AMERICAN HUMANE FARM PROGRAM

ANIMAL WELFARE STANDARDS

SWINE

AMERICAN HUMANE CERTIFIED FARM ANIMALS

AMERICAN HUMANE SOCIETY RESCUE. CARE. PROTECT.

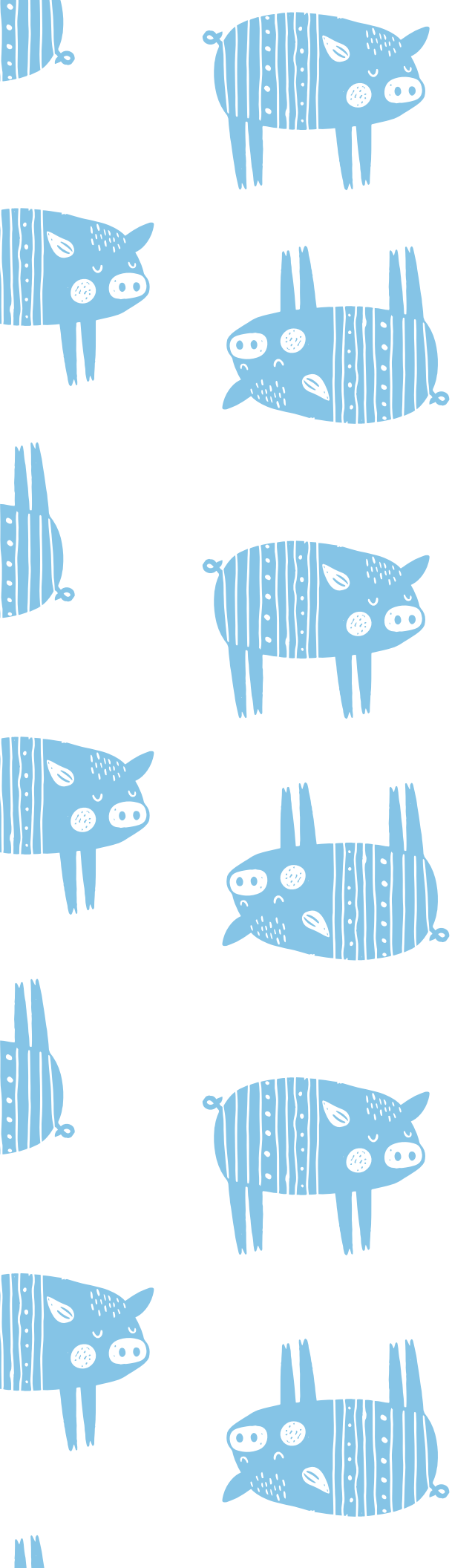

TABLE OF CONTENTS

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American Humane Certified™ Animal Welfare Standards for Swine

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INTRODUCTION

THE PROGRAM IS PREDICATED ON THE PRINCIPLES OF:

- Improving animal welfare for as many lives as possible
- Ensuring scientific knowledge and expert opinion drives our standards
- Conveying the commitment of farmers toward excellent welfare and exceeding industry standards with independent third-party verification
- Differentiating American Humane Certified™ products in the marketplace

The American Humane Farm Program (American Humane Certified™ Animal Welfare Standards) is the product of over 140 years of applied experience in farm animal welfare. Since its beginning in 1877, American Humane Society has had a long history with the humane treatment of farm animals. In its work to improve the treatment of working animals and livestock in transit, American Humane Society has been involved in almost every major advancement in improving the welfare of animals, including an instrumental role in the enactment of the 28 Hour Transportation Law. In 1916, the U.S. Secretary of War asked American Humane Society to help with the rescue of horses and other animals on the battlefields of World War I. The program that followed became Red Star Emergency Services program, which continues to this day to rescue and shelter animals involved in disasters throughout the country.

Given its history, it was natural that American Humane Society would create the first farm animal welfare audit program. In 2000, they pioneered the first third party audit and certification program in the United States to encourage and support the humane treatment of animals used for food.

Always underpinning the program has been the values of science- and evidence-based standards, transparency, accountability, and verification.

The audit standards, which are a living document, are reviewed and updated by the American Humane Scientific Advisory Committee on a regular basis. This committee of internationally renowned animal scientists and veterinarians advances new science and regularly evaluates the standards to help ensure that the American Humane Certified™ program incorporates the best and current knowledge of humane practices.

AMERICAN HUMANE CERTIFIED™ DEFINITION LIST

COMPANY ANIMAL WELFARE POLICY	Emphasis of the company's commitment to providing an environment which promotes high standards of animal welfare.
"ZERO TOLERANCE" POLICY	Policy that states that kicking, throwing, making loud noises or quick movements to purposely scare pigs, purposefully scaring, and other acts of abuse towards the broilers will not be tolerated and, upon the discretion of the company, these actions are grounds for immediate dismissal.
ANIMAL WELFARE OFFICER	The individual who is responsible for ensuring the implementation of animal welfare policies and for monitoring operations to help ensure that high standards of animal welfare are being provided to the animals.
EMPLOYEE CODE OF CONDUCT	Policy stating that all personnel are expected to handle the broilers in a positive and compassionate manner; Each worker has the responsibility for and is expected to contribute to upholding high standards of animal welfare; Each worker must be cognizant that the basic requirements (feed, water, lighting, ventilation, temperature control, biosecurity) must be provided to the broilers at all times, and a supervisor must be notified if any of these basic necessities are lacking; All personnel have been trained in and have access to an Animal Welfare Incident Report or a similar company document.
FIRE PREVENTION PLAN	Written plan including emergency contact information and numbers; Fire safety training for all employees (such as how to use a fire extinguisher); A plan to protect and house combustible material; A plan to keep combustible materials away from ignition sources; A no-smoking policy; A plan to upkeep and inspect electrical systems; A plan to monitor and control dust accumulation on electrical panels, motors, or other equipment at risk; A plan to regularly clean ventilation fans and heaters.

"WHISTLE BLOWER" POLICY	Policy that protects employees who report animal welfare issues.
EMERGENCY RESPONSE PLAN	Written plan including emergency contact information and numbers; Primary and alternate numbers for at least three responsible farm workers, and a "telephone tree" to help ensure that all responsible parties may be contacted if necessary; Contingency plans and precautions to cope with emergencies in order to safeguard the welfare of the animals, and the procedures to be followed by those discovering an emergency such as fire, floods, storms or other severe weather, interruption of power or water, etc.
LIGHTING PROGRAM	The lighting system where swine are housed must be designed and maintained to regulate a daily cycle for all animals. The lighting program for each barn must be documented with records on file. The lighting program must provide within each 24-hour period: A minimum continuous period of 8 hours of daylight supplemented by artificial light as needed. The daytime light levels must be an average minimum of 50 lux (5 foot-candles) at the head height of the animals throughout the barn, excluding areas in the shade of equipment (50 lux is bright enough to allow a person with normal eyesight to read standard newsprint without difficulty); and a minimum period of 6 hours of continual darkness or the natural period of darkness, if less.
INJURY	Injury is described as damage severe enough for the formation of granular scar tissue or defective bones or joints, and to an extent significantly greater than would be caused by accidental bumps or scratches.
ANIMAL HEALTH PLAN	Details of the therapeutic use, defined as treatment, prevention and control, as allowed by current laws, of any antibiotics (including ionophores), antiparasitics, and antifungals, which includes the requirements that antibiotics, antiparasitics, and antifungals must only be used therapeutically as prescribed by the flock veterinarian; therapeutic use is in conformance with the latest edition of the FDA Judicious Use of Antimicrobials For Poultry Veterinarians and complies with withdrawal periods.

COMPLETE TREATMENT RECORDS	Records include reason for treatment, date of treatment, quantity of medication used, route of administration, and withdrawal date.
ACTION AND MANAGEMENT PLANS	Procedures to be followed in the event of an outbreak of abnormal behavior, including appropriate and immediate changes in the system of management; Management plans for the prevention of suffering from chronic joint disease or leg deformation, which includes: the monitoring and assessment of daily inspection logs for culls due to leg abnormalities and/or deformities to help ensure that an increasing problem is not developing; Action plans for the mitigation/ prevention of recurring injuries s to suggest that there is a common cause and that is attributable to physical features of the environment or handling procedure; The program adopted and followed for the reduction and control of Salmonella, Campylobacter, and other organisms that cause food safety concerns.
VETERINARIAN CLIENT PATIENT RELATIONSHIP (VCPR)	Written proof that there is a dedicated veterinarian who is licensed in the state of operation and familiar with the flock, producer, and has agreed to work with the producer.

THE CERTIFICATION PROCESS

FOR COMPANIES THAT ARE INTERESTED IN BECOMING CERTIFIED, THE PROCESS IS AS FOLLOWS:

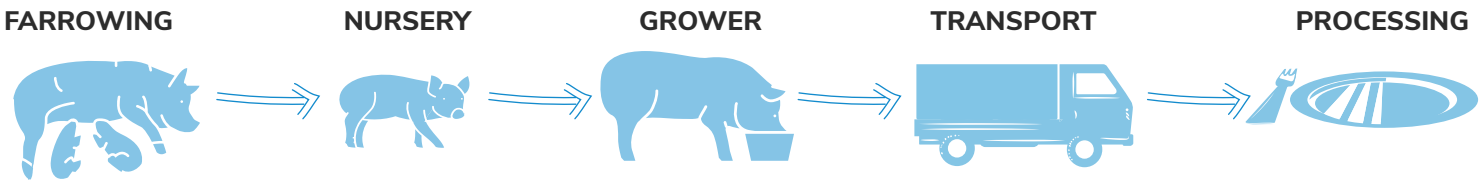
Before their products bear the American Humane Certified™ mark or label, producers show their commitment to the welfare of their animals by meeting the American Humane Certified™ standards and participating in a comprehensive certification program. When applying for the certification program, each producer must submit to American Humane Society a completed initial application providing, but not limited to, the following information: the animals or animal products for which certification is sought, the facilities at which the animals are raised, and the processing facilities at which the animals and/or animal products are slaughtered, packaged or further processed.

