



AGRITOURISM AND FAIRS

*Animal and Public
Health Education*

WHAT IS AGRITOURISM?

- ◆ Any agricultural-related activity that brings visitors to a farm
- ◆ Examples include:
 - Working farm with petting zoo
 - Farm tours
 - “Goat yoga”
 - Pick-Your-Own
 - Winery tours & tastings
 - Corn maze



WHY AGRITOURISM?

- ◆ Farmers can market their products directly to consumers
 - Can be more profitable than selling to retail or other indirect means
- ◆ Consumers value on-farm experiences
 - Family activity
 - Educational opportunity
 - Confidence in “buying local”
- ◆ A rapidly growing trend in the Northeast!



AGRITOURISM: A GROWING TREND

State	Farms in 2007	Farms in 2012	% Increase
MA	154	287	86%
CT	101	237	135%
RI	43	68	58%
NH	88	190	116%
VT	109	155	42%
ME	112	270	141%

Top States in Direct Consumer Sales (\$ millions)

California	169.9
New York	100.6
Pennsylvania	86.0
Michigan	58.8
Massachusetts	47.9
Wisconsin	46.9
Ohio	46.6
Washington	45.1
Oregon	44.2
Virginia	41.7



Value-added Products

In the United States overall, the share of farms producing and selling such products was 4.5 percent. The top states in percent of farms were Vermont (14 percent), New Hampshire (13 percent), Maine (11 percent), Rhode Island (11 percent), and Alaska (10 percent).

FAIRS — ROLE IN AGRITOURISM

- ◆ Also provide that public-livestock interaction
- ◆ Allows for similar opportunities for public education and interaction with food origins and farming in general
- ◆ Poses similar health risks to naïve public

CHALLENGES WITH AGRITOURISM

- ◆ Farmers want to offer true picture of agriculture and farm-fresh products
- ◆ However, also inviting *risk*
 - Lack of public understanding of a “working farm”
 - Farm equipment, animal behaviors, etc.
 - Public can bring disease to the farm
 - Exposure of visitors to potential pathogens on the farm
 - Through animal contact or food served on-farm
 - E. coli, Salmonella, Campylobacter, Orf, Rabies, Ringworm, parasites, etc.



HAZARDS TO ANIMALS

- ◆ Foreign Objects
 - Metal objects such as jewelry
 - Plastic objects such as trash
- ◆ Dangerous Foods
 - Excess sugar such as ice cream and candy
 - Foreign or uncooked food
- ◆ Injury
- ◆ **Disease**



HAZARDS TO ANIMALS — DISEASE RISK

- ◆ **Avian and Swine Flu**

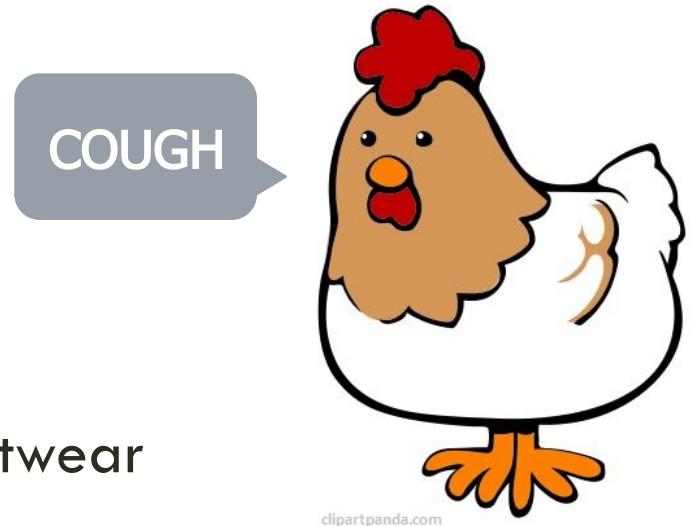
- Risk of animals contracting flu virus from ill visitors

