

Volume 1, Number 2

Fall 2010

liaison

The Canadian Food Inspection Agency Magazine



Working Together

On Food Safety *see Page 12*

CFIA Actions Improve Food Safety – *see Page 4*

Industry Collaboration Helps Develop Canada's Traceability System – *see Page 10*

Modern Inspection Services Benefit Fresh Produce Sector – *see Page 11*



Canadian Food
Inspection Agency

Agence canadienne
d'inspection des aliments

Canada 

liaison

The Canadian Food Inspection Agency Magazine

Inside

liaison is the voice of the Canadian Food Inspection Agency, a federal science-based organization responsible for safeguarding the food supply, monitoring animal health and protecting plants and crops from pests and other environmental hazards.

Published by Public Affairs Branch,
Canadian Food Inspection Agency
George W. Shaw, Vice-President

Managing Director
Janice Snyder

Managing Editor
Thomas Costea

Production Manager
Joanne McCarthy

Contributing Editors

Eric Aubin
Garfield Balsom
Bryan Blom
Dr. Brian Evans
Yves Lacroix
Dr. Gary Little
Victoria McBride
Luc Mougeot

Cover Photo: *Inspector Rosette Fayez of the Canadian Food Inspection Agency.*

liaison welcomes letters to the editor, suggestions and contributions. Please include name, e-mail address and telephone number.

liaison

Canadian Food Inspection Agency
1400 Merivale Road, T1-2-125
Ottawa, Ontario, K1A 0Y9
Telephone: 613-773-6506
Facsimile: 613-773-5618
E-mail: LiaisonMagazine@inspection.gc.ca

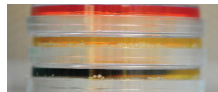
© 2010 Her Majesty the Queen in Right of Canada (Canadian Food Inspection Agency), all rights reserved. Use without permission is prohibited.

CFIA P0732-10 ISSN: 1920-034X

Message from the President/New Executive Vice-President at CFIA...3



CFIA Actions Improve Food Safety...4



Anatomy of a Food Safety Investigation...6



Market Access Negotiations Revitalize
Beef Exports/International Regulatory Highlights...8



Industry Collaboration Helps
Develop Canada's Traceability System...10



Modern Inspection Services
Benefit Fresh Produce Sector...11

Working Together on Food Safety...12

An Integrated Food Safety Strategy for One Health...13

Food for Feedback Fodder

The CFIA welcomes the readership of **liaison** Magazine to send in comments, suggestions and contributions. Ideas or manuscripts are welcome for commentaries, essays or feature stories. All correspondence will be answered and contributions considered for publication. Please include a name, e-mail address and telephone number. Send in any feedback to **liaison** Magazine, 1400 Merivale Road, T1-2-125, Ottawa, ON, K1A 0Y9 or e-mail LiaisonMagazine@inspection.gc.ca.

www.inspection.gc.ca

Message from the President

Food safety remains one of the top priorities of the Canadian Food Inspection Agency (CFIA). We are committed to a process of continuous improvement and the stories in this edition of *liaison* reflect just some of our many areas of activity.

The CFIA is responsible for verifying and enforcing food safety standards, as well as conducting scientific research and communicating in an open fashion with all our partners and stakeholders. The CFIA is always working with our partners to protect consumers, animals and plant life resources. Our partners include key federal departments such as the Public Health Agency of Canada, Health Canada, Agriculture and Agri-Food Canada, provincial and territorial public health authorities and our vital relationship with industry and academic stakeholders.

The CFIA and our partners have updated and refined some of our procedures and protocols so that we work together more efficiently when responding to food safety incidents. Close coordination with

our provincial partners in food safety is key and we're happy to have Ontario's contribution to this magazine (see *Working Together on Food Safety*, Page 12). We are also working with our partners to make food safety information readily available, reaching out to those most vulnerable to foodborne illness.

We are making significant strides working in science to fortify our surveillance and emergency response capabilities. The capacity to detect and respond rapidly to hazards in the food supply is now stronger thanks to improvements in testing procedures and a comprehensive surveillance network.

The CFIA continues its focus on safety requirements to detect and control listeria. We have thoroughly



Carole Swan

reviewed and improved how we monitor and verify food safety controls for contaminants such as listeria at ready-to-eat meat processing establishments.

