FOR THE RECORD

Oversight of animal disease in Canada lacking

Canada should expand the scope of its procedures to assess risks to animal health to include potential economic, environmental and social consequences, the Council of Canadian Academies says.

“Many risks to animal health have economic, ecological, and social implications beyond those directly affecting domestic animal health. Consequence identification and selection should be a formal element of animal health risk assessment,” the council’s Expert Panel on Approaches to Animal Health Risk Assessment says in a report, *Healthy Animals, Healthy Canada* (www.scienceadvice.ca/uploads/eng/assessments%20and%20publications%20and%20news%20releases/animal%20health/final_ah_web_report_eng.pdf).

“A full range of potential consequences (increased breadth) should be identified early in the risk assessment process using input from risk managers, risk assessors, and relevant stakeholders,” the report added. “Further, secondary or subsequent consequences should be considered (increased depth) as well as immediate, direct consequences. The Panel felt that exploring this breadth and depth of consequences within a single, integrated risk assessment would be more effective than considering different consequences independently. Methodologies and perspectives from more disciplines should be integrated (interdisciplinarity, as opposed to multidisciplinary, is the goal) to ensure adequate consideration is given to the consequences.”

“The Panel is not suggesting that all consequences should be explored in all risk assessments, but rather that there is a conscious consideration of the full breadth and depth of consequences. This should be accompanied by a trans-

parent selection process for determining which consequences to include. This approach would ultimately facilitate risk communication and risk management, and the acceptance of decisions by stakeholders,” the report states.

The need for such an integrated approach has become more evident in recent years as it became clear that “the well-being of animals and humans and the environment in which we live are linked in many ways,” Dr. Alastair Cribb, panel chair and dean of the Faculty of Veterinary Medicine at the University of Calgary in Alberta, stated in a press release ([www.scienceadvice.ca/uploads/eng/assessments%20and%20publications%20and%20news%20releases/animal%20health/\(2011-09-19\)%20ah%20news%20release%20eng%20final.pdf](http://www.scienceadvice.ca/uploads/eng/assessments%20and%20publications%20and%20news%20releases/animal%20health/(2011-09-19)%20ah%20news%20release%20eng%20final.pdf)). “These links have become very apparent over the last decade as countries around the world have experienced, for example, SARS, BSE and H1N1.”

Surprisingly absent in the report is any mention of the threat to human health posed by increasing antimicrobial resistance among livestock (www.cmaj.ca/lookup/doi/10.1503/cmaj.109-3109).

To achieve a more integrated multi-dimensional approach to risk assessment that would better estimate the “real costs” of animal disease outbreaks, the expert panel said the following will be necessary:

- “Risk assessment organizations across the animal-human-environment health spectrum should work to align and integrate processes, where appropriate, to ensure efficiency, transparency, communication, integration, and continuity. The conditions for effective, integrated animal-human health risk assessment will be affected by a range of factors such as institutional arrangements and resource constraints.
- A structured and transparent prioritization system helps to ensure that routine risk assessments, as well as those required for policy decisions

and strategic planning, are completed in a timely fashion.

- Canada’s research and training in animal health risk assessment should be enhanced to strengthen its knowledge capacity for protecting animal health, human health, and the environment. Canada’s current research funding structure does not facilitate integrated animal-human health research.”

The report also calls for greater transparency and collaboration in the risk assessment process. Currently, stakeholders who request a risk assessment, such as importers and government agencies, are only consulted at the beginning and end of the process, and the majority of risk assessments conducted by the Canadian Food Inspection Agency remain confidential.

But making more risk assessment documents publicly available, as is the case in countries such as Switzerland and the United Kingdom, and involving stakeholders throughout the process could improve uptake of risk management decisions, the expert panel argued. It also called for the creation of a framework to prioritize risk assessments. — Lauren Vogel, *CMAJ*

End-of-life care topped health agendas of victors

Residents of Ontario, Manitoba and Prince Edward Island can expect considerable more access to home, long-term and palliative care if the campaign promises of the victors in three provincial elections hold water.

While leading their parties to re-election, incumbent Premiers Dalton McGuinty of Ontario, Greg Selinger of Manitoba and Robert Ghiz of PEI placed considerable emphasis on end-of-life care, which many consider to have long been underfunded by provincial governments.

In **Ontario**, McGuinty's re-elected Liberals, who won a minority by capturing 53 of 107 seats, vowed to provide "improved and equitable access to the community support and home care seniors need. We'll treat our seniors as productive members of society rather than merely institutionalizing them. We'll work to keep seniors out of emergency rooms and hospital beds by keeping them healthy, in their homes and with their loved ones."

