



Government of Canada
Gouvernement du Canada

NATIONAL DEMENTIA RESEARCH AND PREVENTION PLAN



Canada.ca/Dementia

Canada

Around the world, dementia is widely recognized as one of the most pressing problems facing healthcare systems and an aging population. The Government of Canada is focusing its efforts on a national research and prevention plan for dementia which will support improved care.

RESEARCH

Improving our understanding of dementia to provide the latest preventive, diagnostic and treatment approaches to help those living with dementia, their families and caregivers.

PREVENTION

Helping to prevent or delay the onset of dementia by reducing risks through early diagnosis.

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PRINT Cat.: HP35-46/2014E **PDF** Cat.: HP35-46/2014E-PDF Pub.: 140259
ISBN: 978-1-100-24892-9 ISBN: 978-1-100-24891-2

Disponible en français

MINISTERIAL STATEMENT

Anyone who has seen a loved one suffer from dementia knows what a profound impact it has on an individual. We know that families and caregivers carry a burden as well.

It is estimated that between 6 and 15% of Canadians aged 65 years and older suffer from Alzheimer's disease and other forms of dementia.¹

Sadly, there is no cure—and just as troubling, the number of Canadians who are living with dementia is expected to double by 2031.²

Many countries around the world are facing this similar situation. That is why our Government has joined our G7 partners and other global partners in addressing this growing challenge. Together, we committed to coordinate international efforts with the ambition of finding a cure for dementia by 2025.

The impact of dementia on individuals, caregivers, families, and national economies are significant, and are expected to intensify.



The Government of Canada is committed to national and international leadership in dementia research and prevention. We are working to stem the tide and improve our understanding of these conditions and their effect on Canadians.

THE HONOURABLE RONA AMBROSE
Minister of Health
Government of Canada

¹ Estimates are for 2011. Lower estimate of 6.3% derived from microsimulation modelling (Public Health Agency of Canada). Higher estimate of 14.9% derived from extrapolations and includes cognitive impairment (Alzheimer Society Canada).

² POHEM-Neurological microsimulation modelling data (Statistics Canada and Public Health Agency of Canada).

STATEMENT

Alzheimer Society of Canada

Alzheimer's disease, which continues to affect more and more Canadians, is a major public health concern and one of the biggest challenges facing medical research today.



Reducing the impact of Alzheimer's disease and other forms of dementia will not only improve lives, but decrease the costs to our health-care system and economy. To achieve this end, we must maximize our research talent through collaboration and innovation and work harder to raise awareness about dementia and its risk factors.

Thankfully, we have the will and commitment of the Government of Canada and some of the world's brightest researchers to get us there. Alzheimer Societies across the country will continue to work side-by-side with our government and research partners.

Our combined expertise and resources will help fuel breakthroughs that prevent this disease's onset, yield more effective care and treatment and eventually lead us to a cure.

MIMI LOWI-YOUNG
Chief Executive Officer
Alzheimer Society of Canada

STATEMENT

Women's Brain Health Initiative

Women represent 62% of dementia cases and 70% of new Alzheimer's cases, putting them at the epicenter of a growing health issue.



In addition to this, women are nearly twice as likely as men to succumb to dementia and two-and-a-half times more likely to be providing care for someone with the disease.

Up until now, gender-based research in this field has been severely limited and past studies have inadequately addressed these discrepancies.

Canada is taking a leadership position to ensure gender differences are now part of the ongoing discussion among researchers in this area. This will be important to helping us better understand the unique risks for the two sexes, why differences exist, what the different outcomes are and whether they should be treated differently.

LYNN POSLUNS

President

Women's Brain Health Initiative

DESCRIPTION OF DEMENTIA

What is dementia?

Dementia is the loss of mental functions as a result of cell loss and connections in the brain breaking down over time, also called “neurodegeneration.”

Symptoms can include:

- › memory loss
- › impaired judgment and reasoning
- › changes in behavior, mood and communication capacities

As dementia progresses, a person’s ability to function diminishes and reaches a point where the patient becomes totally incapacitated.

There are many types of dementia, Alzheimer’s disease being the most common type. Other forms of dementia include vascular dementia (when the brain cells are deprived of oxygen), Lewy body dementia (when abnormal deposits of the alpha-synuclein protein are found in the brain’s nerve cells), frontotemporal dementia (a rare disorder that can occur at any age and affect the frontal and temporal loss of the brain), and dementia due to HIV, among others.

What causes it?

While the understanding of the causes of dementia is limited, early research is pointing to possible risk factors such as physical inactivity, unhealthy diets and environmental factors, as well as genetic and gender factors and traumatic brain injury.

Research is needed to learn more about the causes, and the most effective ways to prevent, identify and treat dementia.

DID YOU KNOW?