In order to receive permission to use the American Humane Certified™ Certification marks or to make reference to certification status, each producer must (1) agree to comply with all applicable requirements and standards of the American Humane Certification Program, including the relevant Animal Welfare Standards and any applicable Traceability Standards, and (2) successfully complete required third-party audits of its facilities and the facilities of any of its processors to help ensure and verify compliance with the requirements and standards of the American Humane Certification program.

American Humane Society recognizes that there may be other acceptable methods of providing good animal welfare and meeting the intent of each standard. American Humane Society encourages producers to offer feedback on the standards and to explain reasons why it believes it cannot meet a particular standard, why the standard is not applicable and/or appropriate to its situation, or how the producer has demonstrated good animal welfare outcomes. American Humane Society may consider specific exceptions to some of the listed requirements where the producer provides sufficient evidence of good animal welfare. Whether to grant an exception is at the discretion of American Humane Society.

SCOPE

The *American Humane Certified™ Animal Welfare Standards for Swine* include measures of animal welfare that are assessed to certify welfare for the full life of the pig, including the farrowing, nursery, the growth period, transportation of the pig, and humane slaughter and processing.



KEY WELFARE INDICATORS (KWI)

Key welfare indicators are defined as factors affecting animal welfare that can be measured, monitored, and managed to assess or improve animal welfare. The KWI measures were selected based on science-based and clear correlations with animal welfare. The KWI are designed to be outcome-based, inclusive to various types of production, include sampling instructions to help ensure data can be used to improve animal welfare, and able to be used to guide improvements of a specific welfare outcome.

PIGS ON-FARM

- Body condition score
- Lameness
- Abscesses
- Open wounds
- Scratches
- Shoulder sores
- Tail biting
- Hernias
- Vaginal and rectal prolapses
- Vulva injuries

DOCUMENTATION

- Mortality Records
- Cull Records
- Documentation of Daily Animal and Temperature Inspection
- Quarterly Animal KWI Records

FARM ENVIRONMENT

- Ammonia
- Functional Waterers

AUTOMATIC FAILURES

ACTS OF ABUSE OR NEGLECT, INCLUDING BUT NOT LIMITED TO[1,2]:

- Forcefully hitting/beating the animals (hitting with a closed fist, foot, or any solid object that can cause pain, bruising, or injury)
- Throwing the animals or lifting them by the ears or tails
- Slamming gates on the animals
- Intentionally using any type of prod inappropriately, like on sensitive areas of the animal (nose, eyes, ears, genitals, or rectum) or for extended periods of time, and/or using the electric prod when neither the welfare of the animal nor of the handler is in immediate jeopardy
- Using electronic immobilization for any reason
- Driving pigs off ledges, platforms, or steps while moving resulting in animals falling down and/or on top of one another
- Physically damaging the snout or tusk of boars as a means to reduce aggression
- Intentionally driving ambulatory animals atop one another
- Dragging live animals by any part of the body, except for rare exceptions to move a non-ambulatory animal from an unsafe or harmful situation
- Failure to provide food, water, and/or care that results in injury, harm, or death

AREAS OF AUTOMATIC AUDIT FAILURE:

If any of the following observations are made during the audit process then the audit is an automatic failure and the act must be immediately reported to farm/processor management, the audit company, and American Humane Certified™. Upon informing American Humane Certified™, the audit may be suspended or completed at the discretion of the facility manager, the auditor, and American Humane Certified™, taking time and safety into account when deciding. **DEFINED AS ACTS OUTSIDE OF NORMALLY ACCEPTED PRODUCTION PRACTICES THAT INTENTIONALLY CAUSE PAIN OR SUFFERING**

1 WILLFUL ACTS OF ABUSE OR NEGLECT (FARM, TRANSPORT, AND PROCESSOR)

There must be no observed acts of abuse or neglect performed by the personnel of the facility being audited. This applies to all pigs present at the facility at the time of the audit.

2 PERFORMING AN UNAPPROVED METHOD OF STUNNING OR EUTHANASIA (FARM, TRANSPORT, AND PROCESSOR)

The facility being audited must only be using American Veterinary Medical Association (AVMA) approved methods of euthanasia for routine culling or for emergency euthanasia for animals by trained personnel. These methods must be performed promptly to prevent further suffering and must comply with the latest edition of the AVMA Guidelines for the Euthanasia of Animals[3].

THE FOLLOWING ARE APPROVED METHODS OF ON-FARM EUTHANASIA FOR PIGS[3]:

Sows, boars, and grower-finisher pigs

- Intravenous administration of barbiturates and barbituric acid derivatives performed by a veterinarian
- Inhalation of carbon dioxide, nitrogen, nitrous oxide, and argon
- Gunshot in the following sites: frontal, temporal, and from behind the ear toward the opposite eye
- Penetrative captive bolt
- Electrocution

Nursery pigs

- Intravenous administration of barbiturates and barbituric acid derivatives
- Inhalation of carbon dioxide
- Non-penetrative captive bolt
- Penetrative captive bolt
- Electrocution

Suckling pigs

- Intravenous administration of barbiturates and barbituric acid derivatives
- Inhalation of carbon dioxide
- Non-penetrative captive bolt
- Manually applied blunt force trauma

3 NO ANIMALS HAVE HERNIAS THAT ARE ULCERATED AND NECROTIC, PERFORATED, OR TOUCHING THE GROUND WHEN STANDING AND IMPEDING WALKING (FARM, TRANSPORT, AND PROCESSOR)

All animals must be assessed to help ensure they are free from hernias that are ulcerated, necrotic, perforated, or so severe that they come into contact with the ground while the animal is standing, thereby impeding normal walking behavior. This requirement applies across all phases of animal care, including on the farm, during transport, and at the processing facility.

4 NO ANIMALS HAVE AN UNTREATED PROLAPSE THAT HAS BECOME NECROTIC, AND NO ANIMALS HAVE A UTERINE PROLAPSE (FARM, TRANSPORT, AND PROCESSOR)

No animal shall exhibit an untreated prolapse that has become necrotic, and under no circumstances should any animal present with a uterine prolapse at any stage, on the farm, during transport, or at the processor.

5 ANIMALS THAT HAVE NO PROSPECT FOR IMPROVEMENT OR ARE NOT RESPONDING TO CARE OR TREATMENT AFTER 2 DAYS OF INTENSIVE CARE ARE EUTHANIZED IN A TIMELY MANNER, UNLESS RECOMMENDED BY A VETERINARIAN (FARM)

On the farm, any animal that shows no reasonable prospect for recovery or fails to respond to appropriate care and treatment within two days of receiving intensive veterinary attention must be humanely euthanized in a timely manner, unless otherwise directed by the attending veterinarian. These measures are essential to safeguard animal welfare and prevent unnecessary suffering.

6 NO LIVE PIGS IN WASTE DISPOSAL AREAS (FARM, TRANSPORT, AND PROCESSOR)

Live pigs must never be present in or have access to waste disposal areas at any point across the supply chain, including on the farm, during transport, or at the processing facility. Waste disposal areas are inherently hazardous and pose significant risks to animal welfare, including exposure to harmful substances, physical injury, and disease transmission.

7 THERE MUST BE NO LIVE PIGS IN ON-FARM COMPOST (FARM, TRANSPORT, AND PROCESSOR)

Live pigs must never be present in or have access to compost areas at any point across the supply chain, including on the farm, during transport, or at the processing facility. Compost areas are inherently hazardous and pose significant risks to animal welfare, including exposure to harmful substances, physical injury, and disease transmission.

8 DURING LOADING, ALL ANIMALS MUST BE EXAMINED AND SHOWN TO BE FIT AND HEALTHY FOR TRANSPORT. (FARM, TRANSPORT, AND PROCESSOR)

The following animals must not be transported, except in emergencies or for medical treatment or as permitted by the attending veterinarian:

- Animals that are unable to walk unassisted or stand on all four limbs
- Injured animals
- Pigs with BCS of 1
- Pregnant sows that are expected to give birth within 21 days (except for short distances where special considerations have been made).

9 ELECTRIC PRODS MUST NOT BE USED ON NEWLY BORN OR NURSERY PIGS AND NO MORE THAN 10% OF ADULT PIGS BEING LOADED (FARM, TRANSPORT, AND PROCESSOR)

The use of electric prods is strictly regulated for the humane handling of swine across all phases of animal care, including on the farm, during transport, and at the processing facility. Electric prods must never be used on newly born or nursery pigs under any circumstances. For adult pigs, such as those in gilt development units, sows, boars, and grower/finisher pigs, electric prod use must be limited and may not be applied to more than 10% of the animals being loaded.

FARM GUIDELINES

OFFICE RECORDS AND STANDARD OPERATING PROCEDURES

The Office Records and Standard Operating Procedures (SOPs) section outlines the necessary records, SOPs, and documentation that must be available to the auditor at the time of the audit. These records must be maintained as part of a Farm Manual and be easily accessible to both staff and auditors. Farm records must be retained for a minimum of one year, unless regulatory requirements mandate a longer retention period (e.g., Veterinary Feed Directives must be kept for two years, as required by the U.S. Food and Drug Administration).

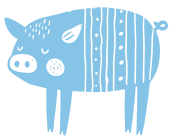
One of the most effective ways to prepare for an external audit is by conducting an internal practice audit. An internal audit helps identify areas of non-compliance before the official audit, provides an opportunity to clarify standards, and ensures that any necessary corrections can be made in advance. Therefore, every American Humane Certified™ site must conduct and maintain records of an internal audit at least once every three years for each facility. The internal audit must be conducted using a swine welfare audit tool, such as, but not limited to, the *American Humane Certified™ Animal Welfare Audit for Swine* or the *Common Swine Industry Audit*[1].

Each company must establish a Company Animal Welfare Policy that outlines expectations for animal caretakers regarding animal welfare practices. This policy must be reviewed and signed by all caretakers to confirm their understanding.

