

# Posters for Prevention and Protection: Integrating Case Study Posters to Help Law Enforcement Understand Agroterrorism in an Emergency Training



## AUTHORS

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## Introduction

- Agroterrorism is defined as the “acts of terrorism intended to damage a country’s agricultural production or food supply” (Merriam-Webster, 2014, para. 1).
- This form of terrorism is usually fairly easy to accomplish due to the large amounts of rural land in America.
- When law enforcement agencies encounter instances like bomb threats, they are likely handling a case of terrorism, but threats to the agricultural industry may be more challenging to identify.

## How it Works

- Funded by the United States Department of Agriculture (USDA), National Animal Disease Preparedness and Response Program (NADPRP), we designed the Agricultural Preparedness Training (APT) to provide agricultural readiness training for law enforcement and federal agency personnel.
- The APT agenda included highlights of agroterrorism risks, an overview of response and recovery elements in the agricultural industry, and a mock crime scene.
- The posters served as a way for personnel to take a deeper dive into agricultural threats and gain more insight on their own.
- We designed each poster to include an overview, major takeaways, and a QR code for additional information.



**Abstract**

**Digital Poster Library**

## Results to Date

- Guided by a subject matter expert team, consisting of statewide veterinarians, public health officials, emergency managers, retired law enforcement, and Extension personnel, we received positive feedback on the posters.
- Participants stated they appreciated the real-world connection that each poster brought to the program, and they specifically highlighted the bulleted takeaway section as useful and practical.
- The posters also spurred dialogue about potential scenarios that participants may experience in their local communities, which will hopefully provide a starting place for future investigations due to the thought-provoking nature of the cases.

## Costs and Resources

- We printed the 10 posters using FedEx online for approximately \$155 (FedEx, 2022). We used Adobe InDesign to design the posters, so a subscription to Adobe would be helpful, or another design software, such as Canva. No other costs were associated with these case studies.

**Case Study #1**  
Sunland Racetrack Equine Herpes Virus

**MAJOR TAKEAWAYS**

- Equine herpesvirus-1 (EHV-1) is a common virus that causes respiratory and neurological disease in horses.
- EHV-1 is highly contagious and can spread through direct contact with infected horses or their secretions.
- EHV-1 can also be spread through indirect contact with contaminated equipment, such as grooming brushes and blankets.
- EHV-1 can cause a wide range of clinical signs, including fever, depression, coughing, and difficulty breathing.
- EHV-1 can also cause neurological signs, such as incoordination, muscle tremors, and paralysis.

**Case Study #2**  
Highly Pathogenic Avian Influenza (HPAI)

**MAJOR TAKEAWAYS**

- Highly pathogenic avian influenza (HPAI) is a type of influenza virus that can cause severe disease in birds and humans.
- HPAI is highly contagious and can spread through direct contact with infected birds or their secretions.
- HPAI can also be spread through indirect contact with contaminated equipment, such as feed troughs and water troughs.
- HPAI can cause a wide range of clinical signs, including fever, depression, coughing, and difficulty breathing.
- HPAI can also cause neurological signs, such as incoordination, muscle tremors, and paralysis.

**Case Study #3**  
Friedrich-Bouliminiformis/Boudouin Bacterium

**MAJOR TAKEAWAYS**

- Friedrich-Bouliminiformis/Boudouin bacterium is a rare, highly contagious bacterial disease that affects horses.
- The bacterium is highly contagious and can spread through direct contact with infected horses or their secretions.
- The bacterium can also be spread through indirect contact with contaminated equipment, such as grooming brushes and blankets.
- The bacterium causes a wide range of clinical signs, including fever, depression, coughing, and difficulty breathing.
- The bacterium can also cause neurological signs, such as incoordination, muscle tremors, and paralysis.

**Case Study #4**  
Foot & Mouth Disease in New Mexico

**MAJOR TAKEAWAYS**

- Foot and mouth disease (FMD) is a highly contagious viral disease that affects cloven-hoofed animals, including horses.
- FMD is highly contagious and can spread through direct contact with infected animals or their secretions.
- FMD can also be spread through indirect contact with contaminated equipment, such as feed troughs and water troughs.
- FMD causes a wide range of clinical signs, including fever, depression, coughing, and difficulty breathing.
- FMD can also cause neurological signs, such as incoordination, muscle tremors, and paralysis.

**Case Study #5**  
Rajneesh/Bior/Attack Salmonella

**MAJOR TAKEAWAYS**

- Salmonella is a common bacterial disease that affects humans and animals.
- Salmonella is highly contagious and can spread through direct contact with infected animals or their secretions.
- Salmonella can also be spread through indirect contact with contaminated equipment, such as feed troughs and water troughs.
- Salmonella causes a wide range of clinical signs, including fever, depression, coughing, and difficulty breathing.
- Salmonella can also cause neurological signs, such as incoordination, muscle tremors, and paralysis.

**Case Study #6**  
Winter Storm Goliath

**MAJOR TAKEAWAYS**

- Winter storms can cause significant damage to agricultural infrastructure and operations.
- Winter storms can also cause significant damage to human infrastructure and operations.
- Winter storms can cause significant damage to the environment.
- Winter storms can cause significant damage to the economy.
- Winter storms can cause significant damage to the population.

**Case Study #7**  
Chinese Scaud Threats

**MAJOR TAKEAWAYS**

- Chinese scaud threats are a type of agroterrorism that involves the use of biological agents to cause damage to agricultural infrastructure and operations.
- Chinese scaud threats are highly contagious and can spread through direct contact with infected animals or their secretions.
- Chinese scaud threats can also be spread through indirect contact with contaminated equipment, such as feed troughs and water troughs.
- Chinese scaud threats cause a wide range of clinical signs, including fever, depression, coughing, and difficulty breathing.
- Chinese scaud threats can also cause neurological signs, such as incoordination, muscle tremors, and paralysis.

**Case Study #8**  
Listeria: Bluebell Case

**MAJOR TAKEAWAYS**

- Listeria is a bacterial disease that affects humans and animals.
- Listeria is highly contagious and can spread through direct contact with infected animals or their secretions.
- Listeria can also be spread through indirect contact with contaminated equipment, such as feed troughs and water troughs.
- Listeria causes a wide range of clinical signs, including fever, depression, coughing, and difficulty breathing.
- Listeria can also cause neurological signs, such as incoordination, muscle tremors, and paralysis.

**Case Study #9**  
Intentional Adulteration with Antibiotics

**MAJOR TAKEAWAYS**

- Intentional adulteration with antibiotics is a type of agroterrorism that involves the use of antibiotics to cause damage to agricultural infrastructure and operations.
- Intentional adulteration with antibiotics is highly contagious and can spread through direct contact with infected animals or their secretions.
- Intentional adulteration with antibiotics can also be spread through indirect contact with contaminated equipment, such as feed troughs and water troughs.
- Intentional adulteration with antibiotics causes a wide range of clinical signs, including fever, depression, coughing, and difficulty breathing.
- Intentional adulteration with antibiotics can also cause neurological signs, such as incoordination, muscle tremors, and paralysis.

**Case Study #10**  
Cyber Attack: JBS

**MAJOR TAKEAWAYS**

- Cyber attacks can cause significant damage to agricultural infrastructure and operations.
- Cyber attacks can also cause significant damage to human infrastructure and operations.
- Cyber attacks can cause significant damage to the environment.
- Cyber attacks can cause significant damage to the economy.
- Cyber attacks can cause significant damage to the population.