The main risk factor for developing dementia is age. By 2030, the number of Canadians over the age of 65 is expected to rise to more than 20 per cent of the population.¹

¹ Statistics Canada projection

RESEARCH

A Collaborative Approach

The Government of Canada believes that strong partnerships will accelerate efforts to help improve health and quality of life for those suffering.

The Canadian Consortium on Neurodegeneration in Aging (CCNA)—Supporting research to prevent, delay, and improve life with dementia

Economic Action Plan 2014 implemented the 2013 Speech from the Throne commitment to renew investments to tackle the growing onset of dementia by allocating new funding for the creation of the Canadian Consortium on Neurodegeneration in Aging (CCNA).

The CCNA is supported by the Canadian Institutes of Health Research and many partners in both the public and private sectors. The CCNA will support 20 collaborative research teams that include over 300 researchers from across Canada.

Together, they share a common goal: to find solutions to neurological diseases that affect cognition in aging, such as dementia, and to improve the quality of life for patients and family members.

As dementia affects women more than men, specific resources will be dedicated to study gender and sex-related issues.

With this initiative, Canada is joining forces with its G7 counterparts to support additional research aimed at finding a cure for dementia by 2025.



Canadian Longitudinal Study on Aging (CLSA)—Learning how dementia develops

In partnership with the provinces and other partners, the CLSA will follow 50,000 Canadians aged 45 to 85 over the next 20 years. The data collected will provide a wealth of information, which will help Canadians better understand how diseases, such as dementia, develop as people age. The Canadian Longitudinal Study on Aging represents a \$50 million investment from the Government of Canada and its partners.

DID YOU KNOW?

The 2013 Speech from the Throne pledged to renew investments in health research to tackle the growing onset of dementia, and related illnesses.



Cognitive Impairment in Aging Partnership—Working together to tackle dementia

This initiative brings together private, non-governmental, voluntary and government organizations to work together to further research and share knowledge on cognitive impairment and dementia. The Government of Canada and its partners have invested over \$32 million in the Cognitive Impairment in Aging Partnership.

Canadian dementia researchers

Canadian dementia researchers are at the forefront of their field, poised to help us improve our understanding of dementia and its impacts. While no cure has been found, researchers are making great advances in their understanding of dementia, and in ways to delay the onset.

Milestones

Canadian scientists are making significant contributions in four major areas. Research examples include:

- 1. New prevention approaches:** Genes that increase the risks of dementia were identified by a number of international researchers, including Canadians.
- 2. Improved diagnosis:** Canadian scientists developed an internationally-recognized cognitive assessment test to detect mild cognitive impairment, often a sign of dementia.

3. Innovative treatment: Canadian researchers have shown that memory training can help increase brain plasticity (the brain's ability to change and reorganize itself), to reduce symptoms of dementia.

4. Enhanced quality of life: Through collaborative efforts, Canadian researchers are making great strides in sharing best practices about caring for and supporting people with dementia and their caregivers.

DID YOU KNOW?

The Government of Canada has invested over \$236 million on dementia-related research over the last ten years through the Canadian Institutes of Health Research.

Canada Partnering Globally

Through partnerships with other countries the Government is providing Canadians with rapid access to the latest international research on dementia.

International research collaboration:

The Government of Canada helps link Canadian dementia research with the international community. Since 2009, through the Canadian Institutes of Health Research's International Collaborative Research Strategy on Alzheimer's Disease, the Government of Canada has facilitated the participation of Canadian researchers in key international research partnerships related to the prevention of dementia, its delayed onset, and ways to improve quality of life. The Government of Canada has invested \$12.96 million in this strategy, with an additional \$21.1 million in international partner funding.

Global Action Against Dementia: As leaders in the field of dementia research, Canada and France are co-hosting one of four global dementia Legacy Events in Ottawa in September 2014. This gathering of the top international academia and industry experts will help translate research into real solutions for people living with dementia, their families and caregivers.

World Dementia Council: Canada is proud to participate in the first World Dementia Council. The Council aims to champion international dementia research and development, and encourage investments in countries across the globe.

DID YOU KNOW?

Canada was the first non-EU Member State to join the EU Joint Programme—Neurodegenerative Disease Research (JPND), which involves 27 member countries. JPND is the largest global research initiative aimed at tackling the challenge of neurodegenerative diseases.

PREVENTION

Reducing risks and promoting well-being through healthy living

The Government of Canada supports efforts to prevent or slow the progression of dementia by promoting healthy living throughout life. Research is increasing knowledge and awareness on the possible risk factors and health promotion activities that improve the well-being and quality of life of those living with dementia, or better yet, prevent or delay the onset of dementia.

Physical inactivity and unhealthy eating are suspected preventable risk factors for dementia.

Dementia shares many of the same risk factors as many chronic diseases, such as diabetes and heart disease. That's why the Government of Canada takes a healthy living approach to chronic disease prevention. Each year, close to \$20 million is invested in partnerships that promote healthy living and prevent chronic disease.

