



Health
Canada Santé
Canada

REPORT OF THE OCTOBER 2001 MEETING

RAPPORT DE LA RÉUNION DE OCTOBRE 2001

SCIENCE ADVISORY BOARD

LE CONSEIL CONSULTATIF DES SCIENCES

October 2 and 3, 2001
les 2 et 3 octobre 2001

Health Canada
October 2001

Santé Canada
octobre 2001

----- **Note:** Contents of the Meeting Report are a reflection of the discussions of the October, 2001 Science Advisory Board Meeting. The points contained in this document are those of the Science Advisory Board and do not necessarily reflect the views of Health Canada and its employees. / Le contenu du présent rapport est le reflet des discussions de la réunion du Conseil consultatif des sciences tenue les 7-8 octobre 2001. Les points de vue qui y sont exprimés sont ceux du Conseil consultatif des sciences et ne reflètent pas nécessairement les points de vue de Santé Canada et de ses employés.

Canada

Day 1 - Tuesday, October 2, 2001

In Attendance: Judith Hall, Richard Lessard, Allan Ronald, Karen Grant, Rodney Ouellette, Stuart Macleod, Neena Chappell, Ardene Robinson Vollman, Elizabeth Jacobson, Lillian Dyck, Linda Lusby, Carol Herbert

Ex Officio Members: Ian Green, Kevin Keough, Robert McMurtry

Secretariat: Valerie Marshall, Véronique Frenette

1. Opening Remarks - (Chair - Judith Hall)

The Chair welcomed members to the meeting in Winnipeg and conveyed a special welcome to the new members to the Board.

2. Welcoming Remarks (Ian Green, Deputy Minister)

The Deputy Minister welcomed Board members, passing on best wishes from the Minister.

He briefed members of the Board on Health Canada's actions following the September 11 bombings in New York and Washington, specifically speaking about the offers of aid made to the United States government and the logistics of caring for the 47,000 airline passengers who were diverted to Canadian airports.

The Deputy Minister also spoke to members about the recent meeting of federal-provincial health ministers in St. John's, Nfld. One of the issues raised was the rising costs for pharmaceuticals. An agreement in principle was reached to work together to reduce costs and to establish a national database to track drug prices, usage and cost trends.

Discussion included the following points:

- balancing the cost of medications with the individual needs of a particular patient is a complex issue
- creation of a "best practices" guideline could be a useful tool in addressing this issue

3. Update on Office of the Chief Scientist *(Dr. Kevin Keough, Chief Scientist)*

The Chief Scientist welcomed Chair Judith Hall and members Linda Lusby and Lillian Dyck. He called on members to consider two additions to the Board: an individual knowledgeable in ethics; and, a retired government employee who could bring an arms-length but knowledgeable, perspective to inform the Board's discussions.

Dr. Keough noted the Health Research Secretariat has been transferred to his office and that their efforts to foster linkages with the CIHR continue. Health Canada representatives sit on 10 of the 13 Institute Advisory Boards, on the Standing Committee on Oversight of Awards and Grants and on the CIHR Working Group on Partnerships.

An electronic Departmental Science and Research Database, which summarizes information on the Department's scientists and researchers and their projects, has been developed by the Health Research Secretariat in collaboration with the Information Management Services Directorate of the Information, Analysis and Connectivity Branch. The Departmental Science and Research Database will provide our scientists and researchers with a central place for sharing information on their expertise, science and research interests, current projects, and other related information.

The Health Canada Research Ethics Board now has its first Chair, Dr. Bernard Dickens. The next steps are to appoint the REB membership and to develop more detailed policies.

Dr. Robin Hill, Acting Director, Science, and Dr. Keough have been negotiating with CIHR with the intent to commission CIHR to conduct peer reviews of some of Health Canada's programs.

The Office of the Chief Scientist also hopes to develop a program for student and post-doctoral fellowship programs for Health Canada. A consultant is working on designing and costing the program. Comments from the Board on this program idea would be appreciated.

Other programs underway include a plan to revitalize abilities of Health Canada researchers. Specific initiatives could include short-term placements of HC researchers in other venues and attracting outside researcher and science workers on secondment into HC.

In a partnership with the National Microbiology Laboratory and the Institutes of Infection and Immunity, the OCS is funding a three-year pilot project to attract clinical fellows into infectious disease epidemiology.

The OCS has also retained a quality accreditation consultant to evaluate the quality

control status and accreditation status of HC laboratories.

Discussion included the following topics:

- Health Canada has a diversity of research activities in areas of interest to the health care community and the public.

4. Approval of May Meeting Report (Judith Hall, Chair)

With changes, the meeting report for May, 2001 was approved.

5. Health Canada Science Advisory Board Terms of Reference (Dr. Judith Hall, Chair)

The revised Terms of Reference for the Health Canada Science Advisory Board were approved.

