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Licenses to Direct-Market Individual Cuts of Meat in Michigan

Selling meat by the individual retail cut or in bundles requires a license in Michigan

Many farms are offering direct sale of their meat to increase their profitability and fill consumer demand for locally produced foods. Budgets of households have been tighter over the past several years, and families often cannot afford to purchase a whole, half or quarter of a beef carcass. Similarly, those selling pork, lamb or goat carcasses may also experience that consumers do not want to purchase a whole carcass worth of meat at one time.

Meat sold in individual pieces, bundles, quarters or halves that are brought back to the farm after slaughter and processing must be USDA inspected. Most often farmers are selling the meat frozen, and will pick up the meat from their local USDA inspected processor already frozen. In order to sell this meat to consumers, a Michigan Department of Agriculture and Rural Development (MDARD) Food Establishment License is required. All of these regulations fall under the Michigan Food Law of 2000. There are several types of licenses under the Food Establishment License, and the exact type depends on how the business operates and what is sold to whom. The license that will most often affect a farmer direct marketing meat stored on his/her farm is a food warehouse license. This type of business is considered a food warehouse because the activity with the meat is storing the product. All processing and packaging take place at the USDA inspected plant. The cost associated with such a license is currently \$186 per year. There will be a site inspection when first applying for the Food Warehouse License and the MDARD inspector will do the following:

Identify that the area the food (in this case frozen meat) is stored is separate and has a separate entrance from living quarters and personal food.

Inspect the overall area for sanitation or other concerns (make sure no unsanitary conditions



exist, no evidence of rodents, etc.)


Speak with the person in charge for the license (make sure they understand the requirements and regulations)

Check temperatures of the food storage area (make sure that refrigerated food is 41°F or less and frozen food is 0°F or less)

Observe for cross contamination (make sure the packages are not being opened; handled in unsanitary manner; or allowed to come in contact with anything that could be hazardous)

Check for hazardous materials stored in the area where the food is stored (i.e. petroleum based products; if the separate area is a detached garage, then no oil, gas, or other potentially hazardous materials can be stored in the garage or contained portion of the building where the food is stored)

More information on licensing requirements is available through this quick guide from MDARD.

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On the cover: Michigan Pork Producers Association board member Brandon Hill stands with his wife Jessica and sons Davis and Quinton.

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Get to Know MPPA Board Member Brandon Hill

By: Emily Schmitt

MPPA PROGRAM
DIRECTOR



Pictured above, MPPA Board Member Brandon Hill visits Disney World with his wife Jessica and sons Davis and Quinton.

Growing up in central Missouri raising purebred duroc hogs, Brandon Hill always knew he wanted a life centered around agriculture, especially livestock. He continues to live that dream today as he works as the Strategic Account Manager with United Animal Health.

Working in the livestock industry ran in the family for Brandon, with a long history of hogs.

“My grandpa was a hog buyer back in the 40s,” he said. “He was the one that got me going in agriculture and animal science. My mom and grandpa really instilled that love for ag in me. I am happy that I was able to have that, and I hope to instill that into my boys.”

Brandon grew up showing pigs across Missouri and the country. He moved with his family to Michigan when his mother, Gretchen, took a position as a professor with Michigan State University (MSU) in 1993. Brandon then attended Black Hawk College for two years and was a member of the Livestock Judging Team. He transferred to MSU to earn a degree in Animal Science.

Brandon continued to stay active in the agricultural industry throughout college, receiving the Michigan Pork Producers Association’s pork scholarship award in 1995. He then attended Purdue University, receiving a master’s degree in swine nutrition.

“I was really interested in nutrition and how nutritionally, you could impact the environment,” Brandon said about his chosen field of study.

Brandon worked for Hamilton Farm Bureau and then for Dykhuis Farms, allowing him to gain more experience in nutrition management and commercial pork operations. Through those positions, he encountered an opportunity with United Animal Health and has been working there for seven years.

“In my current role, I work with a few smaller operations and some of the larger systems in the Eastern corn belt,” he said. “I do nutrition consulting. I try to assist producers by looking at today’s market and predicting tomorrow’s market to adjust nutrition accordingly. I try to help my customers achieve

goals through nutrition and production.”

Some of the biggest changes Brandon has seen since he started working with pork producers has been the price volatility.



“When I first started, things were a lot more stable for corn, soybeans and pork,” he said. “You had swings, but you didn’t have these wild rides. You can take some of that as a producer, but it is tough to deal with the repeated blows of up and down.”

Brandon began serving on the MPPA Board of Directors in 2018 as a ex-officio member, but was elected as a regular board member in 2019.

“I think it is important to stay involved with organizations like MPPA, National Pork Board and National Pork Producers Council,” he said. “It is easy to stay in our own little worlds and focus on what we are doing, but keeping everybody connected and engaged outside of that helps us realize what is going on around us. I’m proud to be able to serve on the board and hope that ideas

that we have will benefit the pork industry.”

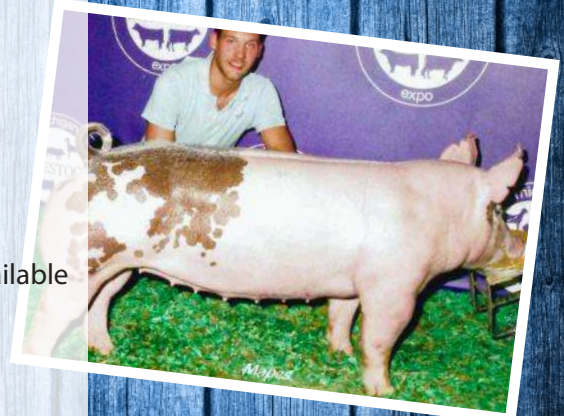
In Brandon’s spare time, he owns a small cow-calf operation in Mason, MI. He also enjoys bird hunting and spending time with his wife, Jessica, and sons, Davis and Quinton. 🐖



Pictured above left, MPPA Board Member Brandon Hill of Mason, MI takes his sons bird hunting, a favorite hobby of theirs. Pictured above right, Brandon helps his son walk a 4-H steer.

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By: Pat Albright
MPPA PRESIDENT

Hello all, I hope this edition of the magazine finds you and your family healthy. The upheaval and chaos created by this “pandemic” has been unprecedented. I hope that your farms have been able to “weather the storm” up to this point. I know that some of those reading this, will be, or have already had to, make some very hard economic decisions. At this point I have not heard of any of our members having to euthanize any animals, but if you have, my heart goes out you. It seems that the biggest back-ups have been, and still are, occurring in the western areas of the corn belt. Let’s all keep those fellow producers in our prayers. On the bright side, during the last couple of weeks, packing capacity has been running at full speed, even above at times. We all know that we will be in a precarious position, as it pertains to packing capacity, for at least several more months. I, along with many of you, think this event has worked to greatly speed up the discussion about how we are going to determine the value of pork as we move into the future. I hope that we can look at the experiences of fellow members of the “barnyard” (chicken, beef) as resources, as we try to put something together to help all the participants in the value chain prosper.

At this point (July 12th, 2020) we are getting ready for the start of some new “Executive orders” (mandates) from the Governor about how we will deal with the Covid-19 issue. One of those mandates will effect the meat processing plants that we have here in Michigan. While most of the requirements are already being implemented in the larger plants, the smaller plants with just a few employee’s, and small facilities, will be required to implement some hard to achieve space and distance requirements. I hope that all of those small plants around our state will be able to survive this latest hurdle. Full disclosure, as most of you know, my family is part owner in a small multi-specie harvest/processing plant. We are currently in our third month of being absolutely overwhelmed with requests to harvest and process livestock. There seems to be no end in sight. While obviously we want to keep all of our employees safe, it sure would be nice to be able to provide input about how these mandates affect your business.

I urge you all to keep up the good work, doing the essential work of providing food. These are tough times, but you do not need to go thru it alone. If you have questions about getting assistance with anything, PLEASE give Mary or Emily a call. Your organization, MPPA, is here to help. 🇺🇸

The Michigan Pork Producers Association to hold Annual Meeting and National Pork Producers Delegate Body election on July 22

The Michigan Pork Producers Association (MPPA) and the National Pork Board will hold the election of pork producer delegate candidates for the 2021 National Pork Producers (Pork Act) Delegate Body during the association's annual meeting on July 22, 2020 at 10:30 a.m. in the GreenStone Farm Credit Services Building, 3515 West Road, East Lansing, MI.

