How to Improve the Security of your Farm

Introduction

Both security and biosecurity procedures are important for minimizing the risk of intentional or unintentional introduction of pathogens to your farm. Most producers have implemented biosecurity programs. This guide is focused on farm security issues. The goal of this guide is to provide pork producers with an extensive checklist of security procedures that could be implemented at the farm level. This guide is designed and intended for internal use within a farm or production system. It would not be practical, nor is it recommended, for every farm to implement all of these procedures. Producers need to review their operation and determine which recommendations are appropriate for them. This checklist is intended to be a tool from which individual producers can select relevant security procedures to create a farm-specific security program.

The security of your farm can be compromised in any of three ways. First, intruders could "break in" to your farm using forced entry. Second, someone using false identification could covertly gain access to your farm. Third, an employee or other person who already has access to the facility can intentionally harm your farm. Considering all crimes, external crimes account for about 25-50% of all losses, while internal crimes account for 50-70% of all losse

Managing risk is important when developing your security plan. No farm will be able to protect itself against all possible risks. Risk management is the process by which you anticipate or recognize risks to your operation and then intervene to remove the risk or decrease the risk to an acceptable level. Risk can be avoided (lock valuables in a safe), reduced (improve lighting), spread (implement a surveillance system), transferred (purchase an insurance policy), or accepted. Try to not accept any unnecessary risks when developing your security plan; however, realize that some risk must always be accepted. A successful security program should be economical, effective, and efficient.

The following security checklist is intentionally extensive. Most likely, no producer will be able to implement all the procedures listed below. Select all applicable procedures to develop a security program tailored to your farm or production system.

Preventing Unauthorized entry.

1. General access

Deterring access to the farm is the first step in preventing intruders.

- Limit farm entry to one gated road. Keep the gate locked when not in use.
- Secure the farm perimeter using fencing.
- Minimize the number of entrances to restricted areas within the farm. Keep restricted areas locked when not in use.
- Have occupied homes or offices at roads leading to the farm to help prevent unauthorized intruders.
- Place buzzers on gates to alert you when a vehicle or person has crossed the farm entrance.

Buzzer systems are sensors that ring or buzz when a gate/door is opened or someone passes through it. Buzzer receivers can generally work on gates up to 1,000 feet away. Buzzers can be used in conjunction with gate locks to keep out visitors. However, someone must be available to monitor the system and open the gate for people.

- Don't advertise vacations or other times when buildings will be vacant.
- Minimize places where people can easily hide within and around the farm.
- Ensure areas surrounding and within farm buildings are well lit. Try to have back-up lighting for emergencies.

General lighting recommendations for industry:
- Building entrances and exits - 5 to 8 footcandles
- Surface parking lots - 3 to 5 footcandles
- Parking garages - 5 footcandles
- Parking garage entrances and stairs - 20 footcandles

2. Physical security

Locked doors, fencing, and other physical barriers are strategically placed to delay the intruder long enough for you to call the appropriate authorities. Consult state and local fire codes before making any changes to your facility.

- Implement a master key system.

Locksmiths can supply you with a master key system on doors and padlocks that can allow some employees access to all areas of the farm, while giving others restricted access. Careful distribution and accounting of all keys and privileges is an important part of farm security. On clean areas of the farm, electronic locks can perform similar functions. Electronic locks have a more costly start-up but are less expensive to re-key.

- Check key codes when purchasing locksets at hardware stores.

Key codes are a set of 5-7 numbers stamped on the key or packaging which correspond to the depth of cuts in the key. Many times all locks on the shelf have the same key code and the same keys. A locksmith can re-key the locks for you to make them secure. Choose locksets with keys having alternating high numbers and low numbers on the key code and locks with pick-resistant pins. These features make the lock more difficult to pick.

- Select industrial grade locksets and other door hardware. Lesser equipment will not hold up to farm conditions and will need to be replaced frequently.
- Stamp all keys with "Do Not Duplicate". This procedure can prevent illegitimate copying of keys.
- Remember to change key codes when employees leave.
- Swap padlocks from different areas when an employee leaves or is terminated. This will prevent you from having to re-key or purchase new locks.
- Do not put hand-turning dead bolts on the inside of glass doors.

Intruders can smash the glass and turn the deadbolt. Instead, use keyed-deadbolts on both sides of glass doors or treat/coat the glass to make it smash resistant.

- Keep windows, doors, and storage areas locked when rooms are not in use.
- Use metal or metal-clad doors. These doors are more secure than wooden doors.

3. Fire security
- Use fire doors.
- Place smoke, heat, and fire detectors throughout the farm.
- Use fire alarms and check for proper function regularly.
- Locate fire extinguishers in strategic places.
- Have a "No Smoking" policy.
- Store important written and digital information in fireproof containers.
- Protect against lightning strikes.

