



Behind the Legend

Quarterly newsletter for Ontario's provincially licensed meat plant operators
Issue 25 Summer 2018

The **meat inspection legend** is the stamp that goes on meat products when they have met all regulatory requirements and are deemed safe for Ontario consumers.

Good Hand Hygiene: Get on Board!

On January 1, 2018, OMAFRA Meat Inspectors began using the Hygienic Slaughter Checklist to conduct focused inspections on hygienic slaughter and dressing practices of beef and veal. The Hygienic Slaughter Checklist is conducted daily by inspectors, and deficiencies (CAPS) are identified, discussed with plant operators and their employees and corrected immediately on the kill floor. You are encouraged to use your copy of this checklist to conduct your own assessment of hygienic slaughter and be a positive influence of change in your own operation.

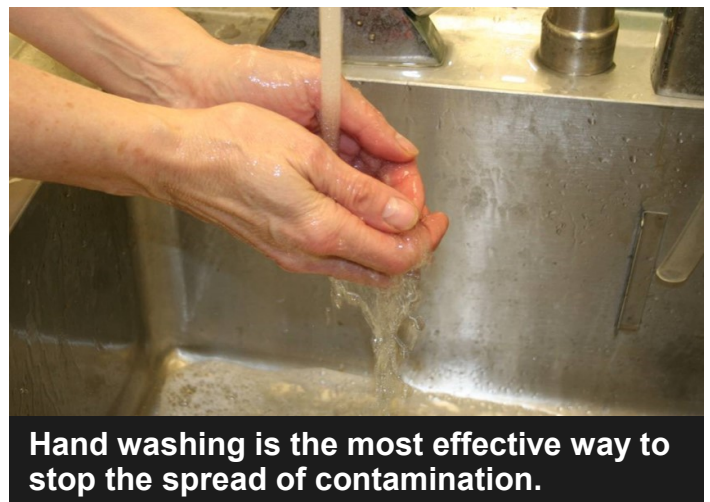
The completion of over 1,200 Hygienic Slaughter Checklists since January 1, 2018, has shown that inadequate hand washing practices is the most common deficiency, occurring in more than 50 per cent of all abattoirs that slaughter beef and veal. See page 3 for a graph of the top five deficiencies.

Hand washing is the single most effective way to stop the spread of contamination to dressed carcasses in your meat plant. Hand washing is only effective if both soap and water are used.

Your employees should wash their hands with soap and warm water every time they:

- Enter the room from the barn or retail store
- Go to the bathroom or take a break
- Get visible contamination on their hands
- Touch the animal's hide
- Come into contact with secretions, excretions, blood and bodily fluids

Remember: Reduce contamination through good sanitation. The future of your business is in your "clean" hands.



Hand washing is the most effective way to stop the spread of contamination.