According to MPPA President, Pat Albright, a producer from Coldwater, "The duties of the delegate body include nominating members to serve on the National Pork Board, establishing how much of the Pork Checkoff is returned to state organizations and providing direction on pork promotion, research and consumer and producer education priorities funded by the Pork Checkoff."

A zoom meeting option will also be available if meeting restrictions are still in place or you feel more comfortable calling in. All Michigan pork producers are invited to attend. Any producer, age 18 or older, who is a resident of the state

and has paid all assessments due may be considered as a delegate candidate and/or participate in the election. All eligible producers are encouraged to bring with them, or provide prior to the meeting, a sales receipt proving that hogs were sold in their name and the checkoff deducted. For more information, or a link to the zoom meeting, contact Michigan Pork Producers Association, 3515 West Road, Suite B, East Lansing, MI 48823 telephone 517/853-3782.

The 2021 National Pork Industry Forum will be held March 3-5, at the Omni, Louisville, Kentucky.

MPPA is an East Lansing-based commodity organization that administers producer-funded pork promotion, consumer information, and research programs, and monitors public policy activities affecting Michigan's 2,000 pork producers. Michigan producers raise more than two million hogs annually with a market value exceeding \$330 million dollars. 



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By: Mary Kelpinski

MPPA CHIEF
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“Not based on science”

always say that farmers are the true stewards of the land. Many farmers are working land that has been in their family for generations and they intend to pass that land down to the next generation. Each generation relies on science to improve the technologies and practices that they use every day to make the farm more sustainable for the future. It can be a constant balancing act to incorporate new science without jeopardizing the ability of farmers to stay in business.

Every five years the state reviews the National Pollution Discharge Elimination System (NPDES) general permit that establishes rules for the state’s large livestock operations or Concentrated Animal Feeding Operations (CAFOs). The most recent general permit was released on April 1 by the Michigan Department of Environment, Great Lakes and Energy (DEGLE) after receiving comments from many individuals, agricultural commodity groups and environmental organizations on the draft permit released last fall.

Unfortunately, the permit still includes language that is not based on science and will make it difficult for many farmers to remain economically sustainable.

Recently Michigan Pork Producers Association in conjunction with a broad section of the animal agriculture industry in Michigan and in coordination with over 160 livestock farms worked through the law firm of Clark Hill, in filing an initial first step in legal action against the DEGLE challenging aspects of the CAFO General Permit. In addition to the farms that have signed on as plaintiffs, Michigan Farm Bureau, Michigan Milk Producers Association, Michigan Allied Poultry, Dairy Farmers of America, Foremost Farms, Select Milk and Michigan Pork Producers Association are all willing to be plaintiffs. The coalition believes the permit goes far beyond the requirements set forth by

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NPDES standards and is an attempt by the DEGLE to overregulate the Michigan livestock industry. Additionally, the permit impacts all farms that receive manifested manure and causes concern by livestock operators about the additional costs and regulatory compliance of animal nutrients versus commercial fertilizer.

Participating in this administrative process was not taken lightly. The MPPA Board of Directors sought input from manure management providers and others to fully understand the permit changes. After discussing the final permit, the board decided to join the coalition in this process. The MPPA Board is made up of a cross-section of the pork industry and, while not all of the members fall under the requirements in the permit, they all felt the permit would set precedent and have impact on all farms regardless of size.

This filing is not a court lawsuit, it is a petition for a review of the permit by an Administrative Law Judge. The filing alleges the permit conditions exceed the department's regulatory authority; are unlawful under the U.S. and Michigan Constitution; and contradict state and federal law regulating large livestock farms. The coalition may also file a lawsuit in the Michigan Court of Claims challenging the components of the permit.







The components of the permit that are being challenged include:

- A virtual ban on wintertime land application of manure: for both permitted farms and non-permitted farms receiving manure from the permitted farms.
- The arbitrary restriction on the amount of phosphorus in the soil to which manure can be applied.
- The mandated installation of permanent, 35-foot vegetated buffer strips around every surface water, tile-line intake and ditch located on any land to which permitted farm manure nutrients are applied, on top of the existing 100-foot prohibitions from applying manure nutrients from those sites. This mandate severely limits the land that can be farmed by crop farmers and denies permitted farms the ability to apply manure nutrients in an environmentally and agriculturally beneficial manner.

- The permit enforces additional restrictions, some of which are unspecified, based on a farms' location within a Total Maximum Daily Load watershed.

As a member of the MPPA, the association is standing up to represent you and your ability to raise livestock. If you want to add your name to the list of farmers supporting this fight, please let me know. You can contribute financially or just add your name to the list of supporters. The more farmers involved the stronger united front we can show.

With all the challenges our industry has been facing recently, an overreaching CAFO permit should not be one of them. Please reach out to me and let me know your level of commitment on this effort. 🐷

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Online Farm Stress Training is Free and Open to the Public

Online course will better equip farmers, their families and the agricultural community with tools and resources to help in stressful times.

What is farm stress and how can you help? With the current uncertainties the farming community is facing, it's likely you or a fellow farmer could experience effects of stress. You or someone you know may be struggling with stress, anxiety, depression, burnout, indecision or thoughts of suicide. Would you know what to say or do if you were personally experiencing or confronted with those situations?

Recognizing the high levels of stress affecting America's farmers and ranchers, Michigan State University Extension has partnered with others from the USDA's Cooperative Extension System, Farm Credit, American Farm Bureau Federation and National Farmers Union to create a free online course that is now available and open to the public.

About the course

Rural Resilience: Farm Stress Training is a free online course that brings together the knowledge of agricultural conditions and evidence-based approaches in behavioral health to help people recognize the signs of stress and better equip farmers and the agricultural community with tools and resources to help in time

of need. This course has been designed to provide an opportunity to interactively learn about farm stress and how to help others manage stress through an online platform that consists of three units: Managing Stress, Communicating with Distressed Farmers, and Suicide Awareness. The engaging content is self-paced and offers a number of voice-over slide presentations, videos and downloadable resources.

By completing the course, you can improve your knowledge and skills to know best approaches in helping farmers and ranchers find their own solutions through communication strategies shared. Additionally, the information will help you recognize and provide assistance to someone who is showing signs of suicidal thoughts. National hotlines, mental health support options and ideas for community-based support are provided.

If you have questions about MSU Extension's farm stress management resources and programs, or if you would like to know more about this training online, please contact Extension educator Eric Karbowski at karbows8@msu.edu or 989-317-4079. To register and access the course,

visit https://opencoursesstore.d2l.com/product?catalog=msu_urmfs_2020.

PLEASE NOTE: The information presented in this course is for informational purposes only and should not be construed as professional medical or public health advice, or other advice for any particular issue or subject. If you have any concerns about a particular mental health condition, please seek help from licensed providers.

Opportunities to connect

Michigan State University Extension's many resources and information on farm stress can be found at the Managing Farm Stress website, www.canr.msu.edu/managing_farm_stress/. There you will find descriptions of programs such as Communicating with Farmers Under Stress and Weathering the Storm, as well as other articles, projects and resources. Learning self-awareness, signs and symptoms of stress, mental illness and suicide can better enable the farming community to support each other during trialing times.

This article was published by Michigan State University Extension. 

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Michigan State University Extension releases COVID-19 Hazard Assessment and Mitigation Program (CHAMP) e-tool to support the agriculture industry

Addressing the COVID-19 pandemic and mitigating the spread of the novel coronavirus, the virus that causes the infectious disease COVID-19, in the agriculture industry requires business owners and operators to be agile and forward thinking. An essential industry well versed in biosecurity and food safety, few agriculture operations were prepared to address a pandemic that was a threat to their workforce.

Understanding this, Michigan State University Extension formed a team focused on supporting the industry in this effort through



the development of e-tools and programming that facilitate activity by business owners and operators to both prevent transmission amongst their workforce and address rapidly changing regulatory requirements aimed at protecting the health of workers and the public. This e-tool is designed for use by farming operations and associated businesses of all size and types.

The MSU Extension COVID-19 Hazard Assessment and Mitigation Program (CHAMP) was developed as a flexible, easy to use e-tool to assist the Michigan agriculture community in assessing risk for spread of COVID-19 in their operations. Using CHAMP will help the agriculture community identify, develop, and implement appropriate and meaningful exposure control strategies tailored to protect workers and the public (customers) consistent with business operations, and to comply with Michigan requirements for essential and

open businesses under the current executive orders.

