



Title: Biosecurity Procedures for Outside Sourced Teaching Swine at Texas Tech University
SOP Number: 063

Purpose: Teaching needs at Texas Tech University warrant the sourcing of swine from both the New Deal Swine Unit as well as outside sources in order to maintain a progressive teaching program and a highly competitive livestock judging program. Consequently, the purpose of these procedures is to outline sound biosecurity procedures with regards to the housing, feeding, transportation and daily care of outside sourced swine so that the health and welfare of the animals at the New Deal Swine Unit at TTU is not compromised.

Currently, the TTU New Deal Swine Unit is a well vaccinated herd, free from PRRS, brucellosis and pseudorabies, among other diseases, as such; the goal of the biosecurity programs is to maintain the barrier to outside pathogens. Cross contamination of pathogens derived from outside sourced swine used for teaching, judging and research purposes represents a threat to the TTU Swine herd at New Deal if not diligently supervised.

DEFINITION OF OUTSIDE SOURCED SWINE

- A. Swine which have been purchased, donated or leased/borrowed by TTU from an outside vendor (non-TTU raised).
- B. Animal Care Services will be notified via email or phone, when outside sourced animals arrive at any TTU managed facility.

LOCATION OF OUTSIDE SOURCED SWINE

- A. Livestock Arena on main campus (Indiana/Main Street).
 1. Housing- Swine can be housed for a maximum of 10 continuous days at the livestock arena. Swine can be housed on either concrete or soil surfaced pens (or a combination thereof) in the holding pens on the north end of the livestock arena (both in the bath of the arena and in the concrete pens on the NE wall in the arena) which provide unlimited access to water. Swine should be provided a minimum of 20 ft² per pig. Additional bedding (i.e. straw or wood shavings) can be provided when housed on the concrete pens.
 2. Daily Care – Daily health observation of the swine will be conducted by personnel on the appropriately approved animal use protocol. In the event that swine demonstrate clinical signs of disease the PI and university veterinarian must be immediately contacted to determine an appropriate treatment plan. Daily health records will be maintained in a notebook hanging on the outside of the wood closet adjacent to the animal holding pens.
 3. Feeding- Swine may either be hand-fed or provided feed ad libitum via a self feeder. At a minimum, swine will be fed once daily to either meet or exceed their daily nutrient requirements. Unopened feed will be labeled with expiration date of the feed (6 months from the milling date). Open feed sacks should be stored in closed containers that are labeled with the species of intended use, and expiration date of the feed (6 months from the milling date). Empty feed sacks should be discarded. They should NEVER be returned to the TTU New Deal

Feed Mill for reuse. Additional feeding details are provided in section 7 of this document.

4. Cleaning and General Housekeeping- If swine are housed in the concrete holding pens then the pens should be washed out as needed during the housing period. At a minimum, manure must be removed (i.e. shoveled) on a daily basis. Collectively, pens and the surrounding area should be maintained in a manner conducive to minimizing odor and upholding a respectable appearance for potential visitors entering the animal holding area. After removal of swine, the concrete holding pens should be washed and disinfected.
- B. The New Deal Holding Facility for Outside Sourced Swine located on the southwest corner of the TTU New Deal Farm at a distance greater than 1500 linear feet from the TTU Swine Unit.
1. Housing- This outdoor facility should be used to temporarily house market swine (i.e. swine not intended for breeding purposes) for a period not to exceed 120 days. Swine will not be housed in the facility from December thru February in order to avoid potential water trough freezing issues. In addition, swine will not be housed in the facility during July and August to minimize the potential for heat stress. These rest periods should provide an opportunity for turf rest and recovery. Swine should be provided a minimum of 200 ft² per pig. A maximum of 40 total pigs will be allowed at the facility at one time (maximum of 20 pigs/pen; 2 total pens). A lift-lid water trough will provide unlimited access to drinking water in each pen. A bedded hoop housing structure will provide shelter for swine with a minimum of 20 ft² per pig allotted for overhead shelter within the pen. A net wire perimeter fence will surround the area and act as the line of separation for visitors.
 2. Human Traffic- Anyone wishing to cross the line of separation and enter the holding area must wear disposable boots or rubber boots which will be stored at the shop in a barrel labeled for "Outside Sourced Swine Use". Disposable boots should be discarded after use. If disposable boots were worn, then after discarding them, a disinfectant (i.e. Tektrol) should be sprayed on the sole of the visitors' shoes before exiting the area.
 3. Daily Care- Daily health observation of the swine will be conducted by personnel on the appropriately approved animal use protocol. In the event that swine demonstrate clinical signs of disease the PI and university veterinarian must be immediately contacted to determine an appropriate treatment plan. Daily health records will be maintained in a notebook in the beef unit.
 4. Feeding- Swine will be provided feed in a self-feeder or be hand-fed. Prior to swine arriving in the holding facility an estimation of the total feed usage will be calculated based upon the expected duration the swine will be held in the facility. Feeders will be filled based upon this estimate. Extra unopened feed will be labeled with expiration date of the feed (6 months from the milling date), and be stored in the shop. Open feed sacks must be stored in closed containers that are labeled with the expiration date of the feed (6 months from the milling date). Empty feed sacks should be discarded. They should NEVER be returned to the

TTU New Deal Feed Mill for reuse. Additional feeding details are provided in the section below.