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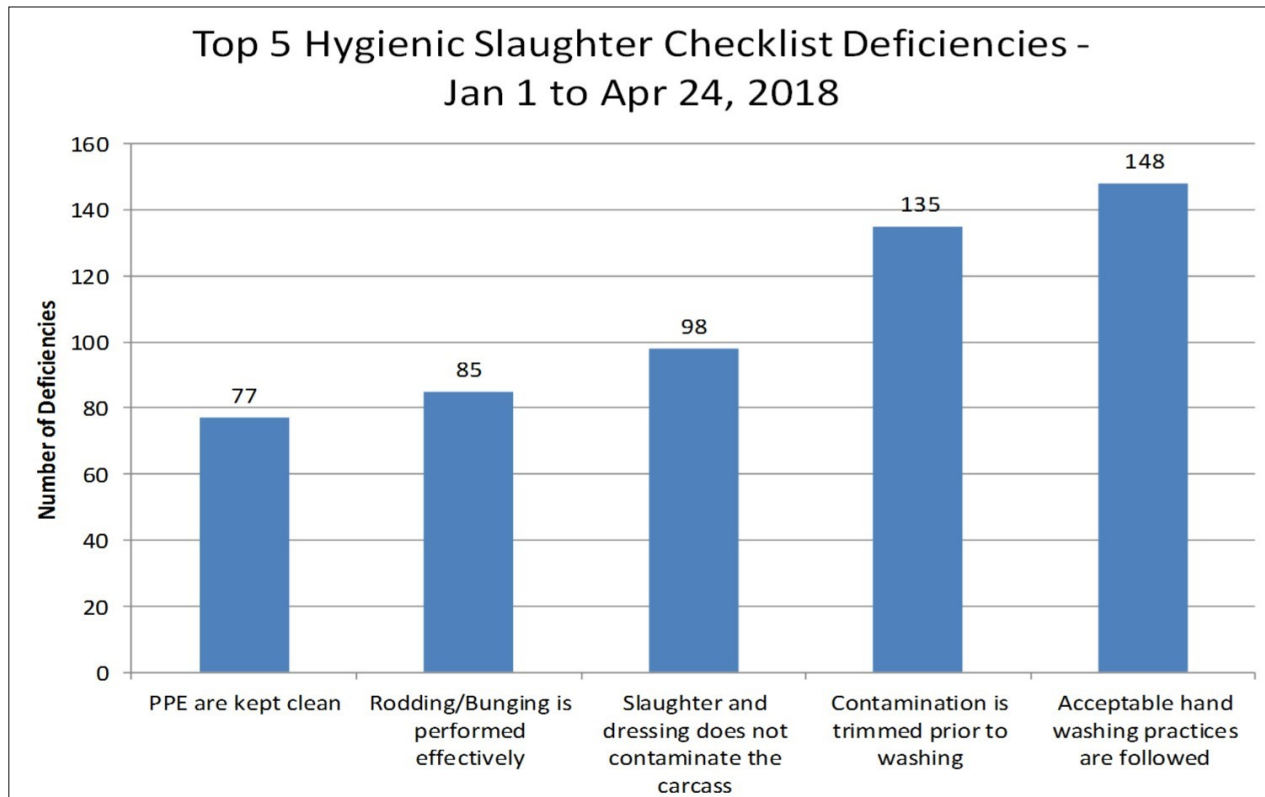


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subject line, and the newsletter
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Good Hand Hygiene: Get on Board! Continued from page 1



Picture Use at OMAFRA

Inspectors with the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) take pictures for a variety of reasons, including:

- supporting inspection duties
- training new inspectors
- to more effectively communicate abnormalities to veterinary staff

The majority of pictures taken by inspectors are to provide the Veterinary Scientist with a visual aid to help assess food animals during ante- and/or post-mortem inspection.

Inspectors are trained to identify abnormal from normal. They have an obligation to contact the Veterinary Scientist for a number of reasons, including suspicion of a food animal having a reportable disease, animal welfare concerns and unusual findings during post-mortem inspections. These matters are often time-sensitive, so inspectors usually have camera-equipped cellphones available at all times.

Please note:

- Communication with operators is encouraged; however, inspectors may not ask permission before taking pictures or videos if the pictures or videos support their inspection duties.
- Inspectors taking pictures or videos for training purposes, or for any reason outside of their inspection duties, must first ask permission from their manager and from the meat plant operator.

Selling Across Borders

Remember, provincially licensed meat plants can only sell and/or distribute their products within Ontario. Only federally registered Establishments can sell across provincial borders. This includes online sales.

Federal Livestock Traceability Regulations

Amendments to the federal Health of Animals Regulations under the *Health of Animals Act* will affect producers that handle cattle, bison, pigs, goats, sheep or farmed cervids. Keep up-to-date on the latest information with the Canadian Food Inspection Agency's (CFIA) monthly newsletter found on the Canadian Cattle Identification Agency's website at canadaid.ca.

For questions about the proposed federal regulations, contact the CFIA at trace@inspection.gc.ca.



