



Biosecurity for Florida Producers Training Guide



SART Training Media



Biosecurity for Florida Producers

Training Guide

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- Florida Department of Agriculture and Consumer Services (FDACS)
- Florida Fish & Wildlife Conservation Commission
- Florida State Agricultural Response Team
- University of Florida, IFAS Extension Service

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SART Training Media are available for download from the Florida SART Web site <www.flsart.org>.

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About Florida SART

- SART is a multi-agency coordination group.
- SART is made up of over 25 partner agencies (state, federal and non-governmental organizations).
- SART provides preparedness and response resources for Emergency Support Function 17 [(ESF 17) Animal and Agricultural Issues].
- SART statutory authority
 - State Emergency Management Act (Section 252.3569, Florida Statutes)

SART Mission

Empower Floridians through training and resource coordination to enhance all-hazard disaster planning and response for animal and agricultural issues.

SART Goals

- Support the county, regional and state emergency management efforts and incident management teams.
- Identify county resources available for animal and/or agricultural issues.
- Promote the cooperation and exchange of information of interested state, county and civic agencies.

Specific Learning Objectives

At the end of this training module, participants will be able to:

- Discuss the vulnerability of Florida Agriculture
- Discuss agroterrorism
- Explain biosecurity
- Identify methods to ensure premises' security
- Identify worker security and awareness
- Identify methods to protect animals from exposure to disease or contamination
- Identify recommendation for personal sanitation
- Identify equipment cleaning and disinfection procedures
- Identify procedures to reduce potential for premise contamination by movement of animals and visitors
- Identify emergency procedures

Resources

The following are sources of additional information about the subjects mentioned in this introduction.

USDA-APHIS District Office locations and contact information

https://www.aphis.usda.gov/animal_health/downloads/sprs_contact/field_office_contact_info.pdf

State Veterinarian list

http://www.usaha.org/upload/Federal%20and%20State%20Health/StateAnimalHealthOfficials_rev.pdf

FDACS Division of Animal Industry

<https://www.freshfromflorida.com/Divisions-Offices/Animal-Industry>

United States Department of Agriculture (USDA)

<http://www.usda.gov>

USDA Animal and Plant Health Inspection Service (APHIS)

<https://www.aphis.usda.gov/aphis/home/>

United States Animal Health Association (USAHA) animal disease information links

<http://www.usaha.org/disease-information>

UF-IFAS EDIS fact sheets on veterinary and animal health topics

http://edis.ifas.ufl.edu/DEPARTMENT_VETERINARY_MEDICINE

http://edis.ifas.ufl.edu/TOPIC_Livestock_by_Animal

http://edis.ifas.ufl.edu/TOPIC_Livestock_Health_by_Animal

UF-IFAS Extension Disaster Handbook

<http://disaster.ifas.ufl.edu>

University of Florida Institute for Food and Agricultural Sciences Extension publication resource (EDIS), Bioterrorism and Biosecurity

https://edis.ifas.ufl.edu/topic_bioterrorism

Resources, continued

**University of Florida Institute for Food and Agricultural Sciences
Extension, Biosecurity and Biological Risk Management for Livestock
Enterprises**

<https://edis.ifas.ufl.edu/an194>

Animal Health Australia (AHA), Farm Biosecurity

<http://www.farmbiosecurity.com.au/>

Canadian Food Inspection Agency, Animal Biosecurity

[http://www.inspection.gc.ca/animals/terrestrial-animals/biosecurity/
eng/1299868055616/1320534707863](http://www.inspection.gc.ca/animals/terrestrial-animals/biosecurity/eng/1299868055616/1320534707863)



Biosecurity for Florida Producers

Appendix A - Training Slides



SART Training Media






Biosecurity for Florida Producers

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 State Agricultural Response Team

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Learning Objectives 1

- Discuss the vulnerability of Florida Agriculture
- Discuss agroterrorism
- Explain biosecurity
- Identify methods to ensure premises' security
- Identify worker security and awareness
- Identify methods to protect animals from exposure to disease or contamination



Learning Objectives 2

- Identify recommendation for personal sanitation
- Identify equipment cleaning and disinfection procedures
- Identify procedures to reduce potential for premise contamination by movement of animals and visitors
- Identify emergency procedures



What is biosecurity?

