping operations can all require physical labor where risks of heat illness exist in the right conditions.

It’s also worth noting that many of today’s farm employees may lack previous farm or other outdoor employment experience, so dealing with weather-related conditions may be new to them, not to mention the difference among individuals who may or may not be acclimatized to high heat conditions. Particular employees – such as older workers, those who are overweight or have heart-related medical conditions – may have an even lower-than-average sensitivity to heat and require additional monitoring.

In general, farm workers can become overheated in one of two ways – either the heat from the environmental conditions in which they work;

or by an individual generating internal heat by physical labor.

Less serious forms of heat-related illness include heat exhaustion, fainting, heat cramps and heat rash. These conditions should be taken seriously as they can quickly progress to heat stroke.

Heat stroke can cause death or permanent disability. Heat stroke occurs when the body becomes unable to control its internal temperature, the body temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down – the body temperature can quickly rise to 106 degrees or higher. Heat stroke symptoms include hot, dry skin or profuse sweating, hallucinations, chills, throbbing headache, high body temperature, confusion or dizziness and slurred speech. First aid should include the following steps:

- Call 911.
- Move the employee to a cool shaded area and fan the body.
- Cool the worker by soaking, spraying, sponging or showering them with water.

Farm owners and supervisors should manage employee work conditions where heat stress may occur. Possible considerations include:

- Acclimatize newer farm employees to hot work and weather conditions by exposing them for progressively longer periods.
- When possible, schedule hot jobs for the cooler part of the day – and where preventative maintenance and repair jobs may occur in hot areas, schedule these tasks for cooler months.
- Tasks that require physical exertion during hot conditions should either be scheduled during the cooler part of the day – or provide more frequent-than-usual rest and cool-off periods. Assigning extra employees to reduce the workload may also help.

- Provide workers with rest periods in cool or shaded areas, and provide cool water or liquids to employees.
- Where enclosed areas are not air-conditioned, provide adequate fans and ventilation to assure air movement.
- Encourage employees to consume sufficient liquids so that they do not become thirsty or dehydrated. NOTE: Although this article focuses on heat-related conditions, it is important to remember that dehydration can occur in any weather conditions, including very cold weather. Always consume adequate fluids year-round.
- Encourage employees to wear light, loose-fitting breathable clothing.
- Where protective clothing or personal protective equipment is necessary, additional monitoring is required as this can increase the risk of heat stress.
- Monitor workers who may have additional heat stress risk factors.

Overall, it is important to plan and provide training and awareness to farm supervisors and workers. Topics should include heat stress risks, heat illness prevention, and employee and self-monitoring in hot weather conditions. Such training should be part of regular farm safety education. Even a five-minute stand-up talk (where workers are gathered for reminders of how to prevent and monitor the possibility of heat stress) can save lives.

Posters can be another way to remind workers of how to prevent heat-related illness. These [posters](#) can be easily printed and displayed in multiple locations, find them at www.osha.gov/sites/default/files/publications/3431_wksiteposter_en.pdf. Similarly, each worker can be provided a [heat stress card](#) (www.osha.gov/sites/default/files/publications/osha3154.pdf) that summarizes this important information. Publications are available in English, Spanish, and other languages, as well as low-literacy resources.

OSHA has a free mobile phone heat app that allows workers and supervisors to calculate the work site heat index. Workers can receive reminders about protective measures that should be taken to protect workers from heat-related illness – such as drinking enough fluids, scheduling rest breaks, planning for and knowing what to do in an emergency, adjusting work operations, gradually building up the workload for new workers, training on heat illness signs and symptoms, and monitoring each other for signs and symptoms of heat-related illness. See the links below for this and other resources.

Occupational Safety and Health Administration, heat illness prevention campaign: [Water. Rest. Shade.](#) www.osha.gov/heat

OSHA Publications: [Heat Illness Prevention](#), www.osha.gov/publications/bytopic/heat-illness-prevention

Centers for Disease Control (CDC) – National Institute for Occupational Safety and Health (NIOSH): [Heat Stress resources](#), www.cdc.gov/niosh/topics/heatstress/

Ohio State University Extension: [Farm worker heat stress prevention video](#), www.youtube.com/watch?v=aPLA6y5xF6U

University of Wisconsin Extension: [Avoiding dairy worker heat stress video](#), www.youtube.com/watch?v=XIr8WadtDz8

Association of Farmworker Opportunity Programs: [Heat stress prevention resources](#), including videos, <https://afop.org/health-safety/heat-stress-prevention/>

[ISU Extension and Outreach Dairy News Podcast](#), www.extension.iastate.edu/dairyteam/

The complete [Farm Employee Management Series](#) can be found on the Ag Decision Maker website at www.extension.iastate.edu/agdm/wdhumanresources.html.

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