Overview:
American Sheep Industry Association’s
Sheep Safety and Quality Assurance Program

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- Disclaimers:
  - Sheep Safety and Quality Assurance Program (SSQA) information was used either verbatim or with edits to consolidate text.
  - I’m only the messenger. SSQA is not an ARS product.
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- SSQA developed to:
  - Ensure that U.S. sheep industry generates consumer products that are safe and of the highest quality possible;
  - Maximize consumer confidence in, and acceptance of, sheep products; and
  - Use research and education to improve management during the production of safe and high-quality sheep products.

- SSQA based on Hazard Analysis and Critical Control Point (HACCP) philosophy and principles.
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Three SSQA levels:

• Level 1: SSQA Participant—Education
  – Completion of Level 1 training identifies producers as “participants” in SSQA.

• Level 2: SSQA Certified—Development of Site-Specific Plans
  – Level 2 certification applies to producers who complete Level 2 training, not to their production units.
• Level 3: SSQA Verified—Verification

  – Level 3 training verifies that producers have implemented SSQA and are following SSQA guidelines.

  – Onsite, independent third-party verification required.

  – Level 3 verification indicates that SSQA is in place and operating successfully in an individual production unit.

  – ASI has SSQA Trainers and Certified Reviewers.
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SSQA Guidelines for Antibiotic Use:

• Use only approved *medicated feed/water additives*, according to label directions and Food and Drug Administration (FDA) Good Manufacturing Practices.

  – Use only FDA-approved, medicated feed additives in rations, according to FDA-approved labels

  – **Extra-label use of feed additives is strictly prohibited.**

  – No one has the authority to adjust the dosage of medicated feed additives.

  – Follow usage according to FDA Good Management Practices.
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- Adhere to all required withdrawal times to avoid violative residues.
  - Check sheep shipped for slaughter to ensure that treated animals meet or exceed label and prescription withdrawal times of all products that have been administered.
  - SSQA training material contains Sheep and Goat Withdrawal Chart.
  - A release slip must be signed and dated before releasing animals from the sheep operation.
  - An SSQA-certified person should examine processing records, feeding records, hospital records, and all other records that may apply.
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- **Verify drug withdrawal** on all sheep sold.

- If compliance with withdrawal periods is uncertain, treatment history should be compared with Food Animal Residue Avoidance Databank (FARAD), and animals should pass a residue screening test such, as Live Animal Swab Test (LAST).

- Residue screening shall be performed under supervision of a licensed veterinarian.

- Test results will determine appropriateness of releasing an animal in question for shipment, but cannot be used to shorten the labeled withdrawal time.

- Strictly follow all FDA, USDA, and EPA guidelines for product selections.
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• Employ **extra-label drug use** only when prescribed by a veterinarian within the context of a valid Veterinarian-Client-Patient Relationship (VCPR).

  – Administer products to comply with label directions for all treatment regimens, unless otherwise prescribed by a veterinarian.

  – All sheep treated with extra-label medications shall comply with prescribed extended **withdrawal times**, which have been set by the veterinarian under the guidelines of a valid VCPR.

  – A sheep operation will collect **random urine samples** from animals that have received extra-label drugs for residue testing as directed by their veterinarian.
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• Follow Judicious Antibiotic Use Guidelines.

  – Minimize development of antimicrobial/antibiotic resistance in human and animal pathogens.

  – Currently, the best way to minimize development of antimicrobial resistance is to follow the Judicious Antibiotic Use Guidelines as outlined by the Academy of Veterinary Consultants (AVC, 1998).
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• Judicious Guidelines (AVC, 1998)
  – Preventive strategies, such as appropriate husbandry and hygiene, routine health examinations, and vaccinations, should be emphasized.
  – Judicious use of antimicrobials should be within a VCPR.
  – Therapeutic alternatives should be considered before antimicrobial treatment.
  – Avoid using certain antimicrobials that are considered important in treating refractory infections in human or veterinary medicine for initial treatment.
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- Utilize culture and susceptibility results to aid in selection of antimicrobials whenever possible.

- Confine therapeutic antimicrobial use to proven clinical indications, avoiding inappropriate uses, such as for viral infections without bacterial complication.

- Optimize regimens for therapeutic antimicrobial use with current pharmacological information and principles.

- Utilize narrow-spectrum antimicrobials whenever possible.

- Minimize therapeutic exposure to antimicrobials by applying treatments for the shortest period of time possible.
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- **Limit therapeutic antimicrobial treatment** to ill or at-risk animals, treating the fewest animals possible.

- **Minimize environmental antimicrobial contamination** whenever possible.

- **Maintain accurate records** of treatment and outcome to evaluate therapeutic regimens.

- **Follow label** instructions carefully.

- **Extra-label antimicrobial therapy** should be prescribed only in accordance with the Animal Medicinal Drug Use Clarification Act amendments to the Food, Drug, and Cosmetic Act and its regulations.
• **Implement biosecurity** procedures to prevent introduction and/or transmission of animal diseases.
  
  – Address biosecurity issues to control animal health and foodborne contamination.
  
  – SSQA contains discussion and list of suggested biosecurity considerations.
  
  – Strategy is preventative.
• **Implement sanitation and hygiene procedures** to prevent introduction and/or transmission of foodborne pathogens.
  
  – Use proper sanitation practices, including disinfection of facilities.
  
  – Maintain an environment that fosters cleaner fleeces.
  
  – Reduce excessive mud because it can result in decreased performance, increased stress, and immunocompromised sheep.
  
  – Prevent accumulation of dirt, mud, and manure on fleeces to help avoid contaminating carcasses at harvest.
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- Use a **validated pathogen intervention** system where appropriate.
  - Vaccines
  - Probiotics
  - Prebiotics
  - Chlorate
  - Plant-derived microbiological inhibitors
  - Antibiotics
  - Bacteriophages
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- Record-Keeping
- Developing a Plan
- Verification Process
- Process Control Principles
- Example of Standard Operating Procedure
- Records and Forms
- Product Use Information

All these sections address antibiotic use to some degree.