

Chapter 33

Regulating Meat Safety

1.0 MAIN POINTS

Saskatchewan laws allow the sale of meat to customers without the meat being inspected. Almost all Canadian provinces require mandatory inspections of meat as well as of slaughter plants. Also, Saskatchewan is the only Province where the responsibility for meat safety is handled by more than one ministry. Saskatchewan's approach to regulating the slaughter of animals to produce meat for human consumption might be outdated. We recommend that the Government assess the risks related to uninspected meat and consider updating its regulations.

In general, slaughter plants that handle larger volumes of meat choose to have the meat they produce inspected in provincial or federal programs. As a result, much of the meat for sale in Saskatchewan is inspected. Fourteen of Saskatchewan's 90 slaughter plants have an in-depth provincial or federal inspection. These in-depth regular inspections aim to ensure that the meat is safe for human consumption. In-depth inspections examine the animal, the slaughter process, the carcass, the plant including the equipment, and the meat. Farmers voluntarily choose to have their animals slaughtered at plants that are provincially or federally inspected because large retail customers require this inspection before they purchase meat.

The Ministry of Health (Health) oversees regional health authorities whose public health inspectors annually inspect whether or not 76 slaughter plants are sanitary – this slaughter plant inspection is mandatory (with the exception of farmgate operations). This inspection is of the slaughter plant only and does not include meat.

We found that Health needs to improve its processes to oversee the work of regional health authorities that inspect and license the 76 slaughter plants subject to its inspections. Health does not monitor the number of animals slaughtered at these plants, review follow-up reports about slaughter plants assessed as medium to high risk of producing unsafe meat, or verify that regional health authorities promptly re-inspect high-risk plants to ensure deficiencies are corrected promptly.

The Ministry of Agriculture (Agriculture) oversees in-depth inspections in 11 slaughter plants that sell meat more widely within the Province – this in-depth meat and slaughter plant inspection is voluntary. We found that Agriculture had good processes to oversee the safety of meat from the 11 slaughter plants it inspects. We did not examine the processes used at the three plants that the Federal Government inspects.

We make 10 recommendations to strengthen the processes that help keep meat safe in Saskatchewan.

2.0 INTRODUCTION

In Saskatchewan, two ministries have responsibility by law for regulating the production of meat that is safe for human consumption—the Ministry of Health (Health) and the Ministry of Agriculture (Agriculture). Section 3.1 explains the relevant legislation. Both



ministries work with other agencies to carry out their roles. We audited whether these two ministries properly carry out their oversight roles. Saskatchewan laws allow the sale of meat to consumers without inspection of the meat. If meat is sold commercially, it must come from a slaughter plant that has been inspected.

Health must oversee regional health authorities whose public health inspectors annually inspect whether or not 76 slaughter plants are sanitary—this slaughter plant inspection is mandatory (with the exception of farmgate operations). These slaughter plant inspections assess annually that slaughter plant premises and equipment are clean and can keep carcasses sufficiently cold. These slaughter plant inspections do not include an inspection of the meat produced.

Agriculture must oversee inspections in 11 slaughter plants that sell meat more widely within the province—this meat and plant inspection is voluntary. Slaughter plants voluntarily register in Saskatchewan’s Domestic Meat Inspection Program (DMI Program) to obtain these inspections for both meat and plant. Under the DMI Program, inspectors assess slaughter plants’ routine processes to prevent the contamination of meat during the slaughter and also assess that the premises and equipment are sanitary. If Agriculture inspects a slaughter plant, then the slaughter plant does not require a plant inspection by Health, as described above. Agriculture contracts with the Canadian Food Inspection Agency (CFIA)¹ to perform these DMI Program inspections.

Saskatchewan’s approach to regulating the slaughter of animals to produce meat for human consumption might be outdated. As explained in Section 3.2, almost all Canadian provinces require mandatory inspections of meat as well as slaughter plants.

3.0 BACKGROUND

3.1 Saskatchewan Legislation Regulating Meat Safety

In Saskatchewan, slaughtering meat is governed under three provincial acts and related regulations and also under federal acts and regulations.

- › *The Public Health Act, 1994, The Sanitation Regulations, 1964, and The Public Health Officers Regulations*
 - Provincial legislation giving powers to public health inspectors to conduct inspections and outlines requirements for safe food

- › *The Diseases of Animals Act, 1966 and The Regulations Governing the Inspection of Meat in Domestic Abattoirs, 1968*
 - Provincial legislation authorizing standards for the humane treatment of animals; procedures before, after, and during slaughter; the disposal of carcasses and waste; and the safe handling of meat products

¹ The CFIA is a federal agency responsible for administering and enforcing 13 federal statutes and 38 sets of regulations, for regulating the safety and quality of food sold in Canada, and for supporting a sustainable plant and animal resource base. The Agency’s activities include registering and inspecting establishments as well as testing food, animals, plants and their related products.