Although lacking in specifics, the platform, *Forward. Together.*, vows to hire more doctors, nurses and other health professionals to provide seniors with "better services, such as house calls and check-in by telephone and online," as well as patient navigators to help guide them through the system (www.ontarioliberal.ca/OurPlan/pdf/platform_english.pdf).

Seniors will also be able to access the services of an additional three million hours of time provided by personal support workers and will be given the option of deferring property tax increases until such time as they sell their homes. The Liberals also vowed to implement paid family caregiver leave for up to eight weeks per year, as well as create a \$1500 annual healthy home renovation tax credit to install ramps, walk-in showers or other equipment needed by seniors.

Over the course of the campaign, McGuinty also called on the province's doctors to accept a voluntary two-year wage freeze when their contract expires in March 2012.

Other Liberal promises included ones to:

- Provide all residents with "an online Personalized Cancer Risk Profile" that will use their medical and family histories to measure risk of cancer.
- Reduce childhood obesity by appointing a Council on Childhood Obesity, providing a "healthy snack" program for all elementary school students and doubling the children's activity tax credit to \$100.
- Develop a "comprehensive approach to mental health."

With a minority government, the Liberals will be pressed to adopt several New Democratic objectives such as funding an unspecified number of

long-term care beds, halving emergency wait room times, scrapping Local Health Integration Networks in favour of decentralized decision-making, eliminating ambulance service fees, hiring 200 new doctors over four years, creating 50 new family health-care clinics and funding "an additional one million hours of home care, over four years, and eliminating the waiting list for home care," according to the party's platform (<http://ontariondp.ca/wp-content/uploads/Plan-for-affordable-change.pdf>).

In **Manitoba**, Selinger's re-elected New Democrats, who captured 37 of 57 seats, vowed to spend \$2.5 million to create a number of "hospital home teams" (initially through three Winnipeg hospitals) to "provide specialized services for seniors who would otherwise have to remain in hospital. The expansion will include a team of hospital professionals who will make home visits to seniors with fragile health issues in need of regular monitoring and specialized care, which are currently only available in a hospital" (<http://todaysndp.ca/news/selinger-expand-best-home-care-program-canada-doctors-nurse-practitioners>).

The hospital home teams would be in addition to a significant expansion of long-term care announced earlier in the year, under which the New Democratic government announced that it would spend \$200 million to establish an additional 400 personal-care home beds and 500 "supportive housing units" (<http://news.gov.mb.ca/news/index.html?archive=2011-2-01&item=10903>).

The expansion also included a vow to spend \$16 million to expand support services provided to senior citizens in their homes and create a "rehabilitation program to help seniors regain and maintain their independence following surgery or injury, and also delay or prevent untimely or inappropriate placement in a personal-care home."

Other New Democrat promises included ones to:

- Hire 200 more doctors and 50 more physician assistants over the next four years, at a cost of \$77.3 million (<http://todaysndp.ca/news/selinger-presents-fully-funded-plan-hire-200-more-doctors>).

- Fund an additional 22 medical residencies, including 16 in family medicine and 6 in specialties.
- Improve access to family doctors by providing \$21 million in capital investment to open three new QuickCare Clinics and three new ACCESS Centres (<http://todaysndp.ca/news/selinger-will-open-more-family-clinics>).
- Hire 1000 new nurses for work in rural areas and replace 1000 retiring nurses over the next four years at a cost of \$74 million (<http://todaysndp.ca/news/selinger-announces-plan-more-nurses-close-home-rural-families>).
- Fully cover the cost of cancer treatment and support drugs for all patients, and provide faster cancer screening and testing by hiring eight more pathologists (<http://todaysndp.ca/news/selinger-commits-shortest-cancer-care-wait-times>).
- Create a tax credit for caregivers providing care to seniors at home (<http://todaysndp.ca/strong-support-manitoba-seniors>).

In **PEI**, Ghiz's re-elected Liberals, who captured 22 of 27 seats, vowed to increase the number of long-term care beds within the province by 75 and the investment in home care by \$4 million by 2015 "including grants to qualifying families & couples to make renovations in their homes to allow seniors to remain in the home."

As well, palliative care would be bolstered by establishing "a dedicated Palliative Care Centre — and increases in palliative care beds across the Island. This new \$5.6 million facility will be supported by an additional \$800,000 per year in operating funding to improve quality end of life care for Islanders and their families," the Liberals stated in their platform, *Moving Forward Together: On Health Care for Islanders* (www.movingforwardpei.ca/uploads/pdfs/Lib-Backgrounder-Health-Care.pdf).