Cattle tag

Eid 2018: Important Dates and Information

Eid al-Adha (Eid) is considered one of the most sacred Islamic holidays. It is known as the festival of sacrifice celebrated worldwide every year. Muslim communities commemorate this by sacrificing an animal and dividing it into three: one third is given to the poor, another is shared with friends, relatives and neighbours, and the final third is kept by the family.

Eid is generally celebrated over a three-day period. This year, Eid is expected to begin as early as the evening of Tuesday, August 21, and could end as late as the evening of Saturday, August 25. The true beginning of Eid is marked by the sighting of the moon; as such, it is impossible to determine with exact certainty the date festivities will begin.

It is important to start preparing well in advance to ensure your plant is ready if you are going to provide Eid services during the festivities. In early July, the Ministry of Agriculture, Food and Rural Affairs' (OMAFRA) Meat Inspection Program will begin planning the inspection scheduling needs for plant operators.

You need to provide OMAFRA with your estimated slaughter days during the Eid celebration by July 6, 2018.

OMAFRA will be sending resources and information to plant operators providing Eid services:

- Operator Checklist - Preparing for Eid
- Operator Booklet - Best Practices for Eid for Licensed Meat Plant Operators
- Brochures and signs to help you communicate regulatory requirements to your customers (for example, the importance of hand washing and use of personal protective equipment)

Last year, 36 of 124 provincial abattoirs provided Eid services for at least one of the three celebratory days. If you are interested in providing Eid services at your facility during this high demand period, please talk to your Area Manager for more information.

Frequency of Inspection Levels

All freestanding meat plants, and slaughter plants conducting complex meat processing activities, are evaluated and assigned a risk level under the Ministry of Agriculture, Food and Rural Affairs' (OMAFRA) risk classification system. Plants are given risk levels of low, medium or high. There are two major evaluation components: risk factors and mitigating factors. Risk factors account for elements that are specific to each operator (business model and structure, processing steps, products). Mitigating factors evaluate the efforts of the operator to remain in compliance with regulatory requirements. For more information, read the Frequency of Inspection Levels article in the Winter 2018 edition of Behind the Legend. (You can read the article online at omafra.gov.on.ca/english/food/inspection/meatinsp/behindlegend24.htm#program2.)

OMAFRA conducts inspections at different frequencies based on the risk level assigned to a plant. The minimum inspection frequencies associated with the risk level are:

Risk Level	Minimum Rate of Inspection
High	Every two weeks
Medium	Every three weeks
Low	Every six weeks

OMAFRA's risk classification system is designed to allocate staff and inspection resources to the greatest area of food safety risk. However, regardless of the risk level assigned, the inspection frequency of a plant may increase in instances where significant food safety risks are identified by an inspector.

Factors Influencing Risk Levels

Operators are encouraged to discuss their current risk levels with their inspectors or Area Managers, and to take action to address risk factors within their control in a timely manner. Actions that plant operators take can directly influence their risk level, which include, but are not limited to:

- Implementation of an enhanced food safety program (e.g. HACCP)
- Improving existing food safety programs
- Gaining familiarity with critical and high risk food safety deficiencies within their facilities, and preventing or controlling their occurrence
- Being audit-ready at all times
- Co-operating with inspector requests

The risk level is calculated over a 12-month period and is reviewed annually. However, revision of the existing risk level could be made as the result of changes to risk factors.

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Remember Your BN9

The Ministry of Agriculture, Food and Rural Affairs collects and uses your Canada Revenue Agency nine-digit business number to help enhance government-to-business interactions.

Our goal is for you to give your information to us once, and it will be shared across government programs.

Keep your BN9 handy when applying for or renewing your plant licence.

