Dairy Farm Biosecurity

John B. Adams, Director Animal Health & Farm Services, National Milk Producers Federation

- Security on the Farm
  - Dairy Security Seminar
  - Wednesday, July 31, 2002
  - Iredell County Agriculture Center
  - Statesville, N.C.

Biosecurity

- Traditional definition:
  - Biosecurity is managing the herd to prevent the introduction and spread of infectious diseases.
Biosecurity
* Mastitis - animal health
* Milk Quality
* Public health

Dairy Herd Biosecurity Priorities

- Protect against foreign animal diseases, infectious agents and contamination
- Eradicate zoonotic diseases/TB & Bangs
- Address emerging animal diseases such as Johne’s Disease & enteric pathogens
- Assure safety and consistent high quality to support market expansion
9/11/01 And Agroterrorism

- Any attack or disruption of our Nation’s food chain from farm to fork. This includes our farms, plants, animals, crops, processors, transportation and distribution systems, institutional and retail food establishments, including final preparation and consumption.

Biosecurity after 9/11/01

- Dairy Herd Biosecurity remains a critical component of Overall Farm Security --now the emphasis is expanded to the vulnerability of the entire production enterprise and all components thereof, including heightened alert at all times to minimize potential risks from Agroterrorism.
Biosecurity After 9/11/01

- Overall Farm Vulnerability Assessment
- Physical Security of Facilities
- Strengthen Operating Procedures
- Tightening Personnel Practices
- Enhancing Preparedness
- Expanding Communications
- Improve Herd Biosecurity

Overall Vulnerability Assessment

- Evaluate overall security and food safety
- How accessible our my animals and production facilities to the public?
- How do we screen visitors?
- Are we in compliance with the feed ban?
- Are we prepared to report?
- How good is our herd biosecurity?
Improving Physical Security

- Lock Storage Areas for chemicals, feed, and equipment.
- Restrict access for visitors/sign-in
- Limit access to animals, feeding, milking and milk storage areas
- Review physical layout with local fire and police
- Prompt reporting of suspicious activity

Strengthen Operating Procedures

- Implement Quality Control procedures
- Screen new employees, id existing employees and train
- Develop Standard Operating Procedures
- Know suppliers and shippers/insist on certification
- Test and train family and employees
**Tighten Personnel Practices**

- Check out potential hires
- Maintain secure personnel files
- Watch for disgruntled employees
- Check references and consider bonding or insurance coverage for outside contractors

**Enhance Preparedness**

- Develop and implement emergency response plan
- Review plan with local fire, police and emergency response resources
- Post key contact information throughout farm for suspicious activity, product tampering or contamination
- Train, practice, train, practice, train etc.
Expand Communications

- Conduct employee training
- Establish best communication channels to all management and employees
- Develop communication plan for external suppliers, veterinarians, hoof trimmers
- Strengthen media skills & prepare external communications plan

Improve Herd Biosecurity

- Maintain a closed herd to extent practicably possible & control access
- Know source of outside cattle, quarantine & test
- Reduce risks from introducing or spreading infectious diseases
- Best herd health management practices
Risk Assessment

- Management Areas: Maternity, Calf, Heifer, Pre-fresh, Lactating, Dry cows, Hospital, Cull
- Risk Factors: Animals, manure, feed, water, facilities, equipment, people
- Risk Modifiers: Material, people and process flows, prevention practices, risk status

Anim. Health & Consistent Quality Issues

- Bacteria Counts
- Somatic Cell Counts
- Temperature of Raw Milk Shipped
- Sanitation & Milking Practices
- General Sanitation & Hygiene
- Fly Control and Manure Management
- Construction and Equipment
Emerging Animal Health Issues

- Biosecurity:
  - Humans
  - Johne’s
  - BVD
  - Leukosis
  - Neosporia
  - Other Diseases
    - TSE's
    - Mice, Rats and Birds
    - Pets (Cats & Dogs)

Critical Emerging Animal Health/ Food Safety Issues

- Bovine Spongiform Encephalopathy (BSE)/ “Mad Cow Disease”
- Johne’s (M. paratuberculosis)/ Crohn’s
- Enteric Pathogens:
  - E. coli 0157: H7
  - Salmonella DT104
- Antibiotic Resistance
Emerging Animal Welfare Issues

- Condition of cull cows
- Tail -docking
- Separation of calves from dam at birth
- Tie -stalls
- Concrete floors/Flounder
- Other Welfare Related Issues
  - Transportation and Handling

Product & Industry Image Issues

- Can We Verify:
  - Good Production Management Practices.
  - Humane Treatment and Proper animal care
  - Food Safety at all times.
  - Environmental compatibility and stewardship.
- How do we verify?
Be On Heightened Alert

To minimize key risk areas

10 Critical Biosecurity Recommendations

National Milk Producers Federation Website/ nmpf.org--Click onto Industry Issues, then Animal Health to Foot-And-Mouth Disease to Top Ten Steps Dairy Producers Can Take Against FMD and BSE
Summary

- NMPF supports the development of on-farm dairy quality management programs that address consumer needs, validate BMP’s that assure food safety, animal welfare and environmental quality, thus enhancing global marketing opportunities for the U.S. dairy industry.
The End

Thanks!