ANIMAL DISEASE TRACEABILITY (ADT)

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Animal and Plant Health Inspection Service
Veterinary Services
October 2017
ADT Update

• ADT 2017 Working Group Report
• ID collection-cross reference at slaughter plant
• Traceability Performance Measures – 3rd Year Comparison
ADT 2017 Working Group Report

- State/Federal members
- Expertise on ADT
- Reviewed feedback
- Prepared preliminary recommendation
# ADT 2017 Working Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
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WG Preliminary Recommendations

Key issues:
• Maintain current population
• When official ID should be required
• Implement electronic identification
• Minimize exemptions
• Improve collection of ID and its correlation to the carcass
• Uniform enforcement
• Import EID tag
WG Preliminary Recommendations

Limiting official identification to interstate movements

• Greatest impediment to tracing capability

• Creates confusion in marketing channels where cattle of differing requirements are mixed

• Creates enforcement challenges
WG Preliminary Recommendations

Limiting official identification to interstate movements

- Revise regulation to include interstate commerce
- Consider “triggers” that would require official ID:
  - Change of ownership
  - First point of commingling
  - Interstate movement (no sale or commingling)
WG Preliminary Recommendations

EID system for cattle
WG Preliminary Recommendations

EID system for cattle

• High majority of cattle must be identified with EID tag
• Issues and questions
• Define technology
WG Preliminary Recommendations

EID system for cattle

- Move toward an EID system for cattle
- Full implementation target date of January 1, 2023
- A comprehensive plan is necessary
- Specialized industry-lead task force with government participation to develop plan
WG Preliminary Recommendations

EID system for cattle
  • Industry and State/Federal Task Force roles/responsibilities
    - Standardization
    - Transitional solutions
    - Timelines
    - Funding options
WG Preliminary Recommendations

EID system for cattle

• Industry and State/Federal Task Force roles/responsibilities
  - Standardization

  Technology Standards
  • Communication; reader and tags
  • Compatibility across manufacturers
  • Single technology; LF versus UHF

  Performance Standards
  • Actual measurement for “speed of commerce”
  • Standardize EID tag; minimum performance capabilities (distance, read rate, environment, etc.)
WG Preliminary Recommendations

EID system for cattle

- Industry and State/Federal Task Force roles/responsibilities
  - Standardization
  - Transitional solutions

Identify solutions that will “bridge” differing electronic solutions during a defined transition period
WG Preliminary Recommendations

EID system for cattle
- Industry and State/Federal Task Force roles/responsibilities
  - Standardization
  - Transitional solutions
  - Timelines

- Communication of plan
- Phase out metal NUES tags
- Define EID tag / visual only official tags no longer available
- Grandfather” outdated official tags during transition
- January 1, 2023:
  - Covered cattle must be identified with compliant official EID tag
    (Cattle with visual only tags are retagged with official EID tags)
WG Preliminary Recommendations

EID system for cattle
• Industry and State/Federal Task Force roles/responsibilities
  - Standardization
  - Transitional solutions
  - Timelines
  - **Funding options**

  • Initial startup
  • Incentives and cost share
  • Spread cost equitably
  • Utilize funds currently in place to support NUES tags
WG Preliminary Recommendations

Administration of Electronic Records
WG Preliminary Recommendations

Administration of Electronic Records

- **eICVI Schema (XML)**
  - Schema – updated to fix known issues
    - AAVLD/USAHA IT Standards subcommittee to maintain leadership role
    - USDA available to support technical issues
  - VSPS must adopt schema
    - allow data to move in and out of VSPS through schema
WG Preliminary Recommendations

Administration of Electronic Records

• Test Charts / Vaccination Forms
  - USDA to create web interface for data entry and file uploading
    - Accredited vets and Animal Health Officials
    - Generate required forms
  - Data must be available for sharing between State and Federal systems
    - Message data to appropriate System(s)
WG Preliminary Recommendations

Message Service Concept

Publishers
- USA-HERDS
- VSPS
- Private State System
- Private SCS
- USDA Provided SCS
- ICVI Systems (Multiple)

Web Interface
Proposed

Subscribers
- USA-HERDS
- VSPS
- Private State System
- Private SCS
- USDA Provided SCS
- ICVI Systems (Multiple)
- EMRS
- AHER
- AIMS
ADT 2017 WG – Preliminary Recommendations

Collection of ID & Correlation to the Carcass at Slaughter

- 2016 WSLHA resolution to create an ADT performance measure
- 2016 State/Federal Working Group
Collection of ID and its Correlation to the Carcass at Slaughter

APHIS should continue the efforts of the State/Federal Slaughter Plant Working Group including:

- Training/outreach materials for plant, FSIS & APHIS personnel
- Monitoring of diagnostic submissions collected
- Communication/collaboration with FSIS to address problems
# 2016 Slaughter Plant Working Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
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<td>VS Animal Health Technician, PA</td>
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Random DNA Matching Pilot

53 plants total represented by submissions tested
35 plants submitted samples with no tissue attached to ID (25 cull/10 fat)
6 plants with mismatches
Challenges to ID Collection & Correlation

• Line speed
• Number of rail-outs
• Establishment house tag identification process
• ID/Tag type
• Contamination
• Est. personnel turnover
• Training
Progress and future

Outreach to all stakeholders
• Training material
• What’s working?

