Multi-State Supervised Agricultural Experience Safety Award Program

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Need for Idea/Innovation

Youth workers in agriculture, between the ages of 14 and 18 years old are vulnerable to agricultural machinery hazards (Hard & Myers, 2006; Jepsen, 2012). Reducing the amount of agricultural injuries to youth will continue to be difficult, especially with regulatory exemptions provided under the Fair Labor Standards Act (Garvey, Murphy, Yoder & Hilton, 2008; Browning, Westneat, Szeluga, 2001; Lawver, Pate, & Sorensen, 2016). In part, the difficulty is also due to a lack of sustainable multilevel efforts to involve farm youth and their mentors in effective experiential learning programs that promote safe work behaviors and safe farm work environments. Most farm safety interventions are focused on adult workers and do not target the many adolescents who work on farms or teachers in career and technical education programs (Westaby & Lee, 2003; Pate, Lawver, & Sorensen, 2016). This agricultural safety youth training project is innovative in its implementation approach across multiple states utilizing evidence based curriculum within Supervised Agricultural Experience (SAE) Programs. The objective of this innovative program is to determine how a local SAE safety award program can be leveraged to reduce injuries to youth who work with agricultural machinery.

How it Works/Program Phases

The local chapter SAE safety award application was developed utilizing the SAE Risk Assessment Protocol provided through the Safety for Youth in Agriculture program. The program targets entrepreneurship and placement type SAE's in which students utilize agricultural machinery. Over a five-year timeframe, school-based agriculture teachers are tasked with and trained to develop an SAE safety proficiency award program at the local level with the purpose of promoting safe agricultural worksites for youth in Montana, South Dakota, and Utah. Training was provided by each state's university teacher educator. A local teacher was hired for one and a half calendar months to assist with organizing the training seminars. The SAE safety award program recognizes students' efforts to improve the safety of their local SAE programs.

An annual $50 stipend to support the SAE safety proficiency award program is provided to each teacher participating in the training. Each year, the stipend will be used by individual teachers to award one of their students who has demonstrated safety proficiency in their SAE. Teachers were allowed to provide the student with the award in cash to be used for SAE improvements or purchase a plaque for student recognition. The SAE documentation is reviewed by the local teacher with project staff during follow-up training seminars to identify a student who has met the proficiency award criteria. The safety award criteria will include documentation of safety improvements at agricultural workplaces. Students must document an agricultural machinery safety issue and how the issue was resolved in collaboration with community support. Documentation must indicate how safety improvements utilized the Safety Guidelines for Hired Adolescent Farm Workers developed by the National Children's Center for Rural and Agricultural Health and Safety. To measure community adoption, the student report must additionally document how communication was conducted with supervisors and parents to improve the safety of agricultural work environments and the specific safety procedures implemented.

Results to date/Implications

Project funding has been awarded for the five-year timeframe by the National Institute for Occupational Safety and Health as a core project of the High Plains Intermountain Center for Agricultural Safety and Health. To date, there has been 150 teachers identified to participate from Montana, South Dakota, and Utah. Training seminars have been scheduled with these teachers for 2017. Implications of this approach of using the SAE safety award include promoting local community adoption of safety procedures and increased interest by students as well as teachers in promoting SAE programs. Targeted outcomes include improved guarding, eliminating machinery hazards, and assigning students appropriate SAE tasks. This should ultimately lead to a reduction of injuries and develop students' skills and abilities that lead to safer agricultural practices.

Future plans

Success stories from the project will be highlighted through quarterly newsletter updates through NAAE and AAAE communication channels. The project team plans to conduct qualitative interviews with teachers to identify barriers and motivators to implementing the SAE safety award program. Future participatory evaluations will be used to identify areas for program improvement. Geospatial reference data will be collected to spatially illustrate through color coded maps to visually represent project diffusion within communities. This will be done using geographic information system software. Project leaders plan to encourage other state agricultural education programs to implement similar awards for students. The project curriculum and planning materials will be made available for future trainings to be conducted with additional students and teachers. Collaborating with agricultural businesses to sponsor the award program may yield sustainable efforts across states.

Costs/resources Needed

The total cost of the SAE safety awards for the recruited teachers was $7,500. Additional resources needed include printing and marketing materials for teacher recruitment. Faculty and staff time committed to the project total one and a half calendar months to complete training and award application reviews. Faculty and staff were needed for a full day in order to complete the 10-hour training seminar with teachers. Planning meetings were used to ensure project training was held constant with all teachers. Video conferencing as well as face-to-face meetings were used to accomplish this. Face-to-face meetings require travel funds provided by sponsoring organizations. Using video conferencing reduced travel expenses. The total funding needed for the 5-year project was $840,000. A cloud server such as Box® was needed to share project curriculum files with faculty and staff. This multi-state program requires collaborative effort from all members of Team AgEd. It is critically important to have input from each stakeholder to promote student safety during SAE activities. Stakeholders include department of education representatives, state FFA leaders, teachers, teacher educators, family members, and industry representatives. This project meets a significant need to provide professional development and curriculum to assist these professionals in protecting and shaping our future leaders in agriculture.

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