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ATV AWARE: An ATV Safety Program

In 2014, the emergency room at CHI Health Good Samaritan in Kearney, Nebraska, reported 18 admissions attributed to All Terrain Vehicle (ATV)-related accidents. In 2015, that number of ATV admits doubled to 36. This statistic prompted Tracy Dethlefs, RN, BSN, Trauma Outreach Coordinator at the hospital, to reach out to me, a University of Nebraska – Lincoln Extension Educator in Rural Health, Wellness, & Safety.

As a new Extension Educator, I was looking for emerging issues in rural health and safety, and Tracy’s passion for ATV safety was thought provoking. ATVs are a useful mode of transportation on farms and ranches, yet there are many known safety hazards associated with their use. The injury and death statistics, lack of laws regarding ATVs and their riders, and behavior patterns associated with ATV riders proved to be an area that needed attention. Together with Erin Howard of the Nebraska Safety Center at University of Nebraska – Kearney, as well as several other partners, the ATV Aware program was born.

ATV Aware is an Extension program in its infancy, yet it is already forging ahead to gain attention with an innovative approach. The program will travel to people of all ages in all areas of Nebraska using an ATV simulator trailer built by Newport Fab & Machine in Iowa City. The simulator operates on electricity and hydraulics that move a full-size ATV at all angles. A participant sits on the ATV while the educator controls its movement with a joystick. The goal of ATV Aware is to reach riders of all ages, particularly youth and young adults, and fully engage them in the learning process.

Aaron Yoder, Ph.D., Assistant Professor of Environmental, Agricultural, and Occupational Health at UNMC and Assistant Professor, Nebraska Extension – Biological Systems Engineering, UNL, has already provided initial safety training to 12 instructors. Use of the simulator, which tips side-to-side and front-to-back, allows instructors to teach about counterbalance and the importance of body shifting on inclines. Basic intervention lessons taught with the simulator include:

- Importance of body shifting and weight balance
- Appropriate sizes of ATVs for age groups
- Dangers of riding with a passenger
- The importance of helmets, especially, and other personal protective equipment
- Dangers and laws of riding on paved or gravel roads

To date, there is limited research on Nebraskans’ ATV education awareness levels. Preliminary information can be gleaned from results of a capstone project by Alexandra Farfalla, a Master of Public Health student with an Environmental, Agricultural, and Occupational health concentration at UNMC. Farfalla spent 150 hours this summer creating curriculum and design content involved with the program kick-off. As part of her Capstone Project, she administered a survey to Nebraska rural youth (N= 64; ages 14 – 15), which included items about their attitudes and behaviors toward ATV safety as well as examining their inclination to change behaviors.
after training. Some of the highlights from Farfalla’s Capstone Experience survey include the following:

- The majority of respondents (61%) reported that their family owned an ATV or UTV (side-by-side)
- More than one third of participants reported being involved in an ATV incident (e.g., rolled, hit something, fallen off)
- About 58% of youth neither owned nor were provided with helmets to use when operating ATVs or UTVs
- About 72% indicated they never wear a helmet when operating ATVs or UTVs
- About 94% of youth had ridden or driven an ATV with one or more passengers
- About 83% indicated they had ridden or driven an ATV on a public road

Results from Farfalla’s Capstone Project is driving the creation of educational materials for the program.

As the program grows, an excellent overall teaching tool will be ready for shared ownership, allowing other entities to network across counties, states, or regions. Especially beneficial to the program is support of the Nebraska FFA Association and relationships with individual FFA Chapter Advisors who will collaborate with Extension to bring education to FFA members. At the request of organizers of the National FFA Convention & Expo in Indianapolis this fall, the simulator will be traveling there for exposure to a national audience, as well.

Other opportunities for outreach are school events, companies with employee safety education, ag-based conferences, outdoor expos, rural fire and rescue department training, and ATV dealership events. The simulator made its debut at a company safety event recently and attracted lots of attention at Husker Harvest Days, with many more events on the schedule.

As emerging issues in farm safety develop, the plan is to expand the program with new partners, new tools, and new outcomes.

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