- ◆ **Porcine Epidemic Diarrhea (PED)**

- Public may have pigs at home, wear same clothing/footwear

- ◆ While not as likely, always have to be concerned about diseases we don't have in this country (i.e. Foreign Animal Diseases)

- Foot-and-Mouth Disease, African Swine Fever, Classical Swine Fever, Highly Pathogenic Avian Influenza
- International travelers



HAZARDS TO PEOPLE

- ◆ Physical Injury
 - Animals
 - Bite, Kick, Scratch, Spitting
 - Environment
 - Equipment
- ◆ Pathogen Exposure
 - Direct animal contact
 - E. coli, Salmonella, Orf, Ringworm, Rabies
 - Indirect contact
 - Contaminated food products, fences



Table 1. Types of germs commonly found in farm animals.

Species of Animal	Bacteria	Parasite	Fungus	Virus
Cattle	<i>Campylobacter</i> <i>Salmonella</i> <i>Escherichia coli</i> O157:H7 <i>Leptospira</i> <i>Coxiella burnetii</i> (Q fever)	<i>Cryptosporidium</i>	Dermatophytosis (Ringworm)	
Sheep	<i>Campylobacter</i> <i>Salmonella</i> <i>Escherichia coli</i> O157:H7 <i>Coxiella burnetii</i> (Q Fever)			Soremouth
Goats	<i>Campylobacter</i> <i>Salmonella</i> <i>Escherichia coli</i> O157:H7 <i>Coxiella burnetii</i> (Q Fever)			Soremouth
Llamas	<i>Campylobacter</i> <i>Salmonella</i> <i>Escherichia coli</i> O157:H7			
Pigs	<i>Campylobacter</i> <i>Salmonella</i> <i>Leptospira</i> <i>Yersinia enterocolitica</i>		Dermatophytosis (Ringworm)	Influenza
Chickens, ducks, turkeys	<i>Campylobacter</i> <i>Salmonella</i>		Dermatophytosis (Ringworm)	Influenza
Rabbits			Dermatophytosis (Ringworm)	

“MY ANIMALS LOOK HEALTHY”

- ◆ Doesn't mean they are free of concern

★ Healthy-looking animals can still make people sick! ★

Table 2. Common symptoms in animals and humans.

Germ	Symptoms in Animals	Symptoms in Humans
<i>Campylobacter</i>	Diarrhea (cattle, sheep, and goats may have abortions)	Diarrhea, cramping, fever
<i>Salmonella</i>	Cattle <u>may</u> have fever, diarrhea, and abortion	Diarrhea, vomiting, fever
<i>E. coli</i>	None	Bloody diarrhea, cramps
<i>Cryptosporidium</i>	Calves may have diarrhea and scours	Watery diarrhea, fever, nausea, vomiting

WHAT STEPS CAN BE TAKEN?

- ◆ Limit Exposure
- ◆ Limit Spread
- ◆ Keep it Clean
 - Animal AND public areas
- ◆ Protect the Fair



LIMIT EXPOSURE — WHAT TO AVOID

◆ Recommendations:

- Don't allow visitors to go unattended
- Don't allow visitors near sick or aggressive animals
- Don't allow visitors to come in contact with newborn animals or animals in labor
- Don't allow food or drink near animals



LIMIT SPREAD — WAYS TO SET UP

- ◆ **Animal health principles** to follow:
 - Assess animals everyday for health and suitability for public contact
 - Appropriate vaccination and treatment protocols
 - *Consult a veterinarian!*
 - Animal ID tags and records
- ◆ **Visitor sign-in** at entry — good time to **inform high risk visitors**

WAYS TO SET UP — HIGH RISK VISITORS



- ◆ Children under 5 years, seniors, those with weakened immune systems, and pregnant women are at highest risk for disease

- *Educate and communicate the risks*

- Consider not allowing small children to hand feed



- ◆ Consider having someone to talk about risks and safety at entry to animal area

