
MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS

3.01–Food Industry Program

BACKGROUND

The objective of the Food Industry Program (Program) of the Ministry of Agriculture, Food and Rural Affairs is to manage food safety risk in Ontario's food industry to protect consumers and enhance market access and industry competitiveness. The Program also helps ensure the competitiveness of Ontario's food producers by delivering programs to develop and expand domestic and international markets for Ontario products. In 2000, Ontario's food industry included over 60,000 farms that produced over \$7.8 billion worth of agricultural production and food processors that shipped to market products valued at \$25 billion. In 2000, Ontario exported agricultural products totalling \$6.8 billion.

To maintain the safety and quality of the province's food supply, the Ministry, in co-ordination with the federal and municipal governments, licenses and inspects food processing plants and performs laboratory tests on selected products for evidence of contamination. While the federal government is responsible for food processors that export, the province, including the ministries of Agriculture, Food and Rural Affairs, Health and Long-Term Care, and Natural Resources, is generally responsible for goods produced and sold within Ontario, and municipal public health units ensure food safety primarily in the restaurant industry and at the retail level. The share of each of these inspection responsibilities for each level of government is estimated in the following table.

Food Safety Inspection Responsibilities by Level of Government

abattoirs (slaughterhouses)	86%	14%	—
dead animal disposal plants*	11%	89%	—
fish processing plants	95%	5%	—
dairy processing plants	20%	80%	—
restaurants, retail stores, hospitals, etc.	—	—	100%

* Percentages in this table are based on the volume of food processed except in the case of dead animal disposal plants where percentages are based on the number of plants inspected.

Source of data: Ministry of Agriculture, Food and Rural Affairs

The Program is administered by the Ministry's Food Industry Division (Division). To support the program for the 2000/01 fiscal year, the Division spent a total of \$20 million, employed 110 staff, and engaged 140 inspectors on a contract basis. Almost half of the Division's expenditures (about \$1 per Ontario resident annually) were spent on licensing, inspection, and testing to ensure food safety. The remainder of the Division's expenditures were spent to enhance market access and industry competitiveness.

AUDIT OBJECTIVES AND SCOPE

The objectives of our audit of the Food Industry Program were to assess whether adequate procedures were in place to:

- ensure compliance with legislation, policies, and procedures;
- ensure that resources were acquired and managed with due regard for economy and efficiency; and
- measure and report on the effectiveness of the Program.

The criteria used to conclude on our audit objectives were discussed with and agreed to by senior ministry management and related to systems, policies, and procedures that the Ministry should have in place.

The scope of the audit, which was substantially completed by March 2001, included discussions with ministry and contract staff as well as the review and analysis of documentation at the Division's head office and a sample of regions. We also visited a number of industry producers and processors and reviewed the monitoring efforts of the Dairy Farmers of Ontario.

Our audit was performed in accordance with the standards for assurance engagements, encompassing value for money and compliance, established by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

Our audit also included a review of the activities of the Ministry's Internal Audit Services Branch. However, we did not reduce the extent of our audit work as the Branch had not issued a report on the administration of the Food Industry Program since 1997.

OVERALL AUDIT CONCLUSIONS

The Ministry has engaged in a number of initiatives to protect consumers from food-borne contaminants and reduce food safety risks. For example, the Ministry has directed extensive consultations with the Ministry of Health and Long-Term Care and the Ministry of Natural Resources to consolidate provincial food safety responsibilities into one proposed piece of legislation. In addition, in conjunction with the federal government and its provincial counterparts, the Ministry has helped in the continuing development of national standards for meat, dairy, and horticultural products. Although such initiatives may address many of the concerns we noted during this audit, we concluded that the Ministry needed to improve its efforts to ensure compliance with legislation, policies, and procedures by addressing weaknesses in its licensing and inspection processes. Specifically, we noted the following:

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- Food safety deficiencies that are defined as critical by the Ministry and could pose risks to human health were noted during annual licensing audits of abattoirs (slaughterhouses) but were not corrected in a timely manner. In fact, almost one-third of the deficiencies noted were detected again during the following year's audit. Such deficiencies include unsanitary food contact surfaces, rusty equipment, and the transportation of meat in non-refrigerated vehicles.
 - Bacterial, chemical, and other more recently recognized hazards to health are not readily detected by traditional meat-inspection methods, which rely on the senses of sight, touch, and smell to detect disease and contamination. Newer testing methods allow bacterial, chemical, and other hazards to be detected easily and quickly. However, the Ministry did not have a process in place to randomly test meat from abattoirs for evidence of these hazards. Procedures to randomly test meat from abattoirs are necessary given that a number of samples in a ministry study tested positive for antibiotics.
 - The Ministry had not audited or otherwise reviewed the activities of the Dairy Farmers of Ontario (DFO) since the DFO had assumed responsibility for the raw (unpasteurized) cows' milk program in 1998. We therefore reviewed the activities of the DFO and found it had established an adequate inspection process for raw milk.
 - One-third of the inspection reports that we reviewed for goats' milk dairy farms gave these farms a conditional rating because of non-compliance with minimum standards. Examples of non-compliance included unclean milking equipment and storage tanks. Furthermore, 90% of the goats' milk samples tested by the laboratory did not meet the legislated bacterial standard, yet no follow-up action was taken by the Ministry.
 - In 2000, the Ministry tested almost 800 fruit and vegetable samples and found 28 cases where chemicals exceeded acceptable limits by as much as 80 times the limit. As of March 2001, the Ministry had yet to formally notify growers and retailers of the test results for these samples collected in the summer of 2000. In addition, we were informed that due to staff reductions and reorganization, ministry staff no longer investigate the source of concerns to help producers resolve identified problems.
 - Penalties imposed for non-compliance with food safety legislation were not sufficient to have a deterrent effect. During the 2000/01 fiscal year, the average penalty was \$320. Non-compliance included illegally slaughtering poultry, illegally processing cheese, and improperly disposing of dead animals.

We also concluded that, overall, the Ministry had adequate procedures in place to ensure that resources were acquired and managed with due regard for economy and efficiency. In fact, the Ministry had implemented a number of strategies to accomplish more with the resources allocated to it and had investigated additional cost-saving opportunities.

However, we also concluded that the Ministry did not have adequate procedures in place to measure and report on the effectiveness of its efforts to manage food safety risk. The Ministry's key measure of success in this area was the number of food-borne disease outbreaks from provincially licensed plants. However, the Ministry did not have in place the necessary surveillance systems to obtain accurate information about food-borne illnesses and disease outbreaks.

As well, while procedures were in place to measure and report on the effectiveness of ministry efforts to help expand export markets for Ontario produce, better procedures were needed to assess the Ministry's efforts to expand domestic markets.

Overall Ministry Response

The Ontario Ministry of Agriculture, Food and Rural Affairs has a long history of delivering food industry programs aimed at maintaining and enhancing food safety in all areas of responsibility and improving industry competitiveness and domestic and export market development. We welcome the Provincial Auditor's Report as a tool to assist us as we strive to increase the effectiveness of our programs and to ensure compliance with legislation, policies, and procedures.