Other Liberal policies included ones to:

- Obligate Islanders who access one of four training spots that the province funds at Memorial University in St. John's, Newfoundland, to sign an agreement that they will

practise in PEI for a period of at least five years.

- Hire 25 new registered nurses, nurse practitioners or licensed practical nurses, as well as expand training opportunities for nurses.
- “Enhance the role that pharmacists play as part of the primary care team.”
- Provide \$1 million over two years to those facing catastrophic drugs.
- Establish a fifth operating room at the Queen Elizabeth Hospital in Charlottetown, thus “providing access to an additional 1200 surgeries per year.” — Wayne Kondro, *CMAJ*

WHO says number of people with tuberculosis falls for first time

Fewer people fell ill with tuberculosis (TB) in 2010 but a third of cases worldwide are likely unreported, data on drug-resistant TB is incomplete and largely unreported, and funding for the treatment of drug-resistant TB remains inadequate, the World Health Organization (WHO) says in its annual TB update.

An estimated 8.8 million people contracted TB as incidence rates continued to decline from a peak of 9 million in 2005, the WHO says in its report, *Global Tuberculosis Control 2011* (www.who.int/tb/publications/global_report/2011/gtbr11_full.pdf). There were “1.1 million (range, 0.9–1.2 million) deaths from TB among HIV-negative people and an additional 0.35 million (range, 0.32–0.39 million) deaths from HIV-associated TB.”

The decline in TB prevalence rates in all regions of the world suggests that all countries, except several in Africa, may reach the Millennium Development Goal of halving 1990 rates by 2015, the report states. That’s in part the product of progress in nations such as Kenya, Tanzania, Brazil and China. In the latter case, “between 1990 and 2010, prevalence rates were halved, mortality rates fell by almost 80% and TB incidence rates fell by 3.4% per year. Methods used to measure trends in disease burden in China — nation-

wide prevalence surveys, a sample vital registration system and a web-based case notification system — provide a model for many other countries,” the report states.

“In many countries, strong leadership and domestic financing, with robust donor support, has started to make a real difference in the fight against TB,” WHO Director-General, Dr. Margaret Chan said in a press release (www.who.int/mediacentre/news/releases/2011/tb_20111011/en/index.html). “The challenge now is to build on that commitment, to increase the global effort — and to pay particular attention to the growing threat of multidrug-resistant TB.”

“Fewer people are dying of tuberculosis, and fewer are falling ill. This is major progress. But it is no cause for complacency,” added United Nations Secretary-General Ban Ki-moon. “Too many millions still develop TB each year, and too many die. I urge serious and sustained support for TB prevention and care, especially for the world’s poorest and most vulnerable people.”

The report also noted that diagnosis and treatment of multi-drug resistant TB (MDR-TB) remain “major challenges. Less than 5% of new and previously treated TB patients were tested for MDR-TB in most countries in 2010. The reported number of patients enrolled on treatment has increased, reaching 46 000 in 2010. However, this was equivalent to only 16% of the 290 000 cases of MDR-TB estimated to exist among notified TB patients in 2010.”

Funding also remains an issue, the report states.

“In 97 countries with 92% of the world’s TB cases for which trends can be assessed, funding from domestic and donor sources is expected to amount to US\$ 4.4 billion in 2012, up from US\$ 3.5 billion in 2006. Most of this funding is being used to support diagnosis and treatment of drug-susceptible TB, although funding for MDR-TB is growing and expected to reach US\$ 0.6 billion in 2012. Countries report funding gaps amounting to almost US\$ 1 billion in 2012.”

The report also notes that there’s a need to “accelerate” laboratory capabili-

ties in many nations. “In 2010, 8 of the 22 HBCs [high burden countries] did not meet the benchmark of 1 microscopy centre per 100 000 population,” it notes. As well, “among the 36 countries in the combined list of 22 HBCs and 27 high MDR-TB burden countries, 20 had less than the benchmark of 1 laboratory capable of performing culture and drug susceptibility testing per 5 million population.” — Wayne Kondro, *CMAJ*

End the SR&ED gravy train, panel recommends

Canada’s generous scientific research and experimental development (SR&ED) tax credit program should be revamped as it hasn’t been particularly successful in promoting research within Canadian industry, a federally appointed task force says.

