

Activities of the Science Advisory Board

Report
to the
Minister of Health

2001-2002

Science Advisory Board Report 2001-2002

Since my appointment in May 2001 as Chair of the SAB, it has been my pleasure to work with the distinguished members of the Science Advisory Board. The Board's collective knowledge of the health issues affecting Canadians has hopefully made it possible for this Board to provide timely and important advice to the Minister.

On behalf of the Board, I would like to take this opportunity to provide you with our report which briefly summarizes the Board's work for 2001-2002.

Judith G. Hall, OC, MD.
Chair, Science Advisory Board

Science Advisory Board Members 2001-2002

Dr. Judith Hall - Chair
Dr. Richard Lessard - Vice Chair
Dr. Michel G. Bergeron
Dr. Carol Herbert
Dr. Rodney J. Ouellette
Dr. Karen R. Grant
Dr. Stuart MacLeod
Dr. Elizabeth D. Jacobson
Professor Linda A. Lusby
Dr. Paul Paquin
Dr. Ardene Robinson Vollman
Dr. Irv Rootman
Dr. Lillian E. Dyck
Dr. Neena Chappell (retired May 2002)
Dr. Allan Ronald (retired May 2001)
Mr. Stephen Strauss (retired January 2002)

Terms of Reference

This year the Board formally adopted new Terms of Reference which more accurately reflect the work the Board does in providing advice on the full spectrum of Health Canada's science activities. The Board's responsibilities include:

- a. providing broad strategic advice on the direction, balance and relevance of Health Canada's science priorities;
- b. providing advice on the effectiveness, relevance and quality of the science and research conducted in Health Canada;
- c. providing a challenge function to ensure that the scientific basis of Health Canada's programs are consistent with its mandate and the needs of Canadians;
- d. reviewing and advising on emerging scientific trends and opportunities in a national and global context;
- e. providing advice on scientific partnerships and strategic linkages between Health Canada and other federal departments, other levels of government, and other sectors both nationally and internationally.

Security and Health

It would be difficult to present a report for this time period without highlighting the impacts of September 11, 2001.

The Science Advisory Board had previously identified bioterrorism as an important area for potential discussion in the planning meeting of May, 2001. The fall meeting, held in October in Winnipeg, was necessarily focussed on the need for Health Canada to take an active role in addressing the science requirements related to bioterrorism and emergency preparedness. The Board has been impressed by Health Canada's role in responding to the challenges presented by September 11.

We were pleased to hear of the Government's significant investment in health and security. These investments have strengthened public health networks across the country. We urge that there be a scientific basis for these investments and that regular evaluation be incorporated so that as much as possible can be learned from the experience.

In addition, our fall meeting in Winnipeg enabled the Board to better understand the role and capabilities of the National Microbiology Laboratory and its staff.

Over the course of the year, we heard about the Chemical, Biological, Radiological and Nuclear (CBRN) Research and Technology Initiative. We are pleased to see that within CRTI, Health Canada is leading on two major initiatives (co-leader with CFIA on biological terrorism and lead on radio-nuclear terrorism) and participating in a diversity of government initiatives in other areas of CRTI.

The Board did note the importance of communication in times of emergency and the need for cooperation between departments and agencies in preparing for and responding to emergencies.

The Board has called on the Department to ensure balance is maintained between the threats of CBRN terrorism and the on-going health risks that Canadians face daily.

Chronic Disease

Several presentations throughout the year highlighted work done by Health Canada in the field of chronic disease. This important health concern has greater impact on the lives of Canadians than any other health issue. The Board believes prevention is a key component in any health care strategy and suggested that the Department consider focussing scientific activities on the common determinants and risk factors of chronic and infectious diseases. The Board also emphasized the need to avoid approaches which may be interpreted as blaming the victims of these disease states.

Privacy and Research Ethics

The Board requested information throughout the year on issues relating to privacy and ethics. While the Board supports the intention of privacy legislation, it notes that the Department faces a number of challenges in ensuring that the legislation does not inhibit research of value to individual Canadians and overall population health.

The SAB applauds the creation of Health Canada's Research Ethics Board. Under the capable leadership of its chair, Dr. Bernard Dickens, the REB will undoubtedly make an important contribution to the ethical conduct of research involving human subjects within Health Canada.