4. Surveillance
- Use electronic sensors (motion detectors, door alarms, glass break sensors) or other surveillance
- equipment (video cameras) to monitor the integrity of your physical barriers. This equipment can be linked to an off-site security system if cost-effective.
- Have regular but unpredictable security patrols by employees, security guards, or local law enforcement.
- Plant/trim trees and shrubs so that they do not block lighting, provide concealment to criminals, or block visibility of security patrols.

5. If you suspect unauthorized entry
- Investigate all information regarding the intrusion or suspicious activity immediately.
- Call the appropriate law enforcement authorities.
- Isolate any animals that may have been contacted by the intruder.

6. Vehicles
- Keep parking areas outside of the perimeter fencing or at least away from sensitive areas (storage areas for water, feed, or hazardous materials).
- Lock all parked vehicles when not in use and keep the keys in a secure area.
- Use stickers or parking passes to discriminate authorized vehicles from visitor vehicles.
- Monitor vehicles for inappropriate contents or unauthorized/unusual activity.

2

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- Keep vehicle logs to record date, origins, destinations, and reason for movement.
- Attend vehicles carrying livestock at all times, especially at truck stops and weigh stations.

7. Visitors
- Have a "No Visitor" policy for non-service individuals if possible.
- Have a separate policy in place for essential visitors such as consultants, service people, and health professionals that are both (1) known to you and (2) have visited the farm on a regular basis. These essential visitors should be handled as non-service individuals if they do not meet the above criteria.

- Use shower-in, shower-out policies to discourage non-service visitors.
- Post signs to inform all visitors of rules.
- Designate a parking area for all visitors.
- Designate a check-in, check-out area for all visitors with a sign-in sheet. Record names, addresses, phone numbers, reason for visit, time since last contact with swine, and facilities entered for each visitor.
- Make non-service visitors provide an authorized, valid reason for entry and proof of identity.
- Identify non-service visitors with badges. Collect badges when the visitor leaves.
- Escort non-service visitors at all times. Visitors should never be allowed to wander the premises.
- Prevent non-service visitors from accessing storage areas, locker rooms, computer areas, or areas where keys are kept. Clearly mark these areas with a "No Visitors" sign.
- Apply non-service visitor rules consistently to all unknown individuals including delivery people, drivers, customers, government officials, reporters, sales people, etc.

Employees
1. Pre-employment screening

Pre-employment screening can be a valuable tool to reduce employee turnover and decrease the risk associated with former employees. Improved efforts in screening will decrease the need for changing locks and possible police surveillance.

- Screen all prospective employees (seasonal, temporary, contract, and volunteers).
- Require all applicants to fill out a written job application including references from previous employment.Conduct thorough background checks to verify previous employment references, addresses, phone numbers, qualifications, and employee demeanor. Check regulations before performing vehicle checks or criminal background checks.
- Check immigration status with the Immigration and Naturalization Service.
- Require vendors to do background checks on employees coming to your farm.
- Have a written security policy to show prospective employees.
- Obtain permission to perform drug and alcohol testing prior to and during employment.

2. New employees

- Have new employees sign a written security/biosecurity policy in the presence of a witness.
- Have a 30-90 day probationary period.
- Place new employees on the day shift.
- Provide all new employees with direct supervision

3. Employee training
- Designate one person to oversee security issues.
- Mandate participation in industry quality assurance programs.
- Train employees and supervisors to recognize and immediately report suspicious activity, unauthorized entry, or areas that may be vulnerable to tampering or intrusion.
- Build security awareness into daily job

responsibilities and reward alert employees.
- Notify employees of contact people, back-up contacts, and procedures to report suspicious activity.
- Post internal, fire, and law enforcement emergency phone numbers in central locations and by each phone.
- Have a zero tolerance policy for workplace violence and animal abuse. Encourage employees to promptly report such incidents.
- Document all security investigations.

> **What constitutes suspicious activity?**
> - *Staying unusually late after the end of a shift.*
> - *Arriving unusually early.*
> - *Accessing or attempting to access files, information, or areas of the farm outside of their area of responsibility.*
> - *Removing documents from the facility.*
> - *Asking questions on sensitive subjects.*
> - *Bringing cameras to work.*
> - *Observing signs of tampering with equipment or facilities.*
> - *Observing suspicious materials or devices.*
> - *Observing misplaced equipment.*

> **How do you know if unauthorized entry has occurred?**
> - *Observing broken lights or dark areas that are usually lit.*
> - *Finding doors that are open, damaged, or don't lock properly.*
> - *Observing broken windows.*
> - *Keep pig inventories. If inconsistencies are found in inventories, pig theft may have occurred.*

3a. If you suspect an intruder has entered pig areas
- Call the proper law enforcement authorities.
- Observe and isolate remaining pigs, if possible, for at least 30 days.
- Emphasize to farm personnel the need for a heightened awareness to detect a potential health status change for the next 4-6 weeks.
- Track and record downstream movements of all animals if they cannot be isolated.
- Isolate animals at destination, if possible, and continue to monitor for clinical signs of disease.