Solid risk-management processes are being put in place to ensure that Ontario-grown and processed meat, dairy products, and produce are safe and wholesome for Ontario consumers. These include but are not limited to: timely correction of critical food safety deficiencies, which is supervised by inspectors who are in provincially licensed abattoirs every single slaughter day; extensive testing of carcasses and meat in abattoirs to detect bacterial, chemical, and other hazards; extensive testing of raw milk and milk products; removal of the privilege to ship milk from Ontario goats' milk producers who do not comply with minimum standards currently in use; and alerting fruit and vegetable producers on a timely basis when non-compliance is detected. In addition, new penalty schemes will be included under a new proposed legislative framework to act as a greater deterrent for non-compliance.

The Ministry is continually strengthening its food safety risk-management activities and processes by updating standards and inspection programs and by using new science and technologies to minimize both public health and economic risks. New staff have been hired to assist the Ministry as it moves to an increasingly science-based food safety system.

In addition, for more than two years the Ministry has been working with the Ministry of Health and Long-Term Care and the Ministry of Natural Resources in conducting risk assessments, research, baseline surveys, and client discussions aimed at reviewing and improving Ontario's food safety system. Out of this work came Bill 87, the proposed Food Safety and Quality Act, which received first reading on June 25, 2001. If passed, this legislation will consolidate and modernize the food safety and quality requirements of six current statutes and will establish a common approach and consistent standards for the safety and quality of Ontario food.

DETAILED AUDIT OBSERVATIONS

COMPLIANCE WITH LEGISLATION, POLICIES, AND PROCEDURES

The Food Industry Program is subject to a number of provincial acts, which establish a range of requirements for meat, dairy, and horticultural products (plant foods), including the:

Meat Inspection Act: provides for the licensing of abattoirs and the inspection of animals being slaughtered for human consumption.

Dead Animal Disposal Act: regulates the disposal of animals that died from causes other than slaughter and sets out licensing and inspection requirements for those engaged in the disposal of such animals.

Milk Act: provides for the licensing and inspection of dairy plants and establishes operating standards for milk producers, distributors, and processors.

Farm Products Grades and Sales Act: provides for the inspection, grading, packaging, and marketing of certain horticultural products.

Each of these acts targets a specific risk area of food safety for which the Ministry has devised specific licensing, inspection, and laboratory testing procedures. Licensing is intended to ensure that operators are subject to common standards in the production of food products to make those products safe for human consumption. Inspection procedures are designed to ensure compliance with legislation and food safety standards. Laboratory testing is to detect biological and chemical contaminants that are not otherwise readily apparent.

Abattoir Licensing, Inspection, and Testing

The *Meat Inspection Act* and Regulations were enacted in the 1960s to ensure that meat processed for consumption in Ontario meets food safety requirements. Since the 1993 amendments to the *Meat Inspection Act* Regulations, all meat destined for retail sale must originate from livestock slaughtered in provincially or federally licensed abattoirs or imported from a federally recognized source. There are 219 provincially licensed abattoirs, which account for about 14% of the animals slaughtered in the province. The remaining 86% are slaughtered in 26 federally licensed and inspected abattoirs. A federal licence is required if the abattoir exports meat from Ontario.

LICENSING

In 1993, regulatory changes required that abattoirs be licensed annually. The Ministry subsequently developed and published comprehensive food safety standards outlining the requirements abattoirs must meet to retain their licences. In 1995, the Ministry engaged a team of veterinary meat hygienists to review each abattoir's operations against these established food safety standards. Detailed plans for corrective action were developed to assist in upgrading abattoir facilities and procedures. This review resulted in the development of an annual licensing audit process.

Annual licensing audits are conducted by veterinary auditors to determine whether food safety requirements are being met. These requirements are designed to ensure that facilities are suitable for slaughterhouse operations. Such requirements include ensuring that equipment is not rusty; cross contamination is prevented by not storing raw and cooked meats in the same area; food-contact surfaces are not made of wood, which can harbour bacteria; and meat is transported in properly refrigerated vehicles.

The Ministry's Food Safety Decision Support System is used to record information relating to all abattoir audits and inspections. Once an audit has been completed, any problems noted are discussed with the responsible individuals at the abattoir. Problems and deficiencies that are noted are rated as being critical, serious, moderate, or minor, depending on the potential impact on food safety, the safety of the working environment, and animal welfare. These preset ratings are applied as outlined in the food safety standards even if compensating factors reduce the potential impact of a deficiency. The deficiencies noted become the basis for a corrective action plan that includes the dates by which identified problems are to be corrected. Meat inspectors are to subsequently follow up on the corrective action taken at abattoirs.

We reviewed the licensing process and found that all of the abattoirs we sampled had received an annual audit and that licences were renewed on a timely basis. Annual licensing audits of abattoirs were conducted in accordance with established standards. However, we noted the following:

- Deficiencies rated as critical were noted during the annual licensing audit of every abattoir we sampled. Such deficiencies, which can pose a risk to human health, included sanitizers that were not capable of maintaining a sufficiently high temperature to be effective, carcasses that were transported in vehicles that were not refrigerated, and food contact surfaces that were not maintained in a sanitary condition. The Ministry had no specific criteria for determining when to suspend licences or impose other penalties for non-compliant abattoirs.
- Meetings with abattoir officials to establish corrective action plans were not held on a timely basis. Given that dates are set at these meetings for the abattoir to correct deficiencies identified during a licensing audit, delays in taking corrective action can put the public at risk. On average, we noted that these meetings took place 110 days after the audit was completed and, in several cases, the delay exceeded 200 days. In addition, the Ministry had no guidelines for setting acceptable time frames for correcting the various deficiencies identified during a licensing audit.
- In our sample, we noted that 40% of the critical deficiencies reported during annual licensing audits had not been rectified by the agreed-upon dates. Many of these deficiencies had been corrected prior to the next audit, but the corrective actions and the dates they were completed by had not been recorded in the Ministry's Food Safety Decision Support System. In addition, almost one-third of the critical deficiencies reported during the 2000 annual audits re-occurred during the 2001 audits.

Recommendation

To better ensure that all provincially licensed abattoirs meet licensing requirements and the meat produced is safe for human consumption, the Ministry should:

- develop specific criteria for licence suspensions and other penalties for non-compliant abattoirs;
- establish guidelines for setting acceptable time frames for abattoirs to take corrective action on problems noted during the licensing audits; and
- ensure abattoirs take corrective action as soon as possible after licensing audits are completed so that food safety issues can be resolved promptly.

Ministry Response

The Ministry agrees with the recommendation. The intent of the Ministry's meat inspection program is to protect the public from potential risks of food-borne illnesses, and there are processes in place to ensure that provincially licensed abattoirs are marketing wholesome and safe meat products.

The Ministry has revised the abattoir audit system and developed specific criteria for licence suspension and other penalties. The new audit rating system is similar to that used by the Canadian Food Inspection Agency in federal plants throughout Canada. Poor audit ratings trigger a licensing hearing process that works effectively in dealing with non-compliant plants. Since 1998, when the Ministry started to link plant audit performance to licensing eligibility, 46 hearings have resulted in 16 provincially licensed abattoirs voluntarily exiting the industry or having their licences suspended or revoked for not meeting licensing requirements.