Information and guidance presented has been adapted and compiled from federal, state, and local sources including the Centers for Disease Control and Prevention (CDC), the Occupational Safety and Health Administration (OSHA), the Michigan Department of Health and Human Services (MDHHS), the Michigan Occupational Safety and Health Administration (MIOSHA), and the Michigan Department of Agriculture and Rural Development (MDARD).

For assistance with developing COVID-19 preparedness response plans using the MSU Extension CHAMP, please contact Melissa Millerick-May at melissa.may@hc.msu.edu or Beth Ferry at franzeli@msu.edu. .

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Information for an Industry on the Move

July 2020

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This newsletter is edited by:

Casey Zangaro, MSU Extension Swine Pork Team, zangaroc@msu.edu
& Emily Schmitt MPPA, Program Director

Annual Summary Report on Antimicrobials Sold for Use in Food-Producing Animals: Key Findings for Swine Producers

Dave Thompson and Beth Ferry, Michigan State University Extension Educators

Based on U.S. Food and Drug Administration's most recent Annual Summary Report on Antimicrobials Sold or Distributed for Use in Food-Producing Animals¹, sales of medically important antibiotics for use in livestock increased moderately in 2018 when compared to 2017. This report dissects the Summary Report, highlighting information for swine production, and provides some context around potential underlying causes for the uptick recorded.

Minimizing animal and human health risks associated with antibiotic resistance is central to policies implemented during the past few years by U.S. pork producers. Specific recommendations for managing antibiotic use are included in the current certification program adopted by commercial pork producers (PQA PLUS²) and reinforced by National Pork Producers Council in its Pork Industry Guide to Responsible Antibiotic Use³. To help ensure responsible antibiotic use, these guidelines stress the importance of pork producers working closely with veterinarians to develop disease prevention strategies best matched to their farm, sound record keeping/transparency, use of alternatives to antibiotics when possible, and other measures designed to ensure sustainability of U.S. pork production.

Annual Summary Report for 2018 for Antimicrobials Sold for Use in Food Producing Animals

In the case of antibiotics used for veterinary purposes, the FDA tracks each product's sales and distribution records to estimate the amount of each class of antibiotic used in animals. Manufacturers and distributors are

Species	2016 ^a Sales (kg*)	2017 Sales (kg*)	2018 Sales (kg*)	% Change (2016-2018)	% Change (2018 vs 2017)
Cattle	3,605,543	2,333,839	2,521,157	-30	+8
Swine	3,133,262	2,022,932	2,374,348	-24	+17
Chicken	508,800	268,047	221,774	-56	-17
Turkey	756,620	670,831	671,108	-11	+1
Total	8,004,226	5,295,648	5,788,387	-28	+9

*Amounts reported in kg of active drug ingredient. Amounts include antibiotics given orally and by injection. However, injected drugs only accounted for about 6% of total sold and amounts were steady over this 3 year reporting period, averaging about 354,000 kg/year.

Table 1. Summary for all medically important antibiotics sold for use in U.S. livestock production, by species, for the period 2016-2018.

required to report by December 31 each year accurate data on their company's sales from the previous year (i.e., the FDA Summary Report issued on Dec 10, 2019 covers antibiotics sold during all of 2018). By law, results reported for each drug class include intended animal species, route of administration (i.e., in-feed, in-water, topical, injectable), and whether the product was meant for U.S. or exported use. For historical context, past results are also included in the FDA Summary Report for these indicators for every year the data have been collected by FDA, beginning in 2009. The rationale for using sales/distribution data instead of direct use data is based on: a) accurate data for sales and distribution are readily available from records maintained by antibiotic manufacturers, while accurate use data are very difficult to track, and b) historical data suggest that most antibiotics purchased for animals is actually used by farmers to prevent or treat the conditions it is approved for.

The FDA Summary Report for 2018 shows that, when data are combined for all medically important antibiotic sales for all species of livestock, the amount (reported as total weight, not number of doses) increased by 9 percent over 2017; this translates to a net increase of 492,739 kg of drug (Table 1). Looking at data for sales and distribution of medically important antibiotics for use in pigs only, the year-over-year increase was about 17 percent (increased by 351,416 kg).

Closer look at 2018 antibiotic sales data for pigs

Most of the increase in sales of medically important antibiotics used for pork production in 2018 came from sale of tetracyclines, especially chlortetracycline and oxytetracycline. This is not surprising, given that tetracyclines have accounted for about 80 percent of the total U.S. market for feed grade antibiotics used in pigs during the past several years (Table 2). These compounds possess a broad spectrum of activity that includes Gram+ and Gram- bacteria, and are frequently used to treat scours caused by E.coli and respiratory diseases including atrophic rhinitis, pneumonic pasteurellosis and Mycoplasma infections. They are also easy to administer in safe doses and relatively inexpensive (e.g., less than 20 cents/dose for a 30-pound pig).

Sales of aminoglycoside and sulfa-containing antibiotics for use in swine also increased by greater than 40 percent in 2018, while lincosamides declined by 19 percent. However, their net impact on total antibiotic sales for swine was small because amounts of these three classes combined was less than 6 percent that of the tetracyclines (Table 2).

In the FDA Summary Report, sales of medically important antibiotics sold as injectables (e.g., includes some macrolides, aminoglycosides, cephalosporins, quinolones) are not broken down by species, but combined for all species. Sales (number of kg sold)

Antibiotic Class	2016* Sales (kg)	2017 Sales (kg)	218 Sales (kg)	% Change (2016-2018)	% Change (2018 vs 2017)
Tetracyclines	2,520,680	1,579,145	1,902,950	-25	+21
Macrolides	337,295	189,503	192,175	-43	+1
Lincosamides	118,916	128,642	104,527	-12	-19
Aminoglycosides	65,850	63,602	90,779	+38	+43
Sulfas	40,215	31,024	45,581	+13	+47

*2016 – Last year before VFD guidelines fully implemented.

Table 2. Summary of top 5 medically important antibiotics sold for use in U.S. swine production (only) for the period 2016-2018

in 2018 declined by about 1 percent from 2017. The combined amount of injectable antibiotics sold for use in livestock in 2018 was about 6 percent that of the combined sales of products administered orally; that pattern has been consistent since 2009 when tracking of these data began.

Sales of non-medically important antimicrobials, which includes ionophores and a few very small sales volume products not used in human medicine, saw U.S. sales for use in pigs of 414,170 kg in 2018; an increase of 5 percent over 2017 levels. Ionophores are sold mainly for use in fed cattle and poultry, which together accounted for 86 percent of their total sales in 2018.

Possible reasons for the 2018 uptick in antibiotic sales for use in swine production

At this point, we are not aware of published reports describing possible reasons why medically-important antibiotic sales for use in U.S. agriculture increased during 2018. However, possible explanations include increased U.S. herd size, increased average slaughter weight, increased incidence of disease, less labor or less experienced labor, and other market dynamics; each of these may have contributed a portion of the gains.

Slaughter hog number, average weight of hogs at slaughter and weight of pork produced are key endpoints tracked carefully by USDA, and each of these indicators increased between 2017 and 2018. Looking

at commercial packer dressed weights, for example, pork production increased by 3 percent (from 25,437 to 26,177 million pounds). It is reasonable to believe that this increase in production probably accounted for part of the increase in sales of medically important antibiotics.

Another possible explanation for why sales and delivery of certain classes of medically important antibiotics increased is that these antibiotics were purchased in order to prevent or treat disease conditions that may have seen small increases in 2017 and 2018. Indeed, based on a 2018 national survey initiated by MSU Extension (Veterinary Feed Directive-1 Year Later⁴), 31 percent of swine producers who responded reported an increase in swine sickness following implementation of VFD guidelines, and 18 percent said they would like to learn more about non-antibiotic options for sick animals (follow-up action most frequently requested in the survey). In this survey, similar results were reported for cattle, which also showed an increase in antibiotic sales in 2018.

A third possible explanation for the increased sales of tetracyclines in 2018 may be related to farm labor shortages, which have been widely reported⁵. Antibiotic delivered in-feed or water requires less labor than that required for individual animal administration by injection.

It's also possible that part of the sales increase

reported for 2018, relative to 2017, was a simple reflection of market dynamics whereby suppliers, veterinarians and producers purchased larger amounts of certain drugs in late 2016 anticipating possible impacts of VFD implementation on veterinary pharmaceutical distribution chains. Also, producers who had an excellent year in 2018 may have accelerated purchases late in the year, anticipating future use in 2019.