THE COMPANY ANIMAL WELFARE POLICY MUST INCLUDE:

- Emphasis on the company's commitment to providing an environment which promotes high standards of animal welfare.
- The company has implemented a "zero-tolerance" policy which states that kicking, throwing, making loud noises or quick movements to purposely scare pigs, purposefully scaring, and other acts of abuse towards the pigs will not be tolerated and, upon the discretion of the company, these actions are grounds for immediate dismissal.
- The company has implemented an animal welfare "whistle blower" policy that protects employees who report animal welfare issues.

Additionally, each company must have an Employee Code of Conduct that each worker must receive training on. This policy must be reviewed and signed by all caretakers to confirm their understanding.



THE EMPLOYEE CODE OF CONDUCT POLICY MUST INCLUDE:

- Expectations for positive and compassionate handling of pigs at all times.
- A responsibility to uphold high standards of animal welfare in daily tasks.
- In addition to the worker's assigned duties, each must also be cognizant that the basic requirements such as adequate feed, water, lighting, ventilation, temperature control, and biosecurity must always be provided to the pigs, and a supervisor must be notified if any of these basic necessities are lacking.
- All personnel have access to the Animal Welfare Incident Report or a similar company document. Personnel are instructed to complete and submit this document whenever they observe incidences related to animal welfare that cause them concern.

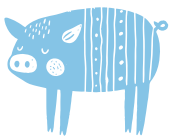
Each farm must designate at least one Animal Welfare Officer (AWO) responsible for implementing animal welfare policies and monitoring operations to ensure high standards of care. The name of the AWO must be recorded at the time of the audit.

Farms must maintain up-to-date SOPs in written or electronic form. These must be regularly reviewed and available to all workers in a language they understand. SOPs should cover daily, weekly, and monthly activities related to animal care and facility upkeep. Access to these SOPs is essential for training, ensuring consistency in task completion, and improving animal welfare. Each caretaker must acknowledge receipt and understanding of the SOPs by signing a documented statement.

AT A MINIMUM THE SOPS MUST INCLUDE:

- Performing and recording twice daily inspections of animals and daily inspection of facilities
- Daily inspections of equipment, routine maintenance and cleaning, and back-up protocols, as well as records of each
- Daily monitoring and recording of maximum and minimum house temperatures (unless automatically recorded) with personnel initials
- Monitoring and recording of ventilation settings/ rates, any necessary adjustments
- Feeding and watering protocols
- Maintenance and testing of auxiliary power supply under load
- Maintenance and testing of alarm systems
- Maintenance and testing of automatic ventilation systems
- Maintenance and management of environmental enrichments and schedule for rotation or replenishment
- A copy of the current *American Humane Certified™ Animal Welfare Standards for Swine*
- Workers must sign and date that they understand and have been provided copies of the SOPs that are relevant to their assigned duties

Due to biosecurity concerns, each farm must have a stock movement plan that details the following procedures when animals are introduced or moved within the farm.



BIOSECURITY STOCK MOVEMENT PLAN MUST INCLUDE:

- Managers must obtain treatment and vaccination records from vendors when new stock is introduced.
- Replacement animals must be quarantined, tested, and/or treated as necessary before being integrated into the herd.

If an external company is responsible for pig acquisition, transport, loading, processing, or other activities, auditors must observe the process whenever possible. If this is not feasible, the company must provide documentation proving that personnel involved in these tasks have received proper training. Acceptable documentation includes training records, employee interviews, and/or a Certificate of Conformance (COC). A COC is a signed document verifying that a service meets specific requirements.

Each farm must have a written or electronic emergency response plan that includes critical contact numbers and contingency procedures for handling emergencies. This plan must be posted in the main office and in each barn to ensure that all caretakers have access to it.

THE EMERGENCY RESPONSE PLAN MUST INCLUDE:

- Emergency contact information and numbers, i.e. fire department, local utilities, etc.
- Primary and alternate numbers for at least three responsible farm workers, and a "telephone tree" to help ensure that all responsible parties may be contacted if necessary
- Contingency plans and precautions to cope with emergencies in order to safeguard the welfare of the animals, and the procedures to be followed by those discovering an emergency such as fire, floods, storms or other severe weather, interruption of power or water, etc.

Additionally, farms must have a fire prevention plan outlining preventative measures and emergency response actions.

THE FIRE PREVENTION PLAN MUST INCLUDE:

- Fire safety training for all employees (such as how to use a fire extinguisher)
- Procedures for safe storage of combustible materials and keeping them away from ignition sources
- A no-smoking policy
- Inspection and maintenance procedures for electrical systems
- A strategy for monitoring and controlling dust accumulation on electrical panels, motors, or other equipment at risk
- Regular cleaning of ventilation fans and heaters

NUTRITION, FOOD, AND WATER

Pigs must be free from unnecessary hunger, thirst, and malnutrition by being provided with a nutritionally balanced diet and continuous access to fresh water, except during transport. These provisions ensure their overall health and promote a positive state of well-being. Feed and water must be distributed in a manner that allows pigs to eat and drink without undue competition. To ensure ample access, the availability of both feed and water must be checked daily.

The diets offered to pigs must be developed in consultation with a qualified swine nutritionist to meet or exceed most recently published National Research Council (NRC) guidelines and reviewed at least annually[4]. The use of pharmaceutical growth promoters as feed additives is prohibited and must be documented, such as a letter from the livestock nutritionist or another qualified individual. Feed mills must maintain records of diet formulations and all ingredients used in diets for at least one year to track ingredient sources in case of contamination or other issues. Additionally, where Veterinary Feed Directives (VFDs) are used, records must be retained for at least two years, in accordance with the latest FDA guidelines.

The number of pigs per feeder and drinker must not exceed the maximum capacity specified by the feeder/drinker manufacturer. Alternatively, all pigs must meet the targets for feed intake and body weight gain specified in the performance parameters plan. Drinkers must be positioned at an appropriate height to allow pigs to drink without restriction. Where wet and dry feeders are used, adequate access to both feed and water must be ensured, and an additional drinker must be available in the pen[5].

Food must be fresh and free from contamination, including mold, moisture, and rodent feces. Feeding surfaces, whether ground, floor, feeders, or troughs, must be kept clean and free from excessive manure, urine, and other contaminants. Feeding space must be sufficient to prevent social competition and ensure all pigs have adequate access to feed. The auditor should ask animal caretakers how they prevent social competition during feeding and observe feed distribution to assess compliance.

Non-feed items such as herbicides, pesticides, chemicals, paint, and machinery oil must be stored separately from feed mixing, ingredient storage, and supplement areas, ensuring they are inaccessible to pigs. For pigs with outdoor access, control measures must be in place to minimize exposure to poisonous plants and unsuitable feedstuffs.

On-site provisions must be available to supply clean water for at least 24 hours in the event of a water shut-off or system failure. Waterers must be of an appropriate design and height for the size and age of the pigs to minimize water spillage and prevent litter management issues.

At the time of the audit, no more than 10% of tested waterers may be inoperable. The auditor must randomly select at least half of the waterers in pens chosen for outcome sampling to assess functionality. For example, if each pen contains four waterers and the auditor samples 10 pens, at least two drinkers per pen must be tested, totaling 20 drinkers. If 20 waterers are tested, no more than two may be inoperable at the time of the audit.

LIGHTING

Proper lighting is a crucial aspect of the pig environment and must be managed to maximize pig comfort. All pigs must have a lighting program that provides a minimum continuous period of eight hours of daytime light within each 24-hour period. The daytime light illumination must average at least 50 lux (5 foot-candles)[6] throughout the barn at the pigs' head height, excluding areas shaded by equipment. If supplemental lighting is used, it should be evenly distributed.

In addition, there must be a minimum continuous period of six hours of darkness per 24-hour cycle or the natural period of darkness if it is shorter. The designated dark period should not exceed an intensity of 1 lux (0.1 foot-candles).

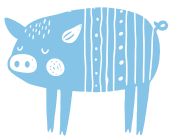
During the audit, auditors must take four light meter readings at the pigs' head height to determine the average light level. Adherence to the lighting SOP must also be verified by the auditor at the time of the audit.

ANIMAL HEALTH PLAN

The Animal Health Plan (AHP) must be a comprehensive, veterinarian-developed strategy designed to prevent, control, and treat disease within the herd while also monitoring herd performance as an indicator of pig health and welfare[6]. This plan should outline detailed procedures for disease prevention, control, and treatment, establish benchmarks to determine when veterinary intervention is necessary, and require the maintenance of health and treatment records to assess past experiences and outcomes. The AHP must be documented in written or electronic form.

THE ANIMAL HEALTH PLAN MUST INCLUDE:

- Documentation that the AHP has been developed in consultation with the attending veterinarian who is licensed in the state of operation and reviewed annually.
- Written statement from the attending veterinarian certifying that:
    - Castration of older animals must be performed with local or general anesthesia under the direction and supervision of a veterinarian[7].
    - Tusk removal is not permitted, and the trimming of tusks must be performed by a veterinarian or trained caretaker.
- Vaccination protocols and complete vaccination records (vaccine, date, group receiving vaccine, and route of administration)
- Protocols for and records of prevention and control practices for external and internal parasitic infestations
- Treatment protocols and complete treatment records (type and amount of drug(s), identification of treated animals, date, route of administration, reason, withdrawal date)
- Sick animal care plan
- Procedures to be taken following, and records of, an outbreak of dangerous or undesirable behaviors (such as tail or vulva-biting, etc.), including appropriate and immediate changes in the system of management
- Protocols for proper use of, disposal of, and actions to be taken in the event of a broken needle
- Documentation that therapeutic use of antimicrobials is in conformance with the latest edition of the FDA *Judicious Use of Antimicrobials For Veterinarians*
- Records of any surgical procedures



NOTE: Treatment must **never** be withheld to maintain an antibiotic-free production policy. Broilers must be given appropriate treatment, including antibiotics, if prescribed by the herd veterinarian, regardless of antibiotic-free production policy.