As part of the audit-system update process, the Ministry reviewed how deficiencies are assessed based on whether the deficiencies have a direct effect on public health. It is not possible to apply absolute corrective-action deadlines to all specific deficiencies since they must be evaluated in the context of overall risk present in a given operation. The Ministry has, however, provided its auditors with guidelines for setting acceptable time frames for abattoirs to take corrective action on major deficiencies that present a risk to public health. In addition, standards of compliance were streamlined to focus on food safety regulatory requirements and make them more accessible to abattoir operators.

The new abattoir audit system provides for quick review of audit results and timely implementation of corrective actions. Immediately after the completion of the audit, a debriefing session is now held to highlight key findings and control any urgent food safety hazards that might be present. Meetings with abattoir officials to establish corrective-action plans are now being held within a week following the audit in the case of plants rating poorly and within two to four weeks for plants receiving acceptable or good ratings. The corrective-action plan creates tasks within the Food Safety Decision Support System that

become part of inspectors' required duties. Inspectors are required to follow up on and ensure that prescribed corrective actions are implemented by plant operators in a timely manner, so that food safety issues can be resolved promptly.

The enhanced audit-rating system, improved timing of corrective-action plan meetings, and increased expectations placed on inspectors will contribute to decrease the reoccurrence of deficiencies that would likely result in public health concerns.

INSPECTIONS

Meat inspection includes the routine inspection of all animals and carcasses to verify that provincially licensed abattoirs are meeting legislated requirements and ministry standards for food safety. Standards include the pre- and post-slaughter inspection of all animals and a pre-operational review of the facilities to ensure they are sanitary. The inspector's stamp on the sides of meat or the Ontario-approved symbol on packaging are intended to indicate that the product has been inspected in accordance with legislation.

Inspectors are also responsible for such tasks as releasing carcasses previously held for further testing, collecting samples for laboratory analysis, and following up on items noted during the annual licensing audits to ensure that abattoirs correct problems within the established time frames. Collectively, these additional duties, known as operational tasks, are assigned to inspectors by ministry management.

We reviewed the inspection process and found that the Ministry needed to address weaknesses in the inspectors' follow-ups and their documentation of operational tasks as follows:

- Inspectors generally recorded their inspection activities in manual logbooks, rather than on the computerized Food Safety Decision Support System. We reviewed both the computerized system and a sample of logbooks and found insufficient documentation to demonstrate that assigned operational tasks had been completed.
- We reviewed a sample of follow-up tasks assigned to inspectors and noted that the required follow-up action was usually not done or not documented. Since there was insufficient evidence that corrective actions arising from annual licensing audits were being completed by the dates assigned, the Ministry had not ensured the timely correction of problems that could jeopardize food safety.

Recommendation

To help ensure that corrective actions arising from annual licensing audits are completed as required and food safety risks are minimized, the Ministry should ensure that inspectors follow up on and adequately document the completion of all operational tasks.

Ministry Response

Agreed. As previously noted, tasks resulting from plant audit corrective-action plans become part of inspectors' duties within the Food Safety Decision Support System. Area managers' performance standards now include the responsibility of ensuring that inspectors follow up on and adequately document the completion of all operational tasks.

The success of this process is highly dependent on recruitment, retention, and training of staff. Therefore, the Ministry has commissioned a study to review ways of improving program effectiveness through an enhanced human-resources strategy for the meat inspection program.

LABORATORY TESTING OF MEAT

Laboratory testing is conducted on meat from animals suspected of potential health hazards through pre- and post-slaughter inspections. In such circumstances, the inspector is required to segregate the animal or carcass and may contact a veterinarian. The meat inspection program relies heavily on the senses of sight, touch, and smell to detect disease and contamination. Bacterial, chemical, and other, more recently recognized hazards to health are not readily detected by traditional inspection methods. Newer testing methods allow these hazards to be detected easily and quickly.

We reviewed ministry testing for bacterial, chemical, and other health hazards and noted the following:

- Although testing is performed on suspect animals, random sampling of meat from animals that appear to be healthy is done on a small scale and used primarily to detect antibiotics. Antibiotics given to animals must leave an animal's body before it is safe for human consumption. The Ministry did not have a process in place to randomly test meat from abattoirs for evidence of microbiological, chemical, and other contaminants. The Ministry was conducting a series of studies on pork, beef, chicken, and ready-to-eat meat to determine the prevalence of contaminants in meats to assess risk and to develop appropriate risk-based strategies. Procedures to randomly test meat from abattoirs are necessary given that a number of samples in one of the Ministry's studies tested positive for antibiotics.
- We were informed that certain on-site tests allow a large number of animals to be tested quickly and at a low cost. However, minimal testing is conducted on-site at abattoirs. Up to March 2001, the Ministry had only conducted on-site testing of hogs for one antibiotic at one abattoir. We were informed that a pilot project is planned for one abattoir to assess the benefits of conducting beef antibiotic tests on-site.
- The Ministry did not have procedures in place to ensure that laboratory test results related to the random sampling of meat taken from abattoirs were followed up on a timely basis to resolve any problems noted. In addition, we found that overall summaries of laboratory test results were not routinely generated to highlight trends or any apparent risk areas.

Recommendation

To help ensure that meat products from provincially licensed abattoirs are safe for human consumption, the Ministry should:

- develop a risk-based approach to laboratory testing and utilize newer methods to test meat from healthy animals for potential food safety hazards;
- summarize laboratory results to help identify systemic problems; and
- ensure that all problems detected are followed up on and resolved in a timely manner.

Ministry Response

Agreed. The Ministry has recently improved its risk-based process for random and targeted sampling for chemical residues and is developing a process for ongoing monitoring for microbial contamination to ensure that meat products processed in provincially licensed abattoirs are safe to eat.

The Ministry is working closely with, and complements the efforts of, the federal government in providing a good estimation of food safety risks in all species while avoiding duplication of testing. In addition to random sampling of healthy animals for antibiotic residues at statistically valid, internationally recognized levels, the Ministry is carrying out extensive baseline studies to determine levels of microbiological and chemical contamination in beef, hog, and chicken carcasses, as well as processed products in provincially licensed abattoirs.

Since the beginning of 1999, the Ministry has conducted approximately 53,300 tests on 35,730 carcasses for chemical residue in all abattoirs throughout the province. When positive results were identified in random testing, control programs were initiated. In addition, the Ministry performed over 27,000 tests on more than 3,900 carcasses for microbial contamination. Study results will help us develop standards for levels and frequency of ongoing microbial monitoring.

The Ministry has invested in research to develop new laboratory testing and rapid-testing technology and continues to monitor new tests that become commercially available. In 2001, after a successful pilot study, on-site testing was initiated in some large cattle plants where the cost-benefit ratio of such testing was found to be favourable. Currently, 41% of all antibiotic-residue samples collected in provincially licensed abattoirs are analyzed using on-site testing. An addition of two more plants is being considered, which would bring this total to 63% of all samples.

The Ministry is committed to improved, systematic review of laboratory reports from the monitoring program and has hired a data scientist to facilitate this process using the Food Safety Decision Support System report-generating capability. A process has been put in place where branch staff

routinely summarize information and identify unfavourable results in random testing to ensure that all problems detected are followed up on and resolved in a timely manner. A manager has been assigned to review the results and develop risk-management programs.