- › *The Animal Products Act, 1978*
 - Provincial legislation giving inspectors the power to search, seize, inspect, or detain animals or animal products
- › *The Meat Inspection Act, 1985 and The Meat Inspection Regulations, 1990*
 - Federal legislation setting standards for inspecting meat sold across provincial or territorial boundaries.

Even though the Ministries of Agriculture and Health carry out their responsibilities for regulating meat safety in Saskatchewan through other agencies, each Ministry remains responsible for ensuring that the regulations are carried out and enforced as explained in **Figure 1**.

Figure 1—Agriculture and Health Ministries Regulate Meat Safety Through Other Agencies

Agriculture contracts with Canadian Food Inspection Agency and must oversee these federal inspectors:²

The Regulations Governing the Inspection of Meat in Domestic Abattoirs, 1968 (section 6) assigns federal inspectors to carry out inspections of slaughter plants, animals, slaughter processes, carcasses and prepared meat for plants that are within the Saskatchewan Domestic Meat Inspection Program.

Agriculture is responsible for overseeing federal inspectors, enforcing the Regulations, and registering eligible plants in the Ministry's voluntary Saskatchewan Domestic Meat Inspection Program.

Health must oversee regional health authorities and their public health inspectors:

The Public Health Act, 1994 (sections 7, 25 and 53(1)) gives regional health authorities the responsibility to do inspections, issue licenses or health hazard orders, and enforce *The Sanitation Regulations, 1964*.

Health is responsible for overseeing that regional health authorities carry out this role effectively.

Source: Saskatchewan legislation

Inspections of plants and meat do not guarantee that meat will be safe. Inspections contribute to producing meat that is slaughtered, cut and packaged at an acceptable standard. Meat must still be carefully cleaned, prepared, and cooked.

Contamination of meat is commonly bacterial, and sometimes is chemical or physical (e.g., with pieces of bone or other items that should not be in the meat). Meat can be contaminated at the source-animal, during slaughter or processing, or by food handlers (e.g., at retail outlets, restaurants, or in homes). Meat can also be contaminated while it is being eaten due to unclean hands or utensils. The most common contaminants of meat or poultry are *Campylobacter*, *Salmonella bacteria*, and *Escherichia coli* (*E. coli*).

It is not known how many people become ill due to contaminated meat. In most cases, contaminated food results in diarrhea and/or vomiting for about three days. Because the illness does not last long, most people do not consult a doctor. However, contamination from very toxic bacteria can cause extreme illness requiring hospitalization. In Canada, about 35 to 40 people die annually due to food-borne illness.³

² The Ministry of Agriculture's agreement with the Canadian Food Inspection Agency expires December 31, 2013.

³ Conference Board of Canada. (2012). Improving food safety in Canada: Toward a more risk-responsive system, p. 10.

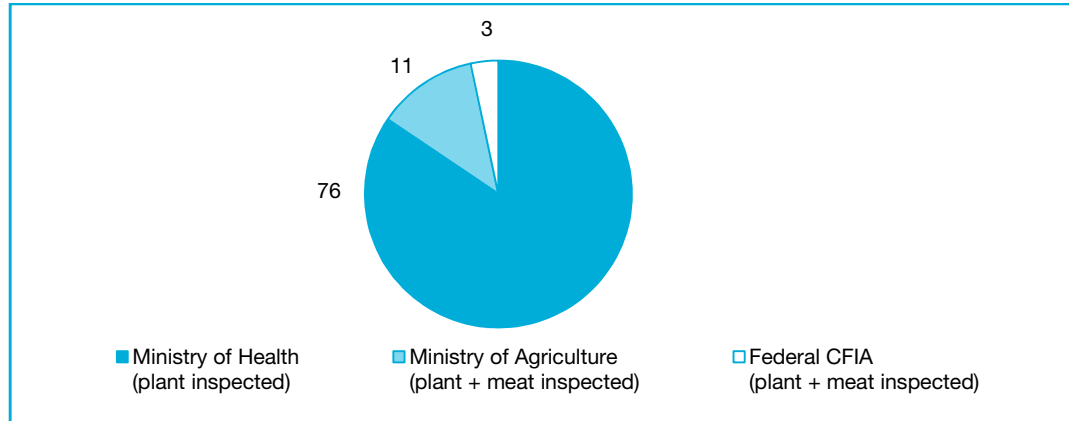


Three types of inspections related to meat safety take place in Saskatchewan—slaughter plant inspections, DMI Program inspections (meat and plant), and federal inspections (meat and plant). The nature of these inspections varies:

