IACUC Policy 01: Biosecurity at the New Deal Swine Unit

Policy Purpose: The intent of this policy is to describe the Biosecurity at the New Deal Swine Unit at TTU.

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1. Purpose
   a. Biosecurity procedures are designed to keep new diseases out; control those already present by limiting transmission and infection; and, if needed, contain any new disease agent, thereby preventing its spread. The goal of the biosecurity program at the TTU swine unit is to keep our pigs healthy by controlling the points of possible disease introduction. This is best achieved by controlling people, equipment and pigs that enter the farm. Other items such as feed manufacturing, general housekeeping and vermin control should also be managed to maintain a secure and safe environment.

2. Background
   a. Viral outbreaks have battered U.S. swine farms over the past 30 years, sometimes killing millions of pigs in a single year. While discovery of new vaccines and vaccination protocols have aided in the prevention and control of disease outbreaks, farm level biosecurity has and will continue to be the most effective way to mitigate risk of exposure to predominate and potentially emerging disease.
   b. The TTU swine herd is currently healthy and free from PEDv, PRRS, Brucellosis and Pseudorabies, among other diseases. We have had some commensal diseases that are managed through vaccinations.
   c. The TTU veterinary staff keeps apprised of current best practices and consults with trained experts across multiple areas of concern about swine animal health. When areas of concern arise, the staff consults with all TTU stakeholders to provide recommendations based on industry established risk assessment methods.

3. Policy
   a. Human Entry into the Swine Unit
      We welcome visitors to the swine unit. We wish visitors to be involved in and experience our teaching, research and service activities. All visitors, staff and students must comply with this program. The Swine Unit staff, the IACUC and faculty will enforce this program. The rules for entry:
      • Any person entering the swine unit must enter through the South side (signaled entrance) of the central office building (portable building). Upon entry, shoes and outer clothing (e.g. jackets), watches, loose items like keys and cell phones are removed and stored on the non-farm side of the facility. The individual will then step over the barrier in their socked feet where coveralls and boots are donned. A barrier (solid bench) separates the non-farm side(dirty) from the farm side (clean). Hands are cleaned using soap and water, or hand sanitizer. The process is reversed when leaving the swine unit.
      • Any person who has had contact with pigs in the last 72 hours must enter the Swine Unit via the
Northwest doors, marked either men’s or women’s, and shower into the facility. They will wear farm coveralls and boots and all personal clothing and items, including cell phones, must remain in that building.

- Any persons who have traveled internationally will be restricted from entry into the TTU Swine Unit for a minimum of 10 days after arriving back into the United States.
- We recommend that every person shower out to protect their health. Most swine pathogens are not infectious to humans, however, some are zoonotic and showering out can minimize the potential for personal risk. At a minimum (optionally), reversing the entry steps (changing footwear and outerwear, washing hands), will be practiced upon exit.

b. Animal Entry into the Swine Unit
Pigs may not enter the Swine Unit except under a specific management plan developed by the faculty supervisor and a University Veterinarian.

- At the discretion of, and with consultation of the University veterinary staff, TTU Swine Unit origin pigs transported to the animal facilities on the main TTU campus for research may be allowed to return to the herd but will be required to follow the new animal entry quarantine and testing procedures at the PI’s expense.

c. Outside semen
TTU breeding females are artificially inseminated with PIC genetics semen. When semen from other sources are used, i.e. purebred pigs, it must be tested for diseases as determined by the University Veterinarian, prior to use at an approved veterinary diagnostic laboratory.

d. Non-swine unit vehicles
Outside vehicles are not permitted at the swine center. Vehicles must park at the central portable building and individuals must enter the swine unit following the appropriate entry system as described in 3a. Only vehicles that have been pre-approved by the swine center manager may enter the perimeter fence.

e. Equipment and supplies
Equipment and supplies (including research equipment and supplies) that enter the swine unit should either be new and clean, or must be cleaned and disinfected prior to being in the same air space as the pigs.

- No research equipment or supplies that have been used or carried onto any commercial swine facilities will be allowed to be returned to, or used at the New Deal Swine Unit.
- It is recommended that keeping a set of regularly used tools and equipment in the barn permanently will reduce the need to enter and exit the barn more than is required.
- It is recommended keeping disinfectant on the dirty side of the entry to disinfect equipment that will enter the swine unit.

f. Feed Mill Traffic
The feed mill is the only common source of animal feed production at the New Deal farm, and as such, is a common traffic source for employee, equipment and outside vendor contamination and a potential source of swine disease transmission. Foot traffic as well as vehicle/equipment traffic of swine unit personnel and equipment should therefore be kept to a minimum.

- All commodities and feed ingredients from international sources should be held for a minimum of 30 days after US arrival before being included in any swine diets.
- Consideration should be given to segregating the mill into biosecurity zones, i.e.
- inbound ingredients,
- outbound swine feed,
- outbound feed to other farm units,
- and internal mill operations

g. **Outside Source Swine**

No contact with outside sourced swine or care takers will be strictly enforced and ensured by following the procedures laid out in SOP 063 “Biosecurity Procedures for Outside Sourced Swine”.