Frequency of Inspection Levels

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Changes to risk factors could result in an increasing or decreasing risk level, depending on the complexities of the changes being made. These can include, but are not limited to:

- Changes to existing or the addition of new processes or products
- Changes to product volume, distribution of product or ingredients
- Improvements made to plant design or flows

Operators may be concerned about the impact that the risk levels may have on their businesses. Operators may be able to improve their businesses by addressing the mitigating factors of their level. Operators can continue to reassure consumers that food safety is a top priority by maintaining their positive compliance records. Additionally, improving existing or implementing new food safety programs has the potential to open new markets. Ultimately, increasing knowledge of food safety programs and principles is often an indication of a strong food safety culture within a business.

“Improving existing or implementing new food safety programs has the potential to open new markets.”

Any events that have negative consequences for an operator's compliance record, including ongoing and repeated food safety concerns, may lead to an increase of inspection frequency (temporary or otherwise). These will be handled at the discretion of OMAFRA inspection staff according to the operator's compliance history and the risk level to food safety.

Any future changes to a level would be made after consultation with the Area Manager and Regional Manager. Operators should contact their Area Manager with any questions about changes within their plant or changes to their production programs that may potentially affect their risk level.

Canadian Agricultural Partnership: Protection and Assurance Cost-Share Funding – Intake 2

Owners of meat plants can apply for funding under the Protection and Assurance Program. The second intake will be open from August 7 to 28, 2018.

In Ontario, the Canadian Agricultural Partnership is a five-year, \$1.5 billion investment in the Ontario agri-food sector: \$1.1 billion for Business Risk Management funding and \$417 million for projects to help grow Ontario's agri-food and agri-products sectors.

Partnership funding will support projects in three key areas, with research and innovation continuing to be a key focus across all programming:

- Economic Development
- Environmental Stewardship
- Protection and Assurance

Protection and Assurance Program

The Protection and Assurance Program (ontario.ca/djwo) provides support to help sustain and grow Ontario's agri-food sector. The program will help businesses to keep pace with changing

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Canadian Agricultural Partnership: Protection and Assurance Cost-Share Funding – Intake 2

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assurance systems, rapidly evolving risk, changing marketplace expectations and increasing consumer demand for greater transparency of Ontario's food industries. An introduction to the printed Program Guides and the Online Interactive Guidebook are available online at ontarioprogramguides.net.

Funding will target three priority areas, with traceability as an element in each area:

- Food safety
- Plant health
- Animal health

Operators of slaughter plants or freestanding meat plants may apply for funding in any of the following food safety categories:

- Food Safety and Traceability Pre-audit, Assessments and Planning
- Food Safety and Traceability Training and Education
- Food Safety Equipment
- Traceability Equipment
- Food Safety and Traceability System Improvements

Operators of slaughter plants can also apply for funding in any of the following animal health categories:

- Education, Training, Assessment and Planning
- Preventing the Introduction and Spread of Disease
 - Defining Zones and Controlled Access Points
 - Establishing Cleaning and Disinfecting Practices
 - Establishing Isolation or Segregation
 - Preventing access by Trespassers, Wildlife, Pests
 - Health Management
- Establishment of Facilities to Manage Deadstock
- Improvements to Animal Housing and Handling

How to apply

Between August 7 and 28, 2018, you can apply online at ontarioprograms.net, by email or by mail. Visit the Ministry of Agriculture, Food and Rural Affairs' (OMAFRA) Canadian Agricultural Partnership website at ontario.ca/AgPartnership for application information. Be sure to read the program guidelines at ontarioprogramguides.net to make sure your project is eligible for funding. For all email and mail submissions, you'll need to include the application form, project information and other supporting documents as required (such as project plans).

For more information

You can find more information about all Partnership funding programs at ontario.ca/AgPartnership. Contact OMAFRA's Agricultural Information Contact Centre at 1-877-424-1300, or email agpartnership@ontario.ca for information about Protection and Assurance Programming.

The Protection and Assurance Program is funded in part through the Canadian Agricultural Partnership, a federal-provincial-territorial initiative.