- › Slaughter plant inspection – Health oversees the inspections of slaughter plants that operate under a health license. This inspection does not inspect the animals, carcasses, and meat. This inspection is *mandatory* if slaughter plants are not inspected under the DMI Program or under Federal inspection. In Saskatchewan, in 2011-12, public health inspectors employed by regional health authorities inspected 76 slaughter plants to determine if the slaughter plants and related equipment were sanitary and appropriate for slaughter purposes. Meat sold commercially in Saskatchewan must come from an inspected slaughter plant, whether or not the meat is inspected (*The Sanitation Regulations, 1964*, section 22). Health does not know the number of animals slaughtered at the inspected slaughter plants. The Regulations do not require that Health collect this information.
- › DMI Program inspection – Agriculture oversees the inspections of the animal, slaughter plant, slaughter process, carcass, and meat cutting and processing under the Saskatchewan Domestic Meat Inspection Program (DMI Program). This inspection is *voluntary* and the meat may only be sold within the province. In Saskatchewan in 2012, 11 slaughter plants were provincially inspected for compliance with *The Regulations Governing the Inspection of Meat in Domestic Abattoirs, 1968* and related standards. If a slaughter plant undergoes a DMI Program inspection, then it is not required to have a slaughter plant inspection by Health, as described above. The Ministry of Agriculture has a formal agreement with CFIA for federal inspectors to assess compliance with these provincial Regulations for the production of meat (the agreement expires December 31, 2013). Manitoba and British Columbia have similar agreements. In 2011-12, these plants handled 72,747 animals including over 5,000 cattle, 33,600 swine, and thousands of other animals (e.g., chickens, lamb, rabbits, bison, goats).
- › Federal inspection - This is an inspection of the animal, slaughter plant, slaughter process, carcass, and meat cutting and processing under *The Meat Inspection Regulations, 1990*. This inspection is *mandatory* for inter-provincial and international transport or sale of meat.⁴ In Saskatchewan in mid-2012, three slaughter plants operated under federal Regulations and were federally inspected by CFIA.⁵ If a slaughter plant undergoes a federal inspection then it is not required to have a plant inspection, as described above.

⁴To sell meat across international borders requires more rigorous inspection based on ISO 22000 or European Union standards. ISO 22000 is an international food safety standard developed by the International Organization for Standardization. It is a framework for a Food Safety Management System incorporating Good Manufacturing Practices, Hazard Analysis Critical Control Point principles and ISO 9001:2000 elements.

⁵CFIA website, August 2012, states CFIA also inspects six plants that process meat from carcasses slaughtered elsewhere.

Figure 2—Types of Inspections Conducted in Saskatchewan’s 90 Slaughter Plants, 2011-12

Source: Saskatchewan Ministry of Agriculture and Ministry of Health, and CFIA website July 2012.

Currently, the number of slaughter plants is declining in Saskatchewan. In 2009, Saskatchewan had 96 slaughter plants and by 2012 it had 90 plants. This decline could be a response to fewer livestock on Saskatchewan farms since 2006.⁶ It also reflects the closure of some federally inspected plants. Saskatchewan farmers and ranchers now ship more animals to large plants outside Saskatchewan.

After the CFIA inspects meat in Saskatchewan, the meat is labelled “*Canada Inspected [plant identification number]*” to designate it comes from a federally inspected plant or “*Canada Inspected [plant identification number] Sask*” to designate it comes from a provincially inspected plant. CFIA inspected plants label all the meat they prepare with that plant’s number so that the source of all inspected meat can be tracked. Some retailers purchase only meat that carries these labels because it shows the meat was inspected and identifies its source. As a result, some plant operators voluntarily request that their meat be inspected under the DMI Program.

3.2 National Legislation Regulating Meat

As previously noted, slaughtering meat is governed by federal and provincial legislation and standards. The federal CFIA uses the broad *Food and Drug Act, 1985* to regulate food safety, supported by specific legislation about inspecting and labelling food.⁷ As part of its role, CFIA inspects food and recalls food that is unsafe for any reason. CFIA focuses on food that crosses provincial or national borders (e.g., is slaughtered or processed in one province and sold in another).

Provincial ministries regulate meat safety within each province. The ministry responsible and the regulatory approach varies across Canada, as set out in **Figure 3**. Saskatchewan is the only province that assigns this responsibility to two ministries.

⁶SaskTrends Monitor, April 2012, p. 5.

⁷Federal legislation governs specific aspects of meat sales: *The Canada Agricultural Products Act*, *The Meat Inspection Act 1985*, the related *Meat Inspection Regulations, 1990*, and the food provisions of *The Consumer Packaging and Labeling Act*. In June 2012, the Federal Government proposed *The Safe Food for Canadians Act, 2012*. If passed by Parliament, this Act would separate the food and drug aspects of *The Food and Drug Act* and would consolidate other legislation relevant to food safety.



