

Improving 4-H Livestock Programs through Partnerships with State Agencies

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Livestock projects are some of the most popular projects in the 4-H program and an estimated 1% of animals that enter the U.S. food chain are from youth livestock programs. Because these animals become a part of the food chain, they are subject to regulations outside of 4-H policy. Education of youth related to animals' health and well-being, food safety and subsequent public health and perception are vitally important learning outcomes of 4-H livestock programs. In order to effectively address these outcomes, Indiana 4-H Youth Development has developed strong partnerships with state agencies, including the Indiana State Fair (ISF) and the Indiana State Board of Animal Health (BOAH). The partnership with ISF provides 4-H members a place to exhibit their livestock projects, to interact with the public about why they are involved in livestock projects and how they care for their animals, and to potentially market their project animals. Also, BOAH provides the health requirements for exhibition for all livestock species. Depending on the species, 4-H members also learn how their project is connected to the food supply through participation in quality assurance programs, the ISF drug testing program, and completion of animal affidavits regarding the use of medications in animals. Partnerships have included addressing animal traceability through encouraging 4-H members to obtain a premises ID and the use of 840-RFID tags for animal enrollment identification. The partnerships among the organizations came to the forefront during the 2012 4-H show season when sickness was noted in swine during several county fairs in the weeks leading up to the state fair. A meeting was held to determine how this disease outbreak could affect the swine show at the ISF and to develop an action plan that would ensure the health of swine, 4-H exhibitor families, and the general public. Notice of this plan was disseminated to all county Extension offices to forward on to 4-H swine exhibitors in their respective county and to email addresses that were provided during the ISF entry process. This plan was developed approximately 24 hours prior to the arrival of nearly 2,000 4-H swine to the state fairgrounds. The partnership between Indiana 4-H, ISF, and BOAH was critical to the execution of this plan, as each task was performed by representatives from all three entities. Recommendations have since been developed by BOAH for the 2013 fair season, which has led to a reevaluation of swine shows at county fairs and the state fair. Throughout this process, these partnerships have proved invaluable as fair organizers work to incorporate the recommendations. Additionally, they have led to pilot projects with Indiana 4-H and BOAH making 840-RFID tags available to counties to ensure that 4-H swine exhibitors have access to the tags for county fairs and the state fair. This is likely to lead to 840-RFID coverage across the state to allow for traceability in case another disease event occurs.

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Introduction

- Livestock projects are some of the most popular projects in the 4-H program:
 - an estimated 1% of animals that enter the U.S. food chain are from youth livestock programs
 - youth education in animals' health, well-being and food safety are vitally important learning outcomes of 4-H livestock programs
 - close interaction between animals and the general public at fairs may create both human and animal health concerns

Problem Statement

- During 2012 4-H fair season sickness was noted in swine and humans in the weeks before the state fair, and was identified as H₃N₂v
 - Several county swine shows truncated and animals sent home
- Concerns arose regarding managing human and animal disease risk at the Indiana State Fair, which has more than 900,000 human visitors, and a swine show of nearly 2,000 animals
- Plan needed to be quickly developed and implemented to ensure continuation of swine show



Action Steps

- Staff from Indiana State Fair (ISF), Purdue Extension 4-H Youth Development and the Indiana State Board of Animal Health (BOAH) met to develop an action plan
 - Entities had previously collaborated on Indiana Animal Traceability plan
- Plan of Action was emailed to all state fair swine exhibitors through County Extension offices and ISF entry database



Plan of Action for 2012

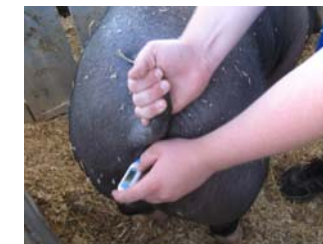
- Rectal temperature of every animal taken by 4-H member before entering the barn
 - Any over 105° F turned away
 - Borderline hogs allowed 20-min cool down and then rechecked
- All swine tagged with an 840-RFID tag
- Hand washing stations around barn
- Precautionary signage for general public
- Barn surveillance by BOAH and contract vets
 - Used quick influenza test and traditional swabbing of sick pigs
- Recommendations for management of swine exhibitions provided by BOAH to all counties in Fall of 2012 for the next year

Plan of Action for 2013

- Repeated 2012 plan
- 840-RFID tags required prior to arrival
- Participated in influenza surveillance project with Ohio State personnel
- Reduced time that hogs were on-site

Results

- One reported case of human H₃N₂v following 2012 ISF and none following 2013 ISF
- Decrease in human cases of H₃N₂v in state of Indiana from 138 in 2012 to 14 in 2013
- Increased awareness of 4-H members about potential human/animal health issues
- Staff reported increased youth self-efficacy for taking animal temperatures and ensuring animal well-being during transportation



Future Plans

- Explore ways to increase traceability from May 4-H enrollment through exhibition
- Encourage continued implementation of 2012 recommendations at county fairs