



Predictors of Personal Protective Equipment Compliance among Farm Youth

Natalie Roy, MPH, Executive Director, AgriSafe Network



ABSTRACT

It is well documented that pesticide handlers do not consistently use Personal Protective Equipment (PPE). Young farmers commonly handle pesticides on their farm even if they are not certified as "pesticide handlers". Therefore, they are considered an important population to target at an early age with accurate information on preventing pesticide poisoning.

The AgriSafe Network collected quantitative data to assess PPE compliance among 379 FFA farm youth during the 2007 FFA convention. The survey tested PPE knowledge, PPE usage, and predominate high exposure farm tasks. Among the youth who stated they mix and apply agricultural pesticides, only 51% stated they always wear chemical protective gloves.

Future AgriSafe strategies to increase PPE use among farm youth include a social marketing campaign aimed at the interests of youth (radio, print, internet) and targeted towards various stages of behavior change

CONTACT

Natalie Roy, MPH
Executive Director
AgriSafe Network

Phone: (985) 845-1116
Email: nroy@agrisafe.org
www.AgriSafe.org

INTRODUCTION

AgriSafe is a national non-profit that advances the delivery of occupational health care to farm families. Strategies to increase use of Personal Protective Equipment (PPE) among farm youth is an important component of AgriSafe's efforts to protect those working in agriculture.

METHODS

The AgriSafe Network collected quantitative data to assess PPE compliance among 379 FFA farm youth during the 2007 FFA convention. The survey tested PPE knowledge, PPE usage, and predominate high exposure farm tasks.

The survey also assessed PPE usage in relation to stages of behavior change as described in the Transtheoretical Model.

Transtheoretical Model

Precontemplation

Farm youth in this stage are unaware of the need to use PPE. There is no intention in the foreseeable future to use PPE.

Contemplation

Farm youth in this stage are aware of the risks associated with not using PPE. They are seriously thinking about use but have not made a commitment to take action.

Preparation

Farm youth are intending to take action in the next month to use PPE.

Action

Farm youth use PPE (either purchased by self or provided).

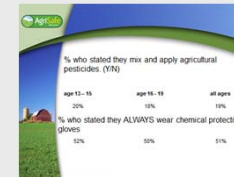
Maintenance

Farm youth in this category wear PPE on a consistent basis.

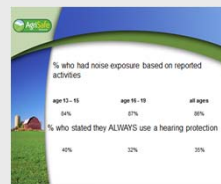
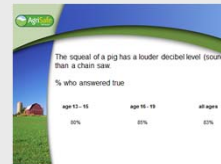
RESULTS



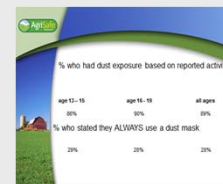
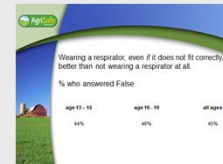
Chemical Protection



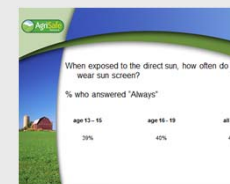
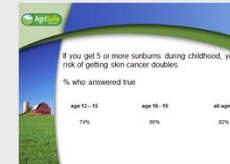
Hearing Protection



Respiratory Protection



Skin Protection.



Common Farming Activities Reported among 379 Farm Youth

- Cleaning grain bins
- Unloading grain
- Mixing and grinding feed
- Unloading & feeding hay
- Cleaning animal pens in barn
- Feeding confinement animals
- Cleaning confinement building
- Working with poultry
- Working with large animals
- Hand harvesting fruits and vegetables
- Using an ATV for farm work
- Driving the lawnmower

Recommendations

Strategies to Increase PPE Use among Farm Youth

- Assess stage of behavior change
- Launch social marketing campaign aimed at the interests of youth (radio, print, internet) and various stages of behavior change
- Apply methods of proven public health prevention
- Identify high risk farm tasks
- Make appropriate recommendation
- Have PPE available by a reliable resource/organization

REFERENCES

- Carpenter SW, Lee BC, Gunderson PD, Stueland DT. 2002. Assessment of Personal Protective Equipment Use Among Midwestern Farmers. American Journal of Industrial Medicine 42:236-247
- Carruth Ann, Stacie G. Duthu, Jeffrey Levin, Thadd Lavigne. Behavior Change, Environmental Hazards and Respiratory Protection Among a Southern Farm Community. Journal of Agromedicine Vol. 13, Iss. 1, 2008
- Prochaika, James O., Norcross, John C. Psychotherapy: Theory, Research, Practice, Training, Vol 38(4), 2001, 443-448.
- Schenker MB, Orenstein MR, Samuels SJ. 2002. Use of Protective Equipment Among California Farmers. American Journal of Industrial Medicine 42:455-464