Open communication and consultation are also important. This publication is but one forum we have launched or improved to maintain an open dialogue with all partners and stakeholders in food safety.

I hope you find this edition of *liaison* informative and enlightening, and I look forward to comments and feedback from our stakeholders. ◀

New Executive Vice-President at CFIA



George Da Pont

George Da Pont is the new Executive Vice-President of the Canadian Food Inspection Agency, announced by the Prime Minister this past May. Da Pont comes to the Agency with almost 30 years experience in the federal government, most recently as the Commissioner of the Canadian Coast Guard.

Da Pont's background in operational policy and corporate positions gives him experience and a proven track record of bringing people together to deal with complex issues. He was Commissioner of the Canadian Coast Guard for about five years and prior to that another five years with Fisheries and Oceans Canada as an assistant deputy minister and associate regional director general.

"I'm looking forward to engaging with the Agency's community of stakeholders," says Da Pont. "We all have an important stake in safeguarding the food supply. Our actions impact Canadians on a daily basis." ◀

CFIA Actions



Improve Food Safety

by Thomas Costea

Improvements to policy, procedures and science that reduce risks along the food supply chain continue to be a priority at the Canadian Food Inspection Agency (CFIA). Building on the foundation of a recognized food safety system in Canada, the Agency is working on actions to improve the detection of hazards and the response to outbreak situations.

Food safety actions recently initiated by the CFIA concentrate on preventing and detecting food hazards such as microbiological contaminants, with new requirements in place specifically for listeria. The listeria requirements, explained in the first edition of *liaison* (CFIA Actions Address Food Safety Priorities, Vol. 1 No. 1 Winter 2010), are published in the Meat Hygiene Manual of Procedures. Mandatory listeria testing and immediate reporting of any positive results to the CFIA are included in the requirements, with prescribed follow-up verifying the effectiveness of actions that plant operators take responding to findings.

The Agency is also thoroughly reviewing and refining its Compliance Verification System for overseeing food safety controls applied in meat processing establishments. This includes an expert panel to review technical requirements and a front-line assessment to evaluate this system at the field level.

The CFIA is strengthening diagnostic tools used in laboratories to improve detection methods for listeria monocytogenes and other microbial hazards in food. These diagnostic improvements are reducing the time required for testing, enabling more rapid response and improving surge capacity during outbreaks; including a seven-days-a-week rotation

Diagnostic tools used in Canadian Food Inspection Agency laboratories are part of improvements to food safety detection methods. Lab technicians Patricia Muggah and Faith Chou (background) isolate toxins within an homogenized mussel tissue solution.

for priority testing of pathogens such as listeria. A new rapid test kit for listeria is an example of CFIA actions to reduce the time needed for characterizing bacteria, which helps to make the linkages with pathogens in food and humans (*New Laboratory on Cutting Edge of Food Safety, liaison Vol. 1 No. 1 Winter 2010*).

Making those linkages and providing alerts to public health jurisdictions across the country is accomplished through PulseNet Canada. Test results reported to PulseNet – operated by the Public Health Agency of Canada through the National Microbial Laboratory in Winnipeg – are posted for provincial and territorial public health jurisdictions to monitor. This allows epidemiologists to match clinical cases with food recalls. It is a significant step in response to listeriosis outbreaks, contributing to an enhanced national public health and food safety surveillance system.

The CFIA has reviewed the reporting structure for its Office of Food Safety and Recall, with the objective of making operations as effective as possible. The Agency is also updating protocols and procedures with provincial and territorial public health authorities, as well as industry and academic stakeholders, to improve response times and the effectiveness of communicating during an outbreak.

The \$75 million announced last year at this time for food safety, and an additional \$13 million in this year's budget to increase inspection capacity for meat and poultry processing facilities, attest to the Agency's efforts.

Improved communications with the public include a new Government of Canada online food safety portal (www.foodsafety.gc.ca) launched early this year. It offers a one-stop source for information about food safety and foodborne illness. The

CFIA's own website is also updated with comprehensive food safety information, including up-to-date listings of all food recalls.

The \$75 million announced last year at this time for food safety, and an additional \$13 million in this year's budget to increase inspection capacity for meat and poultry processing facilities, attest to the Agency's efforts. This year's budget includes funds to hire 170 new dedicated full-time food safety inspectors over three years. ▶



Inspector Rosette Fayeze verifies procedures at a meat processing establishment; just one of the many activities by the Canadian Food Inspection Agency.

