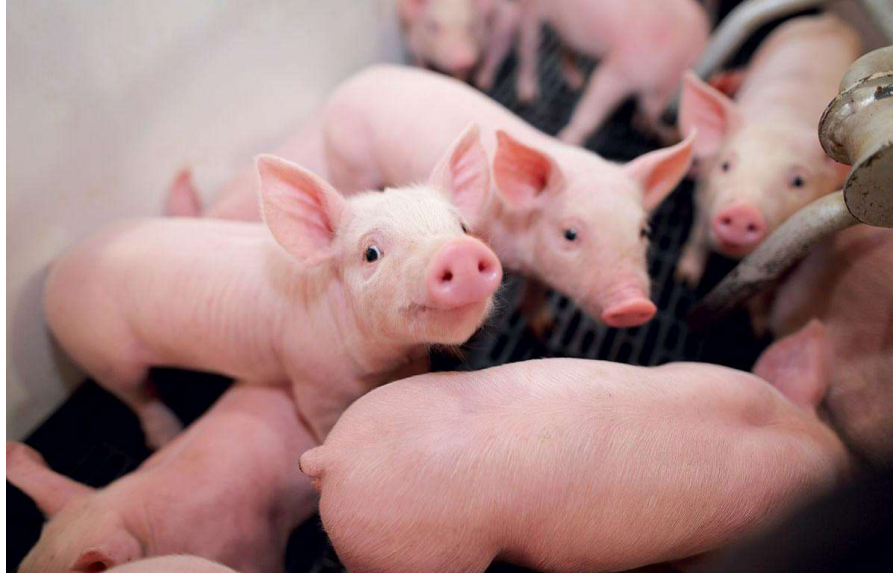


Swine & Pork Industry Educational Resource Guide



PURPOSE:

This guide is intended for use by anyone that is interested in learning about the swine industry. It includes a variation of resources that address all aspects of the swine industry including:

- Animal Health and Well-Being
- Animal Husbandry and Ethics
- Diseases and Biosecurity
- Food and Consumer Safety
- Genetics
- Nutrition
- Packing, Processing, and Meat Science
- Pig Farmer Commitments
- Show Pig Resources
- Sustainability
- Swine Judging
- Virtual Tours
- Virtual Reality Video

HOW TO USE: Each section has various resources listed such as videos, PDF's, slideshows, hands-on activities, printable infographics, etc. Each item has a hyperlink connected to it. Click on the link and you will be directed to that specific item.

QUESTIONS: Contact Wisconsin Pork Association via email wppa@wppa.org or 608-723-7551.

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Quick Links

- Overall Resource (Destination Pork) - <https://www.usporkcenter.org/destination-pork/>
A comprehensive curriculum designed to expose and interest high school students in pork industry jobs and career opportunities.
- Wisconsin Pork Association Industry Links - <https://www.wppa.org/industry-links/>
Great overall resource links to state and national pig production sites.

Animal Health and Well-Being

- Biosecurity at Pig Shows (Video) - <https://www.youtube.com/watch?v=VOgwtRqS59E>
Biosecurity is a critical step to keep your pigs healthy before, during and after a pig show. Following these easy steps can keep your animals healthy and protect pigs across the country from getting sick.
- Broken Needle Protection (Video) - <https://www.youtube.com/watch?v=E5Tvo8wEZT8>
Training video to prevent needle breaking during vaccinating or treatment of pigs.
- Antibiotics (PDF) - [Antibiotics - Pork Checkoff](#)
Antibiotics are critical to treat, control, and prevent disease – in humans and animals. Learn more about their purpose and responsible use.
- Keeping Pigs Healthy (PDF) - <https://www.porkcares.org/our-practices/keeping-pigs-healthy/>
Keeping pigs healthy is important to protecting food safety, public health, and animal well-being. Disease prevention and mitigation requires four practices: preventive care, biosecurity, safe housing, and preventing and preparing for foreign animal disease.
- Protect and Promote Animal Well-Being (PDF) - https://wisagclassroom.org/wp-content/uploads/2013/11/responsibleprotectpromote_pages_18-21.pdf
Hog farmers recognize their obligation to protect and promote animal well-being.

Animal Husbandry and Ethics

- Sow Housing (Video) - <https://www.youtube.com/watch?v=hhhaS0ilgu8>
As pig farmers continue to raise safe and nutritious pork, they ensure their animals are comfortable and well cared for by selecting the appropriate housing for their sows, or mother pigs. Pig farmers are

committed to animal well-being, and they strive to provide the best possible care for their pigs. A big part of this effort lies in providing a safe environment that leads to the highest standard of well-being.

