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PCV2d: porcine circovirus type 2d; PCVAD: porcine circovirus associated disease

Reference: 1. Fano E, Piñeyro PE, Schwartz KJ, Tousignant SJP. Exploring the efficacy of a PCV2d-based vaccine under current severe PCVAD conditions. AASV. 2022;144–145.

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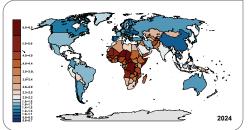
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Labour shortages create dragnet for agri-food

Janet Krayden

Editor's note: Janet Krayden is CEO, Crystal Clear Communications. She can be contacted at 'janet@mushrooms.ca.'

anadian agriculture and agri-food consistently punch above their weight. Agriculture and agrifood contribute \$111 billion per year - more than \$30 million per day - to the Canadian economy, or over six per cent of our GDP. However, there are still more than 16,000 job vacancies on Canadian farms, and this labour crisis is resulting in avoidable financial strain.

With that considered, you would think that smoothing out the regulatory red tape - especially on access to labour for farmers – should be highest priority for federal and provincial governments when the shortage is both critical and chronic, proven with many years of data and evidence. When COVID-19 challenged supply chains, action was taken to secure our food supply, but this level of urgency and priority for the sector appears to have come to an end.

Producers and workers need new solutions

Agriculture is theoretically prioritized in the immigration regulations, but it continues to be squeezed by on all sides. Agriculture and agri-food businesses, and their workers, are getting caught in immigration dragnet of restrictive changes that will reduce Canadian production and processing capacity now and in the future, if not reversed.

Across the country, for years, agriculture agri-food businesses have been vocal about the reality of their workforces: when Canadians do not apply for jobs, programs are needed to support permanent residency for workers, not just the Temporary Foreign Worker Program (TFWP). Even getting permits approved under the TFWP Agriculture Stream is an increasing struggle.

The federal Agri-Food Immigration Pilot program was launched in 2020 in response to COVID-19 supply chain challenges in the sector. To the detriment and dismay of the sector, it closed to new applications in May 2025 after reaching the 1,010-maximum permanent resident threshold as defined by the federal government's 2025-2027 Immigration Levels Plan. To that point, the program supported more than 4,500 workers and their family members, which included the extension of open work permits to spouses of Agriculture Stream workers.

Some of the changes for other immigration programs are really needed. Nearly four million international students were allowed to come into Canada between 2020 and 2024. Over the same time, the International Mobility Program had 2.5 million entrants. Unlike the TFWP, the International Mobility Program does not require Labour Market Impact Assessments (LMIAs), making it easier for employers. Not to mention, LMIA housing guidelines for the TFWP Agriculture Stream currently require employers to retain empty housing when workers choose to live on their own off-farm, which is wasteful and costly.



Janet Krayden specializes in workforce and labour issues, helping to unwind bureaucracy and solve problems for Canadian farmers.



The federal Agri-Food Immigration Pilot program was a rare example of a labour program that was widely supported by farmers. It was closed in May 2025.

The TFWP had a target of bring in 82,000 workers in 2025. but this has been cut down to 60,000 total, with the Agriculture Stream likely included in that amount with all other sectors, along with construction and meat processing. This is very concerning, because the Agriculture Stream has about 40,000 workers coming in every year and it continues to grow at a slow and gradual rate, due to attrition of retiring farmers and farm workers. Will more permits be refused under the Agriculture Steam, even for those already working on Canadian farms?

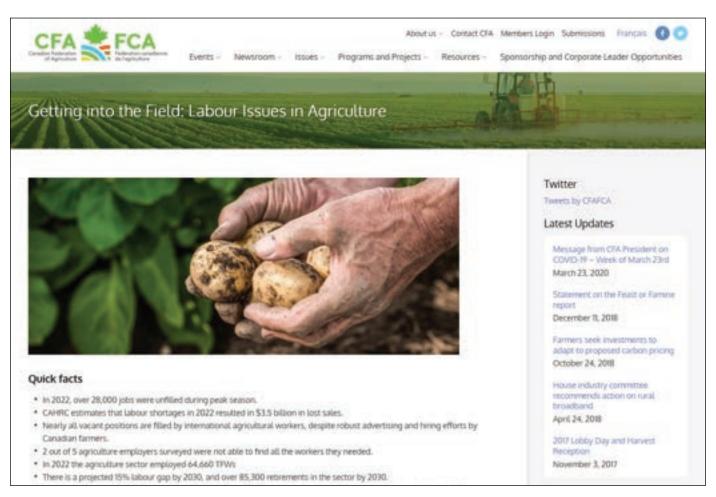
Additional hiccups under the Agriculture Stream include the downgrading of the livestock specialist or technician category from higher-skilled to lower-skilled. This cuts off immigration access through the Provincial Nominee Program and Express Entry programs that generally only prioritize or accept the occupations classified as higher-skilled. This also affects the General Farm Worker wage within the federal Job Bank, which could increase by \$4 per hour or more in some provinces, complicating an already difficult situation.

Industry advocacy remains important

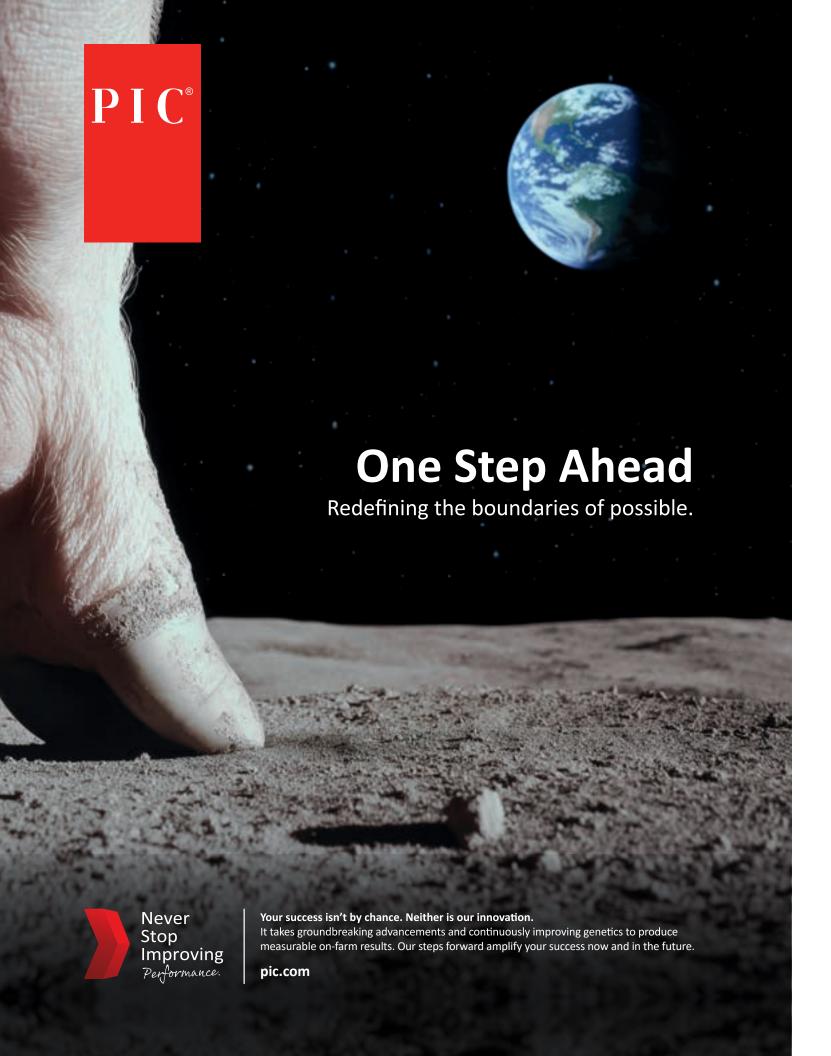
Farmers and their organizations need to continue speaking up for their access to labour with new permanent solutions. Even under the TFWP, caps under the Agriculture Stream need to be kept separate from the Seasonal Agriculture Worker

If action isn't taken, this will only worsen, and our sector will continue to be squeezed out of these programs. The result will be a drastic reduction in production, with workers being sent home or not able to fill existing and new job vacancies. As a consequence, Canada may become more like the U.S., with an underground farm workforce, something no-one - including Ottawa - should want to see.