Animal Disposal Industry: Licensing and Inspection

The *Dead Animal Disposal Act* was introduced in conjunction with the *Meat Inspection Act* in the 1960s to ensure that only meat from healthy livestock enters the food chain. The Act was a response to a serious problem related to dead, diseased, and dying animals being sold for human consumption. It was also designed to protect the environment and water quality and to help control wildlife populations that could feed on animal carcasses that were improperly disposed of.

Deadstock (animals that have died from causes other than slaughter) are a normal by-product of farm production. The Act specifies that the owner of a dead animal must dispose of it within 48 hours: by burial with a covering of at least two feet of earth, by having it picked up by a person licensed as a dead farm animal collector under the Act, or by composting in an approved manner. The Act applies to the disposal of cattle, goats, horses, sheep, and swine.

There are a number of sectors of the animal disposal industry that the Ministry monitors, as follows:

- Collectors pick up deadstock from farms and transport them to deadstock processing (receiving and rendering) plants. Collectors must be licensed by the Ministry, and annual ministry-issued permits are required for vehicles that transport dead animals. Those vehicles must meet requirements for cleanliness and structural integrity and, more importantly, must not be used to transport live animals or meat for human consumption. There are 32 licensed deadstock collectors in the province that collect approximately 300,000 animals annually.
- Receiving and rendering plants process the deadstock received from collectors. Receiving plants are permitted to break down carcasses for sale ultimately as pet food. The meat must be marked as unfit for human consumption by tainting it with dye or charcoal. Rendering facilities process the meat by boiling it and then sell it as an additive for animal feed and other products. There are 23 licensed receiving plants and four licensed rendering facilities in the province.
- Brokers purchase processed meat from receiving and rendering plants primarily for resale as animal feed and pet food. There are four licensed brokers in Ontario.

Several deadstock operators have been licensed in more than one sector of the industry, but no deadstock operator is permitted to have any relationship with an abattoir. Licences are automatically renewed as long as the operator pays the annual licensing fee. Under the Act, all collectors, receiving facilities, rendering plants, and brokers must meet certain facility, operational, and record-keeping requirements to maintain an annual licence. Inspectors periodically review each operator and investigate complaints of non-compliance in all areas of animal disposal.

In 1997, the Ministry developed a manual that outlines the licensing requirements for deadstock operators, and those requirements were meant to serve as the basis of an inspection process. All but one of Ontario's rendering facilities are involved in the export market and, although provincially licensed, they are federally inspected.

We reviewed the licensing and inspection processes and noted that licences were generally renewed on a timely basis. However, the inspection process required improvements as follows:

- We reviewed a sample of deadstock collectors and noted that their vehicles were normally only inspected if they happened to be present when a receiving plant was being reviewed. Consequently, less than half of the vehicles for which collectors in our sample had received permits were inspected. In addition, 10% of the vehicles in our sample that were inspected did not have a valid sticker to indicate they had the proper permit for transporting dead animals.
- The Ministry had no formal policy for the frequency of receiving plant inspections. An informal policy requires monthly inspections of receiving plants. However, only 25% of the plants we sampled had been inspected monthly. We found no indication that the problems noted during the inspections of the plants we sampled had been followed up for correction. In addition, 20% of the collectors, receivers, and brokers had not been inspected in the previous 12 months. Regular inspections are necessary to help ensure compliance with legislation. For example, one inspector noted that an operator had run out of charcoal but was still processing meat. Proper charcoal treatments make meat unfit to eat and consequently reduce the risk that the product will end up in the human food chain.
- We noted that, contrary to provincial legislation, two rendering plants were affiliated with an abattoir. The Ministry relies on federal inspections at these rendering facilities, but does not receive inspection reports from the federal government prior to licensing the facilities. To ensure compliance with provincial legislation, the Ministry must review federal inspection reports and follow up on any areas not covered by federal inspectors.

Ministry policy allows producers to transport deadstock without a collector's licence or a vehicle permit in certain areas of the province. We were informed that such transportation was being permitted because depressed prices for animal disposal products made it no longer profitable for collectors in this region to do free pickups. Nevertheless, such practices are contrary to current legislation.

Recommendation

To better ensure that deadstock operators comply with legislation and that meat from deadstock is properly disposed of and does not end up in the human food chain, the Ministry should:

- **inspect the vehicles of deadstock collectors in accordance with ministry policy to ensure that valid permits are in place;**
- **implement a formal policy for the frequency of inspections of deadstock collectors, rendering facilities, receiving plants, and brokers;**
- **obtain and review all federal inspection reports and follow up on any areas not covered by federal inspectors; and**

- review and revise as necessary legislation, policies, and procedures concerning the transportation of dead animals.

Ministry Response

Agreed. Since April 2000, the Food Inspection Branch has been developing a risk-based inspection program that has been progressively implemented. In addition, the Ministry is in the process of contracting with a consultant to evaluate risks and make recommendations on further program enhancements.

The current legislation and regulations pertaining to transportation and licensing conditions for livestock disposal, including vehicle inspection, are being examined as part of a broader review of all the food safety legislation in Ontario.

A dedicated ministry position has been created to assist in these processes and to ensure that inspections of deadstock collectors, receiving plants, and brokers take place and that corrective actions are taken throughout Ontario according to policy and based upon risks to the food system.

Rendering-plant inspection is the responsibility of the Canadian Food Inspection Agency (CFIA). The CFIA is now forwarding inspection reports for these facilities to the Ministry within 30 days after inspection. The Ministry is committed to reviewing the reports and following up on areas not covered by the CFIA prior to the licensing of rendering facilities that fall under the provincial Dead Animal Disposal Act.

Dairy Licensing, Inspection, and Laboratory Testing

The *Milk Act* and Regulations provide for the quality and safety of the production, storage, and testing of raw cows' and goats' milk, as well as the processing, distribution, and sale of milk in Ontario. There are over 6,300 cows' milk and almost 200 goats' milk producers (farmers) in the province. Pursuant to a 1998 agreement with the Ministry, the Dairy Farmers of Ontario (DFO), a marketing board constituted under the *Milk Act*, was delegated the responsibility of administering and enforcing various quality and safety provisions of the legislation. Raw cows' milk for domestic human consumption can only be sold to the DFO. The DFO inspects and monitors cows' milk dairy farms, oversees the grading of the milk, and has the milk sampled for subsequent laboratory testing and transported to dairy plants for processing. Dairy plants then sell pasteurized milk to fluid milk distributors, other licensed processors, or directly to the retail market. The Ministry is responsible for the licensing of Ontario's 123 dairy plants and 227 fluid milk distributors.

The Ministry, in conjunction with the federal and other provincial governments, has participated in the development of a National Dairy Code—an initiative to provide equivalent or common standards for dairy food safety across Canada. Although the Ministry intends to implement the National Dairy Code, it is not yet ministry policy.

DAIRY FARMS AND MILK TRANSPORTATION

The *Milk Act* and Regulations provide authority for the inspection of raw cows' and goats' milk, dairy farms, milk transport tanker trucks, and certified milk graders. The Ministry has contracted two fee-for-service inspectors to review the operations of goats' milk farms. The DFO has a program in place to inspect all cows' milk dairy farms every two years, using a standardized checklist, to ensure the premises are sanitary and the animals are well looked after. If conditions are unsanitary at the time of inspection, the producer will not be allowed to sell milk until the situation is rectified. Pursuant to legislation, the DFO has the authority to establish fees, administrative penalties, and other charges related to its administration and enforcement of the legislation.

