



By the Numbers

Some facts about vision loss in Canada

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| \$15.8 billion: | Total annual cost of vision loss in Canada in 2007 |
| \$30.3 billion: | Projected total annual cost of vision loss in Canada in 2032 |
| Over 4 million: | The number of Canadians with an age-related, blinding ocular disease in 2007 (will double as the number of aged doubles) |
| 1 in 9: | Number of Canadians developing irreversible vision loss by age 65 (equal to number of women affected by breast cancer) |
| 1 in 4: | Number of Canadians developing irreversible vision loss by age 75 |
| 1 in 3: | Number of Canadian ophthalmologists over age 55 and due to retire in next decade |
| 200: | Number of Canadian workers who suffer eye injuries DAILY |
| 68%: | Percentage of adults with vision loss who are unemployed |
| 60%: | Percentage of Canadian children with reading difficulties who have undetected or uncorrected vision problems |
| 40%: | Percentage of Canadians in the workplace who do not get needed visual aids |
| 1: | Number of provinces offering publicly funded vision rehabilitation services |
| Zero: | Number of federal agencies in Canada exclusively funding vision research |
| Zero: | Number of studies examining the optimum number and distribution of eye care providers needed in Canada |

People with vision loss experience:

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| Double | the incidence of difficulties in daily living and social dependence |
| Double | the incidence of falls |
| Double | the mortality rate |
| Triple | the incidence of depression |
| Quadruple | the incidence of hip fractures |

THE TIME FOR ACTION IS NOW!

The Nature of the Crisis

The National Coalition for Vision Health undertook a research project in 2009 to assess the state of vision health in Canada. The results were shocking. This document distills the findings from the literature review and interviews with over 100 clinicians, researchers, front-line workers, administrators and policy-makers. The message is clear: coordinated action is needed to stem the tide of vision loss before the onslaught of aging baby boomers begin to lose their sight.

Canada faces a crisis in eye health care, due to:

- An aging population
- Special needs in indigenous populations
- A shortage of specialists
- Mounting costs of care
- A lack of preventive programs
- Underfunded research in vision care and prevention of eye disease
- A lack of planning and coordination

An aging population means an increase in eye disease: the four most common causes of blindness increase with age. After age 40, the number of cases of vision loss doubles every decade, and triples at age 75. Vision loss increases the incidence of other problems: compared to people of the same age *without* vision problems, people with vision loss:

- are admitted to nursing homes **three years** earlier.
 - experience **twice** the number of falls.
 - experience **three** times the incidence of depression.
 - have **four** times as many hip fractures.
 - have **double** the mortality rate.
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Special needs in indigenous populations: due to the prevalence of diabetes and the difficulty in providing care in remote locations, vision loss is endemic in First Nations and Inuit communities.

A shortage of specialists: Just as the population is aging, one in three ophthalmologists is reaching retirement age. There are no plans to increase training programs for new entrants to the profession and no plan for underserved areas. Even doubling the number of residency programs immediately would only maintain existing levels of service. Even in cities, wait times for ophthalmic consultation and surgery are the second longest of all referrals from family physicians to specialists. The number of optometrists, meanwhile, has been increasing steadily, but publicly funded coverage for



optometric services remains limited in almost all jurisdictions. Only one Canadian province (Nova Scotia) has established a collaborative care model between ophthalmologists and optometrists for routine, clinical eye care.

Mounting costs of care: Vision loss very often leads to loss of employment (68% of adults with vision loss are unemployed), so in addition to the direct costs to the health care system, vision loss causes a drop in revenue from income tax and an increase in welfare and other support payments. In 2007:

- Total financial cost of vision loss in Canada was estimated at **\$15.8 billion**
- Of that amount, direct costs to the health system were **\$8.6 billion**
- Indirect costs (lost productivity, forgone taxation, welfare payments, home modifications, vision aids, etc.) totalled **\$7.2 billion**

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A lack of preventive programs: Risk factors for eye disease are age, smoking, obesity (due to its association with diabetes), and lack of antioxidants in the diet. Each of these factors except age is preventable, but without public health programs and funding for education about eye health, preventable eye disease will continue to occur. There is no federal health promotion related to vision. Since routine eye exams are generally not publicly funded for the 18-64 age group, there is no regular means of increasing public awareness about vision health. There is no publicly funded education program about vision health or eye safety, even though about 200 Canadian workers suffer eye injuries each day.

Six out of ten children experiencing reading difficulties have uncorrected or undetected vision problems and almost 25% of school-age children have vision problems. Certain eye conditions such as amblyopia (lazy eye) and strabismus (crossed eyes) can lead to visual impairment and blindness if not identified and corrected before a child reaches age 10. However, fewer than 14 per cent of children in Canada under age six have had eye examinations.

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Underfunded research: Although approximately 400 scientists are believed to be working in vision and eye health research in Canada, there is no specific agency supporting vision research, compared to the US National Eye Institute. Vision research is critically underfunded in Canada.

A lack of planning and coordination: Who should deliver preventive services? There is no collaboration between organizations and no national standards for vision care. Key informants most frequently cited lack of coordinated services as the most important gap in vision care, followed by problems with scope of practice and the lack of publicly funded optometry services. Collaboration is needed among eye health care providers, primary care physicians, and public health nurses to provide services to more people and to relieve workloads for ophthalmologists. Examples of collaboration would be: eye care teams of ophthalmologists, optometrists, ophthalmic technicians, orthoptists, and opticians; partnerships among governments, public agencies, community organizations, and health professionals.

Recommendations

If Canada is to meet the urgent requirement for vision health care, the following needs must be immediately addressed:

1. Awareness among politicians and policy-makers that provision of eye health care is essential for all ages
2. Health promotion and education to increase public awareness, understanding, and acceptance of personal eye health care
3. Public education about prevention and appropriate, timely interventions for serious eye diseases
4. Eye health care for special populations, including seniors, indigenous populations and people with diabetes
5. Equitable and timely access to treatment, particularly among those living in rural and remote areas
6. Access to vision rehabilitation and assistive devices, which are key supports for those with visual impairment
7. Provision of eye health care and education for various linguistic and ethnic communities
8. Greater collaboration among vision health professionals and agreement on standard levels of care
9. Funding for research programs, many of which have been reduced or eliminated, and basic research, which has been curtailed because of federal policy
10. Integration of regional, provincial, and national data to support decision-making in delivery of eye health care
11. Recruitment and retention of eye health care professionals, as well as replacements for those retiring

Members of the National Coalition for Vision Health are:

Dr. Calvin Breslin, Chair, NCVH

Charlene Muller, Executive Director, NCVH

Canadian Association of Optometrists

Canadian Institute for Health Research – Institute on Neurosciences, Mental Health and Addiction

Canadian Ophthalmological Society

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