If agriculture and agri-food can come together on labour, there is still time to turn this ship around to prioritize our sector again through effective programs that support us when Canadians alone cannot fill the needed roles.



The Canadian Pork Council (CPC) joined the Canadian Federation of Agriculture (CFA) in July 2025 - a united collection of organizations with the common goal of bringing about positive change





Depopulation could destabilize food systems

Sylvain Charlebois

Editor's note: Sylvain Charlebois is Professor & Director, Agri-Food Analytics Lab, Dalhousie University. He can be contacted at 'sylvain.

t's difficult to argue that climate change isn't the most pressing threat to our agri-food sector. Farmers, processors, distributors, retailers and transporters have all been forced to adapt in real time to extreme weather events, shifting growing seasons and volatile conditions. From droughts to floods to wildfires, climate change has tested the resilience of every link in the food supply chain.

Yet, for all the challenges the sector has faced – and will continue to face – due to climate pressures, it has managed to cope reasonably well. Investments in technology, new crop varieties, smarter logistics and infrastructure upgrades have helped absorb many of the shocks. But there is another looming threat – quieter, slower, and far more difficult to reverse – that few in the industry appear prepared for: depopulation.

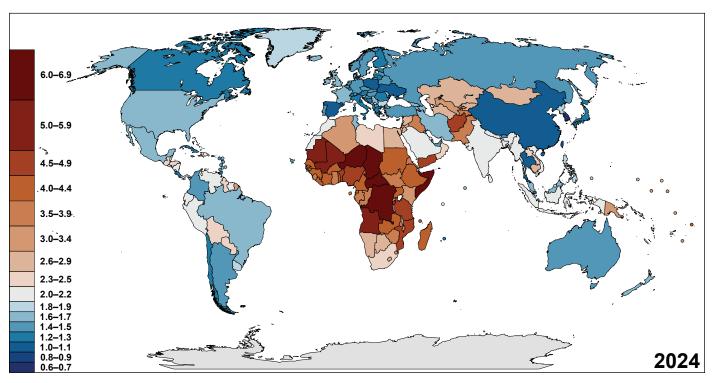
At its core, the food industry is built on one assumption: that there will always be more mouths to feed. Growth in population has long been a proxy for market growth. The logic



Food system expert Sylvain Charlebois believes changing global population dynamics pose a threat to existing models that rely on continued growth.

is simple – more people mean more demand for calories, more diversity in food preferences, and more spending across the value chain. Many strategies across the sector are driven by the idea of expanding 'stomach share' - a concept that assumes a continually expanding consumer base.

But what happens when that base begins to shrink?



Fertility rates are below replacement levels in many countries with which Canada trades in pork. Image @ Korakys

More than 60 countries around the world are already experiencing population decline, and that number is expected to exceed 100 within the next 25 years.

Fertility rates are falling below replacement levels across much of Europe, East Asia and even parts of Latin America. Japan, Italy, South Korea, Bulgaria and many others are already seeing their populations shrink year over year. Aging populations and lower birth rates are creating labour shortages, weakening tax bases and reshaping national economies.

Even countries like Canada and Australia, which have so far used immigration to offset domestic fertility declines, will not be able to avoid the broader demographic shift forever. Immigration policies may adjust, and population levels may stabilize temporarily, but the long-term trend is clear: global population growth is slowing, and in many places, reversing.

While the world has historically worried about overpopulation and the stress it would place on food systems, the more pressing concern now may be how to sustain food systems with fewer people to feed and fewer workers to produce food. For decades, global hunger has been a function not of insufficient supply, but of poor distribution and localized production failures. The fear of 'not enough food' was always more political than agricultural.

But in a world of declining population, the question flips: How do we maintain a vibrant, efficient, and innovative food economy when demand begins to shrink?

Canada's situation underscores this dilemma. While we are not yet in population decline, our fertility rate continues to drop. Without robust immigration, our population would already be contracting. And although the public discourse remains focused on rising food prices and access to affordable groceries, a deeper, more structural issue is emerging – nutritional insecurity.

In 2024, one in eight Canadian households experienced food insecurity, and that number is likely an undercount. Food insecurity is associated not only with hunger but also with poor diet quality, reduced access to fresh and nutritious food, and broader health consequences. More Canadians than ever may be meeting their caloric needs but are failing to meet their nutritional ones.

This brings us to a critical but often overlooked issue: disease-related malnutrition. This condition affects individuals of all ages and is deeply intertwined with both chronic illness and food insecurity. It is estimated that up to one in three Canadian children and one in two adults admitted to hospital are already



Aging populations have different nutritional demands.

malnourished upon arrival. Disease can lead to malnutrition, and malnutrition can exacerbate disease, creating a costly and dangerous feedback loop.

This challenge is only growing. As populations age and chronic illnesses become more prevalent, the demand for nutritional care – not just food – will intensify. Malnutrition is not just a clinical issue; it is a systemic one, reflecting broader failures in how we view, measure, and address food insecurity.

So what does this mean for the food sector?

It means we can no longer rely solely on volume. The industry must pivot from selling calories to delivering nutrition, quality, and personalized value. As the population plateaus – or declines – success will depend on a deeper understanding of demographic shifts, health trends and evolving consumer expectations. We must recognize the increasingly heterogeneous nature of the market. A one-size-fits-all approach will no longer be sufficient. Growth will come not from quantity, but from innovation, specialization and nutrition-forward offerings.

Public policy will also need to evolve. The current focus on food affordability and access must expand to include nutrition security – a concept that emphasizes consistent access to food that promotes health and prevents disease. This is not just a semantic shift; it reflects a deeper understanding of what a modern food system must deliver.

The transition from a growth-centric model to a resilienceand quality-focused one won't be easy. But if we fail to adapt, we risk building a food system that is increasingly out of sync with the demographic and nutritional realities of our time. The future of food will not be measured in tonnes – it will be measured in impact per person.



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Manitoba's hog sector focuses on sustainable future

Joey Dearborn

Editor's note: Joey Dearborn is Communications Manager, Manitoba Pork. He can be contacted at 'jdearborn@manitobapork.com.'



Land stewardship is at the heart of Manitoba Pork's new Sustainability Framework.

f you've ever been camping, you may have heard of 'the campsite rule.' The number one rule of camping – be that in a campground, provincial park, or somewhere in the L backcountry – is that you leave the space you were in better than you found it. That means taking steps and acting in ways that minimize any negative impact on your surroundings, allowing other campers to enjoy nature and the natural environment around them.

Those who work in agriculture across the country, including Manitoba's hog sector, take that rule to heart. For agriculture to continue moving forward, farmers must be good stewards of the land. That means growing crops, raising livestock, and moving what they've grown and raised to market sustainably, thereby leaving a legacy to pass down to the next generation of farmers.

Manitoba Pork and hog farmers around the province are committed to advancing sustainability across all facets of

hog farming and pork production. The organization's new Sustainability Framework focuses on five key pillars that guide our efforts to ensure economic resilience, environmental stewardship, community well-being, animal care and collaborative growth. Groupe AGÉCO is a Montreal-based leader in agri-food economics and corporate responsibility. They have helped national companies and organizations for more than 20 years, including Bell, Air Canada, Cascades and the Canadian Pork Council (CPC). They helped Manitoba Pork develop the new framework.