The Ministry agreement with the DFO authorizes the Ministry to review the activities of the DFO and establishes reporting requirements for the DFO to submit annual reports, business plans, and other periodic reports that are deemed necessary. However, we noted that the Ministry had not reviewed or otherwise assessed the activities of the DFO since it had assumed responsibility for the raw milk program in 1998, although a request for proposals had been drafted to solicit such a review in 2001. In addition, although the Ministry had received some information from the DFO, that information had not been systematically analyzed or reviewed by ministry management to evaluate the DFO's performance.

We therefore reviewed the activities of the DFO and found that adequate mechanisms were generally in place to ensure the delivery of the on-farm inspection program. Since 1998, the DFO has performed over 6,000 farm inspections. Where non-compliance issues were found during inspections, DFO inspectors followed up to ensure the timely correction of the problems noted. However, at the time of our audit, 300 farms had yet to receive an initial inspection.

We also reviewed the Ministry's inspection process for goat dairy farms. We found that this process required substantial improvement due to the following:

- The Ministry did not have an up-to-date list of all goats' milk dairy producers in the province. The most recent list was dated 1998. Consequently, there was no mechanism in place to ensure that all producers were subject to inspection.
- The Ministry had not established a frequency for the inspection of goat dairy farms. Inspection priorities were set by the fee-for-service inspectors, with new farms as the first priority, then farms for which complaints had been received, and finally routine visits. We noted that a checklist for cows' milk dairy farms was being used for inspection purposes without adaptation to goats' milk farms.
- We found no evidence to indicate that the Ministry had reviewed the inspection reports for goat dairy farms submitted by the fee-for-service inspectors or had followed up on any problems noted by the inspectors.
- Based on a sample of inspection reports we reviewed, one third of the farms inspected were given a conditional rating because of non-compliance with minimum standards. Examples of non-compliance include unclean milk storage tanks and milking equipment. We found no evidence that inspectors had followed up on these instances of non-compliance to ensure that the problems were corrected.

Recommendation

To better ensure the quality of raw cows' and goats' milk, the Ministry should:

- periodically review the inspection activities of the Dairy Farmers of Ontario to ensure the established standards are being maintained;
- prepare an up-to-date list of all goats' milk dairy producers and establish a formal risk-based inspection process for goat dairy farms; and
- ensure that problems identified in inspection reports for goat dairy farms are being corrected on a timely basis.

Ministry Response

Agreed. The Ministry will be completing the first comprehensive, independent audit of the activities of the Dairy Farmers of Ontario (DFO) related to the Raw Milk Quality Program and designated legislation by March 2002. Based upon the audit, the Ministry will be developing written procedures and protocols to systematically review DFO activity, documents, and reports on a regular basis to ensure that established standards are being maintained or improved.

All components of the goats' milk quality program are currently under review. The first phase of the review is an inventory and business profile of all goats' milk producers in Ontario. This profile will provide up-to-date and essential information to enable a move to an increasingly risk-based testing and inspection system. The Ministry will be in a position to determine program requirements and report back to the Management Board of Cabinet by spring 2002.

The Ministry will integrate all goat license and inspection information into the Food Safety Decision Support System to facilitate tracking and review of information. Contract staff are in place to ensure that corrective actions are completed. The Food Safety Decision Support System will be updated to ensure proper follow-up is documented once corrective actions have been taken.

DAIRY PLANTS AND DISTRIBUTORS

The *Milk Act* and Regulations establish the conditions for granting or renewing licences to process or distribute milk and milk products. All dairy plants and fluid milk distributors are required to be licensed under the Act. For licensing purposes, the Ministry relies on federal inspections of dairy plants that are involved in the export market. The federal government inspects 77 of the 123 licensed plants in Ontario, which account for 20% of the dairy products produced in the province. All plants receive an in-depth inspection annually performed by either federal or provincial inspectors, and follow-up inspections are performed based on deficiencies noted during the in-depth inspection. In accordance with the Ministry's inspection manual, the storage and delivery facilities of all licensed fluid milk distributors are to be inspected every 18 months.

We audited the licensing and inspection processes for dairy plants and fluid milk distributors and noted that:

- Licences were not renewed on a timely basis. The licences for over 30% of the dairy plants and 25% of the distributors we sampled had been renewed more than three months after expiry. In some cases, a dairy plant licence had been issued even though an annual inspection had not been carried out in the previous year. Of the 46 provincially licensed dairy plants that required inspection in 2000, 16 had not been inspected. We also found that the Ministry generally had no documentation to indicate that problems noted during federal inspections of dairy plants had been followed up on and resolved prior to it renewing licences.
- One-third of provincial dairy plant inspections in our sample noted health and safety violations that required a corrective action plan with follow-up by an inspector in 30 days to ensure the problem had been resolved. Although all but one corrective action plan had been submitted to the Ministry, the required follow-ups had not been performed within the 30-day period.
- Based on our review of available information, only 30 of 227 fluid milk distributors had been inspected in the last two years. We were informed that the Ministry considered distributors to be low risk and ministry inspection activities focused mainly on new distributors. We sampled inspections of fluid milk distributors for 1999 and 2000 and noted that only a few major health and safety concerns had been reported.

Recommendation

In order to better ensure that all dairy plants and fluid milk distributors comply with relevant health and safety requirements, the Ministry should:

- **renew licences on a timely basis for all dairy plants and fluid milk distributors;**
- **inspect all dairy plants annually as required by ministry policy;**
- **follow up on any concerns noted during federal inspections of dairy plants prior to renewing licences;**
- **ensure that all corrective action plans to remedy deficiencies at dairy plants are reviewed and appropriate follow-ups are performed; and**
- **review the inspection process for fluid milk distributors and revise its inspection requirements accordingly.**

Ministry Response

Agreed. Over the last year, the Ministry has been working on integrating all dairy inspection and licensing information into the Food Safety Decision Support System. This will alert staff to required deadline dates for follow-up compliance visits and timely licence renewal.

The Ministry has filled all vacant dairy-plant specialist positions to ensure that all dairy plants will be audited annually. In addition, a Dairy Food Scientist and

a Dairy Food Safety Advisor have been hired to support program development and make improvements based on scientific risk assessments.

The Ministry is working to ensure that reports of all dairy-plant inspections carried out by the Canadian Food Inspection Agency are copied to the provincial dairy-program manager in a timely fashion and that items of concern on these inspections are tracked closely. These must now be addressed prior to renewal of the plant's license.

The updated electronic Food Safety Decision Support System will trigger follow-up on all corrective-action plans.

Ontario's current fluid-milk distribution regulatory system was established in the 1960s to address mainly marketing issues. The Ministry will conduct an internal review and consult with the industry relating to the fluid-milk distribution system to determine an appropriate regulatory framework for this sector of the industry. The framework will be focused on food safety risk reduction only and not on marketing issues.