Working on relationships/cooperation between Agencies and other stakeholders

Monitoring of submissions
• Real time follow-up
• Working in specific areas of concern
Traceability Performance Measures (TPM)

Key to Successful Traceability

Timely retrieval of complete & accurate information
Traceability Performance Measures

Two key factors for each TPM -
  • The elapsed time it takes to answer four specific questions defined by the TPM:
    1. In what State was an imported animal officially identified?
    2. Where in your State was the animal officially identified?
    3. From what State was an animal shipped?
    4. From what location in your state was an exported animal shipped?
  • The % of successfully completed TPMs
## Traceability Performance Measures

<table>
<thead>
<tr>
<th>TPM #</th>
<th>National Baselines</th>
<th>1st Year Comparison</th>
<th>2nd Year Comparison</th>
<th>3rd Year Comparison</th>
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<tbody>
<tr>
<td></td>
<td>% Successful</td>
<td>Elapsed Time</td>
<td>% Successful</td>
<td>Elapsed Time</td>
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<tr>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>88%</td>
<td>39 hr.</td>
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<tr>
<td>2</td>
<td>69%</td>
<td>88 hr.</td>
<td>88%</td>
<td>35 hr.</td>
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<tr>
<td>3</td>
<td>58%</td>
<td>138 hr.</td>
<td>85%</td>
<td>42 hr.</td>
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<tr>
<td>4</td>
<td>76%</td>
<td>264 hr.</td>
<td>88%</td>
<td>46 hr.</td>
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<th>Elapsed Time</th>
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<tr>
<td>%</td>
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<tr>
<td>1st Year</td>
<td>2nd Year</td>
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<tr>
<td>Comparison</td>
<td>Comparison</td>
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<tr>
<td>88%</td>
<td>96%</td>
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<tr>
<td>39 hr.</td>
<td>20 hr.</td>
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<tr>
<td>88%</td>
<td>86%</td>
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<td>35 hr.</td>
<td>25 hr.</td>
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<td>85%</td>
<td>88%</td>
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<td>42 hr.</td>
<td>33 hr.</td>
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<tr>
<td>88%</td>
<td>91%</td>
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<tr>
<td>46 hr.</td>
<td>32 hr.</td>
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Traceability Performance Measures

![Graph showing improvement trend in total TPM time](image)

- Baseline: 490 hours
- Year 1: 123 hours
- Year 2: 102 hours
- Year 3: 74 hours
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LF: **134.2 kHz**: All transponders must be certified by ICAR for conformance with ISO 11784 and 11785.

UHF: **902-928 MHz range**: Devices must comply with:
ISO 18000-6C (EPC Gen 2) and USDA Interim Tag Data Standard

In a laboratory with a neutral electromagnetic environment:
Transponders must have a 100 percent read rate in best orientation at 24 inches (60 cm) in a stationary test and a moving test of 1 m/sec over a passage length of at least 20 inches (50 cm). Note: This test information is optional.

**Low frequency tags**: In a field test environment: Transponders must be reliably machine read at a rate of 95 percent without regard to orientation by a standardized dual HDX/FDX reader, as cattle (or other species) move by in a single file passage at 4 mph (1m/sec).

**High frequency tags**: In a field test environment: Transponders must be reliably machine read at a rate of 95 percent without regard to orientation by a compatible reader at the read distance designated by the applicant.
9. Exemptions for Official Identification Requirements

**Recommends:**

Commuter herd agreements:
- Remove official ID exemption
- Listing the animals’ identification number at discretion of State Animal Health Officials
ADT 2017 WG – Preliminary Recommendations

9. Exemptions for Official Identification Requirements

Recommends:

Tagging Sites:
• Maintain the option to apply ID at tagging sites
  - Not really an exemption; it’s deferred

State ID options:
• Remove the exemption allowing States to agree on alternative methods of official identification
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9. Exemptions for Official Identification Requirements

**Recommends:**

Direct to slaughter movements:

- Maintain official ID exemption from farm/ranch with approved USDA backtag
- Stipulate that animals that leave plant must have official ID
9. Exemptions for Official Identification Requirements

**Recommends:**

Direct to slaughter movements:

- Remove the exemptions for cattle moving to slaughter through one approved livestock facility:
  - Unless specific controls established
  - Involved industry sectors to work out potential protocol
10. ICVI Exemptions and Movement Documents

- Continued emphasis on electronic ICVIs
- Examine alternatives to ICVIs
- Emphasis on key components of traceability
- Destination State greatest responsibility in determining required documents
ADT 2017 WG – Preliminary Recommendations

10. ICVI Exemptions and Movement Documents

**Recommends:**

- Direct to slaughter, including through one approved facility:
  - Maintain ICVI exemption for direct to slaughter cattle
  - The current exemption for slaughter movements through one market must be restricted to one market movement regardless if it is an interstate or intrastate shipment
ADT 2017 WG – Preliminary Recommendations

10. ICVI Exemptions and Movement Documents

**Recommends:**

- Direct to an approved facility with an owner-shipper statement:
  - Concern about the exemption for interstate movements to an approved facility when the cattle move from the approved facility to a premises other than a slaughter plant
  - The current regulation allows for the exemption unless the cattle move interstate from the market
  - This exemption should be removed
10. ICVI Exemptions and Movement Documents

**Recommend:*

- Maintain option for commuter herds to move on documents as agreed upon by the State Animal Health Officials