Surveillance

The Board received a number of presentations related to the Department's surveillance activities. These are, of course, important for monitoring trends and planning programs. The Board encouraged the Department to evaluate its full range of surveillance activities to determine what surveillance is required, how it is performed, how it is integrated and how it should be used. Given emerging health issues and the pace of advancements in health sciences, Health Canada needs to regularly assess its surveillance activities to ensure the right balance and sound research. Many of these activities can and should be undertaken in partnerships with other agencies and the provinces.

Partnerships

The Board has, over the course of the year, invited Scientific Directors from the Canadian Institutes of Health Research to present their research agendas to the Board. The Board was pleased to see the growing relationship and collaboration between the Department and the CIHR. The Department is obviously exploring partnership opportunities with CIHR and other departments and international organizations early in the planning and development stages of new programs.

The Board has stressed the importance of a strong evidence base in support of programs related to First Nations and Inuit Health (FNIHB). We are pleased that FNIHB is developing a broader research agenda within its programs. A productive research relationship with CIHR's Institute of Aboriginal People's Health will also play an important role in establishing evidence. We understand a database is being established of the research related to the health of Aboriginal peoples. This knowledge base will be essential to determining future research directions.

Communications

The Board has expressed on several occasions its concern that the contribution of Health Canada's science and technology activities are not well known by Canadians.

The Board believes a communications strategy, which not only promotes the Department, but provides useful, up-to-date information for Canadians, is vitally important. The Board encourages the Department to formulate its strategy quickly and incorporate what is known from the science of science communications.

The Board has recommended that the Department use a wide range of communication vehicles and resist over-reliance on the worldwide web. It is important that Health Canada model best practices in its science communication and evaluate the effectiveness of its communication strategy.

Human Resources

The Board is aware of the many activities undertaken by the Office of the Chief Scientist with regard to recognizing and supporting Health Canada scientists. This work is essential in view of the looming shortage of qualified scientists.

The Board has expressed its particular concern about the shortage of qualified life and social scientists. It applauds the development of interchanges for near-retirement and post-retirement academics and researchers as well as the newly developed recognition activities of Health Canada's scientists.

The Board has encouraged Health Canada to promote itself as an employer of choice where scientists can contribute to the health of Canadians. It has suggested government departments should investigate innovative approaches to attracting people and be creative in loosening restrictive hiring policies so that new approaches may be used to attract scientists to the public service. This will be critical to the Department's ability to compete with hospitals, universities and industry for highly qualified scientific personnel.

Food and its Safety

The Board was surprised to learn that the most recent data on nutrition and what Canadians eat is several decades old. Nutrition and the choices made by Canadians

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are important health determinants, particularly as related to chronic disease. The Board has recommended strongly that a new nutrition survey be undertaken and regular 5 surveillance be initiated.

The Board was also informed about the progress made by Health Canada in light of recommendations by the Royal Society Expert Panel on the Future of Food Biotechnology.

Office of the Chief Scientist

The Board is encouraged to see progress made by the Chief Scientist and his office on a wide variety of issues. Their work for the Department on issues such as lab accreditation, partnerships and the Science Framework are critical to ensuring effective science and research at Health Canada.

The Chief Scientist has worked to bring new programs to the attention of the Board as they are being formulated, which has allowed the Board to reflect on the quality of science underlying the programs, as well as to assure evaluation is built in at the beginning.

The Board was pleased to hear about the launch of Health Canada's Post-Doctoral Fellowship (PDF) Program as well as the inaugural Research Forum which took place in November 2002.

Forward Planning

In its Forward Planning Session, the Board confirmed that policy and program information provides essential context, but the SAB will provide advice on and challenge the science that underlies them. The Board is anxious to understand the Department's priorities to ensure that it can provide timely and useful advice on the science that is critical to the Department's ability to fulfill its mandate.

A considerable portion of the Forward Planning Session was devoted to identifying potential principles to assess current and emerging health issues. These principles are: number of people affected and severity of impact; evidence-based intervention; evaluability; capacity; mandate; equity; context; innovative approaches and the contribution of our understanding of the mechanisms of disease. These principles were seen as useful in identifying the issues brought to the Board for advice.

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The Science Advisory Board asked for the Department's assistance in developing a framework which would enable them to assess the Board's effectiveness. 6

Discussions in the Forward Planning Session initiated work on a Guidance Document which will more clearly define the Board's approach for the coming year.

Conclusions

The Science Advisory Board is pleased to present this report of its activities over the past year. The Board has made its best efforts to provide the Department with advice and guidance on the science issues facing Health Canada.

Maintaining and improving the health of Canadians is Health Canada's mission. The Board is pleased to play a role in this important endeavour.