Partnerships among the private and not-for-profit sectors are necessary and we will continue to invest in new ways of helping Canadians reduce their risks.



Focusing on brain health

Traumatic brain injuries (TBI) are a known risk factor for developing dementia.

Canada is an advocate for research on TBI. It participates in **The International Initiative for Traumatic Brain Injury Research**, a collaborative effort of the Canadian Institutes of Health Research, the European Commission, and the National Institutes of Health. The initiative has a long-term goal of improving outcomes and reducing the global burden of TBI by 2020. CIHR and its partners have committed \$10 million over 5 years to this initiative.



The Government also supports the **Canada Brain Research Fund (CBRF)**, a public-private partnership with Brain Canada to increase investments in Canadian brain research. A portion of the funds are targeted towards research on how to prevent dementia. A total of \$100 million was allocated in the 2011 budget to help establish the CBRF.

NEUROLOGICAL CONDITIONS

Canada's support for research and prevention on dementia also extends more broadly to neurological conditions as a whole.

Neurological conditions are diseases, disorders, and injuries that affect the brain, spinal cord, and peripheral nervous system.

Alzheimer's disease is one of many neurological conditions. Others include:

- › Amyotrophic lateral sclerosis (Lou Gehrig's disease)
- › Brain Tumour
- › Cerebral Palsy
- › Dystonia
- › Epilepsy
- › Huntington's Disease
- › Hydrocephalus
- › Multiple Sclerosis
- › Muscular Dystrophy
- › Neurotrauma (including brain and spinal cord injuries)
- › Spina Bifida
- › Parkinson's Disease
- › Tourette's Syndrome

Although the characteristics of each neurological condition are different, people living with them have many of the same experiences and needs. Understanding both these similarities and differences strengthens our ability to address neurological conditions in Canada.

The four-year **National Population Health Study of Neurological Conditions (NPHSNC)**, led by the Public Health Agency of Canada and the Neurological Health Charities Canada, is helping to fill gaps in information concerning neurological conditions, including dementia, their impacts on Canadians, their risk factors, and use of community and healthcare services.





The **National Population Health Study of Neurological Conditions (NPHSNC)** provides an important base of information needed by governments, health charities, healthcare providers, communities and families to support the development of effective programs and services. One of the outcomes of the study will be the capacity for ongoing surveillance of neurological conditions through the Public Health

Agency of Canada's Canadian Chronic Disease Surveillance System. The Agency will monitor long-term trends as well as the factors that increase Canadians' risk of developing neurological conditions in the Canadian population.

Keeping track of dementia rates over time tells us how we are doing in our collective effort to reduce dementia and the Government of Canada plays a unique role in reporting on these trends.

The Government of Canada has invested \$15 million in the NPHSNC.

DID YOU KNOW?

Neurological conditions affect people of all ages and backgrounds. Chances are you know someone who has one, as neurological conditions are estimated to affect 3.6 million Canadians.¹

¹ 2010–2011 Canadian Community Health Survey data (Statistics Canada).

SUPPORT FOR CAREGIVERS

Our government will work with employers through the Canadian Employers for Caregivers Plan to help identify cost-effective solutions to support employed caregivers, helping them achieve a better balance of work and caring responsibilities.

There are currently 6.1 million employed Canadians who are providing informal caregiving to a family member or friend due to chronic or long-term illness, disability or aging. The demands of caregiving can create many challenges in the workplace such as conflicting working hours and flexibility required for emergencies.

The Government of Canada understands the sacrifices many Canadians make to care for their family members. We are helping Canadians who are providing care to loved ones through the Family Caregivers Tax Credit, Employment Insurance Special Benefits for those caring for a dying relative or a critically ill child and a new Information for Caregivers portal on the seniors.gc.ca website.



Economic Action Plan 2014 announced the Canadian Employers for Caregivers Plan (CECP), which will help maximize caregivers' labour market participation. The CECP has established an Employer Panel for Caregivers which will help identify successful and promising workplace practices that support caregivers.

THE HONOURABLE ALICE WONG
Minister of State (Seniors)

THE DEMENTIA RESEARCH AND PREVENTION PLAN

The dementia research and prevention plan demonstrates the Government of Canada's commitment to act on dementia. This plan contributes to the knowledge needed to improve care and helps families caring for a loved one with dementia.

If you are a caregiver of someone with dementia, please visit seniors.gc.ca for information on how you can access local resources and take advantage of federal tax credits.

For more information on how the Government of Canada is addressing dementia, visit:

- › The Canadian Institutes of Health Research website at www.cihr-irsc.gc.ca
- › The Canadian Consortium on Neurodegeneration in Aging (CCNA) page at www.cihr-irsc.gc.ca/e/ccna.html
- › The National Population Health Study of Neurological Conditions Synthesis Report at: www.phac-aspc.gc.ca/publicat/cd-mc/mc-ec/index-eng.php