Non-Antibiotic Options for Disease Prevention and Control

Most pork producers advocate further reduction in use of medically-important antibiotics when effective alternative measures to prevent disease are available. Other options for ensuring herd health, which include improved husbandry and biosecurity measures and disease surveillance, increased use of vaccines, and use of selected probiotics and other nutritionals (when solid supporting evidence exists). It may also be useful to consider non-medically important antibiotics (e.g., ionophores, such as narasin) and use of individual animal (usually injectable) antibiotics, when necessary. Advice on how to implement these and other measures to help reduce reliance on feed grade antibiotics in swine production has been the subject of several recent publications⁶. Because pig health issues can vary markedly year-by-year and are often regional or even farm specific, your veterinarian or nutritionist are the best sources of ideas for strategies to reduce the use of medically-important antibiotics in your herd.

U.S. pork producers remain committed to responsible use of antibiotics

While it is useful to pay attention to year-over-year antibiotic sales data, it is also important to recognize that results from one year don't necessarily indicate a new trend; numerous factors influence when and how antibiotics are used to combat disease in pigs and other livestock. In spite of the uptick, FDA data suggest overall use in 2018 of medically important antibiotics in pigs

and other livestock was still the second lowest, for the year, since 2009 when this metric for antibiotic sales to livestock producers was first reported. Importantly, 97 percent of medically important antibiotic sales for use in pigs in 2018 came with a veterinarian's prescription and/or under a VFD. These findings demonstrate that, in spite of the modest increase reported in 2018, overall use of antibiotics for swine production, when normalized against pounds of pork produced, remains well below historical averages, and suggest U.S. pork producers remain committed and on the right track in their antibiotic stewardship efforts.

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Lessons of Seasonal Manure Application Research

Erica Rogers, Michigan State University Extension Educator, Dale Rozeboom Michigan State University Extension Specialist, Gerald May, Retired Michigan State University Extension Educator and Mike Staton, Michigan State University Extension Senior Educator

Introduction

Late August and early September is an ideal time to apply swine manure. Wheat stubble fields are idle and available, soils are dryer and less prone to compaction, and labor is available prior to the fall harvest rush. Much of the nitrogen (N) available in swine manure is in the ammonium (NH_4) form. When NH_4 is applied to the warm soils of late summer it is quickly converted to NO_3 and may leach out of the root zone when the soils become saturated (see side box). Many farmers strike a compromise, preferring to get the manure applied when conditions allow and accepting the inevitable loss of N.

Nitrapyrin, a nitrification inhibitor, slows the bacterial conversion of NH_4 to NO_3 for extended periods of time. In a 2016/17 field demonstration (Thelen, 2018), swine manure, applied in August, was treated with a

Nitrogen Leaching Basics¹:

- Plants equally absorb ammonium (NH_4), nitrite (NO_2) and nitrate (NO_3) N.
- The positive charged NH_4 binds to negatively charged soil particles. Therefore NH_4 doesn't move downward in the soils.
- Nitrification is the bacterial conversion of NH_4 to NO_3 . In warm, moist, aerated soils, bacteria quickly convert NH_4 to NO_3 , a negatively charged ion.
- The negatively charged NO_3 no longer binds to soil particles and will move through the soil profile with water when the soils become saturated.
- Nitrification slows when soils are below 50° F.

¹Edited from Fernandez, 2018

nitrification inhibitor (NI). The subsequent year's corn yield increased when compared to August applied swine manure without NI. While the results of this field demonstration were encouraging, there were questions associated with the results that suggested additional research was needed. We have conducted a second field demonstration to confirm or refute what had been observed previously. This study was conducted in collaboration with a swine farm in central Michigan.

In this field demonstration, manure was applied in August and October of 2018, and in the spring of 2019 prior to planting, with the goal of meeting the farmer's desired 215 lbs. of N per acre within each treatment. The August and October applications were both untreated and treated with the nitrification inhibitor Instinct®. Treatment strips were laid out and application rate set using the custom applicator's auto steer technology and application rate monitor. Application rate was then verified mathematically using gallons applied ÷ area covered = gallons/acre. Representative manure samples were collected during the August and October applications and then used to determine actual N application rate. Unfortunately, no one from the team was present during the spring application and a manure sample was not collected. As the swine farm's production practices, including diets and growth rate, had not been changed from fall to spring, an average of the August and October samples was used to determine the spring N application rate. Yield data was collected using the combine's yield monitor and crop harvest moisture was determined using the farm's commercial moisture meter.

Materials and Methods:

The demonstration consisted of the following six manure treatments, designed with three randomized replications of each treatment.

- No N (no fertilizer or manure)
- August + NI (Aug^{+NI})

Table 1: Results 2019 PSNT¹ soil analysis, stalk nitrate analysis, yield and partial factor productivity (PFP²)

Treatment	Total N applied	PSNT 2019 ³	Stalk NO ₃ 2019 ³	Yield 2019 ³	PFP 2019 ³
Aug ^{UT}	217	3.00 ^c	16.67 ^d	151.33 ^c	39.12 ^c
Aug ^{+NI}	217	5.00 ^c	276.67 ^{cd}	180.33 ^{bc}	46.54 ^{bc}
Oct ^{UT}	212	14.67 ^{bc}	860.67 ^{bc}	215.33 ^a	53.40 ^{ab}
Oct ^{+NI}	212	19.67 ^{ab}	1,272.67 ^{ab}	199.33 ^{ab}	49.32 ^{ab}
Spring ^{UT}	215	30.67 ^a	1,832.67 ^a	217.67 ^a	55.14 ^a
No N	0	3.00 ^c	5.00 ^d	55.00 ^d	--

¹PSNT, Pre-sidedress nitrate test, an in-season soil nitrate test that can be used to determine if additional fertilizer N is needed for corn (Ketterings et.al, 2012)

²PFP = pound of yield per pound of nutrient applied

³Data within each column with different superscripts are significantly different, $P \leq 0.05$

- August untreated (Aug^{UT})
- October + NI (Oct^{+NI})
- October untreated (Oct^{UT})
- Spring untreated (Spring^{UT})

Other than the No N treatment, manure was the only source of crop nutrients across all treatments.

Soil samples were collected on June 21, 2019 to determine pre-sidedress nitrogen levels (PSNT). Stalk samples were collected on October 23, 2019 for end of season stalk nitrate analysis. Yield data was collected from all treatments on November 24, 2019.

All soil and stalk nitrate samples were analyzed at the Michigan State University Soil and Plant Nutrient Laboratory (SPNL).

Statistical Analysis

All data were analyzed using a randomized complete block design with a mixed model ANOVA and Fisher's least significant different mean separation at the 10 percent significance level.

Results and Discussion:

The results of the late summer, fall, and spring manure applications, with and without NI, can be found in table 1 above.

There was no significant difference within the PSNT levels between the No N treatment and both

August treatments, leading one to conclude that most of the manure N from the August applications was not present at the 16" sample depth. Both October PSNT concentrations were significantly greater than the August PSNT levels, but less than the Spring^{UT} treatment. Of interest, the Oct^{UT} was both numerically and significantly less than the Spring^{UT} treatment, while Oct^{+NI} PSNT concentration was only numerically less than the Spring^{UT} PSNT, indicating a positive effect from the NI.

The end of season stalk nitrate levels (Stalk NO₃ in Table 1) were also interesting. In a summary of research, and university recommendations, Silva (2011) provided the following ranges for interpreting end of season stalk nitrate levels:

- Low: NO₃ levels less than 700 ppm indicate available N throughout the growing season may have negatively impacted yield.
- Optimal: NO₃ levels between 700 to 2,000 ppm indicate adequate N was available throughout the growing season to maximize yield.
- Excess: NO₃ levels greater than 2000 ppm indicate available N was in excess of the amount required to maximize yield.

These ranges are also the standards recognized on the MSU Plant and Soils Nutrient Lab's end of season stalk nitrate analysis report received by growers who submit stalks for NO₃ testing. In our study nitrate levels

for the No N and both August treatments were within the Low category, indicating the Aug applied manure N was not available for crop uptake the following summer. While not significant, the Aug^{+NI} NO₃ levels were numerically greater than both Aug^{UT} and No N. Stalk nitrate concentrations for both October treatments fell within Optimal category, but only the Oct^{+NI} was significantly greater than the Aug+NI. While numerically less, there was no significant difference between the Oct^{+NI} and Spring^{UT} NO₃ concentrations. As with the PSNT tests, the Stalk NO₃ concentrations suggest a positive effect from the NI.