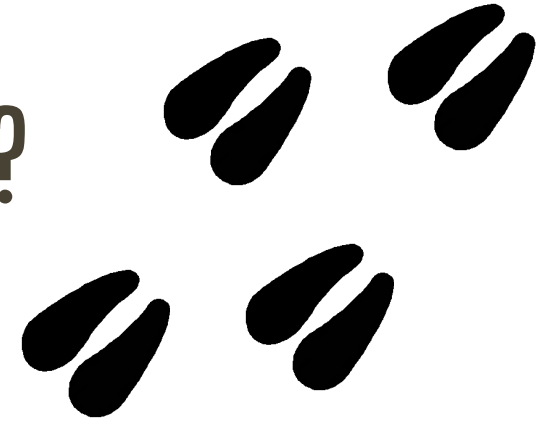
- *Importance of training employees!*

WAYS TO MINIMIZE RISK

- ◆ Many resources available to learn the risks and assess the operation or fair
- ◆ Need to understand priorities and make improvements
 - Doesn't need to cost a lot!
 - Many simple improvements that can make a big impact
- ◆ ***Biosecurity!***



WHY IS BIOSECURITY IMPORTANT?



- ◆ Biosecurity's goal is to:
 - **Reduce infectious disease introduction** and to **minimize disease spread** between animals on the farm
- ◆ Protects:
 - Animals
 - People
 - The Farm



**DO NOT
ENTER**
WITHOUT PERMISSION

**DISEASE PREVENTION
PROGRAM IN USE ON
THESE PREMISES**

Biosecurity

- Daily routine of **reducing disease introduction** and **reducing disease spread** amongst your animals
- Common sense practices to prevent:
 - Introduction from multiple sources
 - People, vehicles, equipment, other animals
 - People from getting sick too!
- *Make it happen every day!*



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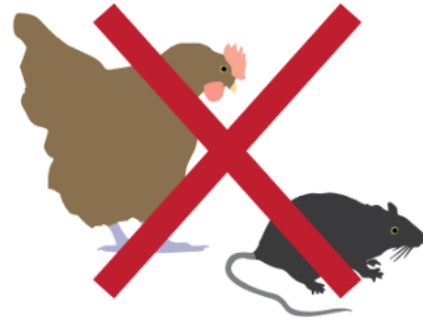
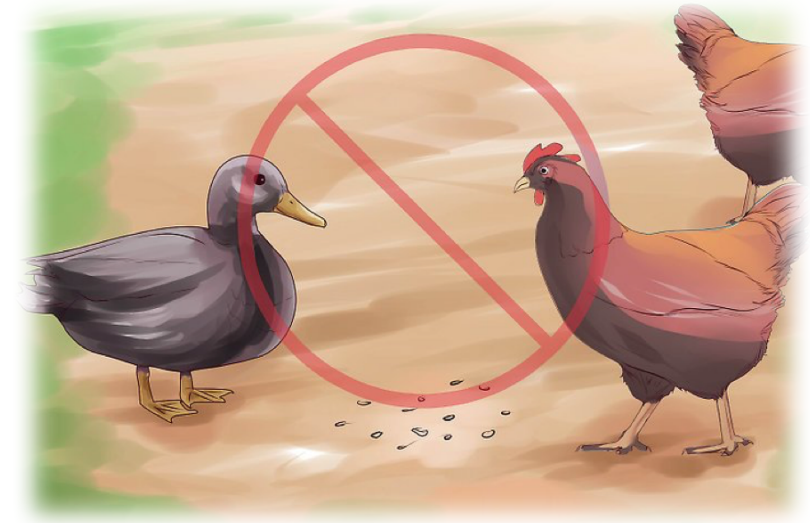
Biosecurity – Key Components

- Controlling access to the animals
 - Enclosure boundaries, access points
 - Minimizes risk of disease introduction!
 - Visitor Records: Knowing who was on your farm when
- Footbaths, Personal Protective Equipment (PPE)
 - Prevents spread of disease, protects the visitor
 - **Dedicated clothes/footwear** for your animals
 - For visitors:
 - Provide shoe covers or go through footbath



Biosecurity – Key Components

- Feed and water sources
 - Free feed on the ground outside can attract other birds
 - Water from sources like a nearby pond where waterfowl visit
- Pest control
 - Songbirds and rodents can carry disease
 - Can risk bringing disease to your flock



Biosecurity – Key Components

- Cleaning & Disinfection (C&D)
 - Everything from vehicles to equipment to animal facilities
 - Remove ALL dirt and organic debris
 - Rinse thoroughly
 - Some will get deactivated by remaining soap residue!
 - Ensure proper contact time



What Disinfectants Can I Use?