Building Food Safety Management Capacity in Ontario Meat Plants

Guest Columnist: Ontario Independent Meat Processors (OIMP)



For meat processing operations and abattoirs, plant sanitation and controlling contamination of carcasses during slaughter and processing are two of the most critical hygienic practices that reduce major risk factors for food-borne illnesses in humans. In a *Growing Forward 2 (GF2)* funded pilot project, the Ontario Independent Meat Processors' (OIMP) objective was to enhance food safety management capacity related to hygienic slaughter and sanitation in provincially licensed meat plants.

The project focused on three key areas: Hygienic Slaughter Improvements, Customized Sanitation Training and Luminometer Use, in plants producing high-risk products.

Hygienic Slaughter Improvements

Seven provincially licensed bovine abattoirs received an on-site evaluation of their plant's hygienic slaughter practices using a risk-based gap assessment. This assessment was used to identify areas of improvement that included employee practices, appropriate facility design and work flow, and process design. It was noted during the evaluations that the areas of improvement included hygienic slaughter and dressing procedures to avoid cross contamination, good manufacturing practices to prevent contamination, operational sanitation and employee movement. Participants were provided with a copy of the assessment and its findings as well as educational resources on the benefits of hygienic slaughter and applications of carcass interventions. The participants were provided technical expertise and funding for the implementation of a carcass wash intervention, suitable for their specific operation, which included either spray equipment and antimicrobial chemicals or hot water.

Customized Sanitation Training

On-site evaluations of the sanitation practices of nine provincially licensed freestanding meat plants were conducted using a standardized checklist, which facilitated the development and delivery of customized training. Areas identified for enhanced training included employee practices, practical knowledge of sanitation equipment and chemicals, and accessibility to chemicals and tools to facilitate effective cleaning. A copy of the evaluation report was issued to plant operators. The report included findings and recommendations for specific cost-effective sanitation solutions and product options to address identified deficiencies. Training, tailored specifically to the individual needs of the meat plant, was created based on the findings of the assessment and delivered following adult learning principles, including classroom-style training and hands-on demonstrations.

Luminometers

OIMP facilitated the distribution of 50 3M™ Clean-Trace™ NG Luminometers and cases of swabs, with training and technical support, to meat plants producing high-risk products. Luminometers provide invaluable rapid, real-time data to operators and plant personnel to highlight areas for improvement and help assess the effectiveness of their sanitation procedures.

Overall, the plant operators participating in the pilot project felt that the services provided, whether it was the hygienic slaughter assessment, customized sanitation training or receipt of the luminometer, was beneficial to their company, improved their understanding and knowledge and will influence their future activities. OIMP wishes to thank all project participants and commend their ongoing commitment to food safety.

Why Implement Microbial Control Interventions in Your Abattoir?

Some types of *E. coli* bacteria can cause disease in humans that can lead to severe infections, and even death. They are found in the feces of cattle and can cause contamination of beef and veal carcasses during the slaughter and dressing procedures.

In 2016, OMAFRA conducted a baseline study to quantify the prevalence of *E. coli* O157 and Shiga toxin-producing *E. coli* (STEC) on beef and veal carcasses slaughtered in Ontario's provincially licensed plants. The baseline study showed that there is a need to focus attention on hygienic slaughter and dressing practices, and on the implementation of microbial control interventions to mitigate food safety risks on carcasses.

**“Microbial control interventions
will provide added assurance that you
are producing safe food for consumers.”**

Microbial control interventions may be applied to beef and veal carcasses during and/or after the dressing procedure to remove or reduce bacterial contamination. Using sanitary slaughter and dressing procedures is essential to reduce bacterial contamination on beef and veal carcasses. These, combined with the use of microbial control interventions, can provide significant reduction in bacterial numbers, lowering risk of food-borne illness. You can find more information about microbial control interventions on the Ministry of Agriculture, Food and Rural Affairs' website at ontario.ca/meatinspection. See page 10 for a list of microbial control interventions and implementation guidance.