Agrosecurity means protecting the following from harmful acts – both intentional and unintentional:

- agricultural operations,
- the food processing industry,
- the food distribution system
- the hospitality industry

When talking about agriculture, **biosecurity** focuses on acts involving the introduction of pests or diseases.



Florida's Agricultural Vulnerability

- Agriculture in Florida has an annual economic impact of \$120 billion
- The safety of the food supply has to begin at its source



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Florida's Agricultural Vulnerability

Florida has been called an agricultural sentinel state because if a foreign animal or plant disease introduction or agroterrorism event occurs in the United States . . .

. . . there is a good chance it will occur
FIRST IN FLORIDA!



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Florida's Agricultural Vulnerability

Florida's borders are truly porous:

- 14 major seaports
- 109 general airfields
- 20 commercial airports
- 25 military airfields
- Over 300 private airports



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Florida's Agricultural Vulnerability



- Florida ranked second in the nation (2016) for airline passenger volume with over 168.7 million passengers
- Over 112 million tourists visited Florida in 2016 – 10% of these are from foreign countries and Canada



Agroterrorism

When any person knowingly or maliciously uses

- biological agents
- chemical agents
- plant pathogens
- animal pathogens

... as weapons against the agriculture industry or food supply.



Florida's Agricultural Vulnerability

Global Availability

- Foot-and-mouth Disease in 25+ countries
- Hog Cholera, Avian Influenza and Exotic Newcastle Disease are widespread
- Animal disease agents can be produced or delivered without sophisticated equipment



Florida's Agricultural Vulnerability

Agents that can be introduced, transmitted, and/or created by people pose a significant risk

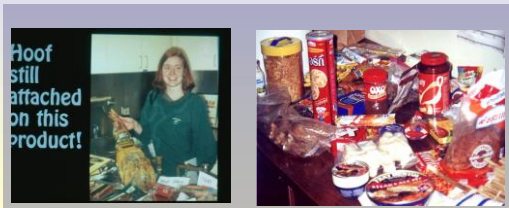
- Anthrax
- Foot-and-mouth Disease
- Food-borne bacteria – *E. coli*, salmonella

Not limited to these organisms!



Prohibited Materials Carry Contagens

High potential for prohibited materials entering Florida – gifts, souvenirs, food and other products



How Florida Is Vulnerable -- Animals

10 million poultry



How Florida Is Vulnerable -- Animals

1.6 million cattle



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How Florida Is Vulnerable -- Animals

55,000 goats

10,000 sheep



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How Florida Is Vulnerable -- Animals

500,000 swine (commercial and feral)



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How Florida Is Vulnerable -- Animals

350,000 horses

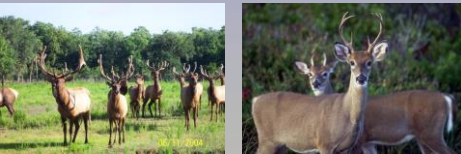


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How Florida Is Vulnerable -- Animals

280 Game Farms and Hunting Preserves

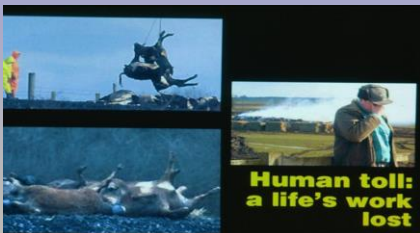


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Biosecurity Measures

May seem drastic, but helps to preserve agriculture



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Definition of Biosecurity

Security from transmission of infectious disease, parasites, and pests among livestock, poultry, wildlife and zoo animals



Your Biosecurity Resource Group?