Figure 3—Varied Approaches to Regulating Meat in Canadian Provinces 2012

	BC	Alta	SK	Man	Ont	Que	NB	PEI	NS	Nfld-L
Agriculture	X ⁸	X	X	X	X	X			X	X
Health			X				X	X		
Inspect all meat before sale	Yes except remote locales	Yes	No	Yes except poultry	Yes	Yes	No	Yes cold carcass	Yes except farmgate	No
Allow farmgate sales	No	No	Yes	No except poultry	No	No	No	No	Yes	Yes

Source: September 2012 information from Saskatchewan Ministry of Agriculture and Ministry of Health.

In Saskatchewan, for commercial sale of meat, it is mandatory to inspect the plant where the meat is slaughtered, but it is not mandatory to inspect the meat produced. As shown in **Figure 3**, most other provinces require that both the plant and the meat be inspected before the meat is sold. Saskatchewan, New Brunswick, and Newfoundland and Labrador are the only provinces where the meat may be sold commercially to consumers without being inspected. In 2012, the Government does not know how many animals are slaughtered in the Province or how much meat enters the food chain without being inspected.

“Farmgate sales” of meat refers to locally-produced meat sold directly from the producer to consumers. For example, consumers may go to a farm to purchase meat. Saskatchewan does not have regulations governing farmgate sales. As explained in **Figure 3**, most provinces regulate farmgate sales so that all meat is inspected before sale.

Management stated that the ministries of Agriculture and Health consulted with stakeholders in 2005-06 about possible legislative changes. No changes resulted from this consultation. In early 2012, Agriculture (assisted by Health) was consulting with stakeholders about ways to regulate meat. The objective of this consultation was to guide Saskatchewan’s response to the Federal Government’s announcement in 2011 that federal CFIA inspectors will no longer inspect meat for three Provinces after December 2013.

1. We recommend that the Government of Saskatchewan formally assess the risks related to uninspected meat and consider updating its regulations for the production of meat that is safe for human consumption.

4.0 AUDIT OBJECTIVE, SCOPE, CRITERIA, AND CONCLUSIONS

The objective of this audit was to assess whether the Ministry of Agriculture and the Ministry of Health each had effective processes during September 1, 2011 to August 31,

⁸ Meat safety is regulated through the British Columbia Centre for Disease Control.

2012 to regulate the production of meat that is safe for human consumption when it is handled by slaughter plants within Saskatchewan.

The audit focused on the Government's regulations and its oversight to prevent contamination of meat due to unsanitary processes in slaughter plants. The audit excluded the handling and further processing of meat. The audit also excluded federal inspections of slaughter plants under federal regulations.

To conduct this audit, we followed the *Standards for Assurance Engagements* published in the *CICA Handbook - Assurance*. To evaluate the regulatory processes, we used criteria based on legislation, our related work, reviews of literature including reports of other auditors, and consultations with management and an external advisor. Section 7.0 includes key sources for these criteria. Management of the Ministry of Agriculture and the Ministry of Health agreed with the criteria in **Figure 4**.

Figure 4—Audit Criteria for Processes to Regulate the Production of Safe Meat

To have effective processes to regulate the production of meat that is safe for human consumption when it is handled by slaughter plants within Saskatchewan, the Ministries of Agriculture and Health should each:

- 1. Set standards for regulating the production of meat**
 - Identify key risks to be addressed
 - Monitor regulatory practices in other jurisdictions
 - Approve standards for operating practices (e.g., sanitation) and inspection practices
 - Coordinate roles for regulating the safety of meat
 - Communicate standards to plant operators and inspectors
- 2. Enforce compliance with authorities (legislation, regulations, standards)**
 - Oversee inspection practices (e.g., on-site audits, file review, verify reports)
 - Use enforcement tools where warranted (e.g., fines, license suspension)
 - Monitor follow-up of corrective action
 - Address complaints (e.g., about inspections, non-compliance)
 - Review reports of enforcement activities and results
- 3. Report results of enforcement activities**
 - Report results to plant operators (e.g., explain standards and required action)
 - Make compliance results publicly available (e.g., website or on request)
 - Analyze trends in non-compliance overall and at each plant
 - Report results to senior management

The two ministries that regulate the production of meat for human consumption in Saskatchewan have different responsibilities and processes.

As explained in Section 3.1, Agriculture regulates the condition of the live animals, the slaughter process, and the carcass, as well as the slaughter plant and equipment. Agriculture's inspections are voluntary, not mandatory. Some slaughter plant operators voluntarily request inspections under Saskatchewan's Domestic Meat Inspection Program. These inspections are conducted daily or whenever meat is slaughtered.

We concluded that the Ministry of Agriculture had effective processes during September 1, 2011 to August 31, 2012 to regulate the production of meat that is safe for human consumption when it is handled by the 11 slaughter plants within Saskatchewan's Domestic Meat Inspection Program.

