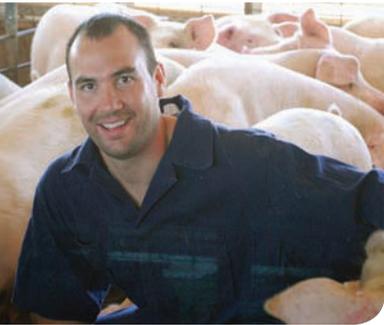


# Protect and Promote Animal Well-Being

Hog farmers recognize their obligation to protect and promote animal well-being by:

- Providing feed, water and an environment that promotes the well-being of our animals
- Providing proper care, handling and transportation for pigs at each stage of life
- Protecting pig health and providing appropriate treatment, including veterinary care when needed
- Using approved practices to euthanize, in a timely manner, those sick or injured pigs that fail to respond to care and treatment



## Raising Healthy Animals in a Respectful, Safe Manner

For hog farmers, ensuring animal well-being is more than taking care of business. Good animal husbandry is part of America's agricultural heritage, and the pork industry is intent on preserving — and building upon — that legacy. There's no question that hog farming looks different today than it did a few generations ago, but many people don't realize that a very large percentage of these changes have advanced animal health, safety and comfort. Today, pigs are raised on farms specially designed to promote the health, comfort and well-being of animals and the safety of the food produced.

## Indoors Versus Outdoors: Which Method Is Better?

Animal housing options have evolved as new research and technology have emerged. Today's pig farms are carefully designed to help producers provide the best possible care for their animals. Pigs can be raised completely outdoors, completely indoors or a combination of the two. The type of animal housing used is dictated by various factors, including the farm's geographic location and climate, the facility's proximity to populated areas and whether the ultimate product will be marketed to a particular consumer niche.

Over the last few decades, there has been a trend toward raising hogs indoors in large barns instead of outdoors. There are many reasons for this transition, nearly all related to animal well-being and food safety. Many people may think that raising pigs indoors inevitably has an overall negative impact on the animals' health and comfort. In fact, by virtually any measure, the opposite is true. Here are a few things to consider:

- Indoor facilities have advanced climate-control features. The pigs are kept at a comfortable temperature (piglets are provided more warmth in their living areas, in accordance with their needs).
- Pigs do not have sweat glands and are susceptible to heat stress, so misters and evaporative coolers are used as needed to support their comfort.
- Feed and water can be automated and very carefully monitored in accordance with each individual pig's needs.
- Buildings are designed and maintained to keep out predators, parasites and vermin, which is vital to prevention of pig injury and disease. In turn, feed and water are less susceptible to contamination.
- Ventilation systems are in place for the health of animals and facility workers. For example, hog barns can be equipped with curtains that can be raised or lowered to let in fresh air and natural light. Other farms use sophisticated mechanical ventilation to ensure good air quality.
- Facilities have strict biosecurity practices in place to ensure that diseases are not accidentally introduced to the animals. Outdoor facilities would be much harder to control in this regard. These security protocols lead to healthier pigs and a safer food supply.

### What Are Pigs Fed?

Today, pigs raised for food are predominantly fed a grain-based, nutritionally balanced diet. The feed is usually based on corn and soybean meal and may include wheat or barley, with vitamins and minerals added to balance dietary requirements for each stage of growth and reproduction. Many farms raise crops and turn part of their yield into food for the pigs (and the manure from the pigs is used for natural fertilizer to complete the sustainable cycle).



CORN



SOYBEANS



BARLEY

*“Safe pork is what we strive for. We don’t want birds or rodents to reach the pigs. We want the pigs to be in a very clean and very safe environment. Our barns help protect the pigs.”*

**Steve DeBruin, farmer, Iowa**

Experts agree that a pig’s environment is important to its health and well-being and that decisions regarding optimal housing systems should be considered on a farm-by-farm basis.

## Education and Certification

### Pork Quality Assurance® Plus (PQA Plus®)

The pork industry has taken proactive steps to support and promote proper, humane animal care. The industry’s flagship education program for farmers and their employees is PQA Plus®. Individuals can become certified in PQA Plus by successfully completing the program’s course, which is administered by a trained, independent advisor (a veterinarian, an Extension specialist or an agriculture educator). As of August 2012, more than 55,000 farmers and farm employees were PQA Plus certified.

To help ensure implementation of the program, on-farm site assessments are a key component of PQA Plus. To date, more than 16,000 farms have been assessed; this represents more than 75 percent of all pigs produced in the United States. The industry has a goal that at least 90 percent of commercial pigs marketed come from sites that have achieved PQA Plus site status by Dec. 31, 2012.

