



FIGHTING BLINDNESS CANADA

BACKGROUND: VISION LOSS IN CANADA

- Today, an estimated 1.5 million Canadians are blind or partially sighted.
- An additional 5.59 million more Canadians (1 in 7) have eye diseases that put them at risk of losing their vision (age-related macular degeneration (AMD), diabetic retinopathy, glaucoma, and cataracts).
- Studies show that vision loss triples the incidence of depression and quadruples catastrophic falls that drive people to emergency care.
- As Canada's population ages, the number of people living with vision loss is expected to double.
- By 2032, vision loss is projected to cost Canadian taxpayers \$30.3 billion. (This number includes associated costs of vision loss like higher absenteeism, lower employment rates, decreased earning potential, premature retirement, depression and premature death.)
- Vision loss already has the highest direct health costs of any disease category in Canada—more than diabetes, mental disorders, cancer, respiratory diseases, arthritis, or cardiovascular disease.

Diabetic Retinopathy

Diabetic Retinopathy is the most common form of vision loss associated with diabetes. It affects approximately 750,000 Canadians and is the leading cause of blindness among working-age adults. In Canada, 11 million people (one in three) is living with diabetes or pre-diabetes. There is no reliable cure for vision loss resulting from diabetic retinopathy, but the eye disease can be managed—and vision loss prevented—if it is diagnosed early enough, before damage to the retina occurs.

Glaucoma

Glaucoma affects more than 400,000 Canadians. It takes the form of a number of related disease-types that damage the optic nerve. Anyone can develop glaucoma, but there are several different factors that can increase your risk of developing the disease, including high intraocular pressure, high blood pressure, a family history of glaucoma, corneal thickness, being over the age of 40, long-term use of steroids, nearsightedness, and diabetes. There is no cure for glaucoma, but there are treatment options that can help slow its progression.

Age-Related Macular Degeneration (AMD)

Age-related macular degeneration (AMD) is the leading cause of vision loss in people over 55, affecting approximately 1.4 million Canadians. The disease damages the macula, which is the small, central portion of the retina. There are two kinds of AMD: *dry AMD*, which is more common and less severe, and *wet AMD*, which affects approximately one in ten people with AMD. There is no cure for AMD, but there are treatment options that can help slow its progression.

Inherited Retinal Diseases

Inherited Retinal Diseases (IRDs) are a group of genetic disorders that damage light-sensitive cells in the retina, leading to gradual vision loss. IRD is passed along genetic lines and inherited from one's parents. The most common of these rare diseases is retinitis pigmentosa (RP), which affects one in 4,000 people.

Get a Regular Comprehensive Eye Exam

Over age 40: every 3 years

Over age 50: every 2 years

Over age 60: every year

For further information:

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Who we are:

- **Fighting Blindness Canada (FBC)** is the largest private funder of vision research in Canada.
- Since 1974, FBC has invested over \$40 million to support vision research and education across Canada: that's over 200 research grants that have led to over 600 new discoveries in areas such as stem cell research, neuroprotective therapies, technological developments, pharmaceuticals, and gene therapies.
- After 45 years, we have changed our name to Fighting Blindness Canada to reflect the national scope of our education and advocacy work, and our mission to accelerate the development and availability of treatments and cures for all diseases that cause vision loss.

Call for a National Vision Health Strategy:

Fighting Blindness Canada is calling for a national vision health strategy that entails:

- A national public health campaign for vision loss prevention;
- Better access to existing vision-related medications and treatments;
- Greater access to emerging treatments such as gene therapy, stem cell therapy, medical devices, and pharmaceuticals;
- Increased research funding to advance science into clinical trials; access to genetic testing; and,
- The creation of a national talent plan to address the decreasing number of ophthalmologists, optometrists, opticians, and other eye professionals.

Research:

- All the research we fund supports our goal of understanding why vision loss occurs, how it can be slowed or stopped, and how sight can be restored.
- We provide critical funding for science that explores the biology of vision, and for pre-clinical and clinical vision research aimed at connecting patients to emerging treatments.
- We provide funding to a diverse portfolio of multi-year projects at universities and hospitals across Canada and internationally.

Scientific Advisory Board (SAB)

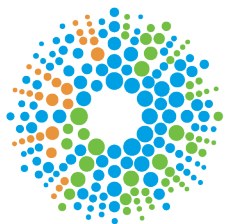
Comprised of internationally renowned vision research scientists, FBC's Scientific Advisory Board (SAB) reviews funding proposals and research applications submitted to the FBC to ensure they meet high standards of academic rigour and address crucial questions about the causes and treatment of blinding eye diseases. The SAB brings a wide range of expertise to FBC's scientific decision-making in genetics, molecular genetics, stem cell biology, biochemistry, cell biology, and other areas of vision research.

Mission Investment Steering Committee (MISC)

Comprised of leading advisors with expertise in translational research, commercialization, intellectual property, and venture capital investing, our MISC provides state-of-the-art investment management and advisory services to ensure all FBC-funded vision research projects achieve their goals.

How We Select Research Projects

FBC uses an internationally-recognized peer review process to fund only the best research projects that offer the most promising research into blinding eye diseases and have the best chance of reaching clinics and treatment centres in Canada.



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Patient Registry

FBC's Patient Registry is a secure anonymized clinical database that connects people living with retinal eye diseases to emerging clinical trials and research in which they may be eligible to participate. Enrollment provides people living with retinal eye diseases the opportunity to participate directly in ground-breaking new studies, as top Canadian researchers draw directly from this database for trial participants. Currently, the Patient Registry is only for inherited retinal diseases.

National Young Leaders Program

FBC's National Young Leaders Program is a leadership training program for young people aged 17-30 living with vision loss. It empowers them to initiate positive change in their communities by helping them develop career skills, cultivate independence, and build thriving networks, both online and at in-person summits held across Canada. The theme of this year's National Young Leaders Program is #SeeMeAs, which aims to help young people living with vision loss market themselves in professional contexts.

Vision Quest

FBC's Vision Quest is an informational speaker series that brings together the vision loss community, vision researchers, eye doctors, and the pharmaceutical industry to share immediate, on-the-ground insights into advancements in vision research. With formats ranging from large-scale symposiums to community lunch and learns, Vision Quest is an open forum for those affected by vision loss to connect, learn, and share. It is a community where participants can learn up-to-date information on emerging treatments and technologies for blinding eye diseases.

Education and Awareness:

Fighting Blindness Canada is an invaluable resource for individuals and families impacted by blinding eye diseases. We provide validated information through our website and educational events across the country, and network with government and other stakeholders to advance better national and provincial vision health policies. We offer hope to Canadians by identifying the best, most promising research that is driving treatments and cures for blinding eye diseases, and by raising and stewarding funds to support this essential, sight-saving research.

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