We found that the Government of Saskatchewan does not require an inspection of all meat produced in 76 slaughter plants and meat produced for farmgate sales.



As explained in Section 3.1, Health regulates slaughter plants and requires that they be licensed. Regional health authorities conduct annual inspections of how plants are built, the equipment used, safe storage of the meat, access to clean water, and safe waste disposal. This plant inspection is mandatory. Meat is not inspected in these plants.

We concluded that the Ministry of Health did not have effective processes during September 1, 2011 to August 31, 2012 to regulate the production of meat that is safe for human consumption when it is handled by the 76 inspected slaughter plants within Saskatchewan. Health did not have sufficient information to know if regional health authorities effectively inspected slaughter plants and resolved identified problems to enforce *The Sanitation Regulations, 1964*. These inspections are typically done annually versus daily.

As explained in Section 3.1, Saskatchewan does not require all meat to be inspected.

We set out our key findings and recommendations for Agriculture in Section 5.0 and Health in Section 6.0.

5.0 KEY FINDINGS AND RECOMMENDATIONS—AGRICULTURE

5.1 Standards Set for Regulating Meat May Need Updating

Agriculture uses several methods to routinely identify and monitor risks. Agriculture monitors trends in animal diseases to identify risks. It attends federal/provincial/territorial meetings to discuss emerging risks and industry changes with officials and experts in other jurisdictions. Health also attends some of these meetings.

Agriculture provides slaughter plant operators with its *Standards for Domestic Meat Inspection Program* (Standards) when the slaughter plant joins the voluntary Saskatchewan Domestic Meat Inspection Program (DMI Program). It also provides plant operators with an electronic copy of the Standards periodically by email. The Standards provide very detailed requirements and explain the desired outcomes and the rationale (e.g., prevent contamination of the meat). For example, the Standards provide detailed instructions for slaughter plant design and construction, equipment, water supply, staffing, processing, and meat storage. The Standards also address the required condition of the animal and the carcass. Agriculture developed these standards in collaboration with the federal CFIA in 2002. Given that ten years have passed, Agriculture's Standards may need to be updated. Agriculture can benefit by reviewing its Standards with CFIA to determine if updates are needed.

In June 2011, the Federal Government announced that, after December 2013, it will no longer provide inspection services to help enforce provincial regulations. Management stated that it is working toward a new system for inspecting meat.

2. We recommend that the Ministry of Agriculture review its standards for regulating meat production and formally approve them.

The Ministries of Agriculture and Health work together informally. Management in both ministries stated they do not use written guidance about when and how to work together as the staff are experienced. We did not detect any gaps in critical communication. That is, when a slaughter plant withdrew from Agriculture's voluntary DMI Program and continued to operate, we found that the plant received the plant inspection that is mandatory under *The Sanitation Regulations, 1964*.

5.2 Standards Enforced and Monitored

As outlined in Section 3.1, Agriculture enforces the regulations relevant for inspecting meat through the CFIA. Agriculture has a formal agreement with CFIA. CFIA agrees to inspect slaughter plants that are registered in Agriculture's DMI Program. The CFIA agrees to use inspectors that are trained in meat hygiene standards. In 2012, 11 slaughter plants voluntarily participated in the DMI Program.

The CFIA inspections assess whether the slaughter plants comply with the provincial *Regulations Governing the Inspection of Meat in Domestic Abattoirs, 1968* (Regulations) and the Standards. The meat can then be stamped *Canada Inspected* (see Section 3.1) and sold within Saskatchewan.

CFIA inspectors provide inspections during slaughter in the 11 slaughter plants that are registered in the DMI Program. CFIA inspectors assess the plant, each animal, the slaughter process, and the carcass and how it is kept clean and cold. Under the DMI Program, whenever these 11 plants are slaughtering animals, CFIA inspectors attend.

CFIA inspectors verbally communicate all deficiencies to the plant operator immediately as well as noting the problems in a monthly inspection report. For example, the inspector assesses the plant before slaughtering begins. If the plant does not comply with the Standards, the problem (e.g., dirty equipment) must be corrected before the inspector allows slaughtering to begin. CFIA inspects the slaughter process throughout and stops the process if there is a risk of contamination. The CFIA inspector has authority to halt slaughtering operations indefinitely until a deficiency is corrected. In this way, Agriculture enforces the Regulations and the related Standards.

CFIA inspectors submit monthly reports to Agriculture with detailed findings. Agriculture reviews the reports and decides if any issues require more action than already taken by the CFIA inspector on-site. It is Agriculture's responsibility to enforce the relevant legislation by taking further action if there are unresolved issues. During our audit period, there were no unresolved issues and Agriculture did not require any slaughter plant to withdraw from the DMI Program. Prior to our audit period, slaughter plants periodically withdrew from the DMI Program and/or ceased to operate.