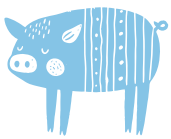
A comprehensive, written or electronic Non-Ambulatory Pig Handling Plan must be in place to help ensure the humane care and management of pigs that are unable to stand or move on their own. This plan should provide clear, detailed procedures that prioritize the welfare of non-ambulatory pigs while preventing unnecessary suffering. All staff responsible for handling pigs must be familiar with and trained in these protocols to ensure proper implementation.

THE NON-AMBULATORY PIG HANDLING PLAN MUST INCLUDE:

- Care must be taken to not cause unnecessary pain or distress to an animal that is unable to move
- Moving by means that can cause further physical damage is prohibited, such as hoisting by chain, dragging, or lifting without complete body support. ***These methods are considered willful acts of abuse or neglect***
- Hind-leg hobbles ("splitters") may be used only when necessary to prevent swine from becoming non-ambulatory
- Non-ambulatory animals must always have access to ample, fresh food and water
- If the attending veterinarian determines that an animal cannot be successfully and humanely transported, treated, or is a downer animal, it must be euthanized immediately

To help ensure optimal pig health and welfare, mortality rates must be monitored and maintained within acceptable thresholds. Pre-weaning mortality, excluding stillborn piglets and those humanely euthanized to prevent suffering, must not exceed a monthly average of 20%, as documented through at least one year of mortality records. Post-weaning mortality, excluding pigs euthanized to prevent suffering, must not exceed a monthly herd average of 5% within each production stage of the facility (e.g., nursery stage, finishing stage, etc.), as shown through at least one year of mortality records.

If pre-weaning mortality surpasses a monthly average of 15% or post-weaning mortality exceeds a 5% herd average, an internal investigation must be conducted, and corrective actions must be documented to address the primary cause.



Key Welfare Indicator (KWI) tolerance levels, as defined by American Humane Certified™, must be consistently monitored as indicators of potential health or welfare concerns. Producers must measure and document these KWIs at least quarterly, and written or electronic records of all performance parameters and their outcomes must be readily available for auditing.

THE KEY ANIMAL WELFARE INDICATORS TO BE MEASURED INCLUDE:

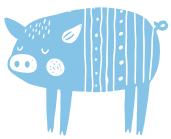
- Body condition score
- Lameness
- Abscesses
- Open wounds
- Scratches
- Shoulder sores
- Tail biting
- Hernias
- Vaginal and rectal prolapses
- Vulva injuries

Records of animal production must be maintained by each farm to ensure that animal movements are tracked and that production-related measures of good animal health (e.g., culling) are monitored and met for each production cycle. These records must also include proof that daily barn temperatures are being checked and recorded, and that pigs are inspected twice daily by trained personnel. Daily observation of pigs is essential to assess their well-being[6].

The AHP should include an Action and Management Plan that outlines procedures for responding to a disease outbreak, a high incidence of physical defects, or abnormal behavioral displays among the majority of the herd. The attending veterinarian must be involved in developing the Action and Management Plan and should advise the producer when intervention is required.

THE ACTION AND MANAGEMENT PLAN MUST INCLUDE:

- Action plans to remedy any problems which cause animal performance parameters to fall below tolerance limits.
- Procedures to be followed in the event of an outbreak of abnormal behavior, including appropriate and immediate changes in the system of management, with records kept.
- Action plans for the mitigation/ prevention of recurring injuries seen in a number of pigs to suggest that there is a common cause and that is attributable to physical features of the environment or handling procedure.



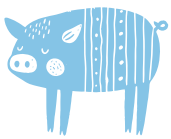
WRITTEN EUTHANASIA POLICY

The Euthanasia Policy must be developed with the herd veterinarian who is licensed in the state of operation and include provisions for routine euthanasia (culls) and emergency euthanasia (including mass disposal during disease outbreaks or other emergencies)[6]. Euthanasia should only be performed by properly trained (with documentation) personnel or the herd veterinarian.

THE EUTHANASIA POLICY MUST INCLUDE:

- Statement declaring that only properly trained farm personnel or the attending veterinarian are permitted to perform euthanasia and euthanasia must be performed as soon as possible.
- Protocols outlining euthanasia decision making.
- Training records which identify: the names of the stockpersons who have undergone training, the name of the trainer, the specific method(s) of euthanasia covered in the training, confirmation that the trainees' competence in performing the procedure was validated by the trainer, including proper techniques and proper use of any equipment, and the date(s) that the training occurred.
- Training must include a hands-on portion with an associated record outlined above.
- For euthanasia equipment, documentation that equipment has been maintained monthly and that it is stored securely, but available when needed, that can be verified by the auditor.
- Euthanasia methods must comply with the latest edition of the American Veterinary Medical Association's (AVMA) *Guidelines for the Euthanasia of Animals*[3].
- Procedures stating that the persons performing euthanasia must verify that each pig has been properly euthanized. If it is not properly euthanized on the first attempt the same method or an alternate method is performed immediately to help ensure that the pig does not suffer.
- For situations other than routine culls, logs stating the reason for euthanasia, numbers of animals euthanized, the date, and the procedure used.

Only AVMA approved methods of euthanasia are permitted; methods must be performed promptly to prevent any further suffering and comply with the latest edition of the American Veterinary Medical Association's (AVMA) Guidelines for the Euthanasia of Animals[3]. Any euthanasia equipment must be maintained per the manufacturer's guidelines and must be stored securely and clean.



AVMA APPROVED EUTHANASIA METHODS FOR PIGS[3]:

Sows, boars, and grower-finisher pigs

- Intravenous administration of barbiturates and barbituric acid derivatives performed by a veterinarian
- Inhalation of carbon dioxide, nitrogen, nitrous oxide, and argon
- Gunshot in the following sites: frontal, temporal, and from behind the ear toward the opposite eye
- Penetrative captive bolt
- Electrocution

Nursery pigs

- Intravenous administration of barbiturates and barbituric acid derivatives
- Inhalation of carbon dioxide
- Non-penetrative captive bolt
- Penetrative captive bolt
- Electrocution

Suckling pigs

- Intravenous administration of barbiturates and barbituric acid derivatives
- Inhalation of carbon dioxide
- Non-penetrative captive bolt
- Manually applied blunt force trauma

Following, the person performing the euthanasia must verify that each animal has been properly euthanized. If necessary, the same or an alternate method must be performed immediately to help ensure that the animal does not suffer. All culls and euthanasia actions must be documented with the date, number of broilers affected, and reason(s) where known.

Nothing stated here is intended to discourage the prompt diagnosis and appropriate treatment of any ill or injured pig.

BIOSECURITY

Biosecurity refers to an established plan put together by the producer to minimize introduction and spread of any pathogens to prevent and control disease outbreak in the herd. There are multiple components to a complete biosecurity plan for swine, typically including structural access, operational access, a cleaning and sanitation plan, and a waste disposal plan[6].

The structural access plan will limit the introduction of pathogens from entering the physical farm, barns, or other buildings by physically limiting access to these areas by humans and animals through physical exclusion methods (property gates, securing doors, etc.). There must be posted signage to deter any unwanted visitors to the secure buildings or barns, and tracking of all allowed visitors to the premises with a visitor log. There must be posted biosecurity protocols and instructions so that approved visitors can follow appropriate biosecurity protocols. These must be documented through a biosecurity plan and verified by the auditor at the time of the audit.

The operational biosecurity plan focuses more on the inside of the operation and includes pest management (i.e. no overgrown outdoor areas with minimal vegetative growth, no spilled feed, using a pest prevention plan) and workflow procedures to minimize exposure of young animals to older animals. Where appropriate, any personnel handling pigs should utilize personal protective equipment to reduce the risk of spreading pathogens when inside the operation or around pigs (protective clothing, footbaths, shower facilities, etc.). These must be documented through a biosecurity plan and verified by the auditor at the time of the audit.

There must be demonstrated methods of rodent control verified by the auditor at the time of the audit. The cleaning and sanitation plan will largely apply to the operational biosecurity plan and provide directions for routine and scheduled cleaning and sanitation procedures of equipment and facilities.

The waste disposal plan outlines detailed protocols for the safe and proper disposal of any medical waste, sharps, carcasses, pit management, and other waste that poses a threat to animal and human health and safety.

BUILDINGS AND EQUIPMENT RECORDS

Farms must maintain animal production and environmental records to ensure welfare is upheld across multiple production cycles. These records must be available at the time of the audit in the form of completed farm data sheets.

THE BUILDINGS AND EQUIPMENT RECORDS MUST INCLUDE:

- Type of housing, breeding system, and/or farrowing system used
- Total floor area available
- Total number of pens, crates, and/or stalls with dimensions
- Total number of animals stocked in each barn and on farm
- Total number of waterers and feeders per pen, crate, or stall
- Total bedded space available

Facilities must maintain comprehensive and up-to-date records verifying the routine and scheduled maintenance of all manual and automatic equipment used in swine housing and care. These records serve as essential documentation of compliance and due diligence in ensuring equipment is functional and safe for animal welfare.

All sites equipped with an onsite auxiliary power supply must conduct and document load testing of the system at least once per quarter. The test results must be clearly recorded, including confirmation that the auxiliary power source is capable of operating all critical equipment required to maintain animal health and welfare in the event of a primary power failure. Facilities relying solely on manually operated systems are exempt from the requirement to maintain an auxiliary power source.

For facilities with controlled-environment

housing systems, alarm systems must be tested on a weekly basis, and the outcome of each test must be documented. Alarm systems must be designed and maintained to remain functional even in the event of a primary electrical power failure.

Records must also reflect the regular maintenance and daily operational checks of all ventilation systems. These include the verification of adequate ventilation rates to meet or exceed minimum standards for air quality, ensuring appropriate levels of humidity, temperature, and gas concentrations (e.g., ammonia and carbon dioxide). A clearly defined backup plan must be in place and documented, detailing the actions to be taken to protect pigs from pain or distress in the event of ventilation failure or malfunction.