Anatomy of a Food Safety Investigation

by Yves Lacroix

It's that time of the year again when the days are getting shorter and cooler. It's the festive holiday season and families are getting together to enjoy good company, good times and great food. The dinner table is stocked, as families gather to feast on the season's fresh and flavourful bounty with food products ranging from baked goods, to fresh fruits and vegetables, to stuffing and roasted meats.

The Canadian Food Inspection Agency (CFIA) and its partners, including the food industry, work together to help keep food safe for consumption during festive holidays and at all times. However, in the event of foodborne illness every partner has a key role to play should a food safety investigation become necessary.

“The complexities of a food safety investigation – from initial reporting, to investigation, to issuing a recall and following up on its effectiveness – can best be managed by CFIA, its provincial partners and industry through teamwork and collaboration,” says Garfield Balsom, a Food Safety Recall Specialist with the CFIA's Office of Food Safety and Recall.

Imagine a scenario where one or more family members become ill days after their festive meal. How did they fall ill? Were one or more food products the cause? If so, how was the food contaminated? Is it widespread? These questions are common from Canadians stricken with fever, nausea, stomach cramps and the other nasty symptoms associated with a potential foodborne illness.



Tracing records for production and distribution of food products, such as Inspector Myriam Bourdon does during her duties with the Canadian Food Inspection Agency, is one of the important steps in a food safety investigation.

Public health officials can identify emerging trends when local doctors' offices and hospital emergency rooms become engaged in cases of illness. Testing in provincial laboratories will confirm clusters of illnesses. The reporting of a trend may indicate an outbreak, but just one illness can trigger an investigation by public health officials.

Reported cases are investigated to identify a common link. Provincial and local health authorities work with the Public Health Agency of Canada to investigate illnesses. If a foodborne source is identified the CFIA will join the investigation.

“Linking the foodborne illnesses to a specific food product from the dinner table is one of the most challenging aspects for the CFIA in a food safety investigation,” says Balsom.

A typical three-course holiday dinner consists of multiple food items which can include tens, even hundreds of individual ingredients. These products can include a mix of domestic and international ingredients, and come from numerous manufacturers, importers, processors and retailers. To pin-point a single food product or individual ingredient as the source of contamination for a foodborne illness is no small feat.

A traceback procedure is necessary in a food safety investigation to pin-point the suspected source of contamination. CFIA regional inspectors often work with local health authorities to collect and test unopened samples of food products if they remain in consumer households or at retail stores. Samples are sent to laboratories where positive test results are matched with strains of bacteria or other contaminants found in the reported cases of illness. This testing helps CFIA inspectors zero in on where consumers purchased a food product and even the exact batches of food.

“This is the stage of a food safety investigation and potential food recall that the food industry coordinates closely with the CFIA,” says Balsom. “Tracing the source of foodborne illness to a particular product requires retailers to identify distributors or importers of a product. Tracing the distribution of food products will lead to manufacturers and processors, who are also essential in identifying batches and lots of food production.”

Tests are conducted on the batches of food and processors’ testing records are analyzed to determine the cause of contamination. Positive

test results come in from the lab and CFIA food recall coordinators work with technical specialists to determine the risk to consumers.

“Once all the evidence has come together and the health risk for consumers is assessed, the need for a food recall is determined,” says Balsom. “Food recalls are nothing consumers or food manufacturing and distribution companies want to see, however they are recognized as an integral element of any sound food safety system. Properly managed recalls not only remove hazards from the food chain, they allow for evaluation and corrective actions to fix the problem and prevent similar situations from arising in the future.”

There were an average of approximately 2,000 food complaints, 3,000 food safety investigations and 225 food recall incidents annually for the CFIA over the last five years. In the event of a food recall, the recalling firm – the company or firm that is accountable for issuing a food recall – works with the CFIA and its partners to alert the public. It is the responsibility of the recalling firm to develop and implement a recall plan that ensures rapid and efficient control of foods that may pose a serious health risk, and to remove all unsafe food products from the marketplace.

The type of recall falls into four basic categories: microbial, such as bacteria, viruses or parasites; chemical, such as high levels of lead, mercury or pesticides; extraneous materials from an outside source, like glass, hair or shards of metal; and allergen, when a food product contains ingredients such as peanuts, milk or eggs that are not identified on the product’s label.