In light of the fact that Canadian businesses continue to invest less in research and development (R&D) than their counterparts in other Western nations despite the generous tax breaks, the \$3.5 billion per year SR&ED program should be “simplified” and scaled back, while the resulting savings should be pumped into direct subsidies of innovation projects at small- and medium-sized enterprises (SMEs), the Independent Panel on Federal Support to Research and Development argues in a report, *Innovation Canada: A Call to Action* ([http://rd-review.ca/eic/site/033.nsf/vwapj/R-D_InnovationCanada_Final-eng.pdf/\\$FILE/R-D_InnovationCanada_Final-eng.pdf](http://rd-review.ca/eic/site/033.nsf/vwapj/R-D_InnovationCanada_Final-eng.pdf/$FILE/R-D_InnovationCanada_Final-eng.pdf)).

To that end, the panel recommended the creation of an Industrial Research and Innovation Council that should be charged with “simplifying” the SR&ED program so that it is focused on “labour-related” costs and be made responsible for dispensing the resulting re-deployed funds “to a more complete set of direct support initiatives to help SMEs grow into larger, competitive firms.” The pool of funds would include monies now dispensed through the National Research Council’s popular Industrial Research Assistance Program.

The current institutes of the National

Research Council, the panel added, should be essentially overhauled to become “a constellation of large-scale, sectoral collaborative R&D centres involving business, the university sector and the provinces,” while intramural research now conducted by the agency should be transferred to other federal agencies.

The panel said its recommendations were predicated upon its findings from consultations with the business community, to wit: “We heard that the government should be more focussed on helping innovative firms to grow and, particularly, on serving the needs of small and medium-sized enterprises (SMEs). We heard that programs need to be more outcome oriented as well as more visible and easy to access. We heard that whole-of-government coordination must be improved and that there should be greater cooperation with provincial programs, which often share similar objectives and users. We also learned that innovation support is too narrowly focussed on R&D — more support is needed for other activities along the continuum from ideas to commercially useful innovation.”

The new innovation council should also deliver a “commercialization vouchers pilot program that connects SMEs to providers of commercialization support; provide a national ‘concierge’ service and associated website to help firms find and access the support tools they need; [and] work with partners to develop a federal business innovation talent strategy.”

It should also have joint responsibility with the nation’s three granting councils in delivering “business-facing programs” funded by the Canadian Institutes of Health, the Natural Sciences and Engineering Research Council and the Social Sciences and Humanities Research Council. Moreover, it should be given sole responsibility for “technical assessment of the innovation element of project proposals submitted to the regional development agencies; and oversight of federal support for business-oriented collaborative research institutes” that emerge once the National Research Council institutes are overhauled.

Simplification of the SR&ED pro-

gram would curb abuse, the report states. “Specifically, for SMEs, the base for the tax credit should be labour-related costs, and the tax credit rate should be adjusted upward. The current base, which is wider than that used by many other countries, includes non-labour costs, such as materials and capital equipment, the calculation of which can be highly complex. This complexity results in excessive compliance costs for claimants and dissipates a portion of the program’s benefit in fees for third-party consultants hired to prepare claims.”

The report also reasserts oft-expressed claims that the government should establish vast pools of risk capital funds to help firms grow, and more aggressively promote the development of Canadian firms through its government procurement policies. — Wayne Kondro, *CMAJ*

US paradigm shift in food labelling urged

Arguing that there’s a need to adopt standardized food packaging requirements that allow consumers to make healthy choices, the influential United States Institute of Medicine is recommending that America adopt a front-of-package rating system for all foods that ranks them on a 1–3 scale according to their levels of saturated and trans fats, sodium and added sugars and conveys that information in the form of stars or other icon.

Foods with high levels of any of the three components “above a threshold limit,” it would not get any such “nutritional points” and hence, no stars. Food manufacturers would also be required to display caloric information in “common household measure serving sizes” (such as cups or slices) on the front of food packaging. Shelf tags displaying the same information should be required for bulk items such as fruits and vegetables.

The Institute of Medicine panel, struck at the behest of the CDC, US Food and Drug Administration and US Department of Agriculture, argued that a move towards nutrition-based rating

on the front of food labels would help to reduce the number of obese Americans, which the US Centers for Disease Control and Prevention has estimated now tops 72 million, at an annual cost to the health care system of US\$147 billion per year.

