

Produce Safe Food

Hog farmers recognize their obligation to produce safe food by:

- Using management practices consistent with producing safe food
- Managing the health of the herd to produce safe food
- Managing technology to produce safe food



“It’s undeniable that U.S. consumers enjoy the safest pork supply in the world.”

Marcos Rostagno, DVM, MPVM, Ph.D.,
research animal scientist, USDA-ARS

Food Safety: The Highest Priority

Providing safe, wholesome food is the pork industry’s most important responsibility. Ensuring food safety is a complex undertaking that requires a deep understanding of and appreciation for the role that everyone in the food chain plays. On the farm, many factors can have an impact on food safety, which is why today’s farming operations employ a wide variety of technology and techniques to minimize food safety threats.

Supporting Pork Safety Through Research

In the past five years, the pork industry has invested more than \$1.3 million in research to support issues associated with pork safety. In 2011, the National Pork Board funded four studies at renowned animal science institutions — Iowa State University, Kansas State University and the University of Minnesota — designed to shed light on ways to better understand and improve food safety. Issues being studied range from the epidemiology of foodborne pathogens throughout the pork chain, to genetic diversity as it relates to viruses within specific pig populations, to the development of diagnostic tests. These studies are selected for funding based on priorities established by producer-led committees and assisted by scientific advisors and animal agriculture experts.

Modern Farming Methods Help Reduce Foodborne Illness

Today, the pork industry is more focused on food safety than ever before. Thanks to new technologies and adoption of scientifically approved methods, hog farmers are better equipped to produce consistently safe, nutritious food for consumers all over the world. One of the most important trends that has improved food safety is the shift from raising hogs outdoors to raising them indoors. Here are the key reasons that food safety is enhanced by housing the animals in modern hog buildings:

- The buildings are designed and maintained to keep out predators, parasites and vermin — vital to prevention of pig injury and disease.
- Feed and water are less susceptible to contamination.
- Facilities have strict biosecurity practices to help ensure that diseases are not accidentally introduced to the animals. Outdoor facilities would be much harder to control in this regard. For example, visitors may be required to sign in and out, state when they last visited another farm, wear special boots and coveralls, and even shower before entering and upon exiting. These security protocols lead to healthier pigs and a safer food supply.

“It’s exciting to see producers, along with allied industry and government, work together to set the course for new pork-specific research. We know the Pork Checkoff’s involvement helps spur advances in science, but what’s particularly gratifying is how this investment in research helps make a difference in how farmers produce food in an efficient and socially responsible way.”

Everett Forkner,
farmer, Missouri, and
past president of the
National Pork Board



Coordinated Approach to Food Safety

America’s hog farmers actively engage with the scientific community, governmental agencies and food chain partners in the development of sound programs and policies to advance food safety. The task of ensuring food safety is vast and complicated, so well-coordinated, forward-thinking programs have been developed to advance good production practices and food safety throughout the pork supply chain.

PQA Plus® and Good Production Practices

The industry’s leading certification program, Pork Quality Assurance® Plus (PQA Plus®), was originally established to promote uniform food safety practices on farms throughout the country. Scientists, veterinarians and animal agriculture experts helped craft the program and continue to update it regularly at the request of the National Pork Board. Today, PQA Plus brings the latest knowledge and science on food safety and animal well-being issues into the farm setting. (For more background on the PQA Plus program, see Page 7.)

The 10 Good Production Practices (GPPs) are the foundation of PQA Plus. They serve as guidelines for safe and responsible use of animal health products and for continually and objectively evaluating and improving animal care. The GPPs are based on:

- The HACCP principles — the standard for controlling hazards in foods produced and processed in the United States
- The Food and Drug Administration’s Compliance Policy Guide (CPG) 7125.37 — “Proper Drug Use and Residue Avoidance by Non-veterinarians”
- The Animal Medicinal Drug Use Clarification Act (AMDUCA) of 1994
- Science-based animal care and well-being practices

“We all share the goal of providing safe, wholesome food. It’s our No. 1 responsibility, and it’s vital to maintaining the trust customers and consumers have in us.”

Liz Wagstrom, chief veterinarian, National Pork Producers Council

The Truth About Trichinosis and the Importance of Biosecurity

Many people believe they must cook pork until it’s well-done. The fact is, that is not necessary, according to the U.S. Department of Agriculture (USDA). The notion that pork must be cooked well-done dates back a few generations when a certain pathogen, *Trichinella spiralis* (trichinae), was a problem for the pork industry and for consumers. Today, we know that *Trichinella spiralis* is transmitted to pigs as a result of poor feeding practices and/or exposure to pathogen-infected animals. The widespread adoption of improved feeding practices and high levels of biosecurity and hygiene, under which nearly all pigs are now raised, have virtually eliminated the presence of trichinae in the U.S. pig herd. Biosecurity measures, in particular, have become very sophisticated and effective. Because most pigs raised for food today are housed in barns instead of outdoors, facility workers can carefully manage barn biosecurity to help keep out disease-causing pathogens. Because the pathogen related to trichinosis is virtually eliminated from the U.S. pig herd, the risk of trichinosis from U.S. pork is virtually eliminated, too.

