

be grouped under four key areas: promotion — co-ordinating Canada's Fitweek, formerly the National Physical Activity Week, and supporting the PARTICIPaction Program; leadership — developing guidelines for the training of fitness leaders and programs to train management volunteers; participation — increasing the number of opportunities for Canadians to participate in physical activity and encouraging the provision of adopted activity opportunities for certain target groups; and research — facilitating the conduct of research projects and national surveys and the dissemination of results. These activities are carried out in conjunction with or on the basis of liaison and co-ordination between the various levels of government, national associations, private sector partners, volunteers and practitioners in the field.

3.2.7 Voluntary agencies

Voluntary agencies are very much involved in the health field. Health departments in Canada recognize and support the intrinsic worth of voluntary action in developing and providing services to promote health and well-being. Historically, voluntary groups have played a major role in promoting public awareness and action leading to the development of Canadian health systems and social services. The voluntary sector, with its grassroots involvement, is in a position to be aware of emerging problems, evolve innovative responses and mobilize rapidly to meet perceived human needs. Thus the work of the voluntary sector is complementary to government efforts. The annual value of volunteer services is estimated at about \$1 billion in the health and social services sector. In 1988-89, Health and Welfare Canada provided sustaining grants totalling \$2.9 million to 50 national voluntary organizations to assist in the operation of their national offices and in carrying out their national responsibilities. In addition, research and project contributions are made toward a wide variety of activities of an innovative or demonstrative nature.

3.2.8 Research and planning

Total expenditures for health science research and related scientific activities in Canada in 1985 were estimated at \$357 million. Federal contributions were estimated at \$176 million.

Responsibility for funding scientific activities is shared among the federal government, private non-profit organizations, private industry and provincial governments. Basic and applied biomedical research is funded primarily by the Medical Research Council of Canada, a variety of non-profit organizations, such as the Cana-

dian Cancer Society, and several provincial research-funding programs. Most of this research is performed in universities and affiliated teaching hospitals. Applied health research, including the development of health care delivery systems, is funded by Health and Welfare Canada and by other organizations, both provincial and private. The provinces not only provide some funds for the direct costs of activities carried out in universities and hospitals but also, through operating grants, provide for indirect costs including the salaries of principal investigators. Related activities include the training of research scientists, scientific data collection, information dissemination, economic and feasibility studies and testing and standardization.

In federal laboratories, work is concerned with standards and regulations to safeguard the quality and safety of foods, cosmetics, pesticides, drinking water and air, and the safety and effectiveness of drugs, radiation-emitting and medical devices. Surveillance is maintained over chronic and infectious diseases; factors affecting their diagnosis and containment are investigated. In universities, most investigations concern physiological and biochemical bases of health and disease. In hospitals, diseases and disabilities are investigated; treatments (both medical and surgical) are developed and tested. In industry, new pharmaceuticals and medical devices are developed. New technologies are developed and tested ranging from hardware, such as medical devices, to strategies for the management of certain medical conditions, such as provision of special care units. Health concerns include: the improvement of lifestyles and self-management of health; reproductive health; occupational health; mental health; and the special health problems of particular population groups, such as the elderly, northern residents, native peoples and the disabled.

Most federal grants supporting health science research in universities and hospitals are channelled through the Medical Research Council. It provides grants-in-aid of operating and equipment requirements for research projects and direct support for investigators and research trainees. It offers incentives for research both in productive fields where major contributions may be expected and in fields or regions where research is not adequately developed. Support is given for meetings, international scientific activities and exchange of scientists.

The Council also funds collaborative research projects with industry. The budget of the Council was \$170.5 million for 1987-88, up \$6.5 million