- **Animal Husbandry and Ethics (Video)** - https://www.youtube.com/watch?v=naYovw_qlas
Karla Dorale never thought she would be an Iowa pig farmer, but then she married one. To her surprise, she discovered that she loves taking care of pigs. "I care so deeply about the well-being of my animals because it is the right thing to do." Karla explains the actions she and pig farmers across the country take to provide their pigs with the best care possible.
- **Evolution of Animal Welfare (PDF)** - <https://pubmed.ncbi.nlm.nih.gov/20378875/>
Animal-welfare education is an evolving component of the veterinary curriculum.
- **Ear Notching Lesson (Video)** - <https://www.youtube.com/watch?v=qM95O0mRLCM>
Ear Notching Lesson from University of Minnesota
- **Slaughterhouse Technology (Video)** - https://www.youtube.com/watch?v=uF_jb_7NWxQ
INCREDIBLE HIGH-TECH PIG SLAUGHTERHOUSE-AMAZING MODERN TECHNOLOGY PORK FACTORY PROCESSING-PIG FARM
- **Commercial Sow Farm (Video)** - <https://www.youtube.com/watch?v=yKh5yrD-ABY>
Farm to Fork: Tour of Sow Farm
- **Research Farms (Video)** - <https://www.youtube.com/watch?v=60dJfRnjyY>
Farm to Fork: Tour of Research Farm
- **Pig Farming Videos (PDF)** - <https://www.wppa.org/pig-farming-videos-2/>
Visit WPA website for a variety of videos pertaining to swine production.

Diseases and Biosecurity

- **Animal Diseases - USDA (PDF)**-
<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/swine-disease-information>
USDA Swine Disease Information
- **Agronomag - Common Swine Diseases (PDF)** - <https://agronomag.com/most-common-pig-diseases/>
Pig producers, just like any other animal farmers, known to be successful in their field, must ensure the health of their pig stock. Given that prevention is the best measure to avoid losing valuable animals, it's

important to know which are some of the most common pig diseases, their symptoms and treatment methods.

- **Foreign Animal Disease - Pork Checkoff (PDF) - [Foreign Animal Disease Prevention - Pork Checkoff](#)**
The swine health team at National Pork Board (NPB) uses Pork Checkoff resources to fund swine-specific FAD research. The goal is to help pork producers and the industry prepare to combat FAD transmission through disease prevention, rapid detection and vaccine and biosecurity countermeasures.
- **Biosecurity Practices (Video) - <https://www.youtube.com/watch?v=VIOwydNgAVY>**
This video provides practical steps on how to implement biosecurity to tackle ASF in pig farms, including cleaning and disinfecting pig pens. This video will help guide smallholder farmers to ramp up biosecurity measures to keep their pigs safe and healthy.
- **Demonstration of Biosecurity (Video) - <https://www.youtube.com/watch?v=Qh7X3SibOjw>**
Protection against the introduction of serious, infectious diseases such as foot-and-mouth disease is crucial to prevent outbreaks of disease.
- **Before Entering the Farm (Video) - <https://www.youtube.com/watch?v=ZJNPBXLV00Q>**
When entering a pig farm, it is important that you understand the farm site entry procedures and protocols to best keep the animals healthy.
- **Vet Science Biosecurity - UI (Video) - https://www.youtube.com/watch?v=RDo_54atPrs**
Through live, interactive sessions Dr. Jim Lowe will guide you through his biosecurity workbook providing training on how to assess a site's current biosecurity risk as well as develop a comprehensive biosecurity plan to be implemented at the end of the course.
- **Clean Equipment - Pork Checkoff (Video) - https://www.youtube.com/watch?v=8yAB2gi_ddE**
Watch this episode of Food Comes from Farms to learn how family farmers produce safe food and safe pork by enforcing strict biosecurity measures.
- **Biosecurity (PDF) - [Biosecurity - Pork Checkoff](#)**
One of the best ways to keep animals healthy and protect pig farms across the country is to practice good biosecurity. Biosecurity on pig farms is another way to maintain business continuity and prepare for a foreign animal disease outbreak.

Food and Consumer Safety

- **Producing Safe Food (Video) - https://www.youtube.com/watch?v=mj5_dFeDfyo**

Consumers need confidence that the food pig farmers provide is both safe and nutritious. Third generation farmer Todd Wiley explains this commitment and his dedication to better transparency.