**6. First Nation and Inuit Health (Catherine Adam)
(Please refer to presentation slides)**

The presentation outlined the objectives of the First Nations and Inuit Health Branch and the key program and service areas of the branch including: primary care, public health, prevention and promotion programs, addiction treatment services, non-insured health benefits and research. The presentation also outlined current issues in First Nations and Inuit health, potential research areas, opportunities for partnership and knowledge-sharing with the national and international research communities and some of the challenges facing First Nation and Inuit health research.

The provision of health programs and services to First Nations and Inuit people is framed within the context of a very young population with a high birth rate located in rural and remote communities, often of under 500 residents. Current health issues impacting these communities include higher rates of chronic conditions, infectious diseases, infant mortality and addictions.

Priority issues for research include environmental health, infectious diseases such as TB and HIV; chronic diseases such as diabetes; child development; social cohesion; determinants of health and health systems.

The next steps include discussing collaborative research with experts in the priority areas building a national research network and building an international network on indigenous peoples health research..

Discussion included the following points:

- A tabulation of research studies done within the Branch, including

surveillance and surveys, should be completed. The tabulation should indicate where the results of research studies have been published.

- A larger proportion of Native Peoples now live within cities. Migration to urban areas and then possibly back to the reserve can present challenges to researchers.
- A spirited discussion ensued that expressed concern that research in this area be relevant

Action Item: Dr. Jeff Reading, director of the Institute of Aboriginal Peoples' Health of the Canadian Institutes of Health Research should be invited to the Board's December meeting to present the Institute's overall research agenda and possibilities for collaboration.

The SAB has requested that the First Nations and Inuit Health Branch provide a presentation on its research agenda at the February 2002 meeting of the Board.

7. Privacy in Health Research (Janice Hopkins)
(Please refer to presentation slides)

The increased use of the Internet for electronic commerce and the provision of services on line has prompted increasing public interest in privacy issues. As the use of information and communications technologies grow in the health sector, many questions are being raised about the protection of individuals' personal health information, one of the most sensitive types of personal information.

Health Canada has an important part to play as a custodian and user of personal health information, as a provider of health care services, as a funder and performer of research and as a policy and decision maker on issues relating to health and health care.

Discussion included the following points:

- It is essential to assess the effects of privacy legislation on health research.
- The SAB has requested an opportunity to review the CIHR draft document on privacy and the speech given by the Privacy Commissioner on science and health.
- The SAB requested examples of research scenarios wherein privacy and the privacy legislation plays a significant role.

8. **Infectious Diseases Program, Emerging Infectious Diseases, Simian Foamy Virus Infection, West Nile Virus, Zoonotic Foodborne /Waterborne Enteric Disease**
(*Dr. Robert McMurtry, Dr. Mohamed Karmali, Dr. Paul Gully, Dr. Frank Plummer*)
(Please refer to presentation slides)

Infectious Diseases Program:

Health Canada has a legislative mandate under the Department of Health Act for “...the protection of the people of Canada against risks to health and the spreading of diseases; the investigation and research of public health, including the monitoring of diseases.”

There are three main infectious disease program areas in the Population and Public Health Branch (PPHB): the Centre for Infectious Disease Prevention and Control; the National Microbiology Laboratory; and, the Laboratory for Foodborne Zoonoses.

The Infectious Disease Program Steering Committee was created in response to the challenge for a more integrated disease program. The committee works to identify priorities for infectious disease programming and provides leadership and co-ordinated decision-making. The priorities set by this committee are foodborne and waterborne diseases, bloodborne pathogens, antimicrobial resistance and zoonoses.

Discussion included the following points:

- The responsibilities of each area is different. The challenge is to work together and plan for the future.
- There are partnerships between Health Canada and provincial representatives, including chief medical officers of health, as well as provincial laboratories.
- Priorities are set in a variety of ways, including a specific response to a specific disease. Treasury Board or ministerial commitments can also affect the agenda.

Emerging Infectious Diseases:

Global travel and increase commerce and immigration, which includes travel and immigration, has an effect on the kinds of infectious diseases which Canadians are exposed to, as well as the spread of those diseases. The source of our food supply, encroachment by humans on animal habitats, and human behaviours such as injection drug use all have an effect on the kinds diseases which we are exposed to.

Discussion included the following points:

- There is no national immunization strategy.
- Public health has been traditionally undervalued by medical schools and the medical profession.
- One of the biggest problems in answering public fears is translating science into public policy.
- There is no evidence of any disease as a result of the Simian Foamy virus.

- While the link had not been discovered before, there are other labs in the country with macaques. There is a proposal to do other research possibly include other institutions depending on the availability of funding.
- It is important to look at the blood system and viruses which could be introduced to the blood supply, but clearly a challenge exists in knowing what to look for.

West Nile Virus:

Before 1999, West Nile Virus (WNV) was considered exotic in North America. The initial question was whether or not West Nile would survive the winter and re-emerge. It stayed in the northwest and moved north with the migration of birds. Although some birds tested positive in Canada, there was no human case of WNV in Canada.

The issue for 2002 is whether or not surveillance should continue and if so, to the degree to which it should continue and how responsibilities should be shared.