Additionally, all heating systems must undergo annual inspections and cleanings to maintain efficiency and safety. Electrical components associated with heating systems must be inspected and verified to be in safe working condition at least quarterly.

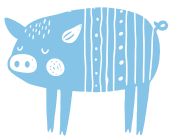
PERSONNEL TRAINING

A high degree of caring and responsible management and husbandry is vital to help ensure good animal welfare. Managers and stockpersons must be thoroughly trained, skilled, and competent in animal husbandry and welfare. They must have a good working knowledge of their system and the pigs under their care. The continuing education of personnel who have day-to-day contact with the pigs is one of the most important ways to help ensure behaviors that support and promote animal welfare. It is important to have documentation confirming personnel training in aspects of herd welfare appropriate to the level of operation (videos, manuals, SOPs).

The early and continuing education of personnel who have day-to-day contact with the pigs is one of the most important ways to promote behaviors that support and foster animal welfare. All swine caretakers should be trained before any hands-on contact with the pigs. All stockpersons must be trained at orientation in a language that each worker can understand, and training must be updated annually. Training may include videos, manuals, and/or SOPs, but must include hands-on experience and evaluations. Training records must clearly define what each stockperson has been trained in, as well as signatures of the trainer, the trainee, and the date of each training.

AT A MINIMUM, ALL STOCKPERSONS SHOULD BE TRAINED IN THE FOLLOWING[8]:

- Normal and abnormal behavior (including stress and fear) of individual animals and of the group in order to recognize good health and welfare.
- Proper low-stress handling of swine.
- Physical and environmental requirements for swine.
- Signs of common diseases and appropriate actions for treatment.
- Training of the emergency response plan.
- Understanding times and circumstances in which swine are prone to welfare problems on their own unit and ability to recognize welfare problems.



There may be some responsibilities that require the caretaker to have additional or specialized training to complete a task that has the potential to cause injury to pigs. For those tasks, the caretaker must again have documentation of specialized training that is updated annually.

SOME EXAMPLES OF SAID TRAINING INCLUDE:

- Identifying which animals are to be culled/ euthanized and the appropriate and timely remedial actions to be taken, either by the direct action of the stockperson or through the notification of the responsible personnel.
- Identifying and caring for non-ambulatory swine.
- Care and management of specific swine life stages, such as:
    - During breeding, the selection of suitable males and females, semen handling, and reproduction.
    - During pregnancy, pregnancy detection and care of the pregnant female.
    - Proper care and management of females during farrowing.
    - The care of the newborn piglet and sow during farrowing.
- Specific training for stockpersons responsible for any equipment that impacts animal welfare.

Stockpersons with Pork Quality Assurance (PQA)[7] training can utilize those records to satisfy personnel training records.

Even if the stockperson is not directly employed at the operation, if they are in contact with pigs then there must be adequate documentation of training. For example, catching crews or processing crews will typically not directly work for the producer but will still be responsible for handling and transporting pigs. Those crews need to be trained in normal pig behavior, swine handling and restraint, proper operation and maintenance of equipment they will use, and proper transportation practices of pigs (where applicable). Training must be validated through employee documents, TQA training records, and/or Certificates of Conformance.

FARROWING, PIGLETS, AND WEANING SOPS

Farrowing and weaning represent critical and potentially stressful stages in a pig's life, making diligent care and management essential for ensuring positive welfare outcomes. To support this, specific standards, protocols, and documented procedures must be in place to guide animal care during these stages.

There must be a written or electronic SOP detailing the conditions under which the induction of parturition may occur. Induction must be reserved for therapeutic purposes or used in accordance with the specific recommendation of the attending veterinarian. When farrowing aids are utilized, their use must be limited solely to assisting a delivery process and not employed to hasten birth unnecessarily. Prior to using any farrowing aid, a thorough examination of the sow must be conducted to determine if the piglet can be delivered naturally without causing undue pain or distress to the sow or her offspring.

Additionally, there must be a written or electronic SOP for piglet processing.

WRITTEN OR ELECTRONIC SOP FOR PIGLET PROCESSING MUST INCLUDE:

- Piglets must receive supplemental iron (100-200 mg) within the first three days of life, in accordance with the National Research Council (NRC) Swine Nutritional Guidelines.
- Where practiced, needle teeth trimming must be performed within the first 24 hours of life or, for weak or sick piglets, within the first three days, but only under the recommendation of the attending veterinarian. The procedure must not remove more than the first third of each tooth, and it must be performed carefully to avoid gum injury or splintering of the teeth.
- Tail docking, if performed, must occur as early as possible and no later than seven days of age.
- Castration must be conducted as early as possible and no later than seven days of age.

A Piglet Environment Management Plan must be established and documented through an SOP. This plan must outline specific measures to prevent hypothermia, describe routine sanitation procedures, and include steps to prevent accidental injury to piglets. A cross-fostering SOP must be in place to guide the care of piglets that are unable to be supported adequately by the sow, ensuring that all piglets receive sufficient nutrition and care. Piglets must not be weaned before reaching 21 days of age[9].

ANIMAL HANDLING SOPS

A comprehensive written or electronic SOP must be in place that outlines humane handling practices for all personnel responsible for swine care. This SOP must clearly prohibit the use of excessive noise during handling, such as screaming, yelling, or banging tools, as these actions can cause unnecessary stress and fear in pigs. Handlers must exercise care at all times to avoid causing pain or distress. Specifically, pigs must never be pulled by the tail, ears, or limbs, and physical abuse in the form of hitting, beating, or poking is strictly forbidden.

An additional SOP must govern the use of handling aids. This document must state that all handling aids must be used in an appropriate, low-stress manner designed to guide animals safely without inflicting pain or distress. Pigs must never be struck or jabbed with handling tools. Furthermore, all handling equipment must be kept in good condition, free from sharp edges or other hazards that could result in injury.

A separate SOP must regulate the use of electric prods. The use of prods is restricted to situations where the safety of either the animal or the handler is at immediate risk, and only as a method of last resort. Prods must never be used on sensitive areas of the animal, and personnel are prohibited from carrying them routinely. Electric prods, when deemed necessary, must be stored in a designated location and only accessed under qualifying circumstances.

A clearly defined SOP must address the permissible use of confinement or restraint of swine. Swine must not be confined or restrained unless it is necessary for a specific and justified purpose, and even then, such confinement must be for the shortest duration possible.

ACCEPTABLE SCENARIOS FOR CONFINEMENT:

- During veterinary examinations, routine testing, blood sampling, or operations
- During feeding
- For the purposes of marking, washing, or weighing
- While cleaning their accommodations
- During and for up to seven days following artificial insemination (excluding the period between weaning and insemination)
- During heat detection when using a mobile boar unit, provided that restraint does not exceed two hours
- While animals are held in preparation for loading and transport

AUDITOR EVALUATION OF BUILDING AND ENVIRONMENT

The structural integrity and cleanliness of the buildings in which swine are housed are fundamental to ensuring their health, safety, and overall welfare. All housing facilities must be maintained in a manner that promotes a safe and sanitary environment for the animals. The physical design and condition of the housing must minimize the risk of injury or distress by ensuring there are no sharp edges, exposed projections, damaged flooring, or other hazardous structural elements that could harm the pigs. Regular inspection and maintenance of the facilities are necessary to identify and correct any deficiencies that may compromise animal welfare.

Electrical systems within the housing must be properly installed and maintained. All electrical equipment must be securely mounted, well-insulated, and appropriately grounded to prevent electrical hazards. Such systems must also be fully inaccessible to the pigs and protected against potential damage from rodents or other environmental threats to ensure continued safe operation.

The design of the housing and associated equipment must facilitate easy and efficient inspection of the animals by caretakers during routine daily observations. Housing must also support effective and thorough cleaning practices to prevent the buildup of pathogens, parasites, and organic waste. Interior surfaces, including pen dividers and walls, must be smooth, durable, and constructed from materials that can withstand rigorous sanitation procedures, thereby contributing to disease prevention and biosecurity.

There must be evidence that used sharps are disposed of in a puncture-resistant container that is properly labeled. There must be no expired animal health products on the premises. There must be evidence that the site is using different needle sizes appropriately according to PQA guidelines[8], such as appropriate needle gauge and length.

During the audit, auditor must be able to verify that there is documentation of the several items.

AUDITOR MUST BE ABLE TO VERIFY DOCUMENTATION FOR:

- The current herd is evaluated twice daily with inspector initials or name
- Minimum and maximum temperatures are recorded daily
- Mortalities and culls are recorded daily

THERMAL ENVIRONMENT AND VENTILATION

Seasonal environmental management must be addressed proactively within swine housing. During hot weather, adequate provisions must be in place to prevent heat stress. This includes the use of cooling systems such as wallows, shade structures, evaporative coolers, drip systems, cooling mats, misters, and fans. Additional space should also be provided to allow pigs to spread out and self-regulate their body temperature. In cold weather, measures must be implemented to mitigate cold stress. These may include the use of heaters, insulated buildings, and suitable bedding materials, as appropriate for the facility. These environmental controls must be monitored and maintained to ensure that pigs are kept within a thermoneutral zone that supports health and comfort throughout the year.

Proper ventilation is required to remove dust, moisture, carbon monoxide and carbon dioxide, and provide oxygen[2]. For all facilities, proper ventilation is required to maintain a comfortable temperature and to maintain good air quality. For that reason, caretakers need to check the barn temperature twice daily, closely monitor ventilation equipment, and be cognizant of air quality while in the barn.

Another aspect of maintaining good air quality is to monitor ammonia levels within the house. During the audit, the auditor must measure ammonia at the height of the pigs in 3 locations, in the first third, second third, and last third of the house. Ammonia levels should be less than 10 ppm and are not to exceed 25 ppm[6] and if they do, there needs to be an ammonia mitigation plan in place to decrease levels.