### Distance-Learning Courses

In addition to face-to-face training, distance-learning programs provide farm workers access to a wide array of information to help better care for animals. The distance-learning courses are interactive programs that can be executed in a variety of ways. Topics cover all phases of production. The following lists a few examples of distance-learning courses available (offered both in English and in Spanish):

- Your Role as a Swine Caretaker
- Breeding and Gestation Management
- On-Farm Euthanasia of Swine
- Pork Production Safety System



### New Pig Adventure

Few people have the chance to visit a working hog farm, yet many people want to better understand how their food is produced. To provide an opportunity to see and learn about modern hog farming, the National Pork Board announced in 2011 its support for the Fair Oaks Pig Adventure. This facility will allow consumers to see firsthand the way pigs are being raised in a modern barn. At the site of the existing Fair Oaks Dairy Education Center in northwestern Indiana (located about an hour’s drive from downtown Chicago), plans are under way for a working 2,700-head sow farm that will allow visitors to view all aspects of production from an enclosed walkway above. Plans also call for a separate education center equipped with exhibits and other educational tools. A \$2 million contribution on behalf of America’s pig farmers will be combined with funding from the Indiana Pork association and private funding. The adventure is expected to open in the spring of 2013.

## IN FOCUS

### Sow Stalls

There has been increasing attention on sow housing. To better understand the issue, it is helpful to recognize the reasons individual maternity pens for sows (female pigs that are pregnant or have given birth) were introduced. Individual maternity pens were created to protect sows from other aggressive sows and better provide individual care and nutrition. There are two types of maternity pens commonly used on modern hog farms today.

The first type of pen is used to house pregnant pigs. Like many animals, pigs must establish a hierarchical social order when mixed together. In this social hierarchy, dominant sows can be aggressive and injure or even kill less dominant, or submissive, sows. Submissive sows also may have difficulty getting access to enough food because of the dominant sows. Farmers want all pigs to receive adequate food and water and be free of injury, so maternity pens were introduced as a means to help protect and nurture each pig. They also allow for better monitoring of the health of individual sows while they are pregnant.

The second type of pen is used for *farrowing*. These maternity pens are used to house sows that gave birth to and nurse a litter of piglets. Sows naturally choose a place away from the herd to farrow, but in an open pen environment this natural desire is impeded. Farrowing pens allow the sow to be away from other sows and provide a dry environment for the piglets to be farrowed. The pens also reduce the occurrence of the nursing sow rolling onto, crushing and killing the piglets. Farrowing pens are designed to allow piglets to easily nurse while keeping them safe.

The nation’s leading veterinarians say individual pens are humane but acknowledge there are advantages and disadvantages to any sow housing system. That is why research is ongoing to improve sow housing in ways that both protect pigs and make them as comfortable as possible.



*“PQA is designed to provide measurements and assessments and thus give a basis for more substantial discussion on the ways that farms and the industry as a whole can improve the provision of care. I have been encouraged by the broad uptake of PQA Plus and the broad discussions that are occurring in the industry.”*

Dr. John Deen, University of Minnesota

*“The key to PQA Plus success in influencing on-farm practices is the training of PQA Plus advisors who have swine production or veterinary medical experience. These individuals offer tailor-made recommendations for each production unit evaluated.”*

Dr. James McKean,  
associate director,  
Iowa Pork Industry Center



### Resource Library

Pork producers and farm managers need access to resources to help them train their employees. Through collaboration of national and state organizations, the comprehensive resource library offers a wide array of electronic and printed brochures, videos and links to useful third-party websites that address topics such as animal care, pig disease prevention and pig handling. Some of these materials are available in both English and Spanish.

### Transport Quality Assurance® (TQA<sup>SM</sup>)

Producers recognize that their obligation to animal care does not end when the pig leaves the farm. Because it's vital that proper and humane methods are used for handling and transporting pigs at all stages of life, the National Pork Board launched the Transport Quality Assurance® (TQA<sup>SM</sup>) program. TQA is an education and certification program that trains swine transporters, farmers and handlers about best practices in handling, moving and transporting pigs. Farmers, their employees and transporters wishing to be certified must attend a training seminar and then successfully pass an exam. As of August 2012, there were more than 29,000 handlers certified in the TQA program. The goal for the TQA program is to achieve a 10 percent increase in the number of individuals certified in 2012 over 2011.

### Research Investments Help Improve Animal Health and Well-Being

Farmers have long been proactive in funding research that leads to better care for animals. Over the past 10 years alone, the National Pork Board has invested more than \$1.5 million of farmer funds into swine-housing research and \$3.13 million in general research to improve animal well-being. Funding for research is directed to leading agriculture education institutions in the United States. Some of the research projects recently spearheaded by the National Pork Board include:

- Comparison of management factors affecting aggression in group-housed sows
- Protecting low-ranking sows in group-housing systems
- Determining the proper protocols for bedding and boarding trailers when transporting weaned pigs
- Evaluating nutritional efficiency of feed
- Studies to better understand, prevent and treat swine diseases