5. Maintenance after each Rotation- If any remains, straw bedding used in the hoop housing structures will be removed after each rotation of swine leave the holding facility. Equipment (i.e. Beef Center front end loader) which is used to clean the area will NOT be allowed on the Swine Unit premise. The bedding will be disposed of in the designated compost pit area at the New Deal farm.

FEED FOR OUTSIDE SOURCED SWINE

- A. Feed which is intended for use by outside sourced swine can be sourced from the New Deal Feed Mill. However, the feed must be removed from the mill in its entirety prior to receiving any outside sourced swine. In addition, no bags or feed will be allowed to reenter the New Deal farm premises.
- B. If additional feed is required during the time in which outside sourced swine are housed at the livestock arena or an approved ACUC site then commercial feed must be purchased. The New Deal feed mill will NOT be an option.

TRANSPORTATION OF OUTSIDE SOURCED SWINE

- A. The following transportation procedures apply to any transport of **any animals**, but specifically outside sourced swine including receiving, between facility transport, and transport to a terminal market.
- B. Outside sourced swine can be transported utilizing a TTU owned truck and trailer.
- C. Operators of the vehicle must be on the appropriately approved animal use protocol.
- D. Separate livestock trailers will be designated for exclusive use by both the TTU swine herd and PIs working with outside sourced swine in order to minimize the opportunity for cross contamination between these swine populations.
- E. The designated livestock trailer for outside sourced swine should NEVER be permitted on the premise of the Swine Unit at New Deal. The trailer is permitted to be at the New Deal Farm but not within the Swine Unit's line of separation. The line of separation is the perimeter around the swine unit in which human and animal traffic is not permitted without entering thru proper biosecurity channels.
- F. Every effort should be made to limit use of the truck utilized to pull the trailer to exclusively the hauling of outside sourced swine. Thus the truck used by the TTU swine unit must not be used by the PI to haul outside sourced swine.
- G. If a scenario arises in which a truck or trailer designated for either outside sourced or TTU swine unit raised swine must be used for the opposing purposes then the truck or trailer must be properly cleaned and sanitized by the person using it as soon as they are done with its use.
- H. Refer to IACUC **SOP058: "Swine Trailer Bio-Security Procedures"** for detailed instruction on cleaning procedures.
- I. Using contracted transportation is acceptable as this is normally done when sourcing swine. Contracted transportation should be arranged by the seller (or their third party contractor; ie. Texas Livestock Marketing) in coordination with TTU personnel (ie. Livestock Judging Coach). Although, TTU does not officially take responsibility of the swine until they arrive at the TTU premise, TTU personnel should communicate our standards for the welfare of the animals during their transport such that they arrive at

TTU in a state of minimized stress. Requests that should be made would entail providing access to water before loading for transport, spraying with water during times of heat stress, and transporting swine during reduced traffic periods and at cooler times of the day if heat stress is expected.

- J. If swine are transported via a semi-truck and trailer they will be unloaded via a ramp. The only permanent ramp at the New Deal farm is at the Burnett Center processing area. Once swine are unloaded they should be immediately reloaded on a TTU trailer as described above and moved to the outdoor facility taking a route directly to the west as to maintain as much distance from the Swine Unit as possible.

HUMANS EXPOSED TO OUTSIDE SOURCED SWINE

- A. Approved individuals on the outside source swine based protocol(s) which are responsible for the day to day management of the outside sourced swine must abide by biosecurity standards outlined in **Policy 01: “Biosecurity at the New Deal Swine Unit”** if they are to visit the New Deal Swine Unit.
- B. The instructor of students (whom will be on the approved protocol) which come into contact with outside sourced swine during their class is responsible for communicating to the students that they must adhere to guidelines outlined by Policy 01 Biosecurity at the New Deal Swine Unit if they will be visiting the New Deal Swine Unit within the next week.
- C. Approved individuals who are responsible for caring for any swine which are in quarantine at New Deal for potential introduction into the Swine Unit’s breeding herd must NOT be responsible for the day to day management of any other outside sourced swine simultaneously.

HEALTH CARE

- A. It is everyone’s responsibility to inform the University Veterinarians when an animal becomes ill or a change in behavior is noted.
 - 1. When an investigator, student or farm personnel detects an animal issue, they must:
 - a. Complete the “TREATMENT/OBSERVATION FORM” in the Notebook.
 - b. Indicate the date, pen number, animal number, problem observed and name or initials of the person making the report.
 - c. If any treatment was given record drug, dose, times applied/administered.
 - d. Make sure to always record the outcome.
 - 2. Seriously ill animals must be reported **IMMEDIATELY** to the veterinarian.
- B. Contact Animal Care Services Veterinarian, Livestock Coach or Facilities Manager:
 - Attending Veterinarian
 - 806-834-8588 Office
 - 806-239-2120 Cell Phone

Clinical Veterinarian
806-834-7373 Office

660-562-4425 Cell Phone

Livestock Coach
806-834-7820 Office
806-789-6725 Cell Phone

Unit Manager
806-834-4604 Office

- C. Provide all the above information to the individual contacted above, who will give advice and authorization for the action(s) that should be taken.