- Roccal
 - Ok for some bacteria, viruses
 - Inactivated by organic matter, hard water, soap residue!
- Virkon-S
 - Great for many bacteria, viruses, some fungi
- Household bleach (sodium hypochlorite 6%):
 - Great for many bacteria, viruses, fungi
 - Inactivated by organic matter, soap residue, sunlight!
- Purell hand sanitizer for hand disinfection
- Lysol spray for footwear



Six Steps to Remember



4 Don't Borrow Disease From Your Neighbor.



5 Know the Warning Signs of Infectious Bird Diseases.



6 Report Sick Birds.

Biosecurity – Keeping People Safe!

- **Zoonotic Disease** = A disease from animals that can pass to humans and make them sick
- Examples:
 - Rabies
 - Salmonella
 - Orf
 - Avian Influenza
- Can pass through direct contact, indirect contact, or foodborne



Zoonotic Disease Prevention

- Handle yourself just like you handle your animals!
 - Washing after handling
 - Have dedicated equipment (shoes, clothing)
 - Wear protective equipment when necessary (ex. cleaning activities)



Outside



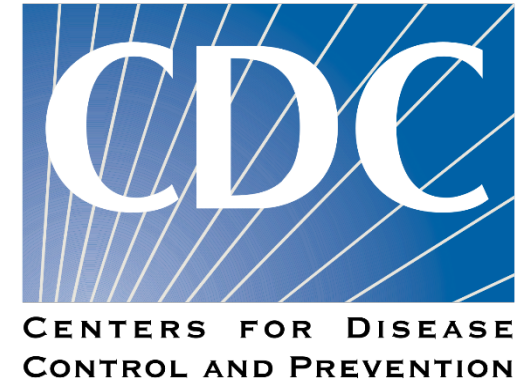
Inside

Zoonotic Disease Prevention



FEDERAL VS. STATE INVOLVEMENT

- ◆ As a Federal agency, what role do we play?
 - Public health disease outbreak prevention
 - Working with federal and state public health colleagues
 - No direct regulations for VS
 - Responsible for “safeguarding animal health”
 - Protecting agriculture in New England – “non-traditional systems”



All About the Education

- Educating yourself and educating your visitors

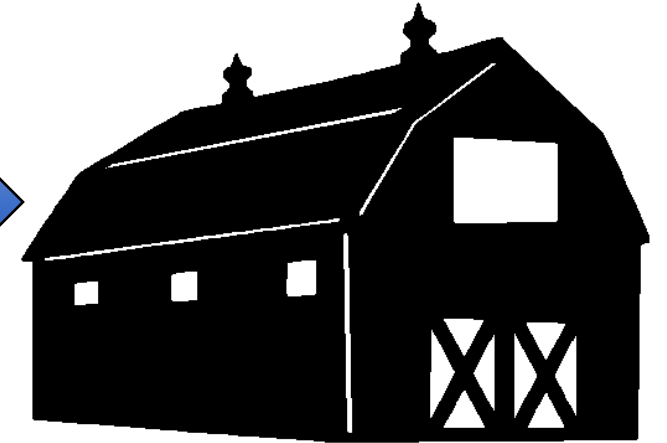
Animal Health



Public Health



Farm Health



All About the Education

- Agritourism provides education to the public that they would get nowhere else!
 - Animal husbandry
 - Animal welfare
 - Modern-day agricultural practices
- Dedicated farmers =
 - Healthy animals
 - Healthy products
 - Happy consumers!

