



Center for Worker Health

Wake Forest School of Medicine

POLICY BRIEF

Hired Youth Farmworkers in North Carolina: Work Safety Climate and Safety

Summary

Work safety climate is a worker's perception of how his or her employer values safety over production. Agriculture is one of the nation's most hazardous industries. Yet youth as young as 10 years old can be hired to do farm work, where they are exposed to pesticides, nicotine, machinery, sharp tools, working at heights, extreme heat, and large animals. Positive work safety climate is important for improving the safety of hired youth farmworkers because they have less control of working conditions than adults, and they are more likely than adults to do as they are told by adult supervisors. Using pilot study data, investigators document that the work safety climate experienced by youth hired to work on North Carolina farms is poor. They further show that poor work safety climate is associated with poor occupational safety practices and with injuries experienced by these hired youth farmworkers. The poor work safety climate documented by these analyses and the associations of safety climate with safety behaviors and injuries demands that efforts be made to improve the culture of safety in these work environments.

Why does it matter?

US child labor laws do not apply in agriculture. Youth who work on farm labor crews do not enjoy the same protections that they would in other jobs. By and large, these youth are US citizens who come from low-income, minority families. They live in rural areas with limited economic and educational opportunities. They are exposed to more hazards than youth in other industries. They also experience higher rates of injury and death than adults do on farms.

With the limited protections afforded to youth working in agriculture, and the vulnerability of these youth, the value placed on safety by supervisors in the work place is especially important for their protection from occupational injury and illness. Several agencies can act to improve the conditions for these youth. State and federal lawmakers, the NC Department of Labor and the US Department of Labor, the NC Department of Agriculture and Consumer Services and US Department of Agriculture, and the US Environmental Protection Agency can take steps to reduce on-the-job hazards and afford protections to youth who work in agriculture.

What did the researchers do?

During the summer of 2013, researchers interviewed 87 youth, ages 10-17, who were working on North Carolina farms. Over one-third (38%) of the youth were girls. Over three-quarters (78%) were born in the United States, and the majority (90%) identified as Latino or Hispanic. They worked in



Hired youth farmworkers
in North Carolina

(Photo by Peter Eversoll)

Research for this policy brief is reported in:

Kearney GD, Rodriguez G, Arcury JT, Quandt SA, Arcury TA. Work safety climate, safety behaviors, and occupational injuries of youth farmworkers in North Carolina. *American Journal of Public Health* 2015;105(7):1336-43.

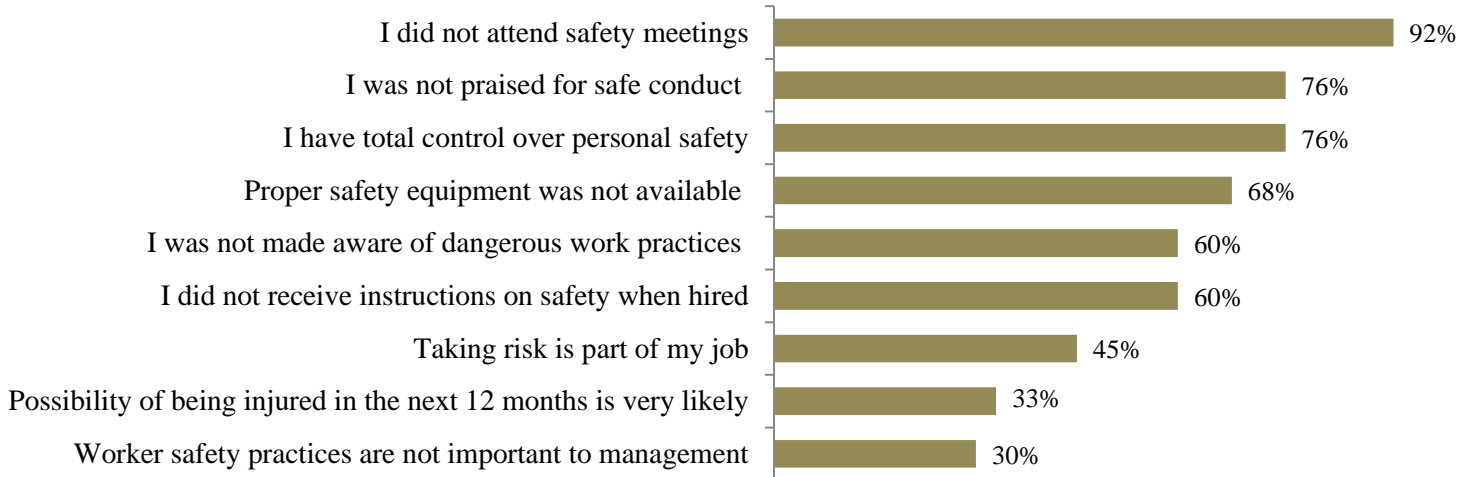
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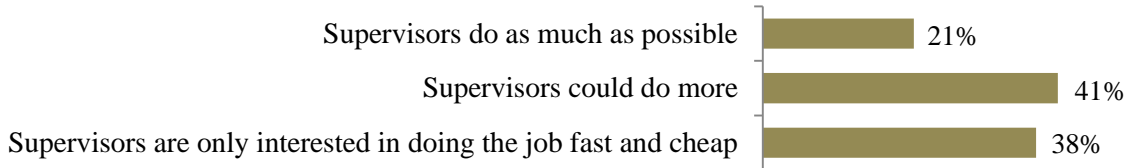
tobacco, sweet potatoes, and berries, as well as other crops. They performed tasks such as harvesting, topping tobacco, loading, and weeding. Most of the youth reported that they worked to earn money for basic needs, such as clothes and school supplies, or to help support their families. The researchers used a standard scale to measure work safety climate that was developed by Gillen and colleagues (2002). They also measured the use of personal protective equipment among the youth farmworkers, their pesticide exposure risk behaviors, and their self-reported work injuries.

What did the researchers find?

Work safety climate among the hired youth farmworkers was poor. The mean work safety climate score was 4.2, on a scale of 0 to 9. The percent agreeing with each item was:



Youth were asked to characterize how much their supervisors cared about safety:



Work safety climate was associated with safety behaviors and injury.

- Those with a sense of better work safety climate reported a smaller number of injuries.
- Those with better work safety climate took fewer pesticide exposures risks:
 - Fewer wore wet shoes
 - Fewer wore wet clothes
 - Fewer wore shorts when working
 - Fewer re-wore soiled clothes
 - More washed their hands frequently
- Those with better work safety climate used personal protective equipment:
 - More wore hats while working
 - More wore rain suits to protect from nicotine exposure
 - More used one or more forms of personal protective equipment

Recommendations

Several policy changes can reduce youths' exposure to hazards in agriculture. Greater emphasis should be placed on:

- Safety among employers and supervisors; they should receive greater safety training.
- Safety training for youth farmworkers.
- The rights of youth farmworkers to demand a safe work environment.

Further reading

- Gillen M, Baltz D, Gassel M, Kirsch L, Vaccaro D. Perceived safety climate, job demands, and coworker support among union and nonunion injured construction workers. *J Safety Res.* 2002; 33(1):33-51.