While comparing yields it is important to note that an observable problem occurred within the Oct^{+NI} treatment. While collecting samples in October, 2019, one visibly inferior row was noted within the area that would later be harvested for yield comparison within the three Oct^{+NI} replications. The source of this problem was unknown, but the inferior row was consistent across all three replications of the treatment. It is possible that this issue affected the yield differences within this treatment.

As expected, the No N was the least yielding treatment (55 bu/acre). The extremely low yield for this treatment suggests there was very little residual N from previous crops interfering with the results of the other treatments. A time of year effect was noted between the summer and fall applications with the fall applications producing a greater yield than summer. The Aug^{+NI} yield (180 bu/acre) was shown to be numerically greater than the Aug^{UT} (151 bu/acre). There were no statistical differences in the yields for the Oct^{UT} (215 bu/acre), Oct^{+NI} (199 bu/acre), and Spring^{UT} (217 bu/acre) treatments, with only the Oct^{+NI} yield being numerically less than the other two.

Significant differences were noted for the PFP. The PFP represents the pound of yield per pound of nutrient applied. According to Snyder and Bruulsema (2007) the acceptable PFP range is 40-80 pounds of yield per pound of nutrient and is closely correlated with the yield. The Spring^{UT} and both October treatments made more efficient use of the applied N, while the Aug^{UT} was outside the acceptable PFP range. All other treatments were within the acceptable PFP range.

Conclusions:

This research confirms that fall and spring manure applications are superior to summer applications. Additionally, it appears that the NI improves nitrogen utilization in summer applied swine manure, but does not significantly impact fall applied manure. More research is needed with more treatment replications to confirm the above findings and make further recommendations.

Funding for this demonstration was provided by: Michigan Soybean Promotion Committee and Michigan Pork Producers Association, Cooperating farms were D&K Farms, Damien Miller and Washburn Farms, Brian Washburn. A special thank you to Michigan State University Extension Swine Educator, Casey Zangaro, for all her help gathering samples and staking research plots.

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Preparing for a Foreign Animal Disease: MSU-Extension Planning a Survey of Branch County Pig Owners

MSU-Extension is teaming up with Michigan Pork Producers Association on a survey and follow up information designed to help Michigan pig owners prepare for an outbreak caused by African Swine Fever virus or other Foreign Animal Diseases.

Dave Thompson, Michigan State University Extension Educator

Though much attention has been paid recently to the global pandemic caused by COVID-19, pork producers know that the threat of a different virus, which causes African Swine Fever (ASF), has not gone away (see <https://www.porkbusiness.com/webinars/dont-take-your-eyes-african-swine-fever> for a recent update). Pork producers also know that when a deadly virus outbreak attacking pigs occurs, identifying the origin or location of the attack early and isolating affected animals is critical to managing the outbreak and limiting its spread and damage. MSU-Extension is teaming up with Michigan Pork Producers Association on a program designed to help Michigan pig owners prepare and protect their animals from an outbreak caused by ASF (or another Foreign Animal Disease such as Classical Swine Fever). This program, which is free and for which participation is completely voluntary, will include a brief electronic survey that will be followed-up (at participant's request only) by an e-mail or phone call providing helpful information about what pig owners will need to do if an outbreak occurs. It will be conducted in Branch County, Michigan, beginning in July. Branch County was selected for this survey because of its large and diverse community of pig owners that includes large and medium size producers, hobby farmers and show pig owners.

African Swine Fever does not infect people, but it is extremely lethal when it infects pigs. An ASF outbreak in Branch County (or anywhere) could have devastating effects on swine farmers and the local economy. These effects would be most damaging if pig owners are not prepared to identify the disease and stop it from spreading quickly and efficiently, once a potential

outbreak on their farm or another farm in the area is confirmed. Pig owners can improve their chances of stopping this disease quickly by taking steps now to ensure that they can recognize key clinical signs of the disease, join an emergency contact list of pig owners in the area, and ensure that farms can be quickly located by veterinary health teams if a local disease outbreak is detected or suspected.

What participation in the survey will look like? Full participation will consist of 2 easy steps, each with about 6 questions.

Step 1 - Participants will be asked to complete an on-line survey (using the Qualtrics survey platform) that requires less than 3 minutes to complete, and is designed to determine:

- # pigs you typically have on the farm
- if you work with a veterinarian
- if you are willing to be contacted by MSU-Extension to learn more about how to prepare for a potential outbreak

Step 2 - Based on results from the Qualtrics survey, Branch County residents who keep at least 1 pig and are willing to participate further (using e-mail or phone, whichever they prefer) will be contacted during the months of August and September. During that contact, which will require 5-10 minutes to complete, they will be asked 6 questions, and will have the option of declining any they prefer not to answer:

- Legal owner of pigs and emergency contact information

- Location (address) of farm or home where pig(s) are located

- PIN (Premise ID Number if you have one; can we help you obtain one if you don't?)

- Veterinarian (Name if you have one; can we help you find one if you don't?)

- Do you have a farm biosecurity and enhanced biosecurity plan for your farm? (Can we send you information that would help you develop a plan; we can also provide individual help with that)

- Do you know the clinical signs of African Swine Fever? (Can we send you information that provides useful guidance on what clinical signs to look for in your pigs?)

Why is this specific information needed? If an outbreak occurs anywhere in the U.S. pig herd, all pig movement to/from all US farms will STOP until veterinary health professionals are able to determine what other farms in the area, if any, the disease may have already spread to. At that point, having emergency contact information, precise location of your pig barn, current PIN, and enhanced biosecurity plan (approved by a veterinarian) will be needed to ensure timely testing of other potentially infected herds, possible quarantining of pigs, and resumption of pig movement. Additional information describing this process can be found at <https://www.pork.org/secure-pork-supply/>

If your farm is located in Branch County, or if you keep one or more pigs (e.g., show pig or pet pig) at your Branch County residence, please consider participating in this survey, which will be sent by MSU-Extension using one of several swine list serves, to help ensure Branch County is prepared for a Foreign Animal Disease outbreak. If you don't have access to e-mail, but would like to participate in the survey, MSU-Extension will mail a paper copy to the address you provide one of the

MSU-Extension representatives listed below.

If the survey and follow-up program are successful, we will have a contact list of most pig owners for use in the event of a FAD outbreak in Branch County. Pig owners will be better informed of the clinical signs of Africa Swine Fever and will have a PIN and a biosecurity plan in place, both of which are critical to stopping the spread of disease. We anticipate that lessons learned from it will be applied in other places where swine production plays an important role in the region's economy.

If you reside in Branch County and have any questions about this survey, please contact participating MSU-Extension/staff:

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In addition to the Branch County survey, in the next few months, the Michigan Department of Agriculture and Rural Development (MDARD) along with Michigan State University Extension (MSUE) and in partnership with Michigan Pork Producers Association (MPPA) will be contacting pork producers and farmers raising pigs across the state with a broader survey. The information generated from this survey will be used to enter Michigan swine farm data into MDARD databases to respond to disease outbreaks. This survey information will further define the farming operation under the PIN. It is critical to continuity of business and to minimize disruption to farm operations in foreign animal disease situations. Under Michigan law all data is private and not shared. 🐷

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All comments and suggestions should be directed to the:

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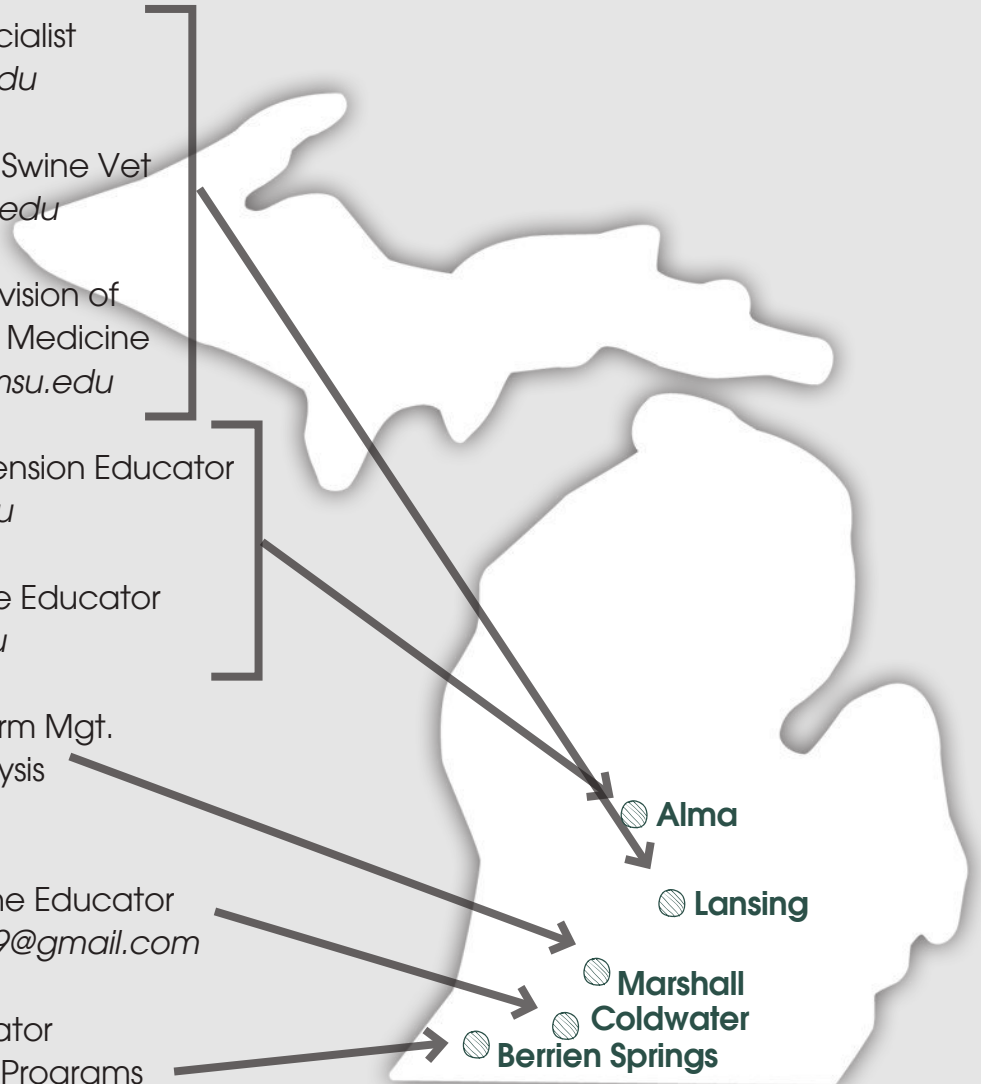
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Capital Update

All activities reported under this heading are financed by non-checkoff funds.

NPPC APPLAUDS USDA FOR FIRST SIGNIFICANT FMD VACCINE BANK PURCHASE

The establishment of a robust Foot-and-Mouth Disease (FMD) vaccine bank—a top, long-term priority for the National Pork Producers Council (NPPC)—came closer to reality as the United States Department of Agriculture (USDA) announced its first significant vaccine purchase. NPPC was instrumental in advocating for establishment of the FMD vaccine bank as part of the 2018 Farm Bill.

Currently, the USDA, which has prescribed vaccination for dealing with an FMD outbreak, does not have access to enough vaccine should an outbreak occur. FMD is an infectious viral disease that affects cloven-hooved animals, including cattle, pigs and sheep; it is not a food safety or human health threat. The disease is endemic in many parts of the world and would have widespread, long-term fallout for livestock and crop agriculture, including the immediate loss of export markets.

“The announcement is momentous, representing years of NPPC advocacy to ensure U.S. agriculture is protected should we have an FMD outbreak,” said NPPC President Howard “AV” Roth, a hog farmer from Wauzeka, Wisconsin. “While U.S. pork producers and other farmers face significant challenges and uncertainty due to the COVID-19 pandemic, a solution to FMD preparedness is in our grasp. We thank USDA and especially Under Secretary for Marketing and Regulatory Programs Greg Ibach for proceeding with such an important effort and look forward to continuing to work with the agency to ensure the FMD vaccine bank is adequately stocked.”

The 2018 Farm Bill provided \$150 million in mandatory

funding over the next five years for the FMD vaccine bank, the National Animal Health Laboratory Network and the National Animal Disease Preparedness Program. According to Iowa State University research, an FMD outbreak would result in \$128 billion in losses for the beef and pork sectors, \$44 billion and \$25 billion, respectively, to the corn and soybean farmers, and job losses of more than 1.5 million across U.S. agriculture over 10 years.

SENATOR VOWS NEXT COVID AID PACKAGE WILL HELP HOG FARMERS IN CRISIS

NPPC’s top priority is a new COVID congressional relief package that includes much-needed financial assistance to U.S. pork producers in crisis.

U.S. Sen. Chuck Grassley (R-Iowa) plans to push for the next coronavirus aid package to include the RELIEF for Producers Act of 2020, which would provide hog farmers with a critical lifeline to address the COVID-19 crisis, he told reporters. Grassley, along with Sens. Jim Inhofe (R-Okla.), Richard Burr (R-N.C.), Joni Ernst (R-Iowa) and Thom Tillis (R-N.C.), introduced the bill recently, which would: 1) compensate hog and poultry producers who are forced to euthanize or donate animals that can’t be processed into the food supply due to COVID-related packing plant capacity reductions; 2) increase funding for animal health surveillance and laboratories, which have appropriately assisted and shared resources with their public health partners; and 3) revise the Commodity Credit Corporation charter so a pandemic-driven national emergency qualifies for funding. NPPC strongly supports the legislation. “In a nutshell, this helps hog farmers and they really need help,” said NPPC Vice President & Counsel, Global Government

Affairs Nick Giordano. “This is an unprecedented emergency in hog farming, so it’s really important that Congress pass legislation to help hog farmers and that the president sign it,” he added. In related news, NPPC and 20 other agriculture groups sent a letter to Congressional leadership, urging for the next relief package to address the unprecedented emergency in U.S. agriculture.

USMCA TAKES EFFECT

On Wednesday, July 1, the U.S.-Mexico-Canada (USMCA) trade agreement went into effect. USMCA allows the U.S. pork industry to maintain zero-duty market access to two of our largest export markets. Exports help sustain a highly innovative, efficient and competitive U.S. pork production system, and they are especially critical today, providing economic benefits throughout the country. In 2019, Canada and Mexico took in more than 30 percent of the pork that was exported from the United States. U.S. pork exports to Canada and Mexico support more than 26,900 American jobs. In January, President Trump signed the trade agreement into law. Mexico ratified the agreement last year and Canada followed suit in March 2020.

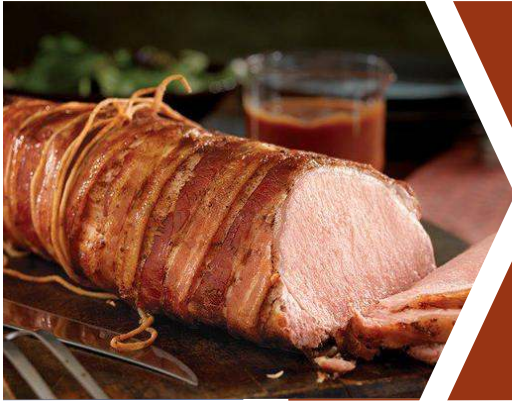
NPPC LEADS COALITION WARNING CONGRESS OF AG INSPECTION FUNDING SHORTFALL

A coalition of more than 150 agriculture, trade and related groups led by NPPC sent a letter recently to Congress warning of a major funding shortfall that could severely weaken agricultural inspections at our borders. The letter urged lawmakers to protect our nation’s agriculture by appropriating funding to address what could be a \$630 million COVID-19-related

shortfall through fiscal year 2021. In the letter, the coalition highlighted a funding shortfall for Agricultural Quarantine Inspection (AQI), which plays a critical role in protecting U.S. agriculture from plant and animal pests and diseases. The U.S. Department of Agriculture’s Animal and Plant Health Inspection Service collects the AQI user fees that pay for U.S. Customs and Border Protection agriculture inspections. Due to the recent economic downturn and travel restrictions as a result of COVID-19, there has been a significant reduction in the collection of these user fees. Preventing Africa swine fever and other foreign animal diseases from entering the country has been one of NPPC’s top priorities.