DAIRY LABORATORY TESTING

To help ensure the safety and quality of Ontario's milk supply, pursuant to Regulations under the *Milk Act*, laboratory tests of producer milk samples are routinely performed. The samples are taken by certified milk graders who pick up the raw milk from producers in bulk milk vehicles. For cows' milk, the DFO trains, certifies, and oversees the work of milk graders and inspects their vehicles. The graders either accept or reject the raw milk being collected from producers based on criteria set out in legislation. Foreign substances and objectionable odours are the two most common reasons for rejection. If accepted, the graders take milk samples, which are sent to a holding facility. The Ministry has a contract with a laboratory to carry out the analysis of raw milk. Laboratory staff determine which samples to take from the holding facility to test in the laboratory. Penalties are stipulated in legislation for producers that fail to meet minimum quality standards for bacterial levels, water content, antibiotics, and a number of other quality attributes.

We reviewed the activities of the DFO in relation to milk graders and their vehicles and found that adequate mechanisms were generally in place to ensure proper delivery of the inspection program for milk graders and their vehicles. In addition, based on laboratory results, where fines for non-compliance with minimum quality standards were warranted, they were properly assessed by the DFO in accordance with legislation.

We also assessed laboratory results and ministry records for raw goats' milk and finished cows' milk and noted the following:

- Even though the National Dairy Code has established standards for all finished dairy products, the Ministry has no standards for bacteria content for finished dairy products, including cheese. In fact, the Ministry only tests for bacteria in milk and cream.
- There are also no legislative or ministry temperature control standards for the transportation of raw milk. We noted that such standards were in place in another province and were

specified in the National Dairy Code. If milk products are not transported properly, the quality and safety of the products may be compromised.

- The Ministry is required by legislation to ensure that raw milk samples from all goats' milk producers are tested at least monthly. Based on our sample, however, no goats' milk producers had samples tested every month as required. We also noted that almost 30% of the samples that were received by the laboratory could not be tested because of delays in submitting the samples. Furthermore, over 90% of the goats' milk samples tested by the laboratory did not meet the legislated bacterial standard, yet no follow-up action was taken by the Ministry.

Recommendation

To better ensure the safety and quality of Ontario's cows' and goats' milk, the Ministry should:

- **establish bacterial standards for finished milk products and adopt temperature control standards for the transportation of raw milk;**
- **collect, promptly transport, and test raw milk samples from all goat dairy farms at least monthly, as required by legislation; and**
- **follow up on and ensure corrective action is taken in all instances where goats' milk producers exceed the legislated bacterial standard.**

Ministry Response

Agreed. Bacterial standards for finished dairy products and maximum temperatures for the acceptance of raw milk at processing plants, as recently established in the National Dairy Regulation and Code, will be adopted as part of the regulations under the appropriate legislation.

The goats' milk industry does not have at its disposal the same sample storage and transportation infrastructure that the cows' milk industry does. The Ministry is currently reviewing the logistics and will ensure that samples are collected monthly and transported to the laboratory in a refrigerated condition.

When unacceptable bacteria levels are found in goats' milk, inspectors visit the farm to determine the cause of the problem and ensure corrective action is taken. Currently, regulations allow the Ministry to order removal of the privilege to ship milk but do not allow for penalties to be given. The Ministry is looking at developing a penalty-based system as part of the broader review of the food safety and quality legislation.

The Ministry is currently developing appropriate regulations and inspection requirements pertaining to collection, testing, and transportation of producer samples for on-farm goats' milk production. In addition, bacterial standards and penalties appropriate for goats' milk production and processing practices are being developed.

Horticulture Monitoring

The horticulture industry includes approximately 10,000 producers, packers, shippers, processors, and retailers of fresh and processed fruits, vegetables, and other plant-based foods. The *Farm Products Grades and Sales Act* was created primarily for the purposes of grading, packaging, labeling, and advertising. Regulations under the Act prohibit the sale of produce that is unfit for human consumption. In recent years, food-borne disease outbreaks have been increasingly associated with fresh fruit, vegetables, and juice. Regulations have been established under the federal *Food and Drug Act* to limit agricultural chemical residues to levels that do not pose a health hazard to consumers. The federal government is responsible for ensuring the safety of fresh and processed fruits and vegetables that are imported into Ontario, which amounts to about 70% of the total provincial consumption.

In addition to following up on complaints, the Ministry's horticulture monitoring program tests random samples of fruits and vegetables for pesticide residues, bacteria, heavy metals, and other contaminants. Horticulture samples were taken from various sources in 2000, including roadside stands and retail outlets. The Ministry tested almost 800 horticultural samples and found 28 cases where chemicals exceeded acceptable limits as set by federal legislation. The violations were as much as 80 times the acceptable limit. In addition, almost 200 samples were tested for bacterial contamination but no deficiencies were detected. We found that too few samples were tested to provide a reasonable assessment of bacterial and chemical residues on produce in Ontario. We were informed by the Ministry that the tests were designed only to detect incidents of non-compliance, not to provide an overall assessment of contamination.

Test results that exceeded acceptable limits were to be communicated immediately to the retailer or grower and were to be used to follow up on and identify the source of any food safety concerns. Some producers were verbally informed, if they were present, when ministry staff visited their farms to select a second sample for testing. However, as of March 2001, the Ministry had yet to formally notify growers and retailers of test results for samples collected in summer 2000. Most growers and retailers remained unaware of test results and therefore may not take corrective action to prevent a re-occurrence of any problems detected. In addition, we were informed that due to staff reductions and reorganization, ministry staff no longer investigate the source of concerns to help producers resolve problems related to contaminants.

In western Canada and the United States, some retailers are beginning to request safety assurances for fresh fruits and vegetables in order to prevent food safety problems instead of having to react to them after they occur. Along these lines, by January 2001, the Ministry had completed risk assessments for ten fruit and vegetable commodities. The assessments are to provide a baseline of information to identify the areas of risk associated with each of these horticultural commodities. We understand that this information will be used to aid in decisions concerning the allocation of inspection and research resources. As well, future assessments can be compared to the original data to help determine the impact of inspections.

World Trade Organization agreements require that imports into a province be subject to the lowest standards applying to any like product sold within the province. Given that a large percentage of the fruits and vegetables consumed in Ontario are imported, the current lack of inspection standards for domestic produce poses a risk to Ontario consumers. The implementation of higher standards in Ontario would help reduce the risk of any outbreaks of illnesses associated with imported horticultural products.

Recommendation

To help ensure that plant-based foods are safe from biological and chemical contamination, the Ministry should:

- send letters outlining laboratory test results to growers and retailers on a timely basis and follow up to ensure that serious safety violations are rectified; and
- develop a risk-based monitoring and inspection process for fruit and vegetable commodities to help reduce the risk of outbreaks of illnesses associated with domestic and imported horticultural products.

Ministry Response

Agreed. The Ministry is establishing new protocols to consistently and formally advise the retailer/grower of any laboratory test results above the limits in the Health Canada standards. These standards incorporate a wide margin of safety. For all of the results found to be above the limits in the Health Canada standards in 2000, producers received a letter and a visit from ministry staff by July 2001 to advise on adjustments that should be made to their pesticide-use practices prior to the 2001 harvest. From this year on, producers will receive their results during the same growing season. In addition, a reorganization within the Ministry will allow for increased and more timely advisory and follow-up activities by Agriculture and Rural Division staff. Also, the Ministry will examine the possibility of using the Food Safety Decision Support System to ensure tracking, monitoring, and follow-up.