To educate consumers about how best to prepare meat, the U.S. Department of Agriculture’s Food Safety and Inspection Service has stated: “Cooking raw pork, steaks, roasts and chops to 145°F with the addition of a three-minute rest time will result in a product that is both microbiologically safe and at its best quality.” (USDA News Release, May 2011)

145°_F

“A coordinated approach to food safety programs is designed to prevent rather than to detect problems.”

Jose Rojas, farmer, Colorado

Responsible Practices in Action

PQA Plus has both individual worker certification and on-farm site assessment components, ensuring that both training and actual implementation are key components of the program. To become certified, an individual must successfully complete the PQA Plus course, which is administered by a trained, independent advisor (a veterinarian, an Extension specialist or an agriculture educator). As of August 2012,

55,383

producers and farm personnel were PQA Plus certified. Site assessments have been conducted on more than

16,000

farms, which represent 75 percent of all pigs produced in the United States.

Good Production Practices

1. Establish and implement an efficient and effective herd health management plan.
2. Use a veterinarian/client/patient relationship (VCPR) as the basis for medication decision-making.
3. Use antibiotics responsibly.
4. Identify and track all treated animals.
5. Maintain medication and treatment records.
6. Properly store, label and account for all drug products and medicated feeds.
7. Educate all animal caretakers on proper administration techniques, needle-use procedures, observance of withdrawal times and methods to avoid marketing adulterated products for human food.
8. Follow appropriate on-farm feed processing and commercial feed processor procedures.
9. Develop, implement and document an animal caretaker training program.
10. Provide proper care to improve swine well-being.

Consumer Education

An important part of the National Pork Board’s mission is to help educate the consuming public about food safety issues, such as handling, preparation and cooking time. The organization provides information to consumers through a variety of channels, including print and online media. Also, as a member of the Partnership for Food Safety Education, the National Pork Board supports the Fight! BAC (bacteria) program. Fight! BAC combines the resources of the federal government, industry and consumer organizations to conduct broad-based food safety education to arm consumers with the information they need to cook meat products properly and ensure safe handling.

The following are basic good-handling procedures that should always be followed when preparing food. As always, when meat is handled and cooked properly, there is virtually no risk of becoming sick from a foodborne pathogen.

CLEAN

Wash hands and surfaces often.

SEPARATE

Don’t cross-contaminate.

COOK

Cook to proper temperature. Use a meat thermometer.

CHILL

Refrigerate promptly.

Government Oversight of Pork Safety

Many checks and balances are in place throughout the production chain to ensure the integrity and security of the food supply at every step in the process. The U.S. food system has earned a global reputation for the safety of its products, and governmental oversight is part of the reason for this success. Various federal, state and local entities contribute to our nation's food security safety net through regulation or inspection. The following entities have responsibility for various aspects of ensuring food safety:

U.S. Department of Agriculture (USDA)

The U.S. Department of Agriculture's Food Safety Inspection Service (FSIS) has regulated meat and poultry processing for more than a century. The centerpiece of its meat and poultry food-safety regulation is the 1996 Hazard Analysis and Critical Control Point (HACCP) rule. The agency works to enhance public health by protecting consumers from foodborne illness and by ensuring that the nation's meat, poultry and egg products are safe, wholesome and correctly packaged. This systematic preventive approach to food safety identifies physical, chemical and biological hazards in production processes that can cause the finished product to be unsafe, and it designs measurements to reduce these risks to a safe level.



National Animal Identification System (NAIS)

NAIS is a streamlined information system that helps producers and animal health officials respond quickly and effectively to animal disease events in the United States. Its work is carried out through a voluntary state-federal-industry partnership.



Food and Drug Administration (FDA)

Under the Department of Health and Human Services, the FDA is responsible for regulating more than \$1 trillion worth of consumer goods. Areas of regulation that impact the pork industry are related to food safety and veterinary products.



Center for Veterinary Medicine (CVM)

The CVM is a branch of the FDA that regulates food, food additives and drugs that are given to animals, including food animals and pets. Its primary focus is to ensure medications that are used for food animals do not affect the human food supply.

National Antimicrobial Resistance Monitoring System (NARMS)

The FDA conducts monthly retail meat sampling as part of NARMS. The results of that testing consistently indicate that pork has a very low incidence of foodborne pathogens.



Food Animal Residue Avoidance Databank (FARAD)

FARAD is a national, USDA-sponsored, cooperative project, with a primary mission to prevent or mitigate illegal residues of drugs, pesticides and other chemicals in foods of animal origin. This computer-based decision support system is designed to provide livestock producers, Extension specialists and veterinarians with practical information on how to avoid drug, pesticide and other environmental contaminant residue issues.