All four types of recalls are classified as Class I, II or III based on the health risks posed for consumers. Class I recalls warn the public of a



A Canadian Food Inspection Agency lab technician weighs a food sample for salmonella testing, which is an important step in matching a food source with reported cases of illness.

high risk of serious health problems or death. Class II recalls are issued for moderate risks likely leading to short-term health problems that are not life-threatening. Class III recalls are low risk and are not likely to result in any adverse health effects. All recalls are listed on the CFIA website.

Each food recall has a follow-up process where the CFIA monitors the effectiveness of a recall. The Agency’s Office of Food Safety and Recall and regional inspectors check that the product is controlled and removed from consumer exposure. The effectiveness of a recall is highly dependent upon teamwork and collaboration on the part of the CFIA and its stakeholder partners such as the food industry. ◀

Market Access Negotiations Revitalize Beef Exports

by Victoria McBride

It is a day the Canadian cattle sector will never forget – May 20, 2003. Bovine spongiform encephalopathy (BSE) is confirmed for the first time in an animal born and raised in Canada. This single event instantly transformed the landscape of the national cattle and beef sector. More than seven years later, the road to recovery continues.

“Our main focus has been to encourage international best practices for BSE control, as well as restore and expand the market opportunities that were lost in 2003,” says Dr. Gary Little, Senior Staff Veterinarian with the Canadian Food Inspection Agency (CFIA) and a member of the technical team involved in beef access negotiations.

Dr. Little and colleagues at the CFIA, Agriculture and Agri-Food Canada, Foreign Affairs and International Trade Canada and Health Canada, as well as provincial governments and the livestock industry all contribute to restoring international consumer confidence in commodities impacted by BSE.

Market opportunities are identified in collaboration with industry and once priorities are established the CFIA approaches its counterparts internationally. The process to acquire access for Canadian products is



The beef sector in Canada is working to re-establish international markets with the help of the Canadian Food Inspection Agency and other levels of government.

initiated based on the fundamentals of sound science and international trade guidelines.

The composition of CFIA’s “team” is determined by the nature of the commodity and specific issues that may be an impediment to market access. The market access team uses its expertise in regulation to instill confidence in Canada’s domestic practices and policies with their foreign counterparts. Chief Technical Negotiator Dr. Robert Morrison and a team of experts including Dr. Little provide technical expertise during Canada’s bilateral exchanges with trading partners in the case of beef negotiations.

The Canadian cattle industry received a well-deserved boost in 2007 when the World Organisation for Animal Health (OIE) officially recognized Canada as a “controlled BSE risk” country. This categorization, annually confirmed by the 176 member countries of the OIE, acknowledges the effectiveness of Canada’s BSE control measures and reflects the commitment of all stakeholders to mitigate the risks for human and animal health.

“We have been very successful in our engagements so far, thanks in large part to the science-based measures we have put in place for managing BSE risks,” says Dr. Little.



International Regulatory Highlights

United States of America

- The United States Food and Drug Administration (FDA) changed its rules for large-scale egg producers this summer, to reduce the number of salmonella enteritidis illnesses. Most notably, egg producers are required to refrigerate shell eggs during the storage and transportation phases of production. The FDA hopes these new rules will reduce significantly the 79,000 reported cases of salmonella enteritidis annually. Perhaps reinforcing the need for these regulations, only a few weeks later in response to a nation-wide increase in salmonella enteritidis infections, the FDA issued a food recall on approximately 550 million shell eggs. These eggs were distributed nationally in over 22 states and packaged under numerous brand names.
- The FDA also took time this summer to put in place regulations that require restaurants and similar retail food establishments with more than 20 locations to list the calorie content on restaurant menus and menu boards. This initiative aims to curb unhealthy eating by providing detailed nutritional information to consumers. The University of Waterloo in Canada is conducting a study funded by the Canadian Cancer Society with a similar purpose; to investigate whether posting nutrition information on restaurant menus helps people to make healthier food choices.