SPACE ALLOWANCE

Swine housed indoors must be provided with either slatted or solid flooring and must have continuous access to a dry and clean lying area to promote comfort and support proper hygiene. In service pens, the flooring must be maintained to ensure adequate traction to prevent slipping during mating activities, and the pen must be of sufficient size to allow for natural courtship behaviors and successful mating.

Space allowance requirements for growing pigs, including those in nursery, grower/finisher, and gilt development units (GDUs), must meet or exceed the standards outlined in the applicable space allocation table[10], which is based on the target weight of the animals. Target weight is defined as the average final weight of the pig at the point it exits a specific production phase (e.g., market weight for finishing pigs, final nursery weight for pigs in the nursery phase).

In the case of breeding animals, gestating sows, gilts, and boars must be housed in open pens and provided with a minimum of 20 square feet (1.9 square meters) of usable floor space per animal[10,11]. These animals must be able to stand, lie down, and turn around freely without obstruction. Group housing systems must be managed to minimize aggressive behaviors and to promote the welfare and safety of all animals within the group.

Swine must not be subject to confinement or restraint, except in clearly defined circumstances and only for the shortest duration necessary.

Pig Size		Total Area	
kg.	lbs.	sq. m.	sq. ft.
10	22	0.16	1.7
20	44	0.25	2.7
30	66	0.33	3.5
40	88	0.4	4.3
50	110	0.46	5
60	132	0.52	5.6
70	154	0.58	6.2
80	176	0.63	6.8
90	198	0.68	7.3
100	220	0.73	7.9
110	242	0.78	8.4
120	264	0.82	8.9
130	286	0.87	9.4
140	308	0.91	9.8
150	330	0.96	10.3

Adapted from Gonyou et al., 2017.

PERMITTED INSTANCES TO USE TEMPORARY RESTRAINT INCLUDE:

- Veterinary examinations, testing, blood sampling, or medical procedures
- During feeding
- For marking, washing, or weighing
- While cleaning their housing area
- During or for up to seven days following artificial insemination (not including the period between weaning and insemination)
- During heat checking using a mobile boar unit, for a duration not exceeding two hours
- While the animals are being prepared for or awaiting loading for transport.

When used, breeding and farrowing stalls must be of sufficient dimensions to allow sows to lie fully on their sides without their udders protruding into adjacent stalls, and long enough to permit lying without the head resting in the feeder. Individual pens must be designed to allow visual, auditory, and olfactory contact with other pigs, except in cases where isolation is required for biosecurity or quarantine purposes.

HANDLING AND TREATMENT FACILITIES

All animal handling facilities, including treatment areas, loading ramps, and associated infrastructure, must be designed and maintained to promote both animal welfare and handler safety. Flooring in these areas must be non-slip to minimize the risk of animals slipping or falling, and all surfaces must be constructed from materials that are durable, impervious to moisture, and easily cleaned and disinfected to maintain proper hygiene standards[2].

Key structural elements such as alleyways, handling gates, chutes, and handling aids must be kept in good repair at all times. These components must be free from protrusions, sharp edges, or any other hazards that could cause injury to the pigs. Routine inspection and maintenance should be conducted to ensure all surfaces and equipment are safe and functional.

In all designated loading areas, specific features must be present to ensure the safe and humane movement of pigs. Ramps used for loading must not exceed a 20% incline, as steeper angles may cause undue stress and increase the risk of slipping or injury[2]. To further prevent accidents, both ramps and tailboards must be equipped with railing barriers along the sides to prevent animals from falling. Ramps must also include properly designed and spaced foot cleats, stair-step configurations, or equivalent non-slip surfacing to ensure animals maintain stable footing during movement[2]. Additionally, the entire loading area must be well lit to facilitate calm and safe handling of animals and to support effective observation by stockpersons.

There must also be a comprehensive and accessible plan in place to document and monitor the treatment of sick or injured animals. This plan must be known and understood by all stockpersons involved in handling pigs. At the time of the audit, the auditor should ask relevant personnel what training was performed to monitor and document treatment of sick or injured animals. That same personnel must show the auditor an example with explanation of the documentation.

Adherence to the non-ambulatory pigs SOP must be demonstrable and verifiable during audit inspections. Proper training of personnel and clear documentation practices are essential to ensure the welfare of compromised animals is appropriately managed at all times.

EVALUATION OF FARROWING SYSTEMS

Sows must be housed in clean and dry farrowing facilities prior to parturition to provide a hygienic and comfortable environment for both the sow and her piglets. In farrowing areas, piglets must have access to a starter (concentrate) ration prior to weaning to support healthy development.

In systems where bedding is used, it should be introduced 48 to 72 hours before parturition. Special attention must be given to sanitation when using bedding, including protocols to prevent the buildup of waste, avoid blocking drainage systems, maintain safe distances from heat lamps, and ensure thorough cleaning between lactation cycles.

The farrowing facility must also be equipped to maintain an environment appropriate for

both the sow and her litter. This includes a temperature range suitable for the sow as well as the provision of a microclimate area, maintained through supplemental heating, that meets the thermal needs of the piglets. Additionally, there must be evidence that orphaned or fallback piglets are properly managed in accordance with the farm's established protocols. This includes monitoring for health and welfare, and providing adequate warmth, nutrition, and care to ensure their survival and well-being.

ENVIRONMENTAL ENRICHMENT

Environmental enrichment plays a vital role in promoting the welfare of swine by encouraging the expression of natural behaviors, reducing boredom, and mitigating aggressive tendencies. Enrichment strategies contribute to improved mental stimulation and behavioral health by fostering positive engagement with the environment. In swine production systems, studies have indicated that environmental enrichment can lead to measurable improvements in animal welfare, and similar benefits are increasingly recognized in swine production.

THE PRIMARY OBJECTIVES OF ENVIRONMENTAL ENRICHMENT INCLUDE:

1. Increasing the occurrence and range of the normal behavior.
2. Preventing the development of abnormal behavior, or reducing its extent and complexity.
3. Increasing positive exploration of the environment.
4. Increasing the animal's ability to handle behavior and physiological challenges[12].

To achieve these objectives, enrichment materials must be thoughtfully selected to meet the sensory and behavioral needs of pigs. Enrichment for swine can be broken into five categories[13].

SWINE ENRICHMENT CATEGORIES[13]:

1. **Nutritional** – nutrient based enrichment that encourage natural foraging behaviors (puzzle feeders, food toys, adding new food items or treats, hanging forager, hiding scattered food under mats or bedding)
2. **Occupational** – giving pigs and enriching "job" that encourages natural behaviors (puzzle feeder, scattering and hiding food, straw/hay bales, exercise outside of their home pen)
3. **Physical** – enrichments that modify or add complexity to the pigs' environment (ropes, wood blocks, peat, dog toys, balls, scratching brushes or walls)
4. **Sensory** – enrichments that appeal to smell, touch, or hearing (novel synthetic or natural odors, wood shavings, scratching brushes or walls)
5. **Social** – positive social interactions with humans (giving pigs treats, talking to them, gentle handling)

There are certain objects that should not be used as enrichment items on their own because they can be ineffective at preventing tail biting or keeping pigs engaged. These objects include metal chains, tires, and agars.

A review of more than 70 enrichment materials concluded that pigs interacted with enrichment materials more if they were ingestible, odorous, chewable, deformable, and destructible[13]. Enrichment should be investigable and manipulable, offering characteristics that are chewable (deformable or destructible), olfactory, and/or edible.

A formal enrichment program must be established on each farm, ensuring that all pigs, regardless of production phase, have consistent access to appropriate enrichment. This includes animals housed in nurseries, grower and finishing barns, gilt development units, as well as boars and gestating sows or gilts housed in pens. The enrichment program must also include a documented cleaning and rotation plan to ensure that items remain sanitary, safe, and engaging over time.

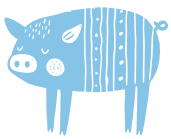
When using items such as ropes or chains, care must be taken to ensure that the manipulable portion accessible to the pigs measures at least one foot (30 cm) in length, allowing for adequate interaction. Through thoughtful implementation, environmental enrichment can significantly enhance the quality of life for swine, supporting both behavioral health and overall welfare outcomes.

OUTDOOR HOUSING

For swine housed extensively outdoors, it is essential to provide appropriate environmental accommodations to ensure their health, comfort, and welfare under varying climatic conditions. During periods of cold weather, all animals must have continuous access to a shelter that is both windproof and waterproof. This shelter must be adequately sized to allow all animals to lie down comfortably at the same time and must contain a sufficient supply of clean, dry bedding material to provide insulation and prevent hypothermia. The provision of such shelter is critical to mitigating the adverse effects of cold, wet, or windy conditions.

In hot and humid weather, swine must have access to a shaded area that offers relief from heat stress. This shaded area must also be of adequate size to accommodate all animals simultaneously, allowing them not only to lie down but also to space themselves apart from one another as desired to aid in thermoregulation. Providing ample shade is essential to preventing heat exhaustion and supporting natural resting and social behaviors.

When outdoor farrowing is practiced, additional care must be taken to manage the farrowing environment. Farrowing sites located outdoors must be rotated at least once every two years to prevent the buildup of pathogens and maintain soil and environmental health. As part of this rotational protocol, all used materials must be removed from the site, the ground must be properly sanitized, and new ground cover should be planted. This process helps to ensure a hygienic environment for both sows and piglets and supports long-term sustainability of the outdoor housing system.



INSPECTION OF PIGS

Timely observation and documentation of animal outcomes are essential components of a robust welfare management program in swine production. Monitoring the health, behavior, and physical condition of pigs not only ensures that welfare standards are met but also allows for early identification of potential issues that may affect animal well-being, biosecurity, or productivity. One critical indicator of welfare oversight is the prompt removal of deceased pigs from pens. There must be clear, timely, and verifiable evidence that any pig found deceased is immediately removed upon identification. Failure to do so can result in compromised hygiene, increased disease risk, and unnecessary distress to remaining animals.