- Do not sell these animals to other farms if obvious signs of disease are noted.
- Do not sell animals for consumption if there are any concerns for food safety.
- Record date of intrusion, number of pigs affected, origin and destination if moved, vehicle(s) used to move animals, and personnel who moved them.

4. Employee monitoring
- Appropriately supervise employees at all levels, especially new ones.
- Make employees aware of who belongs on the farm and who doesn't. A picture badge identification system can help if the operation is large.
- Use time clocks to monitor employee movement.
- Require employees to notify management if they will be arriving early or staying late.
- Require employees to notify management if they are going on a break or leaving the premises.
- Allow employees access only to their areas and computers/information relevant to their areas.

5. Personal items
- Restrict personal items allowed on the farm or into certain areas.
- Provide employees with a locker or desk drawer to keep personal items and valuables while at work.

> *All personal items should be labeled with owner's name. See-through or metal mesh lockers provide additional security because contents can be seen without opening the locker.*

- Notify employees that contents of lockers, bags, and vehicles can be inspected when on farm property for safety and security reasons.
- Notify employees that taking anything from work is theft.
- Restrict personal items to locker rooms or "dirty" areas of facility if shower-in, shower-out protocols are used.

4

6. After an employee has been terminated or leaves

- Collect all identification badges.
- Swap, re-key, or change the combinations of all mechanical and electronic locks.
- Notify law enforcement authorities if problems with terminated employees are suspected.
- Consider the need for night surveillance of your facilities for a period of time.

Hazardous materials (drugs, disinfectants, pesticides, herbicides)

- Physically secure all storage areas containing hazardous chemicals.
- Limit access to storage areas containing hazardous chemicals.

- Inspect all hazardous materials on receipt and verify authenticity with packing slip and supplier as needed.
- Keep an up-to-date and accurate inventory of all hazardous materials.
- Investigate missing materials or other irregularities.
- Notify law enforcement authorities of any unresolved problems.
- Purchase hazardous materials from known, licensed, or permitted suppliers.
- Supervise maintenance and sanitation staff with access to materials.

Deliveries

1. General

- Have a single mail/delivery receiving area. The employee in charge of mail can deliver packages within the facility.
- Secure the mailroom or office where mail is received.
- Identify all delivery people and ask if they have been to other farms prior to coming to your farm.
- Wash hands before and after handling mail.
- Use gloves if you have cuts or scrapes on your hands.
- Prohibit eating, drinking, and smoking in the mail room/office.

- Be alert for suspicious packages (see Appendix A).
- Inspect incoming products for authenticity.
- Supervise off-loading of incoming products.
- Disinfect, fumigate, or quarantine supplies and equipment entering the facility if deemed necessary.

2. If you get a suspicious package/letter

- Do not carry around, shake, or empty suspicious envelopes or packages.
- Do not open, smell, or taste the package.
- Isolate the package.
- Place the letter or package in a plastic bag or other container to prevent leakage of contents and to prevent others from contacting it.
- Call 911 and tell them what you received and what you have done with it.
- Immediately report the incident to your designated person in charge of security.
- Wash your hands with warm water and soap for 1 minute.
- Do not allow anyone who has touched the package to leave.
- Do not merely throw the letter or package away.
- Write down the names of all people who were in the room or area when the suspicious letter/package was noticed.
- If you suspect that the package is a bomb, evacuate the area immediately and then call 911.

3. If you open a contaminated package/letter

- Do not try to clean up any spillage.
- Cover or contain the package and spilled contents immediately.
- Leave the room and prevent others from entering the area.
- Shut off the ventilation system for the area.
- Wash your hands with soap and warm water for 1 minute.
- Remove any contaminated clothing as soon as possible and place clothing in a plastic bag or other sealed container and give it to the emergency responder.
- Shower with soap and warm water as soon as possible.

Phone threats

Phone threats usually begin with the words "Listen very carefully. I'm only going to say this once."

- Attempt to verify caller's identity.
- Record the call or write notes during and after the telephone call.

Record the following information:
- *Voice characteristics*
- *Background noises*
- *Name of person who answered phone*
- *Time call was received*
- *What caller said*
- *Exact threat that was made*
- *What demands were made*
- *If the caller indicated that they would call again*
- *How long did you speak with the caller?*
- *How old did the caller sound?*
- *Gender of caller*
- *Accent noted*
- *Caller's attitude (calm, excited, intoxicated, rational, irrational, angry, vulgar)*
- *If the call sounded like it was made from a car or telephone booth*

- Hang up on the caller, then pick up the receiver again and dial *57 to mark the caller's call. Then, call the police and tell them that you have marked the call by dialing *57.
- Notify your supervisor.