The Ministry has committed resources to the design of a risk-based monitoring and inspection process for Ontario-grown foods of plant origin, which is underway. The process includes completing risk assessments, monitoring of outbreak data, conducting commodity-specific inventories, and developing baseline studies and food safety programs for commodities with higher risk. Ten risk assessments have been completed to date and five are in progress. A prototype risk-based monitoring program has been developed for apple cider, which will serve as a model for other commodities.

Legislative Enforcement

The Ministry is responsible for enforcing provincial laws and regulations relating to the food safety legislation it administers. Effective April 1, 2000, the Ministry entered into a co-operative agreement with the Ministry of Natural Resources (MNR) whereby the MNR supervises and facilitates the investigation and enforcement function on behalf of the Ministry. The Ministry remains responsible for the administration of its legislation including the enforcement portion delivered by the MNR.

Complaints received by the Ministry concerning suspected illegal activities are followed up on to determine whether they have merit and, if so, are forwarded to the MNR for investigation.

Between April 2000 and January 2001, almost 100 complaints were forwarded to the MNR. The Ministry had no formal complaint-tracking system, though we were informed that it was developing one. The MNR logs all investigations in its computerized compliance system.

We found that complaints sent to the MNR were generally investigated in a timely manner. Although the final resolutions of the investigations were not sent to the Ministry, we were informed that the Ministry received verbal updates as well as quarterly summary reports from the MNR. In addition, the Ministry may soon be able to access the MNR's compliance information system and is working on providing the MNR with access to its proposed complaints-tracking system.

Appropriate penalties help deter non-compliance with the legislation, policies, and procedures designed to manage food safety risks. However, the lack of a comprehensive approach to food safety and inconsistencies among various pieces of legislation that have been enacted over a long period of time have created a system where inspectors have inconsistent powers of enforcement.

For example, unlike the *Fish Inspection Act* that was updated in 1999 and is administered by the MNR, we noted that no arrest authority is provided in the Ministry's legislation. Penalties under the *Fish Inspection Act* provide for fines up to \$25,000 and/or two years in prison for an individual and up to \$100,000 for a corporation. In contrast, the *Meat Inspection Act* provides for a maximum penalty of only \$2,000 and/or six months in prison for a first offence, and a maximum of \$5,000 and/or one year in prison for a subsequent offence. In addition, although ministry legislation contains provisions dealing with the detention and disposal of foods that do not meet legislated standards, the Ministry often does not have the legal means to order the destruction of foods that may present a health or safety risk. In such situations, the Ministry has relied on local public health officials to deal with any health hazards or notified the federal government, which may use its powers to recall unsafe foods.

Our review of MNR data indicated that the average fine imposed between April 2000 and January 2001 under the *Meat Inspection, Dead Animal Disposal, and Milk* acts was only \$320, with the largest fine being \$500. These fines related to charges like the illegal slaughter of poultry (a salmonella risk), the illegal processing of cheese (that was found to have high levels of *E. coli* bacteria), and the improper disposal of dead animals (numerous dead farm animals dumped in a wooded area). We were informed that no further follow-up was performed unless another complaint was received. We were also informed that the fines levied did not seem to be an effective deterrent as charges had been laid against repeat offenders.

Recommendation

To better ensure the safety and quality of Ontario's food supply, the Ministry should:

- **ensure penalties are adequate to deter non-compliance with legislative requirements;**
- **review its enforcement rights and responsibilities for consistency; and**
- **consider periodically following up on the operations of past offenders to ensure continued compliance with legislation.**

Ministry Response

Agreed. For more than two years, the Ministry has been working with the Ministry of Health and Long-Term Care and the Ministry of Natural Resources in reviewing Ontario's food safety system through conducting risk assessments, research, baseline surveys, and client discussions aimed at reviewing and improving Ontario's food safety system. Out of this work came Bill 87, the proposed Food Safety and Quality Act, which received first reading on June 25, 2001. If passed, this legislation will consolidate and modernize the food safety and quality requirements of six current statutes and will establish a common approach and consistent standards for the safety and quality of Ontario food.

The proposed act would provide for fines greater than the ones outlined in the Ministry of Natural Resources' legislation governing fish and wildlife, which have been found to result in a lower number of repeat offenders. It would also increase the powers of inspectors and create a consistent approach for enforcing ministry legislation.

Ministry compliance officers will offer follow-up advisory services to those convicted of an offence. The Ministry, in collaboration with the federal and municipal governments, is now monitoring the marketplace to ensure past offenders will not attempt to market products processed illegally.

Program Co-ordination

The Ministry administers a number of provincial acts that establish a range of safety and quality requirements for meat, deadstock, dairy, and horticulture. The Ministry has developed policies and procedures to implement the legislation and to provide a degree of safety and consumer confidence for foods not covered by legislation. Nevertheless, legislation and ministry policies have evolved over many years but they are not all-inclusive, and standards have not been developed for all products or all stages of the food processing system. For example:

- The Ministry estimates that approximately 50% of provincially licensed abattoirs contain facilities that further process meat into smaller cuts or products like sausage or smoked ham. Although provincial legislation and standards are in place for the inspection of further meat processing at provincially licensed abattoirs, except for a cursory walk-through by the inspector on slaughter days, only an annual audit of the premises was being done. Furthermore, inspectors were regularly assigned to plants only on slaughter days, not at times when further processing took place. In federally registered plants, further-processing activities are subject to regular inspections. In February 2001, the Ministry sent letters to all provincially licensed abattoirs with processing operations indicating that they were going to commence regular meat processing inspections.
- Not all animals are included in the *Dead Animals Disposal Act*, which prohibits the sale for human consumption of meat from specified deadstock. The legislation covers only cattle, swine, goats, sheep, and horses; there is no equivalent legislation governing the disposal of other animals raised for food, including poultry, deer, emus, and rabbits.

- The *Milk Act* applies to milk from cows and goats. Milk from other animals is not subject to the same legislated quality and safety standards. Although the Ministry had a process in place to review the milk from other animals, such as sheep, the participation of producers was voluntary.
- Ontario's *Fish Inspection Act* requires that fish sold as food be fit for human consumption and establishes facility and operating requirements for processors. The Ministry of Natural Resources is responsible for the legislation, but proposed legislative changes recommend that the responsibility be transferred to the Ministry of Agriculture, Food and Rural Affairs. There are about 500 commercial fishing operations in Ontario, most of which are located on the Great Lakes. Although the *Act* requires the inspection of fish caught and sold in Ontario, there was no inspection program for fish. Based on 1996 data, about 95% of the fish caught commercially in Ontario are federally inspected and exported to the United States. An inventory of non-federally inspected fish processing facilities is needed to help assess the food safety risks and determine what provincial inspection processes are needed.
- The *Farm Products Grades and Sales Act* regulates several industries and enforces standards for grading, packaging, labelling, and advertising. The Ministry no longer performs these functions for many of the products originally included in the legislation, such as Christmas trees.