Europe and United Kingdom

- The Food Standards Agency – the CFIA’s United Kingdom counterpart – has just adopted a Food Hygiene Rating Scheme which helps to inform consumers by rating the hygiene standards of restaurants, hotels and supermarkets on a five-point scale. A similar system exists in at least one city right here in Canada. All food premises in Toronto, Ontario are required to post the latest inspection results on or near the entrance of their establishment visible to the public.
- A European Union-wide health warning must now be present on any food or drink product that contains colours that are thought to cause hyperactivity in children, effective this past July. Six colours (tartrazine [E102], quinoline yellow [E104], sunset yellow [E110], carmoisine [E122], ponceau 4R [E124] and allura red [E129]) were identified in a study commissioned by the Food Standards Agency to have adverse effects on children’s activity and attention levels.

Australia and New Zealand

- Australian retailers are required to report to the Commonwealth of Australia under new policy effective early next year when they become aware that a product they have supplied has or may cause serious injury, illness or death. This initiative is intended to help demonstrate the effectiveness or needed areas of improvement for the country’s food recall system.
- The Australian and New Zealand governments are currently working on developing a bi-national compliance strategy regarding the labelling of caffeinated energy drinks, announced this past spring. This standard will see a “contains caffeine” label and an advisory stating “these products are not suitable for young children, pregnant or lactating women and individuals sensitive to caffeine” on virtually all caffeinated energy drinks.

Yves Lacroix

“There is also clear commitment throughout the cattle and beef sectors, in partnership with all levels of government, to protect public health and responsibly manage the disease. This resonates very well with our trading partners.”

Canada has successfully managed to restore market access over the past seven years, in some form, to most of the countries that purchased Canadian cattle and/or beef prior to 2003. This includes regained access to the United States, Mexico and Japan – the top three markets for Canadian cattle and beef.

“It has been a lot of work for all parties involved,” says Dr. Little. “But we are confident all this work will ultimately lead to renewed trade relationships with important and respected trading partners.”

Industry Collaboration Helps Develop Canada's Traceability System

by Victoria McBride

Travelling across borders from one province to another, the movement of farm animals is a long-standing practice in Canadian agriculture. Protecting the health of animals, the public and supporting food safety has always been important for producers.



The Government of Canada along with industry partners is developing a national traceability system. This is an example of the collaboration needed between government and industry to make regulations and systems effective. The National Agriculture and Food Traceability System builds on existing practices with a target implementation date of 2011, beginning with the livestock and poultry sectors.

Traceability is the ability to follow an item or a group of items – be it animal, plant, food product or ingredient – from one point in the supply chain to another, either backwards or forwards.

“The purpose of traceability is mainly disease control; being able to identify an animal and its origins during an emergency is crucial to the response time and the protection of human and animal health,” says Eric Aubin, Canadian Food Inspection Agency (CFIA) Traceability Regulatory and Policy Officer.

Traceability systems are not new to Canada. In the mid to late 1990s animal health and food safety issues arose around the world, leading Canada to review its risk management practices, including identification and traceback systems.

Traceability systems were developed in 1998 when the Canadian Cattle Identification Agency was created to implement national identification programs. Identification of cattle (beef and dairy) and bison became

mandatory under the *Health of Animals Regulations* by 2001. Identification programs at the federal level expanded in 2004 to include sheep. Animals must be tagged under these regulations when they leave their herd of origin. Tags are reported retired when the animal is slaughtered or exported.

The cattle identification agency functions as the administrator for these animal identification systems; it is responsible for evaluation of national database technologies, tag distribution and producer communications, while Agriculture and Agri-Food Canada is responsible for the development of traceability policies and funding support. The CFIA is responsible for the regulations, enforcement and traceback investigation.

Provincial initiatives also contribute to the overall traceability system. Agri-Tracibilité Québec, for example, was incorporated in 2001 and administers mandatory cattle identification programs. Alberta also introduced mandatory animal traceability requirements for cattle more recently, and is working on other species such as pigs.

Current animal identification programs involve the individual identification of all cattle, bison and sheep that move beyond their herd of origin, with approved ear tags bearing numbers unique to each animal. Radio frequency identification tags must be used to identify cattle since July 1, 2010. Information associated

Approved ear tags for animal identification are an important element of Canada's traceability system.

with each tag is stored within the national database and is only accessed by authorized CFIA personnel in the event of an animal health issue and to verify compliance.

“Industries and government are committed to working together to develop a national traceability system,” says Aubin. “The Industry-Government Advisory Committee has been established to lead the development and implementation.” The advisory committee comprises 22 industry members, the provinces, Agriculture and Agri-Food Canada and CFIA.

