PIII-47: All-terrain vehicle use on hobby and commercial farms

Author List:
Presenting Author: Sarah A. Cole
Additional Author: Jessica L. Wilson, Susan Westneat

Presenting Author: Sarah A Cole
Address: PO Box 1391
Nicholasville, Kentucky 40340
United States
Ph: 859-948-9873
Fax:
Email: sacole@uky.edu
Institution: University of Kentucky

Additional Author: Jessica L Wilson
Address: 429A College of Nursing, University of Kentucky
Lexington, Kentucky 40536-0232
United States
Ph: 859-257-9336
Fax:
Email: jlrice@email.uky.edu
Institution: University of Kentucky

Additional Author: Susan Westneat
Address: College of Nursing
Lexington, Kentucky 40509
United States
Ph: 859-257-9336
Fax:
Email: swest1@uky.edu
Institution: University of Kentucky

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Abstract:
Introduction: This study was to determine if there are differences in all-terrain vehicle (ATV) use and attitudes on hobby and commercial farms, thus requiring different nursing intervention
on farms. ATVs are a significant source of death in Kentucky. Their use on farms is increasing because they are less expensive and easier to operate than pickups or tractors. The fastest growing segment of farms are often called hobby farms.

**Method(s):** A random sample of 4,500 farms was sent a mail survey. Inclusion criteria were 18 years of age and living on a farm in active operation. Descriptive statistics were conducted in SAS for demographic variables. Chi-square was used for bivariate analyses and Satterthwaite t-test was used to compare mean scores for hobby and commercial farms.

**Results:** The response rate was 53%. Respondents resided on farms in 114 counties. Sixteen percent of the farms represented in the sample were hobby farms and 84% were commercial farms. Fifty-three percent of farms in the study owned an ATV and there were more hobby farms that owned ATVs than commercial farms ($\chi^2=4.87, p = 0.03$). More hobby farmers reported using ATVs on the farm for recreation ($\chi^2=54.53, p < 0.0001$) while more commercial farmers reported using ATVs to monitor property and livestock ($\chi^2= 45.8, p<.0001$). Seventeen percent of hobby farmers reported never wearing a helmet compared to 83% of commercial farmers ($\chi^2=4.13, p = 0.4$). Only 6% of each group had ever attended an ATV safety course. Farmers agreed that children under sixteen are at increased risk on ATVs regardless of farm type ($\chi^2=3.28, p=0.07$), but proportions of those wearing helmets were low for both groups (hobby 48% and commercial 55%) and not different ($\chi^2=0.39, p= 0.53$). Dangerous risk-taking attitude was significantly higher among hobby farmers than commercial farmers ($t=-3.14, df 1,p=0.0018$).

**Discussion & Conclusions:** Public health nurses need to educate farmers about the risks of ATVs. This study found that ATV use and associated risks are high on both farm types and most attitudes do not differ significantly. All farm families need training and should be encouraged to wear helmets. Future research should focus on barriers to helmet use and safe riding and testing the effectiveness of safe riding intervention in farm families.

**Abstract History:**
This abstract has not been presented or accepted for presentation in whole or in part at the SNRS or other scientific meeting.

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Submitted by:
sacole@uky.edu