USDA REPORT FLAGS CONCERN WITH WORKER SAFETY DATA IN NEW SWINE INSPECTION SYSTEM

Recently USDA’s Inspector General issued a report on the U.S. Department of Agriculture Food Safety Inspection Service’s (FSIS) New Swine Inspection System (NSIS), which went into effect in October 2019. The report concluded that FSIS didn’t fully disclose sources for its analysis on how the rule would affect worker safety. NSIS is a voluntary program that is designed to increase efficiency and effectiveness of the federal inspection process and to provide more flexibility for adopting new food-safety technologies. In its response, FSIS stated that the worker safety analysis was not used as a basis for the NSIS rulemaking, and the agency feels the inspector general has placed distorted emphasis on minor omissions in the NSIS proposal text, including a website citation and a typo in a table. The response also reinforced the responsibility that Occupational Safety and Health Administration (OSHA), not FSIS, holds for regulating employee safety.



Pork Checkoff

Reports on checkoff-funded promotion, research and consumer information programs.

PORK BOARD DEVELOPS CONTENT TO HELP PARENTS NOW FILLING THE ROLE OF TEACHER

Parents nationwide have access to new ways to keep children learning and engaged during the coronavirus crisis, thanks to free materials developed in conjunction with the Pork Checkoff. With hundreds of thousands of adults and young people working and learning from home during the global pandemic, parents are looking for ways to keep their students occupied and informed.

“The coronavirus pandemic has presented significant challenges for many families,” said Angie Krieger, vice president of domestic marketing for the Pork Checkoff. “Parents are not only working from home, they’re also being asked to fill the role of teacher. It can be hard for parents to fill this additional role, but America’s pig farmers are ready to help. We have a wealth of fun and educational resources parents can use to teach their children about food, nutrition, farming and the environment.”

Working with the award-winning curriculum specialists at Young Minds Inspired (YMI), the Pork Checkoff created a series of fun, educational activities that:

- Support healthy eating habits based on USDA MyPlate guidelines
- Build understanding of the nutritional profile of pork
- Explain how pork is an important protein source in global cuisines, and provide recipes that help families build cooking skills together
- Share the importance of sustainability in food choices and the environmental footprint of

modern pig farming

“These resources come at a very relevant time when parents and teachers are looking for new ways to engage students,” said Dr. Dominic Kinsley, managing partner and editor-in-chief at Young Minds Inspired. “All of our programs are reviewed by a blue-ribbon panel of active teachers, so parents can be assured that these materials are age-appropriate and consistent with content their children are normally exposed to in the classroom.”

The Pork Checkoff has worked with YMI since 2008 to develop and approve standards-based content for classroom use. Just as new materials were about to be shared with classroom teachers around the U.S. this spring, the coronavirus pandemic altered those plans. With minor adjustments, the content was modified to fit the needs of parents now looking for educational materials.

The content may be especially relevant to families, as retail pork sales have risen dramatically since mid-March. From mid-March to mid-April, retail sales of pork has increased 49%.

“Now that more people than ever have pork in their refrigerators and freezers, families can use these lesson plans to better understand where their food comes from, how it benefits their health and learn more about the sustainability of their food choices,” said Krieger. “The additional time I’ve had with my four daughters to have these discussions as we cook together has been enlightening for all of us.”

The lesson plans and activity information can be found at <http://ymiclassroom.com/lesson-plans/pork-family/>

ABOUT YMI

Young Minds Inspired is the nation's leading provider of free educational outreach programs for learners of all ages.

Started in 1978, the YMI team, which is comprised of former educators, has created more than 2,000 programs for schools, daycare centers, youth programs, sports programs, summer camps, public libraries, community centers, senior centers, and religious institutions.

All YMI programs are free of charge to members of the YMI Educator Network, which includes more than 2 million teachers at every public, private, and parochial school in the United States as well as schools in Canada.

NATIONAL PORK BOARD PLACES BEHLKE IN KEY NUTRITION AND DIETETICS ROLE

The National Pork Board is pleased to announce Kara Behlke, of St. Louis, Missouri, has joined the team as director of nutrition and dietetics.

Behlke comes to the Pork Board from Schnuck Markets, a 112-store supermarket chain operating in five Midwestern states, where she was the director of health and wellness strategy. In this role, she was responsible for creating an enterprise-wide health and well-being strategy in support of the company's mission for improving the quality of food in customers' baskets. She has held a variety of positions related to both brand marketing and nutrition in the retail food and commodity spaces, having worked for Schnucks, Hy-Vee and the New York Beef Industry Council.

"We're incredibly pleased to have Kara's leadership and expertise at the Pork Board," said Angie Krieger, vice president of domestic marketing. "Not only is she

already making an impact on the nutrition strategy we launched this year, but her experience working with retail dietitians is going to be invaluable to our efforts to build pork's presence in retail meat cases across the country."

"As customers pay more attention to what they eat and how that impacts how they feel, I'm honored and delighted to be joining the Pork Board as they increase their focus on wellness to help promote healthier choices," Behlke said. "There are strong connections between how we live related to how we feel. Pork and U.S. pork producers play a powerful role in building a healthier future in the global marketplace."

Originally from Benkelman, Nebraska, Behlke holds a BS degree in dietetics from the University of Nebraska Lincoln and completed her dietetic internship at Yale Medical Center. She is a member of the Academy of Nutrition and Dietetics and a previous member of the Retail Dietitian Business Alliance Advisory Board and CEOs Against Cancer. Behlke plans to relocate to the Des Moines, Iowa, area.

SIGN UP FOR PORK CHECKOFF'S EMERGENCY NEWS TEXTING SYSTEM

Text PORKCRISIS to 97296 to opt in for the Pork Checkoff's emergency news texting system.

When a pork industry-wide emergency is declared, Pork Crisis Alert will text instructions to farmers alerting them on how to access information and other critical resources online or by calling the Pork Checkoff Service Center at (800) 456-7675.

The service is free of charge to all participants, however, message and data rates may apply, depending on the individual's personal or business cellular phone plan.

New ASF Cases Hit Domestic Herds in Central and Eastern Europe

While new cases of African swine fever (ASF) continue to be reported in wild boar in many European countries, it's more notable that new ASF cases have recently emerged in domestic herds on the continent. Such reports have been reported to the World Organization for Animal Health (OIE) in the past few weeks by several nations, including Latvia, Poland, Russia, Serbia and Slovakia.

For Latvia and Slovakia, July marks the first time in 2020 when new ASF cases in domestic herds were reported in the European Commission Animal Disease Notification System (ADNS, see map). Meanwhile, Romania remains Europe's hardest hit country registering another 17 ASF outbreaks in domestic pigs with a whopping 338 cases this year. All told, the ADNS' total of domestic ASF cases in participating European

countries stands at 386 outbreaks in 2020 (Russia is not in this count).

As a major pork producer, Poland continues to be challenged with ASF being detected in domestic herds. This month, a new ASF outbreak was reported by the Polish veterinary office in the northeast part of the country. The infection caused a loss of 122 pigs through mortality and culling. This brings Poland's total for ASF outbreaks in domestic pigs this year to six, involving about 34,000 animals.

Russia's ministry of agriculture confirmed four new ASF outbreaks in domestic pigs in early July. According to the official report to the OIE, one of the affected premises was a farm in Novgorod oblast northwestern Russia. Previous ASF cases have been reported in both Novgorod and in Nizhny Novgorod in west-central Russia. 🐷

USDA Announces Initial Purchase of FMD Vaccine

USDA's Animal and Plant Health Inspection Service (APHIS) recently announced the initial purchase of vaccine for the National Animal Vaccine and Veterinary Countermeasures Bank (NAVVCB). APHIS will invest \$27.1 million in foot-and-mouth disease (FMD) vaccine, which the agency would use in the event of an outbreak to protect animals and help stop the spread of disease.

"While we are confident we can keep foot-and-mouth disease out of the country, as we have since 1929, having access to vaccine is an important insurance policy," said Marketing and Regulatory Programs Under Secretary Greg Ibach. "Vaccines could be an important tool in the event of an incursion of the disease in the U.S, but their use will depend on the circumstances of

the incursion and require careful coordination with the affected animal industries."

USDA has awarded pharmaceutical company Boehringer Ingelheim a contract to help supply the vaccine bank. The contract calls for the company to create and maintain a strategic reserve of frozen vaccine antigen concentrate that the company could quickly formulate into a vaccine for FMD in the event of an outbreak in the country.