Discussion included the following points:

- The reporting of dead birds varies from province to province.
- The disease did move south which means it could survive year-round in a place like Florida.
- Elderly people are susceptible, but the summer of 2001 included a drought, which cut down on mosquito breeding places.

Zoonotic Foodborne/Waterborne Enteric Disease:

All emerging new infections featured an impact between humans, animals and the environment: for example, E-coli, West Nile.

If an impact is going to be made, emerging infections must be controlled at their source and they must be prevented from getting into the food chain.

We are entering the era of molecular risk assessment with the possibility of making designer pathogens.

Discussion included the following points:

- Canada is a leader internationally in studying e-coli infections.
- We have to control emergence at their source.

Day 2 - Wednesday, October 3, 2001

In Attendance: Richard Lessard, Allan Ronald, Karen Grant, Rodney Ouellette, Stuart Macleod, Neena Chappell, Ardene Robinson Vollman, Stephen Strauss, Elizabeth Jacobson, Linda Lusby, Stephen Strauss, Lillian Dyck

Ex Officio Members: Kevin Keough, Robert McMurtry, Munir Sheikh

Secretariat: Valerie Marshall, Veronique Frenette

9. **Safe Drinking Water in Canada-** (*Michele Giddings*,)
(Please refer to presentation slides)

Day-to-day responsibility for drinking water is generally that of provincial/territorial departments of Health and/or the Environment, with some responsibilities delegated to municipal governments. The federal government is responsible for ensuring safe drinking water is provided within its territory, such as on First Nations' lands and national parks..

Health Canada plays a key leadership role in helping to ensure the safety of Canadian drinking water supplies. Through its functions as technical secretariat to the Federal-Provincial-Territorial Subcommittee on Drinking Water, the Department's Healthy Environment & Consumer Safety Branch provides scientific and technical support, expertise, and advice to all jurisdictions within Canada and conducts research in the area of drinking water quality. A key Health Canada responsibility is the development of health risk assessments for contaminants that could be found in Canadian drinking water supplies which are published as the *Guidelines for Canadian Drinking Water Quality*.

Health Canada plays a key role in identifying the types of diseases or disease-causing pathogens which may exist in Canadian water supplies and in humans affected by them. This role helps all levels of government respond to emergencies, reduce their impact, or prevent them entirely.

The investigation of outbreaks and the targeted water quality studies are part of a continuing investigation and national surveillance of gastrointestinal illness by the Population and Public Health Branch of Health Canada.

Health Canada's First Nation and Inuit Health Program has provided the environmental health program to First Nations' communities for more than 50 years. As part of this program, the department inspects, monitors, and provides advice on drinking water quality to First Nations communities in collaboration with Indian and Northern Affairs Canada.

Discussion included the following points:

- Guidelines are just guidelines, but mandatory monitoring of all existing guidelines would be cost-prohibitive.
- A national standard might not work simply because of regional/local differences in the types or quality of the source water available.
- There is not necessarily the expertise or the money available to make water quality determinations at a local level.
- There are no regulations now on water treatment components: pipes, taps, after-tap filters. No one filter will do everything the consumer generally wants it to do.
- The Board expressed concern about water quality in general, saying this area is also one of concern for Canadians.

10. Update: Young (Cisapride) Inquest Recommendations - (Dr. Robert Peterson)
(Please refer to presentation slides)

On April 24, 2001, a coroner's jury delivered its verdict on the cause of death of Vanessa Young, a 15 year-old woman who died of a cardiac arrest while on Prepulsid® (cisapride). This verdict provided both a finding about how Ms Young came to her death and recommendations about how to avoid such deaths in the future. These findings and recommendations were made by the lay jury based on the evidence presented at the inquiry. The verdict attributes the cause of Ms Young's death to be brain damage following a cardiac arrest resulting from the effects of an eating disorder, Bulimia Nervosa, in conjunction with cisapride toxicity and a possible underlying congenital defect of the heart. The means of death was found to be accidental.

The jury made a total of 59 recommendations (including the 14 recommendations directed at Health Canada). These recommendations were directed at Health Canada, the pharmaceutical industry, the Ontario College of Physicians and Surgeons, the Ontario College of Pharmacy, the Ontario College of Family Physicians, Ontario Medical Schools, the Ontario College of Nurses, the Ontario Ministry of Health, and the Ontario Coroner's Office.

An internal Health Canada working group has made good progress on the implementations of specific recommendations, with significant progress in the areas of drug product risk communications material and in the development of standardized patient information.

Discussion included the following points:

- Adverse drug reactions are under-reported. New systems are being explored to remedy this.
- There are many products on the market which will have different effects on

- people because of individual genetic profiles.
- There is no standard for medical records and no central area for such record-keeping.
 - The privacy issue is also an important one. Linking genetic information with adverse reactions will impact on privacy laws and regulations.

The meeting adjourned at 9 a.m. for tour of National Microbiology Laboratory.