> "Sustainability in agriculture extends beyond a strict focus on environmental metrics"

— Jean-Michel Couture



The new framework includes five sustainability pillars.

"Sustainability in agriculture extends beyond a strict focus on environmental metrics," said Jean-Michel Couture, Partner & President, Groupe AGÉCO. "When we evaluate a sector's sustainability, we are really asking: can this system thrive in the long-term while supporting the people who depend on it, the communities it operates in, and the natural resources it relies upon? Sustainability is about ensuring the long-term competitiveness of a sector by balancing all forms of 'capital' that businesses – hog operations, in this case – rely on."

One of the key pillars of the framework is to maintain efforts to reduce the greenhouse gas emissions of pork production

Clear goals and commitments support each of Manitoba Pork's five sustainability pillars, guiding efforts and communicating progress to producers, stakeholders and the public. The framework outlines Manitoba Pork's role, potential targets, impacts on producers and areas where collaboration with partners is essential for driving meaningful change.

Take, for example, the organization's commitment to community well-being. Manitoba Pork and its farmers have a long track record of supporting community causes, be that through a partnership with Harvest Manitoba supplying freezers and ground pork to urban and rural food banks, providing a source of well-paying, high-quality jobs in rural areas, and collaborating with the Association of Manitoba Municipalities to ensure community or sector needs are addressed. These collaborative efforts are a measure of sustainability, leaving cities and towns across the province better than they were before.

One of the key pillars of the framework is to maintain efforts to reduce the greenhouse gas emissions of pork production through collaboration and engagement with sector partners and stakeholders. As a result of increased efficiencies, the environmental footprint of raising pigs has decreased significantly in recent decades, including reduced water and energy use, and lower carbon emissions. The hog sector knows



Producers and industry partners are encouraged to visit Manitoba Pork's website, using the QR code shown here, to learn more.

that with research and a steadfast commitment to continuous improvement, pigs can be raised even more efficiently, all while maintaining stringent animal care standards.

Manitoba Pork

"In developing its Sustainability Framework, Manitoba Pork went to great lengths to ensure its commitments had identifiable, positive, and practical impacts for producers that enabled progress without demanding progress," said Couture. "This framework not only sets a course for continuous improvement but also seeks to identify how producers and other key collaborators have maintained efforts over the years to ensure Manitoba's hog industry is competitive, efficient, and responsible."

For generations, farmers have managed our natural resources and provided food for the world, all from right here in Manitoba. Manitoba Pork, along with other agriculture organizations, are committed to empowering those who will take the sector into the future with a sustainable path forward.

"Back in 2011, Manitoba Pork was one of the first commodity groups in Canada to publish a sustainability report and roadmap," added Couture. "That's evolved into Manitoba Pork's new Sustainability Framework, notably contributing to a larger transformation in today's Canadian agriculture, where commodity groups are moving from isolated efforts to

coordinated action. When one commodity group raises the bar, it creates momentum that elevates sustainability practices across the agricultural landscape."

Sustainability Framework

goals and commitments

Leaving things better than you found them is a commitment not only to protecting something right here and right now, but it's also a commitment to the next generation. Guided by a dedication to continuous improvement and a high standard of care for both livestock and the environment around them, Manitoba's hog sector is at the leading edge of sustainability in agriculture.











Sask Pork Symposium looks forward to future

Bruce Cochrane

Editor's note: Bruce Cochrane is Reporter and Editor, Farmscape. He can be contacted at 'farmscape@wonderworks.ca.'



Ken Engele, Manager, Information Services, Prairie Swine Centre (right) received the Distinguished Service Award at this year's Sask Pork Symposium. Image © Nathan Jones

here is a lot to look forward to, as a positive outlook was the overarching theme for those who attended the 48th annual Saskatchewan Pork Industry in Saskatoon. This year's symposium attracted more than 300 guests from across Canada and the U.S., and more than 25 exhibitors in the trade show area.

"There's a lot of confidence and a lot of optimism in the way that everyone is looking at the industry over the next couple of years," said Steve Seto, Communications and Marketing Coordinator, Sask Pork. "It's an opportunity for producers across the province to come together, network, gain new information, refresh themselves on old information, see what's new and developing within the industry, then take that knowledge back to the farm."

Trade, more than tariffs, driving market impacts

Brett Stuart President, Global AgriTrends spoke about current market impacts during his keynote address.

"We're in a good spot," he said. "We had tough years in the industry in 2023 and 2024, and losses accrued quickly. But, if you look at where we are at today, hog farmers are making

money. Using the U.S. hog futures as a forecast, we should see hog producers profitable right on through to the end of 2026."

FEATURES

Stuart pointed out that, despite the rhetoric, most of agriculture has escaped significant impact from U.S. tariffs.

"We've all been front row participants of President Trump's trade agenda as, for the past year, we've heard the rhetoric about tariffs and tariffs have come on, tariffs have been reduced and put back on. Bottom line, I would say, is, I think Trump's agenda has pretty much rolled out on tariffs," he said.

"The impact on agriculture, I would say, has been quite minimal compared to what we thought it could be. You can look at the U.S. and Canada; our agricultural trade is still pretty much all tariff-free. The one industry that's been affected is Brazil. Brazil's beef to the U.S. faces a 76 per cent tariff. That has stopped most of that from coming into the U.S. but outside of Brazilian beef, we really haven't seen much of an impact."

Stuart added that the 25 per cent tariff imposed in March on Canadian goods headed south, which was then raised to 35 per cent in August, only applies to products not covered by the Canada-U.S.-Mexico (CUSMA) or U.S.-Mexico-Canada (USMCA) Agreement, which today accounts for only about 15 per cent of trade with the U.S. and doesn't impact agriculture.

"Canada's stand on supply management could be a factor in the upcoming renegotiation of USMCA. I don't see a real reason where something would need to change," he said. "I would expect that, everything being normal, we would just renew that plan going forward."



The Canada-U.S.-Mexico Agreement (CUSMA) was originally signed in 2018, replacing the earlier North American Free Trade Agreement (NAFTA). CUSMA is up for review in July 2026.

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Stuart cautioned, however, that President Trump has been vocal in the past about Canadian poultry and dairy so, we could go back to the mat over poultry and dairy and supply management. Stuart expects the wild card will be the U.S. Supreme Court's review of the legality of Trump's imposition of tariffs, so there is a possibility the President could lose his authority to impose tariffs.

"As early as maybe even January-February, we'll find out the Supreme Court's ruling and that ruling will stand," said Stuart.

Globally, Stuart noted President Trump was recently in Southeast Asia, where he signed deals with four countries: Vietnam, Cambodia, Malaysia and Thailand. Trump also announced a deal with China that removes the retaliation tariffs.

"That pretty much takes us back, maybe to par with where we were," said Stuart.

He added that U.S. beef prices are high, and we're going to have record beef imports on a year that we impose tariffs and based on the U.S. hog futures, we should see hog producers profitable right on through to the end of 2026, based on affordable grain prices and decent demand.

Keeping focus on young consumers

Lisa Keefe, a protein journalist and communicator, examined the habits of young consumers.

"When it comes to the factors that drive food buying choices, some things change and some things don't," she said. "The two most reliable consumer preferences are going to be price, which is always number one – and I don't care what customers say in surveys about how much they value other qualities in their proteins – and convenience."

Keefe suggested demographics play a larger role in consumer food choices now than at any time in the past 75 years.

"Anything the industry can do to save consumers time during meal preparation is going to be beneficial. I think everybody feels like there have been hours taken out of their day, even though we have all of this convenience coming at us. Digital tools have given us instant communication, but they're not putting time back into our lives; they're taking it out."