*“Our farm recently went through its second PQA Plus site assessment. While we have had quarterly walk-throughs with our consulting veterinarian for about 15 years, these visits have focused mostly on herd health, production and any issues at hand. What I really liked about the site assessment was the thoroughness of the format that was followed.”*

Dale Norton, farmer, Michigan



### Making Progress in the Fight Against PRRS

In every segment of animal agriculture, disease prevention continually poses challenges; new diseases occasionally appear that are not easily understood. These diseases not only threaten the ability of animals to grow, but they also threaten the overall comfort of the animal and, sometimes, the safety of the food supply. For these reasons, the pork industry is continually focused on how to mitigate the introduction of disease into the herd. Farmers have been battling a disease known as porcine reproductive and respiratory syndrome (PRRS). The PRRS virus causes both respiratory and reproductive disease in pigs.

The good news is that the efforts to combat PRRS are paying off. The Pork Checkoff established the PRRS Initiative Research in 2004, and this effort has since funded 123 projects totaling more than \$10 million. The Pork Checkoff has just published a 38-page report, *PRRS Initiative Research, 2004-2011*, which contains key findings and applications for PRRS based on the research funded during this period. These research funds have helped support scientists at more than 25 universities, U.S. Department of Agriculture laboratories and private research facilities in the United States and abroad. One recent example of progress in fighting PRRS is the PRRS Host Genetics Consortium. Member scientists from around the country have discovered a genetic marker in pigs that identifies whether a pig has a reduced susceptibility to PRRS. Scientists involved in the research believe the identification of the marker gene will allow genetics companies to more easily focus on selecting breed stock that is PRRS-resistant. In the future, producers can introduce new "PRRS-resistant" lines into their herds.

### Preharvest Traceability and Swine ID

U.S. hog farmers support nationally standardized premises identification, animal identification and record-keeping as cornerstones for animal health, disease surveillance and rapid and accurate preharvest traceability for animal health. This is important to help monitor and contain an incident in the event of an animal disease or foodborne illness outbreak. Since the late 1980s, hog farmers have had a system for identifying and tracing pigs in interstate commerce from the last farm of ownership to the point at which they enter a harvesting, or processing, facility. This includes following very specific means of officially identifying market hogs, sows and boars, as laid out in the federal Code of Regulations. Farmers and facilities are required to make these records available to animal health officials when necessary.

The Swine ID Plan is one example of pork industry-led efforts to enhance preharvest traceability for animal health purposes. Program standards developed in 2004 for the Swine ID Plan promote the implementation of a nationally standardized animal identification and preharvest traceability system for animal health that is consistent across all states. There are three key components to implementing the Swine ID Plan: premises identification, animal identification and animal tracing. By design, the plan provides animal health officials the ability to rapidly perform a systematic trace-back for disease events that could affect commerce and trade. The National Pork Board has been conducting an educational campaign to promote implementation of the key components of the Swine ID Plan. Today, more than 95 percent of all swine premises are registered.



*"This could be one of the tools used to help eliminate PRRS, but more important, this work may provide the platform for finding similar marker genes responsible for conveying resistance to other economically devastating diseases."*

**Chris Hostetler,**  
director of animal science,  
National Pork Board

*Today, more than 95% of all swine premises are registered.*

### Keeping the Promise

Animal agriculture has changed and evolved over the years, in part because farmers understand that it is in their interest to adopt practices that lead to healthier animals. To further advance animal well-being and farming methods, the National Pork Board plays a key role in bringing together recognized agriculture specialists and researchers to continuously promote a standard of excellence in hog farming. Committees led by farmers, veterinarians and animal well-being experts collaborate on the development of uniform programs and practices that can be shared with farmers throughout the country. These efforts address areas such as employee training, research priorities, certification programs, best practices and standard operating procedures. The National Pork Board then disseminates the latest recommended practices and protocols to farmers to adopt in their individual operations. This coordinated, unified approach has enabled farmers to address strategic health and care issues more quickly and effectively than would otherwise be possible. As a united group, hog farmers will continue to demonstrate their commitment to protect and promote animal well-being and bring best practices to farms across the United States.

### Research Spurs Improvement in Pig Well-Being During Transport

The amount of bedding used in trailers to haul pigs can have a significant impact on animal well-being, according to John McGlone, professor and swine welfare specialist, Texas Tech University. Dr. McGlone was one of the researchers who conducted a 2012 study funded by the Pork Checkoff, which found that more bedding is not always better in cold temperatures and that overuse of bedding in the summer can be detrimental to animal well-being. The study focused on transporting hogs on trailers with various numbers of hay bales in hot, mild and cold temperatures.

Transport losses refer to pigs that die or become nonambulatory during transport to market. To date, the industry has made good progress in reducing the incidence of transport losses. For finishing pigs, it is estimated that more than 99.3 percent of pigs transported to harvesting facilities arrive in good condition. The National Pork Board will continue the efforts to identify areas for improvement in animal transport.