- You (and your family)
- Foreman and workers
- Veterinarian
- Nutritionist
- Extension specialist
- Suppliers

All of you are responsible for your Biosecurity Plan



The Biosecurity Key

Programs must reduce the risk of transferring disease agents, so . . .

Exposure Prevention Is the Key!



If Reducing Risk Is the Key . . .

What should a biosecurity plan include?

- Increase my animals' ability to resist disease
 - Vaccination
- Minimize contacts that might result in disease
- Eliminate sources of infectious agents
 - Other livestock, birds, insects, rodents, people, manure, soil, surface water (or water tanks), feed, and equipment



In Developing Your Biosecurity Plan . . .

Ask these questions:

- What are your disease concerns?
- What are the risk factors for these concerns?
- What management actions should be considered?
- How will this be monitored?

The plan must be written and practiced to be effective!



Premise and Building Security

- Critical to ensuring farm biosecurity
- Perimeter fence (with appropriate signage)
- Only one entry/exit to property with lockable gate
- Critical storage areas should have limited access and be locked when not in use. (Lighted if appropriate)
- Establish neighborhood watch program
- Report any suspicious activity to law enforcement officials
- Maintain inventory of equipment and chemicals



Premise and Building Security

Lock gates!



Protect feed and supplies from unintentional OR intentional contamination



Worker Security and Awareness



- Pre-employment resume and background check
- Provide biosecurity awareness and personal protective equipment training and implementation policy
- Animal disease recognition training
- Job procedure training
- Train employees to recognize and report suspicious individuals or unusual activities
- Review emergency plan regularly



Protect Animals from Exposure to Disease and Contamination

- Keep fences adjacent to livestock on neighboring premises in good repair
- Maintain closed herd if possible
- Purchase from sources with known herd health practices
- Isolate herd additions, including those returning from shows, for at least 2 weeks prior to allowing them to come into contact with other animals to reduce potential for introducing a disease
- Know the source and quality of purchased feed and hay



Does Your Biosecurity Plan Include . . .

- **Maintain a vaccination/parasite control program.**
 - Review herd health plans annually with your DVM
- **Separate any obviously sick animals from the rest of the herd and contact your veterinarian for the appropriate treatment.**
- **Know the signs of reportable/foreign animal diseases and report any unusual signs to your veterinarian.**



Does Your Biosecurity Plan Include . . .

- **Limit direct contact between livestock, wildlife, pets, and pests.**
 - Prevent wildlife and pets from sharing feed bunks or water sources.
 - Rodents, other vermin and wildlife are very mobile and can spread disease agents. Don't ignore dogs, cats, and poultry.
- **Protect Your Animals from Disease and Contamination!**



Other Considerations

- **Ensure that adequate hand washing and boot cleaning/disinfection supplies are available and monitor workers to ensure compliance with established protocol**
- **Do not feed table scraps, human food products or garbage to farm animals**
- **Reduce potential for runoff of water and organize material from adjacent livestock premises**



No meat scraps!



- Don't feed meat scraps to livestock!
- Don't risk introducing Foot-and-mouth Disease



Personal Sanitation

- If possible, provide on-farm laundry facilities or furnish coveralls for use by workers, especially those with personal livestock
- Provide foot bath and require personnel to use when entering and leaving animal areas
- Provide adequate facilities for hand washing and require workers to use them
- Provide disposable gloves for use by workers and insist they use them when treating sick animals or assisting with births
- Insist workers wash hands before milking dairy animals



Equipment Cleaning/Disinfection Procedures

- Equipment includes all farm vehicles, as well as animal transportation/handling and veterinary equipment
- Do not lend or borrow equipment. If it must be loaned or borrowed, clean and disinfect before and after each use
- All manure and organic material must be removed to make disinfection effective
- Clean/disinfect all equipment after each use, especially when used on sick animals

These tips will contribute greatly to keeping animals healthy!