Millennial and Gen Z consumers – those aged 20- to 40-years old, together – make up more than half of all food purchasers in Canada today. These consumers demand more of everything, compared to older generations. They want more convenience, but they also want cleaner labels. They want higher quality but in portions that bring the price down to fit their budget. Reaching those consumers and getting into their hands a product that they're going to buy consistently requires a concerted effort.

"Anything the industry can do to save consumers time during meal preparation is going to be beneficial." – Lisa Keefe

For even younger consumers and future food purchasers, Sask Pork has developed 'The Whole Hog' ambassador program, appealing to kids and teens.

The Whole Hog with Reise: Breaking down parts of a pig with Andrew Boryski hash Push + 127 elemen - 2 months age

The Whole Hog with Reise: Exploring the different levels of marketing with Emily Pearson.

Lank Push + 28 months age

The Whole Hog with Reise: Why is hog manure so important to soil bealth, with Dr. Jeff Schoensea.

Lank Push + 28 months age

The Whole Hog with Reise: Taking a first-class ride with pigs and Adrian Pongco.

Lank Push + 287 years + 2 months age

The Whole Hog with Reise: The importance of animal health with Dr. Coral Williams.

Lank Push + 127 years + 2 months age

Sask Pork's 'The Whole Hog' series of videos can be found on YouTube (@SaskPork).

"The Whole Hog Ambassador was developed because we wanted to talk to a younger audience and felt that it would have a better impact if it was coming from a younger person," said Jessica Podhordeski, Ag Education Coordinator, Sask Pork.

Earlier this year, Sask Pork released a second series of educational videos hosted by 12-year-old Reise Podhordeski.

"Due to biosecurity, not a lot of people see or are aware of how pigs are raised," said Jessica. "Season 1 takes a look inside the barn, and Season 2 is more about careers not directly related to production, such as chefs, butchers, researchers and those working different jobs that are part of the pork industry but not directly related to raising pigs."

'The Whole Hog' can be found on Sask Pork's YouTube page and is promoted throughout the year on social media and inperson events.

Hope, perseverance on display

Chris Koch – a Nanton, Alberta farm boy turned world traveller, marathoner, blogger and inspirational speaker – spoke candidly about his life experiences, echoing the optimistic tone of the symposium.

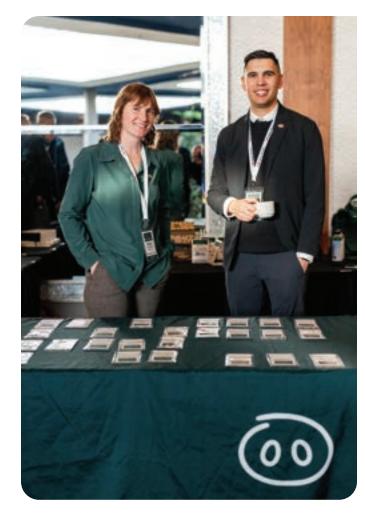
"Simply put, I was born missing arms and legs," said Koch.
"To give you a visual, my arms would be about elbow length, and then as far as the legs, on the left side, there is no leg at all. On the right side, there's a partially developed leg with a partially developed foot. I can hop around on that one leg, or I use a longboard or skateboard to get around."

Koch describes necessity as the mother of invention.

"I grew up farming, and it's been part of my life as far back as I can remember. I don't have somebody that helps me get into the tractor or the combine, or any contraptions to get me up in there. I do it all on my own. You just figure out clever, outside-the-box ways to do things. The older equipment is a little more difficult, but you just figure out a way to make it work. With the newer equipment, I can climb up the ladder on my own.

Koch credits the confidence of family and friends.

"If my mom, dad, grandparents, aunts and uncles treated me like that – a poor disabled boy – I would have grown up acting that way, whereas I was just Chris. I guarantee I'm having more fun and more success without arms and legs than I would have if I had been born with them. I hope that statement alone makes people think about their own situations – about the things in life that they've allowed to hold themselves back. Our biggest obstacle – the biggest wrench that gets thrown into the spokes – is the one we cause ourselves; it's that six inches between the ears. I have a lot of people tell me, 'If I was in your situation, I'd never be able to do that.' I beg to differ. I think we're all capable of overcoming some pretty incredible stuff."



Sask Pork's office staff's involvement in the symposium cannot be overstated. Image

Nathan Jones

Team effort applauded

With the 2025 Saskatchewan Pork Industry Symposium now complete, planning is already getting underway for next year's event.

Seto describes it as a team effort involving the entire office, including Podhordeski, who organizes the agenda, lines up the speakers and coordinates the venue; Tiffany Yang who handles the event's financial end; Karolina Steinerova and Alison Sullivan who assist in the event's planning and execution; and Mark Ferguson who oversees the operation.

Seto also applauds the sponsors who do a fantastic job not only in helping out financially, but also helping with planning the event as part of its advisory committee.

ALBERTA'S

PORK INDUSTRY



Pigs are at the heart of Alberta's pork industry. Our producers are deeply committed to animal health, welfare. Through national quality assurance programs and rigorous onfarm standards, Alberta pork is recognized for its premium quality and safety.

- Alberta produces more than 2.8 million hogs per year, representing 11% of Canada's hogs.
- Meat processed in CFIA-inspected facilities are certified under *Verified Canadian Pork* quality assurance program.
- Commercial farms are trained, certified, and audited under *Canadian Pork Excellence* programs (PigSAFE, PigCARE, and PigTRACE).
- Alberta Pork analyzes thousands of potential disease surveillance samples and conducts ongoing biosecurity audits, safeguarding the pig herd.



Alberta's pork industry supports families, workers, and rural communities.

From producers and processors to educators and chefs, the people behind pork contribute to a thriving agri-food economy.

- Over 13,000 Albertans are employed in the pork sector contributing more than \$1.6 billion annually to Alberta's GDP.
- Hog inventory generates \$664 million in annual sales.
- Alberta Pork delivers ongoing safety training for producers and their workers in collaboration with AgSafe.
- Culinary and meat cutting educational programs from high school through to postsecondary are funded by Alberta Pork.



Environmental sustainability is a core value for Alberta pork producers.

Through innovation and responsible management, farms are reducing their environmental footprint while promoting long-term efficiency.

- Alberta producers use 40% less water, 33% less feed, and 59% less land per pig than 50 years ago.
- Hog manure is a natural fertilizer that reduces carbon emissions, enhances soil quality, and contains 20% less phosphorus than two decades ago.
- All farms must meet Natural Resources Conservation Board (NRCB) operating requirements for environmental protection.
- Alberta Pork collaborates in wild boar at large eradication to protect ecosystems and farmland.



The Alberta pork industry is built on a foundation of continuous improvement.

From adopting smart technologies to supporting cutting-edge research, producers are constantly evolving to raise healthy pigs and deliver safe, sustainable food.

- Antimicrobial use is being reduced through improved biosecurity protocols and animal health practices.
- Internal and third-party audits help uphold the highest standards in care and safety.
- Digital tools and smart tech support traceability, farm efficiency, and reduced emissions.
- Alberta Pork partners with researchers to enhance animal nutrition, welfare, and farm management.

TOP FIVE ADVOCACY PRIORITIES



Alberta Pork represents the province's pork producers, who contribute more than 13,000 jobs and generate over \$1.6 billion in GDP annually. Our industry is export-driven, with more than 60 percent of Alberta's pork shipped to international markets, making us a key player in Canada's agri-food trade.

TRADE & MARKET ACCESS

International market access is vital. Pork must be prioritized in trade negotiations—especially as the *Canada United States and Mexico Trade Agreement (CUSMA)* review approaches—and in addressing barriers such as the proposed U.S. vCOOL legislation.

BUSINESS RISK MANAGEMENT

Tools like the *Livestock Price Insurance Program (LPIP)* and *AgriStability* must be improved to address producer needs in times of disasters, economic crisis, and trade treats. Livestock barn insurance and improved access to affordable capital would improve risk management and support long-term resilience.