By law, operators are required to prevent contamination of carcasses and meat products. Many provincially licensed meat plant operators have already implemented these carcass interventions, and use hygienic slaughter and dressing procedures for every animal they slaughter. We encourage you to adopt a microbial control intervention for your plant to help minimize risks of contamination.

Using good manufacturing practices means safe meat for your customers. When combined with hygienic slaughter and dressing practices, microbial control interventions will provide added assurance that you are producing safe food for consumers, reducing risks of costly recalls and protecting your reputation.

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Recent Convictions

Kenneth E. Valliquette of Sharon, Ontario, was fined \$6,250 for unlawfully engaging in the business of a livestock dealer without a licence as required under the *Livestock and Livestock Products Act*. On January 24, 2018, Mr. Valliquette was convicted of selling cattle without a valid licence.

Justice of the Peace Susanne Doyle ordered Mr. Valliquette to pay \$5,000, plus a 25 per cent Victim Fine Surcharge of \$1,250.

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information for
Ontario's agri-food industry:
twitter.com/OMAFRAsafeFood



Why Implement Microbial Control Interventions in Your Abattoir? Continued from page 9

Microbial Control Interventions	Implementation Guidance	Suggested Record Keeping
Hot water	Minimum 74°C (165°F) for 5 seconds	(1) Periodic check of water temperature, and (2) documentation of application to carcass
Hot water wash cabinet	As per manufacturer's instructions, water temperature minimum 74°C (165°F) for 5 seconds	(1) Periodic check of water temperature, and (2) documentation of application to carcass
Steam pasteurization	As per manufacturer's instructions	(1) Periodic check of water temperature, and (2) documentation of application to carcass
Steam vacuuming	As per manufacturer's instructions; Steam is delivered by a continuous stream of 7-10 psi water at 82-94°C while simultaneously vacuuming the area around the stream of hot water	(1) Periodic check of water temperature, and (2) documentation of application to carcass
Peroxyacetic acid	Not greater than 220 parts per million (ppm)	(1) Documenting proper concentration of solution at make-up, and (2) documentation of application to carcass
Acetic acid	2.5% applied with warm water (up to 54.5°C / 130°F)	(1) Documenting proper concentration of solution at make-up, and (2) documentation of application to carcass
Lactic acid	5% applied with warm water (up to 54.5°C / 130°F)	(1) Documenting proper concentration of solution at make-up, and (2) documentation of application to carcass
Citric acid	2.5% applied with warm water (up to 54.5°C / 130°F)	(1) Documenting proper concentration of solution at make-up, and (2) documentation of application to carcass
Sodium hypochlorite	Not greater than 20 ppm, followed by a potable water rinse	(1) Documenting proper concentration of solution at make-up, and (2) documentation of application to carcass
Dry aging	No more than 90% relative humidity, temperature of 4°C or less for at least 6 days	(1) Cooler temperature less than 4°C, (2) relative humidity is maintained at less than 90% and (3) documentation that carcasses are chilled/aged for at least 6 days
** Any other microbial control intervention that is effective in reducing carcass microbial loads.	Scientifically validated by the operator and submitted for review and approval by the Food Inspection Branch	

Ready-to-Eat Meat Testing Results Summary

As part of our surveillance and monitoring program, the Ministry of Agriculture, Food and Rural Affairs (OMAFRA) tests samples of ready-to-eat (RTE) meat produced at provincially licensed plants. Occasionally, these tests will come back with an adverse result. When the adverse result is a pathogen, in addition to a review of practices/protocols/procedures, the meat inspector will ensure that there is no risk to the public, and assist the plant operator to complete a root cause analysis to aid in the identification of the potential source of contamination (e.g. environmental testing).