Computers

- Restrict access to computers.
- Protect data with virus protection programs.
- Connect critical computers to Uninterruptible Power Supplies.
- Give each user a password and change passwords frequently.
- Use encryption to protect passwords and usernames.
- Set the computer to time out and ask the user to login again after a certain period of inactivity.
- Lock desktop computers and monitors to office furniture using cable locks.

- Protect wiring from environmental damage and tampering using conduit.
- End computer access when an employee is terminated.
- Back up all data frequently.
- Review procedures for backing up critical data systems periodically.
- Test the data security system and procedures periodically.

Preparation for an emergency

- Maintain a protocol for triaging and investigating emergencies.
- Identify critical security decision makers to whom employees should report security problems or emergencies.
- Call herd veterinarian immediately if a foreign animal disease is suspected (See Agroterrorism section).
- The herd veterinarian will notify authorities if warranted.
- Post contact information for fire, police, and other emergency responders.
- Identify a person to handle the media and provide them with press statements and background information for the farm.
- Maintain and clearly post an evacuation plan. Give the evacuation plan and a current floor plan to the local fire department. Have evacuation drills to periodically test the plan.
- Include strategy for continued operation (e.g. alternate facility).
- Keep a current inventory of all hazardous materials and flammable products.
- Maintain an employee roster and visitor log to enable a head count if evacuation is needed.

Backup records to keep on-site and off-site in case originals are destroyed:
- Prioritized list of supplies, equipment, and facilities needed to maintain function
- Inventory of equipment and supplies (part numbers, quantity kept on hand)
- Accounts receivable
- Accounts payable
- List of customers' names and contact information
- List of suppliers' names, contact information, items you purchase, and how much you pay for them
- Vehicle maintenance schedules, payment schedules, and registration information
- Exact payroll numbers

Recall strategy for semen or pig shipments

- Prepare a recall plan to rapidly assess the scope of the problem and contain products that have been shipped.
- Maintain a shipping log.
- Maintain a list of customers and contact information.
- Identify the hazard and its potential to harm people and/or animals.
- Notify immediately all locations where the semen or pigs were shipped.
- Notify law enforcement authorities or government agencies if indicated.
- Document what was produced, shipped, and received.
- Find out if animals are still in isolation.
- Find out if semen has been used.
- Implement a biosecurity program to prevent the spread of disease among farms.

Agroterrorism

- Train employees to recognize and report signs of foreign animal diseases.

Clinical signs associated with foreign animal diseases:
- Unusually high number of sick animals
- Unusually high number of deaths
- Blisters or vesicles on animals' snout or feet
- Large number of lame animals
- Large number of animals with fevers
- Large number of animals not eating
- Large number of animals that do not want to stand
- Discoloration of the ears, belly, rump, legs, or tail
- Animals act uncoordinated or show other neurological signs

Water Security

- Secure water wells if possible.
- Ensure that water systems are equipped with backflow prevention.
- Test for potability regularly and randomly and investigate changes in results.
- Chlorinate water systems.
- Ask your water provider to alert you to known problems.
- Identify alternate sources of water as a backup plan.

Feed

- Label all chemicals and pesticides and store them separately from feed.
- Clean storage areas between batches of feed.
- Clean feed delivery equipment between deliveries and farms.
- Do not use manure-handling equipment for feed or to clean up any materials that may return to the feed mill.
- Examine all feeds and other ingredients closely for manure, mold, or foreign materials.
- Keep a sample of each batch of feed for 6 months.

Evaluation of security program

- Periodically review, test the effectiveness of, and update security strategies as needed by conducting mock attacks (break-ins, thefts, bioterrorism or foreign animal disease incident, computer virus).

Important phone numbers
Make a decision tree for your operation to notify employees of who to call under specific circumstances. For example, dial 911 if there is a fire, police, or human medical emergency. Call your herd veterinarian if you suspect an animal health emergency.
- Security supervisor for unit
- Herd veterinarian
- Dial 911 for local police
- Fire department
- Public health department local and state
- USDA/APHIS, Area office
- State Veterinarian's office
- State Emergency Management Agency

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Appendix A:

Characteristics of suspicious packages/letters
- Relabeled or repackaged
- Invoices or packing slips do not match actual package contents
- Abnormal powders
- Abnormal odors
- Excessive postage
- Sloppy handwritten or poorly typed address
- Incorrect titles
- Title but no name
- Misspellings
- No return address
- Leakage or spillage of fluids
- Marked with "Personal" or "Confidential"
- Postmark that does not match the return address
- Protruding wires
- Lopsided or uneven
- Rigid or bulky
- Oily stains, discolorations, or crystallization on wrapper
- Excessive tape or string
- Ticking sound