“It is time for a fundamental shift in strategy, a move away from systems that mostly provide nutrition information without clear guidance about its healthfulness, and toward one that encourages healthier food choices through simplicity, visual clarity, and the ability to convey meaning without written information. An FOP [front of package] system should be standardized and it also should motivate food and beverage companies to reformulate their products to be healthier and encourage food retailers to prominently display products that meet this standard,” the panel states in its report, *Front-of-Package Nutrition Rating Systems and Symbols: Promoting Healthier Choices* (http://download.nap.edu/cart/download.cgi?&record_id=13221&free=1).

A system using icons is vital, the panel said. “Among consumers with low literacy skills, the evidence reviewed indicates that when a simple rating system is used, differences between high and low literacy adults in choosing the better product are diminished. Front-of-package food labeling, especially using a simple symbol, might serve as a cue or signal for consumers, helping them distinguish between products of greater or lesser nutritional quality. These findings indicate that using simple symbols to summarize complex information about product quality may be especially valuable to low-literacy populations. The committee’s review of the totality of evidence led to the identification of four characteristics of a FOP symbol system most likely to be successful in encouraging healthier food choice and purchase decisions. These characteristics are:

- Simple: not requiring specific or sophisticated nutritional knowledge to understand the meaning;
- Interpretive: nutritional information is provided as guidance rather than as specific facts;

- Ordinal: offering nutritional guidance using a scaled or ranked approach; and
- Supported by communication, with readily-remembered names or identifiable symbols.”

While several nations in Europe have moved more aggressively with nutritional labelling requirements, efforts in Canada have been hampered by lack of political will and jurisdictional wrangling between the federal and provincial governments (www.cmaj.ca/lookup/doi/10.1503/cmaj.081755). — Wayne Kondro, *CMAJ*

WHO updates guidelines for safety training of health professionals

As part of a bid to promote care delivered on “the principles and concepts of patient safety,” the World Health Organization (WHO) has unveiled updated patient safety curriculum guidelines for health educators on the training of health professionals about best practices aimed at improving patient safety.

Patient safety “is still a source of deep concern,” Sir Liam Donaldson, WHO’s envoy for patient safety, writes in the forward to the guidelines, *Patient Safety Curriculum Guide: Multiprofessional Edition* (http://whqlibdoc.who.int/publications/2011/9789241501958_eng.pdf). “As data on the scale and nature of errors and adverse events have been more widely gathered, it has become apparent that unsafe care is a

feature of virtually every aspect of health care.”

“The education and training of dentists, doctors, midwives, nurses, pharmacists and other health-care professionals has long been the foundation of safe, high quality health care,” Donaldson adds. “Yet, it has been under-used and under-valued as a vital tool for addressing the challenges of achieving improved patient safety. It is clear that a new approach is needed if education and training are to play the full role that they should in improving patient safety.”

The guidelines note that the toll from unsafe health practices continues to be massive. “Significant numbers of patients are harmed due to their health care, either resulting in permanent injury, increased length of stay in health-care facilities, or even death.” As for the financial cost, “studies show that additional hospitalization, litigation costs, health care-associated infections, lost income, disability, and medical expenses cost some countries between US\$ 6 billion and US\$ 29 billion a year.”

The multiprofessional guide is essentially an update of WHO’s *Patient Safety Curriculum Guide for Medical Schools* (http://whqlibdoc.who.int/publications/2009/9789241598316_eng.pdf), to include input from the areas of dentistry, midwifery, nursing, pharmacy and related health-care professions.

The 272-page guide is composed of a teacher’s guide that “introduces patient safety concepts and principles and gives vital information on how best to teach patient safety” and a second

part that “includes 11 patient safety topics, each designed to feature a variety of ideas and methods for teaching and assessing, so that educators can tailor material according to their own needs, context, and resources.” The 11 topics:

- “What is patient safety?”
- Why applying human factors is important for patient safety
- Understanding systems and the effect of complexity on patient care
- Being an effective team player
- Learning from errors to prevent harm
- Understanding and managing clinical risk
- Using quality-improvement methods to improve care
- Engaging with patients and carers
- Infection prevention and control
- Patient safety and invasive procedures
- Improving medication safety.”

The curriculum guidelines were developed by an expert working group representing the WHO’s six health regions, as well as the International Confederation of Midwives, the International Council of Nurses, the International Pharmaceutical Federation, the World Dental Federation, the World Medical Association, the International Association of Dental Students, the International Council of Nurses – Students’ Network, the International Federation of Medical Students’ Associations and the International Pharmaceutical Students’ Federation. — Wayne Kondro, *CMAJ*

CMAJ 2011. DOI:10.1503/cmaj.109-4039