Because slaughter plants voluntarily enter the DMI Program for business reasons (e.g., to sell government inspected meat), the plants are co-operative with the CFIA inspectors



that constantly observe their slaughter processes. Agriculture communicates regularly with the 11 plants to reinforce the meat inspection Standards.

Agriculture has formal methods to oversee how the CFIA inspectors do their inspections at the 11 slaughter plants in the DMI Program. It verifies that it receives reports for every plant every month. It also regularly reviews the inspection reports it receives to determine if further action is required to enforce the Regulations. For example, if the same issue arises repeatedly, Agriculture visits the plant to assess the problem and advises the CFIA inspector. Agriculture conducts unannounced on-site audits in each plant annually to assess the plant and the CFIA's inspection work. We noted that Agriculture planned these on-site audits to occur at different times of the year (on a rotation basis) to help it identify any risks related to seasonal activities.

Monitoring complaints from the public can provide an early alert that sanitation practices are not adequate. Agriculture stated it received one complaint during our audit period and worked with the CFIA inspector on-site to resolve it promptly.

5.3 Improve Reporting of Results

Plant operators receive timely and useful reports. Plant operators receive immediate verbal feedback from CFIA inspectors. Inspectors observe each slaughter and provide comments before, during, and after the slaughter. Inspectors explain what corrective action must be taken immediately and what can be done before the next scheduled slaughter day. Plant operators also receive a copy of the monthly report that CFIA inspectors send to Agriculture.

In addition, the plant operator annually receives Agriculture's audit report on the slaughter plant. This report highlights any ongoing questions about the plant's structure, equipment, or capacity.

Agriculture does not make public the results of slaughter plant inspections for plants registered in the DMI Program. Agriculture does not provide plants with a license that could be posted for the public. Management explained that it gets calls from the public asking if particular slaughter plants are registered in the DMI Program. Agriculture provides this information in response to requests.

Agriculture does not use its public website to advise the public that slaughter plants are inspected. For public safety purposes, other provinces have public websites that list licensed slaughter plants (as explained in Section 6.3). When Agriculture receives public inquiries about slaughter plants, it provides information about whether the plant is registered as part of the voluntary DMI Program or is registered for the federal CFIA inspections that enable processed meat to be sold across provincial boundaries. A public website would provide the public with some assurance that the slaughter plants have been inspected.

- 3. We recommend that the Ministry of Agriculture update its public website to include a list of all the slaughter plants registered in the Saskatchewan Domestic Meat Inspection Program.**

In 2012, Agriculture began to analyze trends in inspection results by slaughter plants. These trends will show if slaughter plants do not comply with Regulations. Agriculture does not report to senior management the nature of problems in slaughter plants overall. Instead, Agriculture informs senior management and the public if there is a disease outbreak in animals that is of concern.

4. **We recommend that the Ministry of Agriculture provide a report quarterly to its senior management on the causes of sanitation problems in slaughter plants and actions taken to enforce *The Regulations Governing the Inspection of Meat in Domestic Abattoirs, 1968*.**

6.0 KEY FINDINGS AND RECOMMENDATIONS—HEALTH

6.1 Standards for Sanitation in Slaughter Plants Require Updating

When governments regulate a process, they are responsible for identifying significant risks, setting standards to control those risks, communicating the standards, and enforcing them. The standards may be set out in laws, regulations, or policies. To be applied consistently, standards should be written, approved, and formalized (e.g., in written agreements).

Health identifies risks of contaminated meat primarily through daily and weekly analysis of trends in illnesses caused by food. It tracks illnesses using physicians' reports of specific illnesses (as required by *The Public Health Act, 1994*). Health compares Saskatchewan illness trends to trends across Canada and around the world. In addition, it monitors trends in drugstore sales of over-the-counter drugs used to control diarrhea and vomiting. A sudden spike in sales of these drugs could indicate a disease outbreak and would be investigated. Health receives disease investigation reports that help it identify what is causing a disease and assess the related risks.

Like Agriculture, Health identifies emerging risks during federal/provincial/territorial meetings where it exchanges information with other jurisdictions. At these meetings, officials and experts discuss challenges and actions that could reduce risks such as contaminated meat. Health also periodically analyzes long-term disease trends to monitor risks.

Health uses the standards set out in *The Sanitation Regulations, 1964*. These Regulations were last updated in 1988. These Regulations provide basic standards that state how a slaughter plant is to be built (e.g., cement floor, screened windows, water supply) and how it must be operated. For example, the plant must be operated in a "sanitary manner" and the chill room for hanging carcasses must be maintained at 32 to 38° Fahrenheit, that is, 0-3° Celsius. In addition, Health has technical guidelines for treating waste products and disposing of infected carcasses.