According to Iowa State University research, an FMD outbreak would result in \$128 billion in losses for the beef and pork sectors, \$44 billion and \$25 billion, respectively, to the corn and soybean farmers, and job losses of more than 1.5 million across U.S. agriculture over 10 years. 🐷

2020 Michigan Pork Producers Association Membership Application

Name: _____

Company: _____

Address: _____

City: _____

State: _____ Zipcode: _____

Phone: _____

Cell: _____

Email: _____



Please check one:

- \$40.00 Regular Member: Individuals or firm with over \$30,000.00 gross annual sales from hogs.
- \$100.00 Gold Regular Member: Individuals or firm with over \$30,000.00 gross annual sales from hogs.
- \$40.00 Associate Member: Person or companies associated with the pork industry.
- \$100.00 Gold Associate Member: Person or companies associated with the pork industry.
- \$5.00 Student Member: Individuals under 21 years of age. Student members do not have voting privileges.
- \$250.00 Gold Industry Member Contributor: A Gold Industry Contributor provides additional support for MPPA programs requiring the use of unrestricted (non-checkoff) funds.

Payment Options:

Credit Card: Card Number: _____

Expiration Date: _____ Code: _____

Name on Card: _____ Billing Zipcode: _____

Check: Please make checks payable to MPPA and mail to 3515 West Road, Suite B, East Lansing, MI 48823

As a result of changes made by the 1993 Tax Act, 25% of membership dues are not deductible for federal income tax purposes.

Collins named MDARD Swine and Emergency Management Program Manager

In March 2020, Dr. Cheryl Collins was named as the Swine and Emergency Management Program Manager at the Michigan Department of Agriculture and Rural Development (MDARD).

Prior to accepting this new assignment, Dr. Collins earned her DVM at Michigan State University in 1993. She spent 17 years in private equine practice, first as an associate in another practice and then as the owner of Horse Health Care, PC. Later, she worked for three years as a Field Veterinary Medical Officer for

the USDA in Ohio. Dr. Collins joined MDARD in 2013; and throughout her time in the department, she managed a variety of other programs (such as Dealers and Livestock Markets, Farmed Cervids, and Reportable Diseases) and served as the Field Staff Coordinator. Also, Dr. Collins is trained as a Foreign Animal Disease Diagnostician.

In her current role, Dr. Collins will be actively engaged with swine stakeholders and partners to develop the Secure Pork Supply plan and prepare for foreign animal diseases. 🐷



Ag Leaders: USMCA is a positive step for Michigan agriculture, enforcement will be key

The U.S.-Mexico-Canada Trade Agreement (USMCA) officially took effect July 1, and the Agricultural Leaders of Michigan (ALM) emphasized the positive benefits of the agreement for Michigan agriculture. The leaders applauded administration efforts to negotiate USMCA, as well as bipartisan leadership from Michigan's congressional delegation to ratify the agreement.

"Our North American neighbors are long-standing, dependable customers for Michigan agricultural products, and USMCA is critical to maintain these markets for farmers and agribusinesses," said Chuck

Lippstreu, president of the Michigan Agri-Business Association. "As most segments of American agriculture continue navigating a deeply uncertain time, the negotiation and approval of USMCA is a bright spot for many in the industry."

Michigan exports approximately \$900 million worth of agricultural products to Canada and \$174 million to Mexico annually. In addition to maintaining these markets, USMCA builds on the previous North American Free Trade Agreement, enhancing access for U.S. dairy and poultry products into Canada, eliminating Canada's unfair Class 7 milk pricing policy and establishing strong collaboration on

biotechnology.

"Mexico is the leading export destination for U.S. pork products, and Canada is also a top pork buyer, so USMCA is a win for our Michigan pig farmers," said Mary Kelpinski, CEO of the Michigan Pork Producers Association. "As this agreement takes effect, we applaud all those who worked hard to negotiate the agreement and we appreciate the bipartisan leadership shown by Michigan's Congressional delegation in approving USMCA."

Final approval of USMCA was supported by both of Michigan's U.S. Senators and the majority of Michigan's U.S. House delegation.



Looking for Resources about Modern Pig Farming?

Are you as a pig farmer, educator, industry member or individual looking for more information about modern pig farming and the ethical principles farmers follow?

We CareSM is a proactive, multifaceted initiative to promote responsible practices in all areas of farming and is a commitment to continuously evaluate and improve our methods.

For more than five decades, we've been committed to sustainability and continuous improvement in pig farming. The We Care commitment was launched in 2008 as a way to promote responsibility across every aspect of pork production. Developed by pig farmers and operated by the National Pork Board, the National Pork Producers Council and the state organizations representing pig farmers, We Care serves as a promise to continuously evaluate and improve production methods.

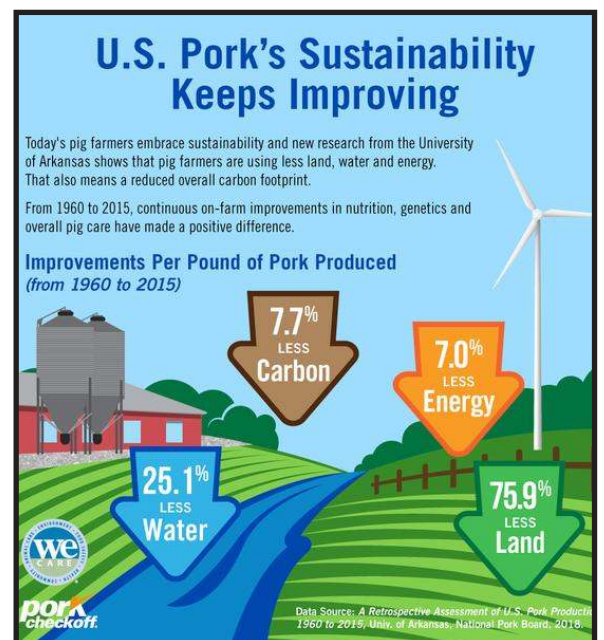
The We Care commitment is comprised of six ethical principles that allow everyone who comes into contact with pigs to create advancements that positively impact animals, farms, people, communities, food and the environment.

The Pork Cares website offers downloadable resources and information such as the infographic shown below at right. Check out porkcares.org for more information! 🐷



Calendar of Events

July:	22	MPPA Board Meeting Greenstone Farm Credit Services East Lansing, MI
Sept.:	9	MPPA Board Meeting
Dec.:	16	MPPA Board Meeting



MI Pork PAC

Helping elect friends of the Michigan pork industry.

The Michigan Pork PAC is the bi-partisan political action arm of the Michigan Pork Producers Association. The MI Pork PAC enables producers to pool their resources together and become directly involved in the election process.

A strong political action committee compliments our advocacy efforts at the state Capitol. By contributing to the MI Pork PAC, you are helping to elect legislators who support your industry. By working with our elected lawmakers, we can be assured that we will have maximum impact in shaping policy issues that impact you. A strong PAC assures us that pork producers and candidates who support us will be at the table when decisions impacting your industry are being made.

Please keep in mind that contributions may be accepted from individuals, partnerships, LLC's, and Sole Proprietors. However, NO CORPORATE CONTRIBUTIONS CAN BE ACCEPTED.

Contributions to the PAC are not deductible as charitable contributions for Federal income tax purposes.

MI Pork PAC Contribution

Name: _____

I would like to contribute:

\$250 \$150 \$100 \$50 Other \$ _____

Payment Options

Credit Card:

Number: _____

Exp. Date: _____ Code: _____

Name and zip code on Card: _____

Address: _____

Check:

Please make checks payable to: **MI Pork PAC**

Mail to: Michigan Pork Producers Association,
3515 West Road, Suite B,
East Lansing, MI 48823

Working for you...

**by urging legislators to enact
responsible legislation
and regulation.**



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Spicy Korean Pork Skewers

INGREDIENTS

- 2 pounds boneless country style pork ribs (cut into 1-inch cubes)
- 1/2 cup garlic chili sauce
- 1/4 cup soy sauce
- 2 inches fresh ginger root (skins removed and chopped, or substitute 2 teaspoons of ground ginger)
- 4 tablespoons sake (filtered, or dry sherry, optional)
- 2 tablespoons sesame oil
- 3 tablespoons brown sugar



INSTRUCTIONS:

In a large bowl combine the chili garlic sauce, soy sauce, ginger, sake, sesame oil and brown sugar and whisk to form a marinade. Add the cubed pork to the marinade and let sit for 20 minutes.

Heat an indoor grill pan or outdoor grill to medium-high heat.

Thread the marinated cubes of pork on skewers, about 4 to 5 pieces per skewer. Transfer the skewers to the grill and cook, uncovered, turning to brown evenly every 2 to 3 minutes until tender, about 10 minutes. Serve immediately.

*You can find chili garlic sauce and sesame oil in the ethnic or Asian section of most major supermarkets.