During the 1997/98 fiscal year, a ministry review of Ontario's food safety system revealed significant deficiencies in programs designed to eliminate or minimize the public health risk posed by food-borne contaminants. Consequently, the Ministry has proposed legislative changes to better facilitate the regulation of the food industry.

Recommendation

To better ensure that consistent standards of food safety are in place for all products consumed in Ontario, the Ministry should:

- **develop appropriate food safety policies for products that are not subject to specific legislation and consider incorporating such products in any proposed new legislation;**
- **review regulatory requirements to determine the level of risk associated with each product and assess the nature of the monitoring required; and**
- **where monitoring is considered necessary, review the inspection process to ensure that minimum standards of food safety are maintained regardless of which level of government inspects the food products.**

Ministry Response

Agreed. The multi-ministry food safety system review includes various research projects and baseline chemical and microbiological studies, as well as program enhancements. This review will enable the Ministry to evaluate risks and develop appropriate food safety policies and monitoring programs for all commodities across the production-to-consumption spectrum, including products that are not currently subject to specific legislation such as further-processed meat, fish, and sheeps' milk.

The proposed Food Safety and Quality Act, which passed first reading in the Legislature on June 25, 2001, would permit regulatory frameworks and inspection programs to be developed that correspond to the risk to public health.

Also as part of the Ontario food safety system review, inspection protocols will be developed that will verify compliance and minimum food safety standards regardless of which ministry, level of government, or third party is delivering the inspection service.

ECONOMY AND EFFICIENCY

The total expenditures for the Food Industry Program for the 2000/01 fiscal year were approximately \$20 million, with half of this amount spent on licensing, inspection, and laboratory testing functions. Approximately 110 staff and 140 fee-for-service inspectors were involved in carrying out the Program for that period.

We reviewed the Program's expenditures and determined that resources were generally acquired and managed with due regard for economy and efficiency. We reviewed a sample of consulting contracts and found that they were properly managed and that consultants were engaged using a competitive process where required by Management Board of Cabinet policy.

In addition, the Ministry had carried out a number of economy-focused initiatives. For example, the Ministry had engaged the investigative expertise of the Ministry of Natural Resources instead of maintaining its own enforcement unit. In addition, inspection services were allocated based on efficiency, such that abattoirs were required to compensate the Ministry if they exceeded the standard inspection time allocated to their facilities.

The Ministry had also performed an outsourcing initiative in 1995, which resulted in the replacement of ministry inspection staff with a more economical fee-for-service system. The Ministry is currently evaluating the economy and efficiency of the in-house versus fee-for-service inspection systems. The Ministry also transferred inspection responsibilities at the producer level to the Dairy Farmers of Ontario. Finally, although the Ministry was satisfied with the quality and effectiveness of the laboratory testing being provided by its supplier, the Ministry reviewed the costs of laboratory testing to determine whether the best value was being obtained for the funds spent.

MEASURING AND REPORTING ON PROGRAM EFFECTIVENESS

The objective of the Food Industry Program is to manage food safety risks to protect consumer safety and enhance market access and industry competitiveness. The goals, or outcomes, the Program expects to achieve are the maintenance of the safety and quality of the provincial food supply, the continued growth of Ontario's agri-food exports, an increase in the sales of Ontario products in the domestic market, and the maintenance of the Ontario agri-food sector as an excellent place to invest.

Regarding the Ministry's goal of maintaining the safety and quality of Ontario's food supply, the Ministry has estimated that Ontarians experience between 200,000 and 500,000 food-borne illnesses annually, at a cost of \$1 billion in terms of health care and lost productivity. However, the Ministry acknowledges that it is responsible for managing only a portion of the risks associated with such illnesses. Other provincial ministries, the federal government, municipal governments, food industry participants, and even consumers play an important role in ensuring food safety. Therefore, maintaining the overall safety and quality of Ontario's food supply is substantially beyond the Ministry's control.

As part of the business planning process for each year, the Ministry states its major goals for the upcoming year, how those goals will be achieved, and the targets or standards that will be used to determine its success in reaching those goals. Based on its *2000/01 Business Plan*, the Ministry attempted to isolate and report on its direct responsibilities by measuring the number of food-borne disease outbreaks from provincially licensed plants. The Ministry's target was to have no food-borne disease outbreaks originating in provincially licensed plants.

However, measuring the number of food-borne disease outbreaks from provincially licensed plants is difficult without the proper surveillance systems in place. Moreover, such a measurement alone would provide little useful information beyond indicating whether the Ministry had or had not achieved its target. Measures of the incidence and origins of specific food-borne illnesses would provide better information about the Ministry's licensing, inspection, and enforcement programs. In addition, the Ministry of Health and Long-Term Care and local health units are responsible for monitoring and reporting health issues including food-borne illness. In order to assess food safety in an economical and meaningful way, co-ordination with other governments and ministries is necessary.

In the fall of 2000, the Ministry entered into an umbrella agreement related to food safety with the federal Canadian Food Inspection Agency (CFIA), Health Canada, and Ontario's ministries of Health and Long-Term Care and of Natural Resources. The agreement includes promoting the development of an enhanced disease-surveillance system, developing and maintaining an effective inter-agency emergency response plan, and entering into additional agreements to co-ordinate food safety inspection activities.

We reviewed the Ministry's efforts to assess the effectiveness of its promotion of growth in both export and domestic markets, to maintain current levels of investment in Ontario's agriculture and food sectors, and to promote new investment. We found that adequate procedures were in place for measuring and reporting on both the effectiveness of its activities on international markets for Ontario produce and investment in Ontario's agri-food sector. We found that program objectives were clearly defined and stated in measurable terms. For example, every two years, the Ministry performs a thorough assessment of the impact its activities have on increasing exports of Ontario food products.

However, more quantified, outcome-oriented measures were needed to report on whether the Ministry's efforts to promote Ontario food products resulted in increased sales in the domestic market. The Ministry used surveys that focused on consumer intentions and brand awareness to assess its efforts to achieve increased sales of domestic food products. Quantified outcome-oriented measures would more fully illustrate the Program's impact.

Recommendation

To ensure that the Food Industry Program can appropriately assess the extent to which it is meeting its goals for food safety and increased domestic sales, the Ministry should:

- develop well-defined performance measures that the Ministry has a reasonable degree of influence over and can link to expected outcomes; and
- perform the evaluations necessary to determine whether its activities are effective in achieving the stated goals of the Program and to take any necessary corrective action.

Ministry Response

Agreed. To assist the Ministry and its partner ministries in delivering the goals of the Ontario food safety system initiative, a consulting firm has been contracted to provide expertise in linking strategic and operational planning and performance measures. The consultant will assist the Ministry in applying an effective performance-measure methodology to science-based food safety programs. The Ministry is scheduled to report back to the Management Board of Cabinet on this initiative by the spring of 2002.

The Ministry agrees that there is a need to develop better procedures to assess efforts to expand domestic markets for fresh produce and has built them into the Domestic Marketing Unit's business plan. There are limitations and challenges in obtaining accurate and timely statistical data that can be confidently used for the purposes of establishing performance measures based on in-season sales. The Ministry is testing promising alternative performance-measurement means that are based on key retail-customer support of the Foodland program and produce sourced from Ontario growers. These are anticipated to be available within this fiscal year.