Public health inspectors, under *The Public Health Officers Regulations*, are required to hold a certificate in Public Health Inspection. This certificate requires formal education in the areas of food safety, sanitation and microbiology.

Health provides public health inspectors with a standard inspection form that outlines what is to be inspected in all types of food premises. The form is not specific to slaughter plants but inspectors can apply the form to assess if slaughter plants comply with sanitation standards. The back of the inspection form explains what the plant operator should do and what the inspector should expect for the 15 items inspected—some items are explicitly explained and some are not (e.g., use an “approved method” for sanitizing knives or equipment). Some items on the form are not relevant to slaughter plants (e.g., requirements for keeping cooked food hot).

To communicate these standards, the inspector provides the completed form to the slaughter plant operator after each inspection. The form lists the standards, in general terms, the operator must meet to be licensed. Some slaughter plants also prepare and package meat (i.e., meat processing). Health does not provide slaughter plants with standards about meat processing although it lists general food processing “best practices” on its website.

Without specific, written standards that are readily available, it is more difficult for slaughter plants to produce meat that is safe and more difficult for regional health authorities to effectively inspect slaughter plants. Health’s practice is inconsistent with Agriculture’s. Agriculture provides slaughter plants with detailed standards that include the sanitation of the plant and equipment. Consistent sanitation standards would be useful to slaughter plants whether they are very small or larger operations.

5. We recommend that the Ministry of Health, consulting with the Ministry of Agriculture and regional health authorities, develop and approve detailed sanitation standards for slaughter plant operations.

Effective communication and coordination of roles across ministries is important to rapidly control emerging risks including uninspected slaughter plants or contaminated meat. Agriculture and Health work together informally to regulate the production of safe meat in Saskatchewan. They communicate about changes in the participation of slaughter plants in Agriculture’s voluntary DMI Program to reduce the risk of an uninspected slaughter plant.

6.2 Standards Enforced by Regional Health Authorities but Not Monitored by Health

As explained in Section 3.1, regional health authorities must enforce *The Sanitation Regulations, 1964* and their public health inspectors inspect slaughter plants. Health’s role is overseeing the process, making requirements clear, and reviewing reports.

Health has an arrangement with regional health authorities to inspect slaughter plants. Health does not provide regional health authorities’ public health inspectors with specific standards for how to inspect slaughter plants (see recommendation 5). Instead, Health

guides inspectors to assess if slaughter plants comply with the 15 sanitation standards listed on its inspection form (e.g., handwashing routine, cool storage, clean containers, garbage removal, rodent control).⁹

Health relies primarily on ad hoc and informal processes to oversee the enforcement carried out by regional health authorities. Each year, Health produces a report of the total number of slaughter plant inspections from its public health information system (described later). Sometimes it receives phone calls or e-mails about slaughter plants that are of concern to inspectors. Health provided us with an example from 2009. It does not keep records of this informal information. Health does not monitor the size of slaughter plants or the number and types of animals slaughtered. As a result, Health cannot adequately assess risks.

Regional health authorities routinely submit part of their inspection results through the public health information system as required by Health. They do not submit the narrative of inspectors' concerns or the list of corrective actions. Instead, Health receives electronic reports that note whether the regional health authority assessed each licensed plant as a low, medium, or high risk, based on identified deficiencies. Medium and high risk plants remain licensed but receive follow-up inspections. Slaughter plants assessed as a medium risk are to be reinspected within six months. Slaughter plants assessed as a high risk are to be reinspected within one month. Regional health authorities do not issue licenses to plants with major deficiencies.

Management does not use its public health information system as a monitoring tool. Management did not know which slaughter plants were at greatest risk (e.g., due to the meat processing carried out in the plant or due to deficiencies identified during inspections). Health did not receive reports that highlight the problems at slaughter plants that inspectors judged to be at high or medium risk. Without receiving complete reports and reviewing this information on a regular basis, Health cannot effectively oversee the enforcement of *The Sanitation Regulations, 1964*.

6. We recommend that the Ministry of Health obtain more information to help it assess risks to meat safety, including the number of animals slaughtered, in slaughter plants licensed under *The Sanitation Regulations, 1964*.

We reviewed the current information on the public health information system. Health's management verified with regional health authorities that the risk assessments were accurate. Our analysis found that during 2011-12, regional health authorities inspected 76 plants, and of these, it assessed 9 plants (12%) as having high or medium risks primarily due to the particular plant limitations. For example, some plants did not have adequate handwashing facilities.