In addition to timely response to mortality, it is imperative that prohibited husbandry practices are neither used nor tolerated within the facility. There must be no evidence suggesting the use of septum nose rings, as these devices interfere with natural rooting behavior and can cause chronic pain or discomfort. Similarly, the tethering of pigs (restricting movement through restraints) undermines core welfare principles by limiting the animals' ability to express normal postural and locomotive behaviors. The practice of ear-notching on-site is also prohibited, as it can cause pain and tissue damage, and alternative methods of identification that are less invasive must be employed.

Pigs should be managed to maintain nutritional needs and good body condition, which is defined as no more than 1% of the pigs at the facility exhibit a body condition score (BCS) of 1[13].

In cases where pigs with a BCS of 1 are present, there must be documented evidence of an active feeding management plan. This plan should clearly outline the specific diet being provided and the methods used by the producer to evaluate the pig's progress. If a veterinarian determines that the pig is unlikely to recover, euthanasia must be performed.

Score	Condition	Detection of ribs, backbone, "H" bones, and "pin" bones
1	Emaciated	Obvious
2	Thin	Easily detected with pressure
3	Ideal	Barely felt with pressure
4	Fat	None
5	Overly fat	None

Adapted from Coffey et al., 1999

Similarly, no more than 2% of the pigs sampled should exhibit severe lameness, defined as a lameness score of 2[15,16,17].

Auditors should work with farm staff during animal evaluations to help ensure all animals chosen for sampling are able to be evaluated while standing. If such cases are identified, facility personnel must intervene and ensure appropriate care and management actions are taken.

Skin lesions (including abscesses, open wounds, skin necrosis, and shoulder sores) can serve as important indicators of animal management practices, social interactions within group housing, and the pigs' ability to adapt to their environment. It is essential that animal caretakers are trained to recognize these lesions, accurately document their occurrence, and implement appropriate treatment protocols specific to each type of lesion.

Lameness Score	Description
0	Pigs move freely and use all limbs and feet evenly, no signs of lameness
1	Pigs shifts weight away from affected limb when standing and has limping or impaired behavior when walking (quick step, short stride, head bob, arched back, caudal swagger)
2	Pig is non weight bearing on the affected limb when standing or walking, severely lame

Lameness Score Scale adapted from Karriker et al., 2013; Nalon et al., 2014; and Renggaman et al., 2015

Abscesses are a localized collection of pus within body tissue, typically resulting in and identified by a soft, raised mass on the skin. These are usually signs of a bacterial infection and can follow any physical trauma to the body, such as injections or another break in the skin. Swollen ears are often hematomas (collection of clotted blood) and not considered abscesses.

There must be no more than 5% of the sampled pigs exhibiting abscesses on any part of their body.

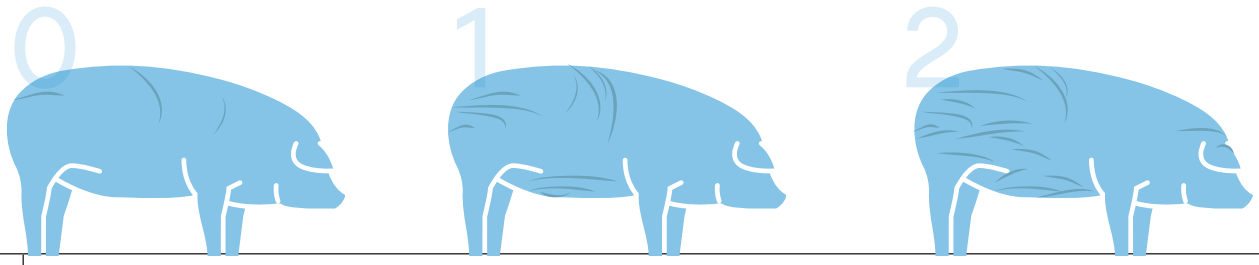
In instances where abscesses are observed, there must be evidence that the affected animals have been identified by trained personnel and are receiving appropriate treatment.

Open wounds are defined as breaks or openings to the skin that completely penetrate the skin. This includes cases of ear tip necrosis and side suckling sores, which must be included in the count. Pigs with scabbed-over wounds or piglets in farrowing rooms with wounds resulting from routine procedures such as castration or tail docking should be excluded. Any shoulder sores identified must be documented separately in shoulder sore counts.

No more than 1% of sampled pigs may have open wounds.

Where open wounds are present, there must be a documented treatment plan in place, including a record of past treatment efforts.

Scratches are defined as injuries on the skin that do not fully penetrate the skin. Even if scratches are scabbed over, they must be counted in assessing the total body area covered in scratches[1]. No more than 2% of the sampled pigs may have severe scratches, defined as lesions covering 25% or more of the body, with or without signs of associated infection or necrosis. Affected pigs must be receiving care in accordance with a defined treatment protocol, supported by documentation of prior intervention.



Score	Description
0	Total scratches on less than 10% of the body with no associated secondary conditions (infection, necrosis)
1	Total scratches on 10-25% of the body with no associated secondary condition (infection, necrosis)
2	Total scratches on more than 25% of the body with no associated secondary condition (infection, necrosis) OR any scratch with associated secondary condition (infection, necrosis)

Scratch Score Scale adapted from Common Swine Industry Audit

Shoulder sores are ulcerations of the skin over the point of the shoulder.

No more than 5% of pigs should show signs of open or newly scabbed shoulder sores.

Healed sores without scabs should not be included in this count. If shoulder sores are observed there must be a treatment plan with proper recordkeeping is required for pigs with shoulder sores.

Tail biting is a behavior occurs when a pig bites or chews on the tail of another pig and negatively affects the health and welfare of the targeted pig. Tail biting can result in bleeding of the tail, infection of untreated wounds, and painful swelling[17].

No more than 5% of the sampled pigs should present with a tail biting score of 2.

This score is characterized by the presence of fresh blood, swelling, infection, or partial tail loss. Where such injuries are observed, there must be evidence of an active tail biting management plan. This plan should outline the identification of affected animals, mitigation strategies to prevent further incidents, and specific treatments administered.

Score	Description
0	No existence of tail biting, healthy intact tails
2	Visible fresh blood on the tail and/ or evidence of swelling and infection and/or part of the tail is missing

Tail Biting Score Scale adapted from Renggaman et al., 2015

A hernia is a condition where a part of an organ is displaced and protrudes through the wall of the body cavity containing it. Common hernias observed in pigs include scrotal and abdominal hernias. No more than 5% of the sampled pigs should present with a hernia. No animals may be observed having hernias that are ulcerated and necrotic, perforated, or touching the ground when standing and impeding walking or the audit will result in an automatic failure. Any pigs identified with hernias must be under observation by appropriate personnel and/or receiving treatment.

A prolapse is a displacement of a part of or an organ of the body from its normal position, usually resulting in it protruding from an orifice, occurring for the rectal lining, vagina, or uterus in pigs.

No more than 1% of sampled pigs should be observed to have prolapses.

No animals may be observed with an untreated prolapse that has become necrotic, and no animals may be observed with a uterine prolapse, or the audit will result in an automatic failure. If prolapses are identified, the animals must be managed under a clear treatment plan with documentation of both past and intended treatment steps.

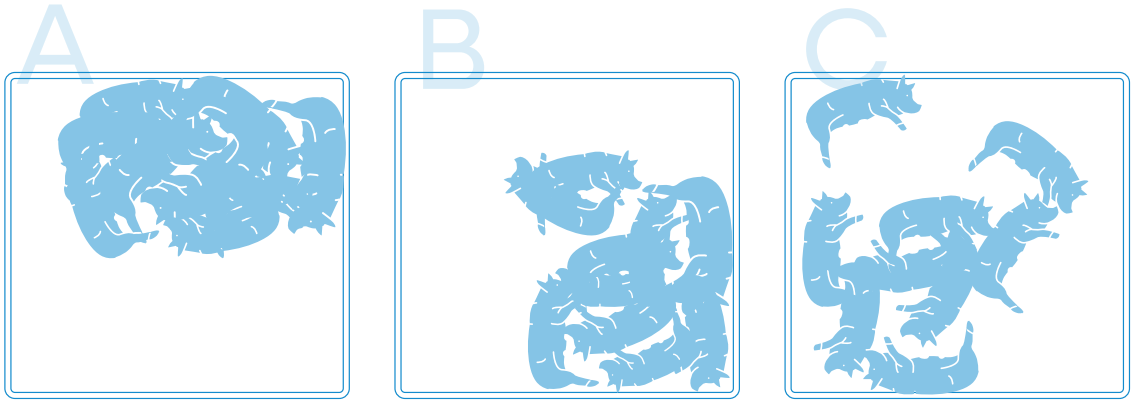
Vulva injuries can be observed by open wounds, bleeding, and infection.

No more than 5% of pigs should exhibit vulva injuries.

As with other health conditions, such injuries must be addressed through a defined and documented treatment protocol.

Pigs should not exhibit thermoregulatory behaviors indicating discomfort due to temperature extremes, indicating that they are too hot or too cold. Thermoregulatory behaviors include but are not limited to huddling (image A), panting, shivering, or uneven distribution (image C) within the pen[6]. If any of these thermoregulatory behaviors are observed by the auditor, they are to record the behavior observed and the temperature of the room they are in at the time. During the audit, the auditor may be able to visually verify that the producer is using methods of temperature mitigation (such as heaters or fans). If observed, the auditor should record the method of temperature mitigation being used by the producer and award full points in the audit tool.

THERMOREGULATORY LAYING POSTURES OF SWINE



Adapted from Shao et al., 1997, in volume 40 of the Transactions of the American Society of Agricultural Engineers

Non-ambulatory pigs that are unable to access food or water or that fail to show improvement must be humanely euthanized. Animals not responding to treatment within 24 hours, or those with no reasonable potential for recovery, must also be euthanized. Any exceptions to these criteria must be based on the recommendation of a licensed veterinarian and supported by thorough documentation.