The vision of a national system is to better serve citizens, industry and government, by providing timely, accurate and relevant traceability information to enhance emergency management, food safety, market access, industry competitiveness and consumer confidence.

“Canada's national traceability system is meeting the needs of international markets; nearly 50 percent of beef and pork are exported to international markets,” says Aubin. “To remain competitive and continue exporting Canada needs to have a solid traceability system in place.”

The scope of Canada's new traceability system is modelled after the World Organisation for Animal

Continued on page 14

Modern Inspection Services Benefit Fresh Produce Sector

by Thomas Costea

Today's food marketplace is a potpourri of taste experiences, thanks to generations of domestic food production and the influx of commodities from around the world. The selection for consumers has become impressive, from exotic meats and fresh produce to many specialized processed products. This same vast menu of food products offers choice for consumers and opportunities for the food industry, but it also presents safety and quality challenges when food products are transported over great distances.

The variety of fruits and vegetables available in the marketplace particularly gives the consumer greater choices year-round, while also posing new challenges for government and industry to monitor the quality of fresh produce. The fresh produce industry in Canada is meeting consumer demands by providing a combination of home-grown and imported products, but is also identifying the need for modernized inspection services in light of increased shipments.

The Canadian Food Inspection Agency (CFIA) is responding with significant enhancements to its Destination Inspection Services program for commercial quality inspections. The Agency continues with its food safety mandate to monitor shipments of fresh fruits and vegetables while at the same time providing destination inspections to meet industry needs.

"It's a triple-win situation for government, industry and consumers," says Luc Mougeot, CFIA's Director of Destination Inspection Services. "The fresh produce sector identified

the need for enhancing inspection services to meet the demands of trade and remain competitive in the international and domestic marketplace, including a recognized system for dispute resolution.

"Industry also committed to working with government in developing a fee structure that reflects the enhancements in services. The outcome is a credible and timely inspection service that supports fair and equitable business practices and helps maintain a competitive marketplace. Consumers benefit from this competitive marketplace with access to fairly priced fresh produce."

The Government of Canada has provided inspection services in the fresh produce sector for about 75 years. There are approximately 868,000 shipments of highly perishable fresh produce received in Canada annually. The United States Department of Agriculture (USDA) historically recognized Canada's fresh produce inspection system as equivalent for the purposes of trade, but had indicated that the Canadian

Inspector Réal Lafontaine (right) of the Canadian Food Inspection Agency assists an inspector from the United States Department of Agriculture checking the quality and quantity of a fresh produce shipment.



system needed to be modernized to meet the demands of the new fair trade environment.

"There has been a long history of cooperation and shared responsibility between government and the fresh produce sector," says Mougeot. "However, industry identified the government shift away from quality-type services and more towards health and safety related activities. This hampered the ability of importers to control the quality of shipments and receive fair prices for loads that did not meet quality standards. Many buyers and sellers receiving shipments in Canada and experiencing sub-standard quality in the commodities were unable to acquire a recognized inspection report that reflected qualities such as the grade of produce, defects, packaging, weight and size."

The amount of time for inspections was critical in some situations and affected by lack of government resources and the destination location of the shipments. Importers also found themselves pursuing legal

Continued on page 14

Working Together on Food Safety

by Dr. David C. Williams, Associate Chief Medical Officer of Health, Ontario



Dr. David C. Williams

Imagine that a few cases of a rare type of salmonella emerge in one of Ontario's public health units. What happens next? When should the situation be escalated to the Ministry of Health and Long-Term Care (MOHLTC)? When should the public be informed? When should recalls be issued? What role should the federal government play in the provincial response?

With new food production and processing practices, emerging food-borne pathogens, changes in eating habits and demographics, and the public health system's ability to connect illness to the source of exposure, there has been a greater awareness of foodborne illness in recent years. In Canada, the federal government sets, verifies and enforces food safety standards, while provinces and territories play a key role in overseeing laws within their jurisdictions to prevent, investigate and manage multi-jurisdictional foodborne outbreaks.

In Ontario, 36 public health units are responsible for delivering food safety programs that include disseminating information to the community, inspecting food premises and responding to complaints. They can also seize food, issue offence notes, lay charges or close food establishments that present a health hazard to the community. During foodborne outbreak investigations, public health units are on the front-line, collecting samples, investigating food premises and contacting cases to determine the source of exposure.