FOREIGN ANIMAL DISEASE PREPAREDNESS

Continued collaboration on preventing and responding to diseases like African Swine Flu (ASF) is crucial. This includes wild boar surveillance and eradication, recognizing Alberta Pork's delegated authority in swine traceability.

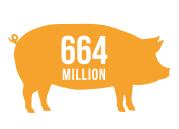
WORKFORCE & LABOUR

Labour shortages continue to limit our sector's growth and productivity. Improvements to the Agriculture Immigration Program, reduced administrative barriers, and the establishment of a permanent agricultural worker program would boost our industry. Permanent residency for qualified foreign workers and a better understanding of agriculture's labour needs are essential.

INFRASTRUCTURE AND LOGISTICS

Secure, efficient supply chains are critical. Investments in resilient infrastructure and the designation of meat processing as essential during market disruptions will ensure the stability of the pork industry.

PORK INDUSTRY SNAPSHOT









\$ ANNUAL SALES

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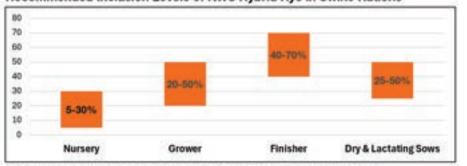
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News & Views

Canadian Meat Advocacy Office hosts delegates

The Canadian Meat Council (CMC), Canadian Pork Council (CPC) and Canadian Cattle Association (CCA) opened the Canadian Meat Advocacy Office in Beijing, China in late 2024. Since then, the office has been an important link to China, in light of trade issues that have emerged in recent months.

In early September, representatives from the Government of Saskatchewan were joined by representatives from the Government of Canada on a bilateral trade mission to China, with the goal of making progress on tariffs currently levied against certain Canadian agricultural products.

Chris White, President & CEO, Canadian Meat Advocacy Office met with the delegation, including Scott Moe, Premier, Saskatchewan and Kody Blois, Member of Parliament for Kings-Hants (Nova Scotia) & Parliamentary Secretary to the Prime Minister. "Both levels of government understand the importance of finding solutions and new economic opportunities for Canadian ag companies in China," said White. "Thank you, too, to the Canada-China Business Council for arranging and hosting the meeting."



Representatives from the Government of Saskatchewan were joined by representatives from the Government of Canada on a bilateral trade mission to China.



Last year, for the first time ever, Canada ranked first by volume in pork imports to Japan.

Canada Pork builds connections in Japan

Producers and processors made an impactful presence in the Japanese market through a joint mission trip hosted by Canada Pork and the Canadian Pork Council (CPC) in late September.

At the renowned Tsuji Wellness Cooking School, members experienced how Japanese people cook and enjoy Canadian pork, showcasing its versatility, premium quality, and the importance of connection and tradition. The team also saw Canadian pork featured in classics like shabu-shabu and tonkatsu, gaining valuable first-hand insights into Japanese consumer preferences.

Last year, for the first time ever, Canada ranked first by volume in pork imports to Japan, surpassing the U.S. Canada's 2024 tonnage represented just over one-quarter of the Japanese market share. The Canadian pork industry's relationship with Japan goes back more than five decades.

20 CANADIAN HOG JOURNAL FALL 2025

NEWS & VIEWS 21

Canadian pork represented in Mexico

Representatives from the Canadian pork industry, including Tara Terpstra, Chair, Ontario Pork and Rick Prejet, Board Director, Canadian Pork Council (CPC) participated in the 34th Tri-National Agricultural Accord in Morelia, Mexico in mid-October.

The three-day conference brought together North American agricultural leaders to strengthen collaboration on shared priorities such as trade, sustainability and rural development.

As part of the program, Canadian pork representatives joined a Team Canada roundtable that gathered government and industry delegates, followed by



Mexico continues to be a trusted and growing partner for Canadian pork exports.

sessions on animal disease preparedness and rural development, including valuable insights into the experiences of women in farming.



The annual celebration helps strengthen relationships and more.

Producers, partners, politicians connect at Porkfest

The Canadian Pork Council's 2025 Porkfest brought together industry stakeholders, government officials and pork producers in early October to enjoy delicious pork dishes showcasing the hard work of the Canadian pork industry.

Beyond the food, Porkfest also provided a valuable opportunity to connect, exchange perspectives and strengthen relationships on key issues that matter to the industry.

Manitoba Pork serves up meals to those in need

Manitoba Pork partnered with the Fairmont Winnipeg in late September to prepare and deliver more than 100 hearty pork meals to the local community at Main Street Project.

Manitoba Pork believes everyone deserves access to nutritious, delicious food, and they're grateful to work with incredible partners who help make that possible.

Main Street Project is a community health centre in Winnipeg. Since 1972, they have served the needs of Winnipeg's most marginalized residents and have always worked towards helping our community find its collective footing.



Community outreach is important to Manitoba Pork.

Swine Innovation Porc names new Chair

Mark Ferguson, General Manager, Sask Pork was named Chair, Swine Innovation Porc (SIP) in late September. He succeeds outgoing Chair Arno Schober, who led the board since 2021.

"We are pleased to welcome Mark as Chair, as we continue providing leadership in the Canadian pork research community," said Daniel Ramage, General Manager, SIP. "We also extend our sincere thanks to Arno for his years of service to our organization and commend his efforts driving innovation on behalf of the pork value chain."

Ferguson brings more than 20 years of experience to the role and has been instrumental in advancing many industry growth initiatives. He also serves as Chair, Prairie Swine Centre.

"I am honoured to be elected as Chair of SIP," said Ferguson. "I look forward to working with our members and partners towards our shared vision of ensuring long-term profitable pork production through collaborative research and innovation."



FROM FARM TARIF

More than 1,500 Ontario students learned about pork production.

Ontario PigMobile plows into Niagara

Ontario Pork was proud to engage with more than 1,500 students from schools across the during the 2025 International Plowing Match, taking place in the Niagara region in mid-September.

This new initiative is an example of the investment in education and community outreach that Ontario Pork does to highlight pork production in the province, while also presenting fun and interactive activities to new audiences.

The Pig Mobile served as a key attraction, where Hambassadors delivered daily presentations to students, families and other visitors.



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December 9

ORKSHOP	FARM MANAGE MENT	1:30 pm	Should we shift our focus on weaned pigs? Zhenbin Zhang, Ph. D., Swine Nutritionist, Cargill Nutrition & Health (Canada)		
		2:20 pm	Back to the future: 10 years later, have we adjusted the needs of our grower pigs? Jean Poulin, Agr., Canadian Director of business development, PIC Canada Ltd.		
	S NO	1:30 pm	Proper Reproduction; a Guarantee for Success! Dan Bussières, Agr., Co-Owner, Swine Nutritionist, Groupe Cérès Inc.		
3	REPR	2:20 pm	Low Birth Rate? Do Something About It! Colin Laferrière, DVM, M. Sc., Services vétérinaires ambulatoires Triple-V Inc.		
3:00 pm		Visit of the booths			
4:00 pm		The Pork Economy and its Competitors in a Changing International Context Vincent Chatellier, Research Engineer, INRAE			
5:30 pm to 9:00pm CELEBRATIONS Come celebrate the excellence of our sector					