Visitor Policy



- Know your visitors!
- Have they been on other premises?
- Have they traveled internationally within the previous week?



Procedures for Premise Entry/Exit 1

- Require delivery vehicles and visitors to use a controlled entry/exit point
- Ensure premise personnel are present to ensure that a record is kept on all persons visiting the premise
- Ensure that all vehicles have tires and undersurfaces cleaned and disinfected prior to entering and exiting the premises
- Prevent visitor and service vehicles from driving across feed delivery and manure removal routes whenever possible



Procedures for Premise Entry/Exit 2

- Park all vehicles away from livestock areas, preferably concrete
- Provide a foot bath or disposable footwear for use by visitors exiting vehicles
- Locate holding pens for animal pickup/delivery away from barns and other livestock areas
- Ensure that livestock hauling vehicles are clean and well-bedded to prevent disease introduction and injury to livestock



Premise Biosecurity



- Don't haul trash or garbage from other ranches!
- Bag all refuse, trash and contaminated clothing when leaving any premises.



Premise Biosecurity



- Clean boots **BEFORE** and **AFTER** working animals!
- Remove dirt, debris.
- Disinfect!



Premise Biosecurity



- Don't carry disease home!
- Clean and disinfect tires at **YOUR** gate . . .
- Reduce the risk of disease!



Emergency Procedures

- **Must be written, provided upon initial employment, responsibilities clearly identified, and reviewed periodically with each worker**
- **Evacuation plans for all buildings**
- **Utility locations and procedures for shutting down**
- **Worker procedures during an emergency**
- **Emergency contact information**



Some Florida Resources

Cases of suspicious disease should be reported to federal and state authorities

USDA-APHIS District Office locations and contact information
https://www.aphis.usda.gov/animal_health/downloads/sprs_contact/fie_id_office_contact_info.pdf

State Veterinarian list
http://www.usaha.org/upload/Federal%20and%20State%20Health/StateAnimalHealthOfficials_rev.pdf



Disaster Resources

FDACS Division of Animal Industry
<https://www.freshfromflorida.com/Divisions-Offices/Animal-Industry>

United States Department of Agriculture (USDA)
<http://www.usda.gov>

USDA Animal and Plant Health Inspection Service (APHIS)
<https://www.aphis.usda.gov/aphis/home/>

United States Animal Health Association (USAHA) animal disease information links
<http://www.usaha.org/disease-information>



Key Resources 1

UF-IFAS EDIS fact sheets on veterinary and animal health topics

http://edis.ifas.ufl.edu/DEPARTMENT_VETERINARY_MEDICINE

http://edis.ifas.ufl.edu/TOPIIC_Livestock_by_Animal

http://edis.ifas.ufl.edu/TOPIIC_Livestock_Health_by_Animal

UF-IFAS Extension Disaster Handbook

<http://disaster.ifas.ufl.edu>

University of Florida Institute for Food and Agricultural Sciences Extension publication resource (EDIS), Bioterrorism and Biosecurity

https://edis.ifas.ufl.edu/topic_bioterrorism



Key Resources 2

University of Florida Institute for Food and Agricultural Sciences Extension, Biosecurity and Biological Risk Management for Livestock Enterprises

<https://edis.ifas.ufl.edu/an194>

Animal Health Australia (AHA), Farm Biosecurity

<http://www.farmbiosecurity.com.au/>

Canadian Food Inspection Agency, Animal Biosecurity

<http://www.inspection.gc.ca/animals/terrestrial-animals/biosecurity/eng/1299868055616/1320534707863>



Review Learning Objectives 1

- Discuss the vulnerability of Florida Agriculture
- Discuss agroterrorism
- Explain biosecurity
- Identify methods to ensure premises' security
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Review Learning Objectives 2

- Identify recommendations for personal sanitation
- Identify equipment cleaning and disinfection procedures
- Identify procedures to reduce potential for contamination of premises by movement of animals and visitors
- Identify emergency procedures



Thank You!