**Agriculture in Society**

**Unit 2:** Animal and Livestock Production in Agriculture

**Lesson 2:** Veterinary Science Basics and Health Care

**Lesson 2.2:** Biosecurity in Animal Agriculture

State Orientation to Agriculture in Society Standards:

**OAS 3.07** Describe biosecurity and apply biosecurity practices to scenarios to prevent disease outbreaks

National AFNR Standards:

**AS.07** Apply principles of effective animal health care

Student Learning Objectives:

1. Students describe biosecurity in agriculture
2. Students will explore the effects of biosecurity and the consequences of not practicing biosecurity in production agriculture

Outside Resources

1. Ag in the Classroom
   1. [Bring Home the Blue, Not the Flu!](https://agclassroom.org/matrix/lesson/791/) (OAS 3.07)
      1. **Lesson Plan and Activity-** Using the context of a county fair livestock show, students investigate how diseases are spread. With a focus on zoonotic disease, students will complete simulations demonstrating the spread of illness and implementation of biosecurity measures as well as complete an online module to deepen understanding of specific diseases and their prevention.
2. Teachers Pay Teachers
   1. [Swine Biosecurity Article Worksheet](https://www.teacherspayteachers.com/Product/Swine-Biosecurity-Article-Worksheet-6312172) (OAS 3.07)
      1. **Article and Worksheet-** This worksheet and article discusses the importance of biosecurity in modern US hog production. It covers prevention practices and management techniques.
   2. [Animal Science/Agriculture - Biosecurity Discussion Pictures and Prompts](https://www.teacherspayteachers.com/Product/Animal-ScienceAgriculture-Biosecurity-discussion-pictures-and-prompts-10658323) (OAS 3.07)
      1. **Lesson Plan, Slideshow, and Worksheet-** Students will review pictures and discuss how diseases could spread in the scenario.
3. One Less Thing
   1. [Current Events - Bird Flu Outbreak in Dairy Cows](https://www.onelessthing.net/products/and-another-thing-current-events-bird-flu-outbreak-in-dairy-cows?_pos=1&_sid=ea4b35de9&_ss=r) (OAS 3.07)
      1. **Reading Passage, Infographic, Questions, Links, and Word Search-** Students will investigate concerns related to the safety of milk supplies, and this lesson will highlight the importance of biosecurity in production agriculture.
4. University of Florida
   1. [Biosecurity Article](https://aec.ifas.ufl.edu/media/aecifasufledu/teacher-repository/BiosecurityArticle-1.docx) (OAS 3.07)
      1. **Reading Passage and Assignment**- Students will review an article about biosecurity and write a 1 paragraph summary about implementing biosecurity measures at the school.
5. Ohio 4H Youth Development
   1. [Basics of Biosecurity](https://www.canr.msu.edu/uploads/236/65684/4H1661_AnimalScienceAnywhere-Biosecurity_NEW.pdf) (OAS 3.07)
      1. **Lesson Plan and Activity-** Students will be introduced to the procedures and concepts related to biosecurity in animal SAEs and projects. This hands-on activity will help students describe animal disease prevention strategies.
   2. [Building on Biosecurity: Reducing the Risk](https://www.canr.msu.edu/uploads/236/65684/4H1667_AnimalScienceAnywhere-BuildingOnBiosecurity_NEW.pdf) (OAS 3.07)
      1. **Lesson Plan and Activity-** Students will evaluate biosecurity risks in the housing and environment of animals and discuss reducing those risks. This is a hands-on activity
6. University of Nebraska
   1. [Call the Vet! Animal Diseases](https://alec.tennessee.edu/alec/wp-content/uploads/sites/40/2020/01/Animal-Diseases-Inquiry-Lesson-Plan.pdf) (OAS 3.07)
      1. **Lesson plan, Slideshow, Handouts, Worksheet-** Students will identify ways to prevent diseases in animal housing, develop a sample animal disease scenario, and identify common diseases and parasites in animal agriculture.