December 10

4:45 pm to 6:00 pm Exhibitors' cocktail

		the state of the last		
7:00 am		Networking breakfast and visit of the booths		
9:1	15 am	2026 Pork Sector: A Focus on Productivity Focus in a Changing World Jean-Philippe Gervais, Ph. D., Executive Vice-President, Strategy & Impact, Chief Economist, Farm Credit Canada		
10:05 am		Animal Welfare: Reconciling Public Perceptions with the Reality of Livestock Production Jamie Dallaire, Ph. D., Associate Professor, Département des sciences animales, FSAA, Université Laval		
10	:55 am	European Pork: From Barn to Slaughterhouse — Past, Present, Future Gert van Beek, Owner, SPF Nucleus Breeder / van Beek SPF Varkens BV Lelystad		
11	:45 am	Lunch and visit of the booths		
	ANIMAL	2:00 pm	Better understanding of sow mortality and how to better prevent it Brigitte Boucher, DVM. Veterinarian	
SHO		2:50 pm	Biosecurity, focus where it counts! Marie-Claude Poulin, DVM, DA, Veterinarian	
WORKSHOP	MARKETING	2:00 pm	Create Tomorrow's Responsible Agriculture Today Christian Grenier, Agr., President and Stéphanie Taylor, B.A.A., Chief executive officer, Grenier Gardengeois	
*		2:50 pm	Costco Business and Member Expectations Marc St-Amour, VP/GMM Food & Sundries and Mark Meyer, Buyer Fresh Meat - Seafood, Pork, Lamb, Misc, Costco Wholesale Canada Ltd.	
31	35 pm	Back to	the main room and presentation of the next generation	
3:45 pm		The importance of playing your role Dave Morissette, Professional speaker and sports analys		







Strep suis management important for hog farmers

Noah de Rocquigny

Editor's note: Noah de Rocquigny is Barn Technician, Trouw Nutrition. For more information, contact 'lauren.dawson@trouwnutrition.com.'

treptococcus suis (Strep suis) is an important cause of bacterial infections and piglet related mortalities in Canadian pig herds. Piglets are often infected by their mother or in the farrowing room, leading to issues between two and 10 weeks of age and after weaning. This pathogen causes significant illness and mortality.

The bacteria can be found in the tonsils and nasal passages of healthy pigs. Under stress or co-infection, it can invade the bloodstream and cause meningitis (head tilt, paddling, incoordination), endocarditis (inflammation in the heart), arthritis (swollen joints, lameness) and septicemia (fever). Unfortunately, these often result in sudden death and high mortality. The diagnosis of this disease must be performed by a veterinarian through observation, historical challenge and a bacterial culture analysis, if necessary.

It is very difficult to eliminate Strep suis since it is carried in the feces, air and dust of a hog farm.

Particularly during the spring and fall in Canada, the chance of Strep suis in young pigs increases. These seasons can encompass great temperature variations between day and night as well as day to day, and a change in temperature greater than two to three degrees Celsius is perceived as a chill to pigs, especially in a nursery.

If your barn has high humidity, this will also cause dampness on a pig, and it will take even less of a change in temperature or draft to cause chilling and precipitate illness like Strep suis.





Piglets with clinical signs of arthritis (left) and meningitis (right), due to Strep suis.

Since these seasons occur every year, here are a few management strategies to help you mitigate the risk:

1. Ventilation management

Ensure there are no cold drafts, keep up good air quality, and reduce humidity.

2. Avoid overcrowding

High stocking densities increase exposure and decrease the ability of piglets to eat and drink.

3. Reduce stressors

4. Use all in/all out systems

Try to avoid mixing different aged piglets, and keep piglets around the same size for less competition.

5. Effective cleaning and biosecurity

Always have proper hygiene and cleaning of both farrowing and nursery areas. Ensure rooms are dry after cleaning before moving pigs in. Ensure tools are cleaned and sanitized during processing.

6. Lower the pH of the water

Use acidifiers in water to lower pH in the piglets' stomach to fight off bacteria before it enters the gut.

7. Avoid introducing new animals

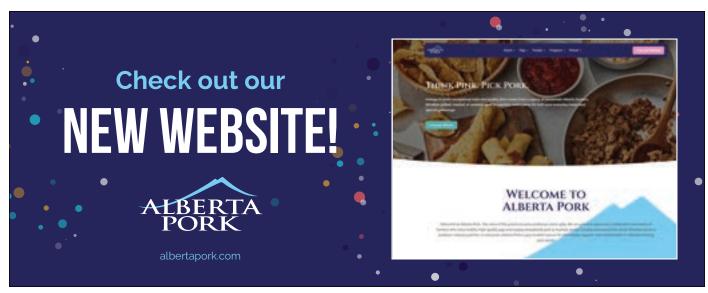
Try to avoid buying replacement pigs that may be carriers. If needed, ensure proper quarantine precautions before introduction.

8. Strategically use antibiotic therapies

You can use in-water treatments or treat sows before farrowing, as prescribed by a veterinarian.

The management of Strep suis on Canadian hog farms is not about eradicating the bacteria; it's about reducing the risk of disease through smart, evidence-based practices. Every farm is different, and successful control hinges on understanding your herd's health status, managing stress and environment, and working closely with your swine nutritionist and veterinarian.











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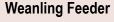
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- 15 animals per feed space

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PCV2d: porcine circovirus type 2d; PCVAD: porcine circovirus associated disease

Reference: 1. Fano E, Piñeyro PE, Schwartz KJ, Tousignant SJP. Exploring the efficacy of a PCV2d-based vaccine under current severe PCVAD conditions. AASV. 2022;144–145

RESEARCH &

Curcumin compound alleviates swine dysentery

Eduardo Cobo

Editor's note: Eduardo Cobo is Associate Professor, Faculty of Veterinary Medicine, University of Calgary. He can be contacted at 'ecobo@ucalgary.ca.'



Treatment with a novel curcumin-derived compound, Traverse Biosciences' CMC2.24, could save producers between \$11 and \$16.50 per pig in costs associated with swine dysentery.

wine dysentery continues to threaten pork production due to increased mortality, restricted growth and higher treatment costs. As Canada moves toward eliminating the use of in-feed antibiotics, the finding of new nonantibiotic treatments is needed to reduce antibiotic use. Therefore, the development of interventions that reduce disease severity and improve pig health is crucial for maintaining sustainable production.

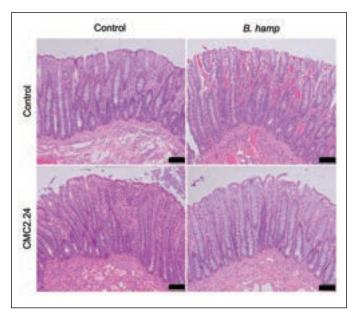
Pigs affected with Brachyspira often exhibit clinical signs, including diarrhea with blood, reduced appetite, and slower growth, which can impact profitability. Controlling inflammation and tissue damage in the colon is key to improving recovery. Recent research suggests that targeting harmful proteolytic enzymes and supporting gut health may help pigs recover more quickly and maintain growth during disease challenges.

Testing the compound

Our recent study conducted at the University of Calgary has shown encouraging results for a novel compound known as CMC2.24 (patented by Traverse Biosciences). This compound is a chemically modified form of curcumin, the active ingredient in turmeric that is commonly used in food, designed to block protease enzymes (metalloproteinases) that are known to break down proteins. Proteases, including metalloproteinases, play critical roles in tissue damage and the progression of colitis associated with swine dysentery. By targeting these enzymes, CMC2.24 aimed to limit intestinal damage and inflammation during infection.

In controlled experimental trials, weaned pigs were infected with Brachyspira hampsonii and treated orally with CMC2.24 from days five to nine post-infection. Researchers monitored clinical signs, bacterial shedding in feces, gut health and the production of beneficial metabolites in the gut, including shortchain fatty acids. Lab tests also examined the compound's effect on bacteria and immune cells.

Pigs treated with CMC2.24 experienced an 82 per cent reduction in the number of pigs displaying clinical signs, less bacterial shedding, improved survival and healthier colons compared to untreated animals. Beyond reducing disease symptoms, treated pigs also exhibited higher levels of beneficial gut metabolites, indicating improved intestinal



Microscopic hallmark lesions in the colons of pigs affected by swine dysentery, showing hyperemia, hemorrhagic mucosa, increased mucus production and thickening of the mucosal wall. These lesions were less severe in pigs infected with Brachyspira hampsonii but treated with CMC2.24.



