IMPORTANT CONSIDERATIONS FOR DRUG TESTING

https://www.statefair.org/
WHY WE DRUG TEST?

- For animal welfare
- To protect the safety of food
- To foster fair competition
- To follow State Fair Rules and Regulations
WHO IS DRUG TESTED?

- 4-H & FFA Market Grand and Reserve Grand Champions
- Random 4-H & FFA Market Animals
- State Fair reserves the right to test any animal entered at the Nebraska State Fair
Drug testing is led by our Nebraska State Fair Official Veterinarian. They hire other veterinarians to assist. Veterinary students may be asked to help as well. Everyone participating is trained in the process and understands the sensitivity of the collection.
When does Collection happen?

- Grand and Reserve Grand Winners
  - Immediately after selection
  - In drug testing area

- Randoms
  - After class
WHAT SAMPLES ARE COLLECTED?

- Swine
  - Urine samples only
- Cattle, Sheep & Goat
  - Blood sample
  - Hair/urine sample
IMPORTANT NOTE FOR EXHIBITORS

• If your animal is being drug tested, you will have paperwork to complete while your animal is being collected.

• It is very important that the collection paperwork matches the ethics affidavit.

• Exhibitors and their parent/guardian will need to sign the paperwork after collection.
What happens to the samples after collection?

- An extensive chain of ownership is followed by the Nebraska State Fair.
- The samples are sent to a drug testing laboratory for analysis. Analysis can take anywhere from 1 week to 1 month, depending on the lab.
- After analysis, results are sent back to the Nebraska State Fair
WHAT IS TESTED FOR?

- NSAIDs
- Growth Promoters/Repartitioning Agents
- Steroids
- Analgesics
- Stimulants (caffeine & nicotine)
- Illicit Drugs
- Sedatives/Tranquilizers
- Diuretics
Information found on the following slides has been provided by Dr. Travis Mays, MS, PhD, the director of the Texas A&M Veterinary Medical Diagnostic Laboratory.
**IMPORTANT DEFINITIONS**

- **Residue**
  - Any compound present in edible tissues that results from use of a drug, and includes the drug, its metabolites & any other substance formed in or on food because of the drug's use.

- **Tolerance**
  - The maximum concentration of a marker residue, or other residue indicated for monitoring, that can legally remain in a specific edible tissue (or milk) of an animal.
Important Definitions

• Withdrawal Time
  ○ The amount of time that must pass following the administration of a drug before an animal can be slaughtered for human consumption

• Elimination Time
  ○ The amount of time required for a substance to be eliminated from the body (no longer detected)

• WITHDRAWAL TIME & ELIMINATION TIME MAY NOT BE THE SAME
Factors that affect elimination & withdrawal time:

- Dose
- Route of administration
- Frequency of administration
- Co-administration of multiple drugs
- Drug storage conditions
- Health status
- Water & feed consumption
WAYS TO AVOID DRUG RESIDUE

• Veterinarian-Client-Patient Relationship
  ○ Retain veterinary records
• Know the ingredients
  ○ READ THE LABEL ON SUPPLEMENTS
• Don't administer human medications
• Avoid Unintentional Exposure
  ○ Caffeine exposure can easily happen – spilled coffee in the feed tub, left energy drink where animal can get to it, etc.
  ○ Remember a positive test is positive, regardless if intentional or not
WAYS TO AVOID DRUG RESIDUE

- Purchase your livestock from a trusted breeder/seller
- Avoid off-label use
- Wash hands
- Don't reuse syringes and needles
- Store medications properly
- Only purchase and use feed that has an ingredient label
THANK YOU