Year	Number of Sampled Lots Tested ⁽¹⁾	Number of Sampled Lots with Adverse Results ⁽²⁾	Percentage of Lots with Adverse Results	Number of Adverse Results, by Type							
				Indicator Organisms			Pathogens/Toxins				
				Aerobic Colony Count (ACC) > 10,000	Coliforms > 1,000	<i>E. coli</i> > Health Canada limits ⁽³⁾	<i>Listeria monocytogenes</i>	Verocytotoxigenic <i>E. coli</i>	<i>Staphylococcus aureus</i> > Health Canada Limits ⁽⁴⁾	<i>S. aureus</i> Toxin	<i>Salmonella</i>
2009	565	64	11.3%	52	1	0	11	0	0	0	1
2010	686	47	6.9%	36	8	0	6	0	0	0	0
2011	820	57	7.0%	48	2	0	9	0	0	0	1
2012	782	50	6.4%	36	1	0	11	2	2	1	2
2013	728	50	6.9%	39	4	0	13	0	2	0	0
2014	786	49	6.2%	32	1	0	17	0	0	0	1
2015	702	42	6.0%	34	0	0	8	0	0	0	0
2016	714	45	6.3%	37	1	0	7	0	1	0	0
2017	638	27	4.2%	26	0	0	1	0	0	0	0
2018 ⁽⁵⁾	320	14	4.4%	11	0	0	3	0	0	0	0

(1) Five subsamples collected and tested per sampled lot.

(2) When levels of indicator organisms and/or pathogens are unsatisfactory (i.e. when levels found in the sample exceed Health Canada Limits). There could be more than one type of adverse result per lot.

(3) Health Canada limits for Generic *E. coli* are any of the following:

- Heat treated Fermented Sausage: >10³/g in one subsample, or >10¹/g in more than one subsample
- Raw fermented Sausage: >10³/g in one subsample, or >10²/g in more than one subsample
- Non-fermented products: >10³/g in one subsample, or >10²/g in more than two subsamples

(4) Health Canada limits for *S. aureus* are any of the following:

- FCC, FCNC and dried: if any subsample has >10⁴/g or >10²/g in more than two subsamples
- Heat treated fermented meats: if any subsample has >10⁴/g or >50/g in more than one subsample
- Raw Fermented: >10⁴/g or >250/g in more than one subsample
- FCC – fully cooked comminuted
- FCNC – fully cooked non-comminuted

(5) From January 1, 2018, to May 31, 2018

New Audit Services Provider

Noraxx Inspections Inc. has been selected, through a competitive procurement process, to conduct the compliance verification audits in the freestanding meat plants as well as to audit the Category 2 activities in abattoirs. Ministry of Agriculture, Food and Rural Affairs (OMAFRA) regional veterinarians will continue to be responsible for compliance verification audits in abattoirs.

Food safety compliance verification audits are an additional food safety checkpoint and are part of Ontario's comprehensive meat plant licensing, inspection and compliance programs. A compliance verification audit is a point-in-time that provides a snapshot of a plant's animal welfare and/or food safety performance against the regulatory requirements. Auditors conduct onsite visits to review the overall structure, operations and documentation of a meat plant. Findings are assessed against the regulatory requirements using the Meat Plant Guidelines (MPGs).

Contracting a professional food safety audit services provider strengthens OMAFRA's ability to verify compliance with the regulatory requirements in an objective, consistent and transparent way. Noraxx Inspections Inc. will be responsible for hiring qualified food safety auditors, meeting ministry service standards and performance measures, and ensuring that audit findings are consistently reported.

Noraxx Inspections Inc. is headquartered in Mississauga and has a highly experienced auditing force specializing in food safety. The company started scheduling and conducting audits as of mid-May 2018.

For questions related to the audit process, please contact your Area Manager.

Ministry of Agriculture, Food and Rural Affairs Meat Inspection Program Management Team

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For any inquiries regarding meat inspection, please contact your area manager.
All area managers can be paged at: 1-866-395-8957. Ask for your area manager by name.

For more information: Telephone: 1-877-424-1300 Email: ag.info.omafra@ontario.ca
Web: ontario.ca/meatinspection Twitter: @OMAFRAsafefood **Aussi disponible en français**