- **Producing Safe Pork (Video)** - <https://www.youtube.com/watch?v=k0SVDQORF4Y>
Everyday Justin Edwards makes countless decisions on his pig farm, and each decision he makes is guided by the commitment to producing safe food. He believes that providing nutritious, safe food is the most important thing that he does on his farm. He promises consumers that the pork coming from his farm meets his own family's high standards.
- **Retail and Restaurant (Video)** - <https://www.youtube.com/watch?v=XHonuzbWoE>
Farm to Fork: Walk through of retail and restaurant.
- **Consumer's Plate (Video)** - <https://www.youtube.com/watch?v=XUfLGurQQfU>
Farm to Fork: Food Ingredients
- **Wisconsin Pork Association Lesson Plans (PDF)** - <https://www.wppa.org/lesson-plans/>
These lesson plans are created for a variety of ages, ranging from middle school to post-secondary education. This is a great resource for culinary arts classes. From organizing recipe steps to safe food preparation, standardizing recipes, and hands-on labs, these materials are student and teacher friendly, and field tested by Wisconsin Family and Consumer Sciences teachers.
- **Wisconsin Pork Association Nutrition (PDF)** - <https://www.wppa.org/nutrition/>
We all want to eat healthy, nutritious foods that make us feel good, but don't want to sacrifice flavor or convenience to do so. With seven common cuts of pork that are 16 percent leaner and have 27 percent less saturated fat than 20 years ago, pork lets you eat healthy and enjoy the delicious flavors you love. Plus, pork is packed with key nutrients—a 3-ounce serving of pork tenderloin is an 'excellent' source of protein, thiamin, vitamin B6, phosphorous, and niacin.
- **Cuts and Cooking Tips (PDF)** - <https://www.wppa.org/home/recipes-cooking-tips/>
Wisconsin Pork Association Cuts and Cooking Tips.
- **Food Safety - USDA (PDF)** - <https://www.usda.gov/media/blog/2021/05/24/be-sure-invite-food-safety-your-next-pig-roast>
Long days, hot temperatures, and family gatherings will soon return to America's backyards. Also returning are traditions, like roasting a whole pig. Roasting a pig requires a lot of planning before, during and after the meal to ensure food safety.

Genetics

- Breeding Overview (PDF) - <https://ge.unl.edu/enviropig/step-3-breeding/breeding-summary-video/>
Watch this video for a quick overview of what we learned from this section and how pig breeders can breed the transgene into a line of pigs.
- Pig Genome Sequencing (Video) - <https://www.youtube.com/watch?v=08NIdnTWKkU>
An international scientific collaboration that includes two CVM researchers is bringing home the bacon when it comes to potential animal and human health advancements, thanks to successfully mapping the genome of the domestic pig.
- History/Science of Pigs (Video) - <https://www.youtube.com/watch?v=OoQe9Wtj1oQ>
Who knew that mud-loving hogs were so high tech? In carefully secured laboratories, scientists use computer programs, genetic histories, and the latest research to provide Ohio hog farmers like Chuck Wildman, with very precise breeding tools.
- Genetic and Environmental Interactions (PDF) - <https://www.showpig.com/EDUCATION/Genetic%20And%20Environmental%20Interactions.pdf>
A major goal of raising show pigs is achieving maximum lean growth with minimal fat deposition.
- Inheritance (PDF) - <https://www.showpig.com/EDUCATION/How%20Inheritance%20Works%20in%20Swine.pdf>
To produce the best animals possible in a livestock operation, we must give them the best environment feasible (nutrition, housing, management) and improve the genetic quality of the animal. However, to do this, we must understand how inheritance works.
- Swine Genetics (PDF) - <https://swinegenetics.com/showpig-program/>
SGI has a rich tradition of housing both purebred and crossbred show pig sires that fit a variety of target audiences. Our primary objective is to house a boar line-up that will help our customers make genetic advancement.

Nutrition

- Feed Mills (Video) - <https://www.youtube.com/watch?v=7drYH7fuor4>
Farm to Fork: Better understand feed mills processes.
- Crop Production (Video) - <https://www.youtube.com/watch?v=bRMOdOQ9SU0>

Farm to Fork: Understand how crop production impacts pig feed.

