

IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

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Health

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Dear Educators, Chapter Advisors, and Club Leaders,

The Center for Food Security and Public Health (CFSPH) at Iowa State University's College of Veterinary Medicine, in collaboration with the Iowa Department of Public Health and with support from the Centers for Disease Control and Prevention (CDC) and the Council of State and Territorial Epidemiologists created an **online course to teach youth about zoonotic diseases, "Excellence in Exhibition: Preventing Disease in Animals and People"**. The course is meant to encourage showmanship and animal involvement while keeping both animals and humans safe and healthy. The course is available to anyone free of charge through the CFSPH website at <http://www.cfsph.iastate.edu/YouthInAg/>.

Animal agriculture is an important part of our country's economy and culture. As with most agriculture based states, youth agriculture programs are a key element in the future of animal husbandry and food production. As you are aware, raising and showing livestock help youth develop responsibility, learn good sportsmanship, and gain confidence. Most Iowa youth interested in pursuing a career in agriculture are members of either 4-H or FFA. In Iowa, nearly 90,000 Iowa youth are involved with 4-H and nearly 23,000 students participate in FFA.

While raising and showing animals have an overall positive impact on youth and the community, there are many animal diseases that can be spread between people and animals (zoonotic diseases), especially when people have close contact with animals. Several animal related disease outbreaks, such as variant influenza A virus of swine (H3N2v), or enteric disease outbreaks caused by pathogens such as *E. coli* and *Campylobacter*, have been associated with fairs in recent years. In many instances, these events resulted in severe illness in youth.

Youth livestock projects can also present disease transmission risks to animals due to the comingling of various animals and animal species from different locations. While most commercial farms implement biosecurity measures to reduce the risk of disease among animals, youth animal agriculture projects are generally reared on a smaller scale, involve closer contact with the animals, and have an increased opportunity for comingling of animals or sharing of equipment.

Understanding disease risks and preventive measures is critical to reduce the occurrence of zoonotic diseases among youth associated with animal agriculture. Awareness of these risks can help youth to understand the importance of disease prevention for themselves, their animals, and the public. Additionally, teachers, volunteer leaders, and parents should understand the same disease risks to further reinforce measures needed to prevent zoonotic disease transmission.

The course is divided into six lessons. The first three lessons focus on specific zoonotic diseases, such as influenza, and ways to prevent transmission to humans and animals. Two additional lessons are presented as case studies, and the sixth lesson highlights agencies and career opportunities in One Health—the

health of animals, people, and the environment. Estimated completion time for each lesson is 20–30 minutes. A certificate of completion with the student’s name, chapter or club, and county is provided at the end of each lesson.

This course can be taken independently by anyone at any time, but is targeted at youth aged 13–18 years. Additional resources are available to students and instructors on the CFSPH website, including

- Learning objectives for each lesson,
- Disease factsheets,
- Lesson worksheets,
- PowerPoints that contain the same information as the online course, and
- Biosecurity and disease prevention posters.

Should you choose to incorporate the course into your classroom or club, we have also developed additional material to aid in your instruction. Included in the password-protected “club leader or instructor” area of the website, you can find

- Learning objectives with answers for each lesson,
- Answers to supplemental worksheets, and
- A biosecurity and disease spread hands-on activity guide.

You can also use the learning objectives to help form questions for any exam you may wish to implement.

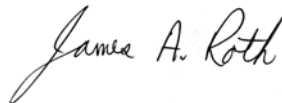
We hope this course is used widely by youth, parents, advisors, leaders, and fair organizers. To maximize participation, we suggest

- Incorporating the online course into classroom curriculum,
- Using the course to prepare for FFA contests,
- Incorporating the course into 4-H projects in animal or human health,
- Developing competitions between clubs or chapters for participation,
- Awarding chapters or clubs for the most participation (completion certificates), and/or
- Requiring completion of the course as a prerequisite for showing at local or state animal exhibitions or fairs.

We are excited to offer the course to you, and hope you enjoy! As always, we welcome feedback. Please complete the course evaluation at the end of the course, or contact us directly at YouthInAg@iastate.edu.



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