In the wake of SARS (severe acute respiratory syndrome) and a number of high profile foodborne outbreaks and food recalls in recent years,

great progress has been achieved in strengthening public health in Ontario, including the food safety system. In 2005, Ontario undertook a comprehensive renewal of the public health system with the introduction of the integrated Public Health Information System for tracking outbreaks, particularly those developing across multiple jurisdictions. Public health renewal activities also included a revitalization of Ontario's public health laboratory system and the creation of the Ontario Agency for Health Protection and Promotion which provides scientific and technical expertise to front-line health care providers, the Chief Medical Officer of Health and the MOHLTC.

However, "food safety" is not a solo effort. It is a collaborative endeavour among local, federal and provincial partners. This shared responsibility becomes more imperative when today's food distribution system is growing in volume and complexity, and our population has become more vulnerable to foodborne illnesses with a greater number of aging communities and immuno-compromised individuals from all ages.

In 2006, the Ontario Multi-Agency Food-borne Outbreak/Food Recall Working Group (the Multi-Agency

Working Group) was formed to address gaps and constraints that arise during multi-jurisdictional outbreak investigations. Federal and provincial agencies have been working collaboratively on tasks of common interest, including fulfillment of the recommendations outlined both in the federal Report of the Independent Investigator into the 2008 Listeriosis Outbreak and Ontario Chief Medical Officer of Health's report on Listeriosis, as well as on the revision of the Ontario Memorandum of Understanding (MOU) for Food-borne Health Hazard and Illness Outbreak Investigation document. Amendment of the Ontario MOU will be based on the recently revised federal/provincial/territorial document Foodborne Illness Outbreak Response Protocol, which outlines guiding principles for multi-jurisdictional responses to foodborne illness outbreaks.

As part of this collaborative effort, the Multi-Agency Working Group also took the initiative to lead a two-day symposium for public health practitioners and professionals from all three levels of government involved with foodborne disease outbreaks investigation and management. Food-borne Disease Investigation and Management: An Ontario Symposium, held in Toronto on March 1 and 2, 2010,

Continued on page 14

An Integrated Food Safety Strategy for One Health

by Dr. Brian Evans, Chief Food Safety Officer and Chief Veterinary Officer for Canada

The evolving perspectives and concepts of food safety today are indicative of the complexities involved in the public health landscape. Relationships are dynamic and becoming increasingly intertwined relating to issues of human health, animal health and ecological health that includes plant life we cultivate.

The consequences that arise anywhere along this continuum can impact not only on health outcomes, but also our economy and the viability of the industries involved. The Canadian Food Inspection Agency is examining and adapting to this convergence with our federal, provincial and territorial partners, and those we regulate.

This summer I was appointed Canada's Chief Food Safety Officer, in addition to my duties as Chief Veterinary Officer and Canada's delegate to the World Organisation for Animal Health (OIE). This too is a convergence that will hopefully have positive impacts in bridging disciplines, perspectives and cultures within the health community. The term "food safety" carries expectations for Canadians, realistic or not, of no risk in consuming food products. However, we do not live in a zero-risk world. That makes it more important for all partners in food safety to establish and maintain an open dialogue with the public, to explain how we collectively contribute and perform in managing the risks associated with preparing and consuming food.

The combination of factors including consumer preferences, population demographics and susceptibility,

ecological changes, intensive production systems, pathogen adaptation, globalization of the food supply chain and new food processing technologies, requires not only vigilance in the identification and management of risks but also an inclusive and responsive commitment to information sharing and performance reporting.


Consider all the networks of food safety management in the world as part of a global web of health – one health for all humans, animals and plant life. Consider all the human interactions with these networks, either in conventional operations and programs or informal activities. There is indeed an enormous and intricate web of interactions and outcomes in our food safety systems, but it has not been built by one lone spiderman. It is a complex collection of web builders.

The food safety community in Canada includes professionals in both health and agriculture, academics, the private sector and non-government organizations alike. These networks must work to prevent safety issues to the fullest extent possible, to detect and report issues early and transparently, and respond quickly and efficiently in order to earn and maintain the trust of consumers.