Curcumir

health. Laboratory studies further revealed that CMC2.24 may limit bacterial activity and reduce harmful inflammation in the gut.

Researchers say this compound works through multiple mechanisms: weakening bacterial colonization, reducing excessive inflammation, and protecting the gut's mucosal barrier. These combined effects could make CMC2.24 an attractive antibiotic alternative for managing swine dysentery. They published this study in the prestigious International Immunopharmacology Journal: "A curcumin derivative metalloprotease inhibitor (CMC2.24) mitigates Brachyspira spp.-induced swine dysentery."

Economic impacts could be forthcoming

This study demonstrates that CMC2.24 offers multiple benefits for pigs with post-weaning diarrhea, including reducing the

severity of swine dysentery, protecting the gut, and supporting pig growth. For pork producers, this compound could help maintain pig health, improve survival and reduce the need for antibiotics, offering a practical tool for managing swine dysentery on farms.

This testing of CMC2.24 for controlling swine dysentery could have a significant economic impact on the pork industry. CMC2.24 may save producers between \$11 and \$16.50 per pig in costs associated with swine dysentery, including treatment expenses, reduced growth, increased feed conversion, mortality, and non-marketable animals. For a mid-sized operation finishing 10,000 pigs annually, this equates to potential annual savings of \$110,000 to \$165,000. On a national scale, considering that Canada produces over 22 million pigs annually, the industry-wide savings could surpass \$200 million, especially if CMC2.24 also helps reduce antibiotic use and related costs associated with antibiotic resistance.









Knowledge is our Power Science is our Tool



Who we are

Swine Innovation Porc drives national research for Canada's pork sector, coordinating industry, academia, and government to foster innovation.

Swine Innovation Porc Programs

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\$71 Million invested in research



8

150 researchers



75 research projects

Strategic Research Investment

Used to leverage

\$1

= \$17

From Producer Organisations From other funding sources (Government+Industry)

Swine Cluster 4

Swine Cluster 4 is the current Canada-wide collaborative research program, focused on fostering continued sustainability, resiliency, and growth in the Canadian pork sector.

Swine Cluster 4 At A Glance

50

Researchers

13

Research Institutions

36

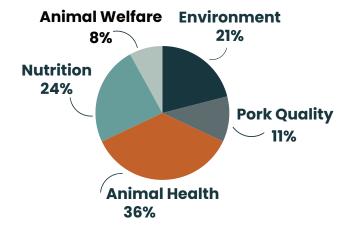
Industry Partners

15

Large Scale Projects

Project Breakdown

Combined government and industry investments in this program total 20.1 million supporting 5 research areas.







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Swine Innovation Porc



Pork cut study brings bellyful of benefits

Swine Innovation Porc

Editor's note: This article is a summary prepared for Swine Innovation Porc. For more information, contact 'cchristensen@ swineinnovationporc.ca.'



With the growing popularity of pork belly – including Asian cuisines, bacon and BBQ – belly quality is getting attention.

othing beats eating for pleasure, and to that end, nothing beats pork. This makes pork quality essential to attracting consumers and sustaining income for producers and packers. It's no surprise, then, that SIP gave two thumbs up to the project, 'Enhancing pork belly quality across the value chain,' and the results are starting to show.

"On a per-pound basis, bellies and ribs are the most valuable pork cuts," said Manuel Juarez, Research Scientist, Agriculture and Agri-Food Canada (AAFC).

In the past, studies to enhance quality focused mainly on the loin. Little was known about improving belly attributes such as width and thickness, lean-to-fat ratio and firmness.

Through their previous work, Juarez and his team developed new methods to measure belly firmness and collected quality data to assess the results. One of the findings was that belly quality traits show medium to high heritability, prompting scientists to explore genetic options that could influence quality as part of the current study.

"Our objective is to select for animals based on pork belly attributes, while still being mindful of carcass price. To reach that goal, partnerships with industry leaders like Genesus are a huge piece of the puzzle. We don't want to produce a great belly but impair the efficiency of the live animal."

At the study's outset, the team reviewed data from previous trials to confirm that belly traits like firmness, thickness and width are heritable. They also gauged the genetic correlation of

those traits with other primals. If that connection is significant, it means that whatever scientists do to impact the belly will also affect hams, loins and other cuts.

"Thus far, we have seen a strong correlation, but there is still room for improvement." $\,$

Scientists also dug deeper, pinpointing two areas of the belly – near the head and at the centre – that are especially linked to quality, so they are giving those spots special attention.

"We developed an ultrasound method for scanning live animals, based on the traits with the highest potential identified in the preliminary genetic analysis. Last year, we used it to scrutinize the loin and belly. Prior to this method, you knew nothing about the belly until the pig was slaughtered. Now, you can measure things like belly thickness on live pigs and determine quality prior to slaughter."

To this point, the researchers have collected quality data on about 600 pigs and are currently analyzing the results. They recently began gathering data for an additional 1,000 pigs from specific lines of the genetics company that serves as their industry partner.

"When it comes to predicting belly firmness, the standard approach is using iodine value [a measure of the fatty acid saturation in the fat]. While that is effective, we're finding that the total level of polyunsaturated fats [essential fats required for normal body functions], especially omega-6 fatty acids, are a better predictor than iodine."

"On a per-pound basis, bellies and ribs are the most valuable pork cuts." – Manuel Juarez

Though progress in the lab pays off, it's on-farm success that helps producers pay the bills. To bridge the gap between theory and practical application, researchers are testing their results at a commercial abattoir.

"Upon completion of our study, we want to have identified genetic markers to select for belly firmness, thickness and other traits related to quality with commercial animals."





The researchers are further qualifying their study by testing bellies at a commercial abattoir.

In research, the larger your data set, the more reliable your results. With that in mind, Juarez and his colleagues hope to analyze a minimum of 1,500 pork bellies and are shooting for 2,000.

"A key part of this process is genotyping the animals [detecting small genetic differences that can influence physical traits of interest]. For this task, we will use a different method from the one commonly employed."

The method is called low-pass skim sequencing with imputation, which reduces bias in genetic evaluations. Scientists currently have about 800 animals that are fully genotyped, so the team is well on its way.

"By the project's end, we should have a database of 4,000 to 5,000 animals, including their genotypes and phenotypes [observable characteristics]. That number should be sufficient to aid any farm in improving belly quality."

Of note, this study dealt with crossbred animals rather than purebreds, making the results more applicable for industry. Armed with that data, pig genetic companies could develop specific lines that support the quest for quality by producers and packers.

"I'm very grateful to SIP and our industry partners, including commercial producers, abattoirs and genetic companies. This was a large, complex study, and we aim to reward their support with concrete results that can be applied in the near future."

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Cutting zinc, not performance, for new regulations

Olufemi Babatunde

Editor's note: Olufemi Babatunde is Technical Specialist, Swine/Poultry, Jefo Nutrition. He can be contacted at 'obabatunde@jefo.ca.'

he Canadian pork industry is preparing for a major shift. By 2027, new regulations will require reduced zinc levels in pig diets to minimize environmental accumulation and protect soil quality. This follows a global trend already seen in the European Union, where pharmacologicalzincoxide(ZnO) use has been heavily restricted due to environmental and antimicrobial resistance concerns. For Canadian producers and nutritionists, this presents both a challenge and an opportunity. The question remains on how to maintain nursery pig health and performance without the traditional high doses of zinc oxide that have long been a cornerstone of post-weaning nutrition.