Health was unaware that 6 of the 9 high and medium risk plants did not receive follow-up inspections within the required timeframe (i.e., within one to six months). Also, Health was unaware that 3 of 9 high and medium risk plants were located within one health region. It had not investigated the reasons or asked for reports about action taken to get

⁹ In some circumstances, public health inspectors also use Health's Food Processing Facility Best Management Practices.



the plant operators to correct the problems. Health does not monitor if regional health authorities' public health inspectors promptly follow-up on identified sanitation risks.

Health stated that it expects the regional health authorities to monitor follow-up. Health has no process to verify that this occurs. We identified that regional health authorities promptly re-inspected some high risk plants a second time and re-inspected some medium risk plants within six months. These follow-up inspections are essential to determine if the plants correct the identified problems (e.g., poor handwashing facilities). If Health does not confirm that all high and medium risk slaughter plants are carefully re-inspected, it cannot know if its Regulations are properly enforced. Without corrective action, high and medium risk slaughter plants could produce meat that is not safe for human consumption.

In some situations, if slaughter plants continuously fail to comply with *The Sanitation Regulations, 1964*, inspectors can take further action to enforce the Regulations. Health provides regional health authorities with a Public Health Enforcement Manual (Manual). This Manual explains how to enforce the Regulations by using a health hazard order or refusing to license the slaughter plant.

The Manual allows for flexibility in handling local situations. This flexibility might reduce the regulatory burden on the meat industry. It also might mean the Regulations are enforced inconsistently. If the Regulations are not consistently enforced across the province, meat products might not be uniformly safe, even if they are from inspected slaughter plants. Allowing flexibility in handling local situations requires careful oversight by Health.

If a regional health authority finds that a slaughter plant is creating a serious health hazard that could have an impact on a wide area, the regional health authority must inform the Minister of Health (*The Public Health Act, 1994* (section 28)). During our audit period, Health did not receive any health hazard notifications.

Health monitors the notifiable diseases that are associated with meat contaminated by bacteria such as *E. coli* and *Salmonella*. Sometimes the illness affects a relatively small number of people (e.g., undercooked turkey dinner). In other situations, many people could become ill due to how the meat was processed or slaughtered. Health must determine whether further illness is likely and decide what actions would reduce the risks (e.g., public education or withdrawing meat products from retail outlets).

7. We recommend that the Ministry of Health confirm that regional health authorities take appropriate action to ensure that high and medium risk slaughter plants correct identified problems that could reduce the safety of the meat produced.

In addition to monitoring disease outbreaks, another way to assess if public health legislation is enforced correctly is by monitoring complaints. Health refers complaints to the regional health authorities. It does not require the regional health authorities to document complaints and the steps taken to resolve them. Also, Health does not receive reports about the complaints that regional health authorities receive. Monitoring complaints from the public can provide an early alert that sanitation practices have not

been maintained at the level observed during an annual inspection. Analysis of complaints can provide insight to changes needed in the meat safety program.

8. We recommend that the Ministry of Health analyze regional trends in public complaints about slaughter plants and/or contaminated meat.

6.3 Improve Reporting of Results

Plant inspections occur at each slaughter plant annually. Inspectors explain any repairs required (e.g., screens on windows, cracks in walls filled to reduce insects). When the slaughter plant meets the required standard, the inspector provides an annual license that the operator must post in the slaughter plant in accordance with *The Sanitation Regulations, 1964* (section 23(6)). The posted license informs the public that the results of the inspection were satisfactory.

Health does not use its public website to advise the public that a specific slaughter plant was inspected. For public safety purposes, other provinces have public websites that list licensed slaughter plants (e.g., British Columbia and Ontario). British Columbia organizes its list according to the type of license granted and states if the plant can slaughter beef, chickens, rabbits, etc. Health refers public inquiries to the regional health authority that has current inspection information about local slaughter plants. A public website is an efficient way for the public to be assured a plant was inspected in the current year.

9. We recommend that the Ministry of Health update its public website to include the inspection results for all slaughter plants licensed under *The Sanitation Regulations, 1964*.

Health expects the regional health authorities' public health inspectors to explain the results of each inspection to the slaughter plant operator. Inspectors give the slaughter plant operator a completed inspection form that describes what the inspector observed and whether the plant complied with standards. The form also has a narrative section for other facts, the inspector's concerns, and a listing of how the operator must improve sanitation to meet the required standards (i.e., corrective actions required).

As explained previously, Health does not analyze trends in the number of slaughter plants that do not comply with its Regulations. It does not analyze or report to senior management the nature of problems in slaughter plants overall or in high risk slaughter plants specifically.

Health informs its senior management and the public if there is a disease outbreak. Regular review of the results of inspections at high and medium risk slaughter plants would enable Health to determine the nature of reports that would be useful to management.



10. We recommend that the Ministry of Health provide a summary report quarterly to its senior management on the causes of sanitation problems arising at slaughter plants and the actions taken to enforce *The Sanitation Regulations, 1964*.

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