Dr. Brian Evans

We are reaching out nationally and internationally, to professionals such as physicians, veterinarians, biologists, agrologists, microbiologists, chemists and other scientific disciplines, to bring a more comprehensive perspective to the concepts of food safety. Sharing information across networks and understanding how we connect the dots is critical for an integrated and comprehensive food safety strategy and food safety culture that reflects the interdependence of one health for all. Looking at all the components of food production through one lens – from seeds for our crops and feed for our aquatic and terrestrial animals, to processing meat and fish, grains, fruits and vegetables – we are seeking to find where investments should be made along the food continuum to provide the most effective consumer protection possible.

The appointment of a Chief Food Safety Officer for Canada acknowledges the rapid pace of change in food production systems, and is symbolic of the importance and profile that food security and safety issues have taken on the worldwide stage. I look forward to working with public and private sector partners to identify emerging trends and opportunities, to actively engage with consumers and to incorporate best practices for the management and reporting of food safety systems. 



Industry Collaboration Helps Develop Canada's Traceability System –

Continued from page 10

Health (OIE) and the International Standards Organization traceability standards. Canada is profiled as a world leader in animal identification, with a compliance rate of over 97 percent for cattle identification programs.

Animal traceability systems in Canada are being developed through industry-government partnerships. In the United States the creation of a national traceability system has been a struggle between government and industry. The current animal identification system in the U.S. is voluntary and focuses only on the interstate movement of animals. Canada continues to strengthen its traceability framework by striving to incorporate the three pillars of traceability into the foundation of the national system: 1) animal / product identification; 2) premises identification; and 3) animal movement. ◀

Modern Inspection Services Benefit Fresh Produce Sector –

Continued from page 11

action for compensation due to unacceptable shipments, which often involved posting a bond that was greater than the value of the shipment. The CFIA and stakeholders jointly developed the enhanced Destination Inspection Services model with some of these key challenges in mind, launching the program in June 2006 complete with a business plan based on client service principles.

The program had to be credible, recognized by the USDA, the U.S. Perishable Agriculture Commodities Act and the Canadian Board of Arbitration, and it had to be competitive and financially viable for both government and the fresh produce industry. The CFIA and stakeholders made it a priority to develop a unified and standardized system that represents a dedicated national service within the Agency.

“Destination inspections of fresh produce were previously managed through a matrix framework that drew upon resources from different areas of the Agency,” says Mougeot. “The new Destination Inspection Services program is based on a line management system consisting of dedicated staff with a priority on destination inspection, fully equipped and trained with a continually updated manual, delivering consistent, uniform and time-sensitive inspections nationally, with clear lines of communication and accountability.”

Destination Inspection Services is recognized by the USDA for trade purposes, and accepted as credible and reliable accounts of fresh produce shipments for international dispute resolutions. The program's strengths are based on accurate reports on the quality and specific details of fresh produce shipments; international recognition of inspection systems that are accountable to performance standards recognized by the U.S. and other trading partners; an opportunity for continuous improvements to the system because of a dedicated service; the provision of timely inspections on demand; and a dedicated and self-sustaining inspection system.

The variable nature of the demand for fresh produce inspections historically made it difficult for the CFIA to provide consistent service, especially considering there are various pressures on the operational resources for these inspections. A strong national government program for fresh produce inspection has improved service for an important industry sector. ▶

Working Together on Food Safety

Continued from page 12

allowed approximately 225 participants to work through a detailed fictional scenario of four cases of a rare type of salmonella that quickly expanded into a multi-jurisdictional outbreak. Throughout the various stages of the mock outbreak, eight panellists from public health units and the sponsoring organizations shared their insights and experiences gained by handling real outbreaks of foodborne diseases.

The event also included case studies, guest speakers and a review of the roles and responsibilities of the agencies and partners involved in an outbreak response. These exercises greatly increased participants' understanding of current communication plans, standards and protocols, and best practices related to foodborne outbreak management. The symposium provided participants with the opportunity to exchange knowledge and experiences, and better understand their respective roles in ensuring the health of Ontarians.

Understanding the roles of federal and provincial partners in maintaining safety, health and well being will impact the steps we take towards strengthening and enhancing the food safety system in Ontario and Canada. This symposium was the first of future opportunities to exchange knowledge, strengthen communication, and build new and renew existing relationships between partners. Together, we must commit to sharing new information, communicating openly, and collaborating to enhance Ontario's and all provinces' responsiveness to foodborne outbreaks. ▶