TRANSPORT GUIDELINES

TRANSPORT AND HANDLING SOPS

An Animal Welfare Officer (AWO) must be formally designated and present on-site, bearing primary responsibility for the implementation of animal welfare policies and for the ongoing monitoring of all operational practices related to swine welfare. This individual serves as a point of accountability and leadership in ensuring that all welfare protocols are consistently upheld.

A written or electronic SOP must be in place to affirm the following transport-related welfare requirements: swine must have continuous access to water up to the point of transport, and they must not be deprived of food for more than 18 cumulative hours (including time spent loading, in transit, and awaiting processing). The total duration of transport for any swine must not exceed 16 hours.

All individuals involved in the handling and transport of swine, including facility employees and external transport personnel, must be adequately trained in swine behavior, low-stress handling techniques, and animal welfare practices. This training must be documented through Certificates of Conformance (COCs), Transport Quality Assurance (TQA) certifications, or comparable verified instruction.

A transport-related SOP must be established to address the protection and sheltering of animals during extreme weather conditions (e.g., heat, cold, snow, or ice). Additionally, a contingency SOP must be in place outlining specific procedures to be followed in the event of an emergency during transport, including accidents, mechanical failure, or road closures. To prevent unnecessary delays, there must also be a documented journey planning SOP, requiring drivers to account for weather, traffic conditions, and other logistical considerations to ensure timely arrivals.

Prior to transport, a formal animal evaluation plan must be followed to assess the fitness of each animal for travel. Animals that are unable to walk unassisted, those that are visibly injured, pigs with a body condition score (BCS) of 1, or pregnant sows expected to give birth within 21 days, must not be transported except under veterinary direction or in emergency cases for medical treatment.

A loading SOP must outline appropriate procedures for minimizing stress and physical risk to animals during loading and unloading. Handlers must avoid creating excessive noise, sudden movements, or exposure to abrupt light changes. Only the minimal amount of force necessary to maintain control may be used. Low-stress handling aids such as flags, boards, rattles, or paddles must be used appropriately[2]. Electric prods must not be routinely carried and may only be used as a last resort when safety is at immediate risk. Loading must be conducted using ramps, bridges, or mechanical equipment that prevents injury and ensures safe movement. All such equipment must be free from hazards such as projections or gaps that may entrap animals, and surfaces must be non-slip[2].

For the transport of smaller pigs or piglets, an SOP must be in place stating that pre-weaning transport is not permitted unless specifically directed and documented by a licensed veterinarian. Manual lifting is only permitted when the animal can be safely lifted by no more than two individuals without causing distress or harm.

A comprehensive cleaning SOP must state that all transport and loading equipment must be thoroughly cleaned and disinfected after each use to mitigate biosecurity risks. In cases where animals are found non-ambulatory during transport and cannot be successfully treated, humane euthanasia upon arrival must be carried out in accordance with American Humane Certified™ guidelines.

Detailed transport records must be maintained for a minimum of one year. These must include the date of each transport, number of animals transported, loading times, departure and arrival times, and any delays encountered. Additionally, all transport-related mortality must be recorded, including causes where known. If mortalities are traceable to a common cause or exceed 2% within any three-month period from a single source, a veterinary investigation must be conducted and corrective measures implemented. The findings must be submitted to the American Humane Certified™ program.

Producers are required to measure and record key welfare indicators during transport at least quarterly, including the incidence of slips, falls, and electric prod use. These metrics must be evaluated against the tolerance levels published in the American Humane Certified™ Swine Welfare Standards (Sections T19–T20), and records must be made available at the time of the audit.

At the time of the audit, loading must be observed for all animals being loaded and all transport trailers that were scheduled for the day of the transport audit.

Prior to the commencement of loading, a visual inspection of each transportation trailer must be conducted by the auditor to verify that the trailer is in good structural condition and has been adequately cleaned and sanitized to prevent biosecurity risks and support animal welfare. Additionally, the auditor must confirm that the trailer is properly aligned with the designated loading or unloading area to facilitate smooth and safe animal movement.

Loading and unloading zones must be equipped with suitable, appropriately sized ramps, bridges, gangways, or mechanical lifting devices. These components must be operated in a manner that minimizes the potential for injury or undue stress to the animals. The flooring of all loading and transport equipment must be constructed with non-slip materials or surfaces to reduce the risk of slips and falls during movement. Furthermore, ramps, bridges, and loading platforms must be fitted with railings or barriers on each side[2]. These must be of adequate strength, height, and length to prevent animals from falling, escaping, or becoming injured during transit.

All transport and loading equipment, including devices used for handling non-ambulatory pigs, must be maintained in good repair and routinely inspected to ensure they are free from hazards such as sharp projections, loose components, or gaps of a size that could trap or injure the animals.

During transport, space allowances must comply with current TQA Guidelines to ensure sufficient room for pigs to maintain balance, lie down, and thermoregulate effectively. In hot weather conditions, additional space must be provided to allow pigs to spread apart, thereby reducing heat stress. For partial loads, the interior of the transport vehicle must be subdivided appropriately to match the group size and to prevent animals from being thrown off balance or becoming injured during transit.

Pig Size		Total Area	
kg.	lbs.	sq. m.	sq. ft.
22.7	50	0.14	1.53
45.4	100	0.22	2.32
68	150	0.27	2.95
90.7	200	0.32	3.48
113.4	250	0.40	4.26
136.1	300	0.44	4.79
158.8	350	0.51	5.48

TQA, National Pork Board

All handling aids used during loading, unloading, or transport, such as boards, paddles, or rattles, must be maintained in good condition, free of sharp edges or defects that could injure the animals.

Transport vehicles used during cold weather must be adjusted to protect pigs from exposure to drafts and the entrance of moisture from rain or snow. In hot weather, several provisions must be implemented to prevent heat stress. Where feasible, animals should be transported during the coolest parts of the day, such as at night or early morning. They must be shielded from direct sunlight, and the transport vehicle must be equipped with a means of effective ventilation to ensure proper airflow. Under no circumstances should transport vehicles remain stationary for prolonged periods while exposed to direct sunlight, as this can significantly increase the risk of heat-related distress or mortality.

Prior to transport, all animals must undergo a visual health assessment to determine their fitness for travel. At the time of the audit, auditors must observe the loading process to ensure compliance with these requirements, paying particular attention to the presence of any animals that meet the exclusion criteria.

It is the responsibility of the loading team, in conjunction with the designated animal welfare officer or attending veterinarian, to ensure that only animals that are fit, healthy, and able to withstand the stress of transport are selected for loading. Animals must be able to walk unassisted and stand on all four limbs. Animals that fall into any of the following categories must not be transported, except in emergency situations or for the purpose of veterinary treatment, and only with the approval of the attending veterinarian:

- ✓ Animals that are unable to walk unassisted or remain standing on all four limbs.
- ✓ Injured animals.
- ✓ Pigs displaying a BCS of 1.
- ✓ Pregnant sows within 21 days of expected farrowing, unless they are being moved over short distances with special considerations in place.

Additionally, piglets must not be transported from the facility prior to weaning (a minimum of 21 days of age), unless an early transfer is required and justified in writing by the attending veterinarian.

For non-ambulatory animals, strict protocols must be followed. These animals may only be removed from the farm if a veterinarian has determined that they are not experiencing uncontrolled pain and that successful medical treatment is a realistic outcome. When transport is authorized, non-ambulatory animals must be moved using slings or containers that fully support the body and help to ensure the animal's comfort. Dragging animals is expressly prohibited and constitutes a serious act of abuse.

During handling and loading, staff must employ only the minimum amount of force necessary to maintain control of the animals. Low-stress handling aids such as flags, boards, rattles, or paddles are to be used appropriately and must be in good condition. Handlers must avoid creating loud noises, sudden movements, or exposure to flashes of light, all of which may startle animals and lead to stress or injury. Pigs must be moved calmly and in small groups to prevent piling and overcrowding.

The use of electric prods is only permitted under specific circumstances. Electric prods may be used only as a last resort when the safety of the animal or the handler is at risk. When used, the prod must be applied correctly, delivering a single, brief shock to a non-sensitive part of the pig's body. Sensitive parts of the body include the eyes, ears, nose, mouth, genitals, udder, and anus. Electric prods must not be routinely carried by staff; instead, they should be stored in an accessible location and brought out only when absolutely necessary.

Additional restrictions regarding electric prod use include: electric prods must not be used on newly born pigs or nursery pigs and for adult pigs (including GDU gilts, sows, boars, and grower/finisher pigs), prods must not be used on more than 10% of the animals being loaded.

At the time of the audit, the auditor must count the number of pigs touched with a prod, regardless of whether a shock was delivered.

Monitoring animal handling outcomes is essential. The incidence of animal falls, defined as a loss of upright position where a part of the animal's body other than the limbs touches the ground, must not exceed 1% for adult pigs.

The incidence of slips, defined as instances where a leg part other than the foot contacts the ground, or where a foot loses contact with the ground, must not exceed 3% for adult pigs.

Auditors should document any evidence of rough handling, inappropriate techniques, or facility or equipment issues, as these may contribute to increased rates of slips and falls. These observations are critical for understanding root causes and implementing corrective actions to improve welfare outcomes.

The American Humane Certified™ program aligns its standards with the *Recommended Animal Handling Guidelines and Audit Guide* published by the Meat Institute to help ensure humane slaughtering and processing practices. As part of maintaining certification, slaughter practices and facilities must undergo an annual audit to verify compliance with MI's humane handling and processing guidelines. This audit may be conducted either by the American Humane Certified™ program or by an approved external auditing organization.

In cases where slaughter practices and facilities are evaluated by an outside audit group, comprehensive documentation must be maintained and made available for review. This documentation must include: the name of the auditor and audit group; the name and location of the slaughter facility; the date the audit was conducted; and the audit results, including any identified non-conformances, the corrective actions taken, and the dates those corrective actions were completed.

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