Zinc's environmental impact

For decades, zinc oxide at therapeutic doses (between 2,000 and 3,000 parts per million per total zinc) has been a reliable tool to reduce post-weaning diarrhea and improve growth in nursery pigs. Zinc supports enzyme function, immunity and intestinal integrity, helping young pigs transition from milk to solid feed. Zinc has also been known to prevent the adhesion of pathogenic bacteria like E. coli to the intestinal mucosa (Figure 1). However, the problem isn't zinc itself; it is how much of it gets wasted

Most of the dietary zinc from traditional zinc oxide is poorly absorbed and excreted in manure, contributing to zinc buildup in agricultural soils. Over time, this environmental burden has become a global issue that has to be addressed. While the exact

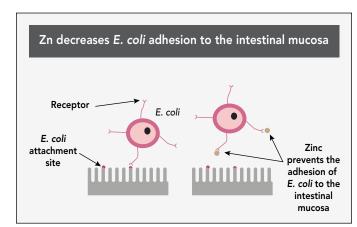


Figure 1: Impact of Zinc on E. coli adhesion in the intestine.

federal limit has not yet been finalized, upcoming Canadian regulations are expected to reduce zinc inclusion to roughly between 150 and 350 parts per million of total zinc, much lower than what is currently used in nursery diets. This shift will require the industry to rethink how zinc is formulated, delivered and utilized within the broader nursery nutrition program.

Microencapsulation for more responsible use

One promising strategy is microencapsulation, which allows zinc oxide to be released more efficiently where it's needed most in the small intestine, rather than being lost in the stomach or excreted unused. In addition, high levels of free zinc oxide can impair a pig's ability to keep its gastric pH low, due to its high acid binding capacity, thereby resulting in reduced protein digestion or increased risk of bacterial infection.

Microencapsulation protects the mineral from early dissociation in the stomach's acidic environment, ensuring a more gradual and targeted release. This technology can maintain or even enhance efficacy at a fraction of the traditional zinc levels, drastically reducing waste.

In a recent nursery pig trial conducted by Jefo, 480 piglets were used to compare traditional high-dose zinc oxide with varying levels of Jefo's protected ZnO [P(ZnO)], a microencapsulated form of zinc oxide.

Trial design

Treatments:

- Control: 3,000 ppm (Phase 1) and 1,500 ppm (Phase 2) of free ZnO
- Jefo P(ZnO): 400, 600, or 800 ppm across all phases. At 40% of Zn in the product, this corresponds to 160, 240, and 320 ppm of Zn, respectively.

Duration:

• 26 to 61 days of age.

Metric

• Growth performance, feed efficiency, fecal zinc, intestinal health (ZO-1 gene expression), and feed cost per kg of gain.

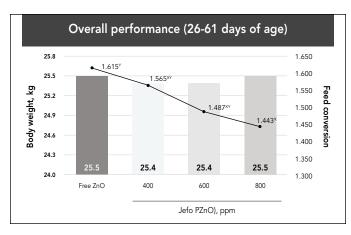


Figure 2: Growth performance and feed conversion of pigs fed Jefo P(ZnO).

Key findings

1. Comparable growth

 Pigs fed microencapsulated ZnO achieved similar or improved body weight and feed conversion compared to those fed pharmacological doses of free ZnO (Figure 2).

2. Reduced zinc excretion

• Fecal zinc output dropped by up to 75% (Figure 3), indicating a major environmental benefit.

3. Enhanced gut integrity

• Expression of Zonula Occludens-1 (a key tight-junction protein) increased (Figure 3), indicating stronger intestinal barriers and improved gut health.

4. Lower feed cost per kg gain

 Optimized nutrient use and better feed efficiency translated into real economic savings.

Together, these results demonstrate that effective zinc nutrition doesn't have to mean excessive zinc inclusion.

With improved bioavailability and intestinal delivery, Jefo P(ZnO) allows producers to meet both performance and sustainability goals.

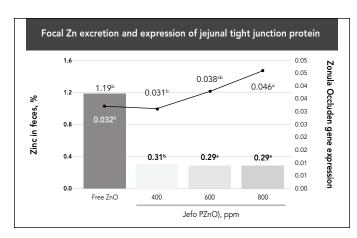


Figure 3: Fecal zinc excretion and Zonula Occludens gene expression in pigs fed Jefo P(ZnO).

Complementary strategies for a successful transition

While smarter zinc sources are a major part of the solution, successful adaptation to lower zinc levels will also depend on strong nutritional and management programs that reduce post-weaning stress and support gut resilience. These include:

1. Optimizing weaning management

- Smooth transitions ensure piglets have early exposure to solid feed before weaning to encourage intake.
- Maintaining optimal pen temperature (28 to 30 degrees Celsius) and clean, dry conditions help to reduce infection pressure while ensuring thermal comfort and hygiene.
- Proper space allowance prevents overcrowding, which can increase stress and pathogen transmission.

2. Supporting gut health through diet

- Use of functional feed additives like enzymes (protease and xylanase) improves nutrient digestibility and reduces undigested protein in the hindgut, lowering the substrate for pathogenic bacteria.
- Organic acids and essential oils help lower gut pH, enhance microbial balance, and improve nutrient absorption.
- Yeast and probiotics could help establish beneficial microflora, reduce pathogen colonization, and modulate immune response.
- Proper fiber management allows incorporation of moderate levels of functional fibers to stimulate gut motility and microbial diversity.

3. Protein and amino acid optimization

- Avoid excessive crude protein in diets by lowering dietary CP and supplementing with crystalline amino acids. This helps reduce nitrogen and zinc interactions in the gut, improving overall nutrient efficiency.
- A balanced amino acid profile with adequate levels of lysine, threonine, and tryptophan is critical to immune competence and gut repair during weaning stress.

4. Health and biosecurity programs

- Effective vaccination and medication protocols help maintain strong disease prevention programs to minimize enteric challenges.
- Ensure water quality by checking for mineral content and microbial load. This is because poor water quality can worsen gut issues and interfere with mineral absorption.

A combination of these strategies with microencapsulated zinc can provide a holistic approach to maintaining piglet health and performance under reduced-zinc programs.

Preparing for 2027

With fewer than two years before the new regulation takes effect, it is time to start adapting nursery feeding programs. Transitioning gradually gives producers the flexibility to test and optimize formulations before limits become mandatory.

Here are a few practical steps to consider:

1. Start early with phase reductions

 Begin lowering zinc oxide inclusion across nursery phases and monitor piglet response. Use performance and health data to refine your approach.

2. Use smarter sources of zinc

 Incorporate microencapsulated or highly bioavailable zinc sources to maintain gut health and growth with minimal inclusion.

3. Strengthen your overall gut health strategy

 Complement reduced zinc levels with proven additives such as protease, xylanase, organic acids, essential oils, fibre and probiotics to support digestion and intestinal resilience.

4. Track environmental and performance metrics

 Monitor manure zinc levels and feed conversion to document compliance and sustainability benefits.

By approaching zinc reduction proactively, producers can avoid last-minute reformulation challenges while demonstrating leadership in environmental stewardship.

The 2027 regulation marks a pivotal shift toward more sustainable hog production in Canada. While it may seem daunting to move away from the comfort of therapeutic zinc, research and on-farm trials show that performance doesn't have to be sacrificed.

Through innovative technologies like microencapsulation, combined with sound management and nutritional strategies, it is possible to achieve equal or better piglet health outcomes while protecting the environment and reducing costs.

This is an opportunity for our industry to show that science-based nutrition and sustainability can go hand-in-hand.



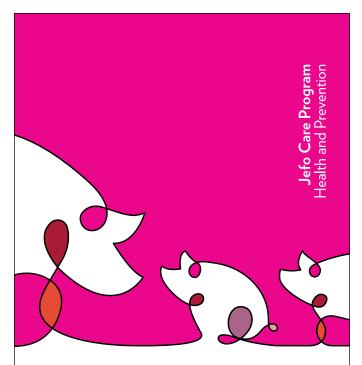
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