- Complete Feeds (Video) - <https://www.youtube.com/watch?v=P6RXpD7QKSY>
Choosing pig feed is as important for your pigs as choosing healthy food is for your family. In this video, you will learn what to feed pigs and why to choose a complete feed as a balanced and convenient diet.
- Show Pig Feed (Video) - <https://www.youtube.com/watch?v=IdKOre20kRo>
Wondering if you should switch up your feed program? Dr. Kevin Burgoon, Purina® Animal Nutrition Senior Nutritionist breaks down a few quick tips for fitting and conditioning a show pig's feed program.
- Pig Nutrition (Video) - https://www.youtube.com/watch?v=M6JBoVUO_Ek
Improving efficiency of production has a much bigger impact on profitability than trying to save on feed costs, especially if you are getting inferior feed... "cheap feed" is not cheap if it does not make your pigs grow.
- Ration Balancing (Video) - <https://www.youtube.com/watch?v=MDIY8X084I4>
Learning how to balance rations and overall percentages within feed nutrition is shown in this video.
- Animal Feed - FDA (PDF) - <https://www.fda.gov/animal-veterinary/animal-health-literacy/animal-feed-lesson-plan-see-touch-and-do>
Exploring animal nutrition and the relationships between feed ingredients in livestock diets
- UW Extension Show Pig Nutrition (PDF) - <https://livestock.extension.wisc.edu/articles/show-pig-nutrition/>
A full guide to show pig nutrition from professional research.
- Swine Nutrition-Purina (PDF) - <https://www.purinamills.com/show-feed>
Getting the most out of your show project and maximizing your animal's genetic potential takes hard work and great feed. Purina® High Octane® supplements deliver the nutrition needed to prepare your project for the show ring.
- National Farmer Sow Feed (PDF) - https://www.nationalhogfarmer.com/mag/farming_feed_sows_condition#:~:text=Shows%20required%20approximately%20%C2%BC%20lb.%20of%20food%20daily,in%20desired%20backfat%20gain%20during%20gestation%20%28Table%20%29.
When designing a feeding program for gestating sows, it is important to remember the overall goals for the nutrition program: Prepare sows to be in proper body condition at farrowing; Maximize reproductive performance (farrowing rate, litter size); and meet the daily nutrient requirements at the lowest cost possible (measured as cost/sow/day). Overfeeding gestating sows creates unnecessary expenses.

Packing, Processing, and Meat Science

- Pork Processing (Video) - <https://www.youtube.com/watch?v=qldxKDcH5aI>
Farm to Fork: Full description of the processing pork.
- List of WI Meat Processors (PDF) - <https://www.wppa.org/meat-processors/>
Purchasing food locally supports the local economy. This document offers a list of Wisconsin Meat Processors.
- Meat Science – American Meat Science Association (PDF) - <https://meatscience.org/>
This website provides resources from the AMSA for resources on meat science education.
- Pork Processing - AGMRC (PDF) - <https://www.agmrc.org/commodities-products/livestock/pork/pork-processing>
In this article, you will learn about what contribute to quality pork carcasses.
- Packing Hazards - OSHA (PDF) - <https://www.osha.gov/meatpacking/hazards-solutions>
Safety and Health Guide for the Meatpacking Industry, Worker Safety in the Meat and Poultry Industry, and OSHA Safety and Health Topics Page.

Pig Farming Commitments

- Pig Farmers Commitment (Video) - <https://www.youtube.com/watch?v=8wOICOqN1N4>
As pig farmers, we are making a commitment. Sustainability and continuous improvement are at the core of our commitment to deliver the safest, highest quality pork supply in the world.
- Promoting Pork Around the World (Video) - https://www.youtube.com/watch?v=0_yUc2biplc
The Pork Checkoff and the U.S. Meat Export Federation work together to promote U.S. pork around the world.
- History of the Pork Checkoff (Video) - <https://www.youtube.com/watch?v=R6ONIK3xxfl>
Today's National Pork Board is a catalyst for bringing pork producers together with other stakeholders to build a bright future for the pork industry through research, promotion, and education.
- WE CARE (PDF) - <https://www.wppa.org/pork-cares/>
Over the last 50 years, the way we raise pigs has changed. Advancements in farming methods, technology and economics have significantly transformed farming. Yet one thing remains constant for farmers: our mission to produce safe, nutritious food in a responsible manner.

Show Pig Resources

- Reading Ear Notches (Video) - <https://www.youtube.com/watch?v=gRz0EdASqDw>
Reading ear notches is an important part of the show pig project.
- Building a Proper Pig Pen (Video) - https://www.youtube.com/watch?v=1SUrHgHsdSA&list=PLBC27eIVUscLDpibSRkbn9C17DPYv_Lh&index=5
You want to make sure your show pig is comfortable.
- Showmanship Posture (Video) - https://www.youtube.com/watch?v=HjyoYZKgxEG&list=PLBC27eIVUscLDpibSRkbn9C17DPYv_Lh&index=6
Posture is an important part of showing your pig correctly.
- Showmanship Tips (Video) - <https://www.youtube.com/watch?v=Fm-x8fzsmsE>
Purina® Honor® Show Chow® Professional Consultant, Brock Herren, walks through why showmanship is important.
- How to Drive a Show Pig (Video) - https://www.youtube.com/watch?v=DN0oLfo_Oh8
This is a guide to get you off to the right start on working and driving your show pig. The video covers four main components.
- Maintaining Skin and Hair (Video) - https://www.youtube.com/watch?v=fwP9_UyOIVU
Learn about products to better maintain the skin and hair of show pigs.
- Selecting the Right Pig (PDF) - <https://www.purinamills.com/show-feed/education/detail/how-to-select-a-show-pig-tips-for-choosing-a-champion>
Selecting the right show pig and feeding to maximize genetic potential are keys to showing success. First, choose the pig that matches your target show goals in age and maturity. The ideal show pig should be sound, well designed in body and healthy.

Sustainability

- Manure and Water Quality (Video) - <https://www.youtube.com/watch?v=3RFMT4NzEGM>
Farming has changed a lot in the last few decades. Minnesotan farmer Randy Spronk walks you through the steps he and other pig farmers take to protect water quality for their families and yours.

- Sustainability in the Swine Industry (Video) - <https://www.youtube.com/watch?v=8UdpoiCtnTs>
Today's pig farmers embrace environmental sustainability like never before. Learn how much we have reduced energy, water, and land usage through A Retrospective Assessment of U.S. Pork Production: 1960 to 2015.
- Environmental Sustainability (Video) - <https://www.youtube.com/watch?v=afY0NGfOU78>
For America's pig farmers, focusing on environmentally sustainable practices is a daily part of how they manage their farms.
- Sustainable Farming - We Care (PDF) - <https://www.porkcares.org/our-practices/sustainable-pig-farming/>
America's pig farmers care deeply about the environment, because we rely on the soil, water and air for our livelihoods.

Swine Judging

- Crossbred Barrows (PDF) - <https://surechamp.com/mark-that-card-swine-barrows/>
- Hampshire Barrows (PDF) - <https://surechamp.com/mark-that-card-hampshire-barrows/>
- Duroc Gilts (PDF) - <https://surechamp.com/mark-that-card-duroc-gilts/>
- Crossbred Gilts (PDF) - <https://surechamp.com/mark-that-card-crossbred-gilts/>
- Crossbred Gilts (PDF) - <https://surechamp.com/mark-that-card-breeding-gilts/>
- Bred Sows (PDF) - <https://surechamp.com/mark-that-card-bred-sows/>

Virtual Tours

- Missouri Farm Bureau (Video) - <https://www.youtube.com/watch?v=oigSMvVzBAG>
In this episode of "From the Farm," we visit the Marion County farm of Missouri Farm Bureau Vice President Todd Hays! Todd talks with Jennifer Poindexter, MOFB's Director of Promotion and Education, about his family's fifth-generation crop and livestock farm, focusing primarily on his 600-sow herd and finishing hogs for market.

- KAE in the Classroom (Video) - <https://www.youtube.com/watch?v=Y2heVNL3wC8>
Kylie visits the Kentucky State Fair to learn how Colton shows his pig. Then she visits Shady Rest Farm in LaRue County to learn how pigs are raised in "hog heaven."
- Smithfield Pig Farm Tour (Video) - <https://www.youtube.com/watch?v=zhHREL8n9NE>
Learn more about how we raise pigs at Smithfield Foods in the finishing barn with this tour.
- Ag in the Classroom Pig Farm Tour (Video) - <https://www.youtube.com/watch?v=-7CEm6d8l4A>
Join Manitoba hog farmers, Andrea Elias and Craig Sawatzky, and learn all about how they raise their pigs and work hard to provide healthy meat for our tables. Students will learn about all stages in a pig's growth, their habitat, and the nutrition pork provides us.
- Wisconsin Sow Farm Tour (Video) - <https://youtu.be/AakFgTCAWKk>
Visit the link to walk through a sow farm located directly in Wisconsin.

Virtual Reality Pork Checkoff Videos

- Gestation Barn Tour (Video) - <https://www.youtube.com/watch?v=bXvHc2TNWOk>
Take a tour through a gestation barn, where mama pigs, known as sows, spend their 3 months, 3 weeks, and 3 days long pregnancy.
- Nursery Barn Tour (Video) - <https://www.youtube.com/watch?v=JZch70WdK1Q>
Take a tour through a nursery barn, where piglets spend about five weeks of their lives.
- Farrowing Barn Tour (Video) - <https://www.youtube.com/watch?v=zPnl1-rtHlM>
Take a tour through a farrowing barn, which is where piglets spend the first few weeks of their life.
- Finishing Barn Tour (Video) - <https://www.youtube.com/watch?v=SYJiTs9CGKE>
Take a tour through a finishing barn, where pigs have space to grow to market weight.