Hypertension: The Silent Killer

High blood pressure, or hypertension, if not controlled causes damage to the body's organs, slowly causing the development of many chronic and deadly diseases.

Hypertension Canada’s impact is measured against the health outcomes of 15 million Canadians living with or at risk for hypertension — the world’s number one cause of death and disability. Together, we can save lives, improve quality of life, and reduce health care costs in Canada.
Hypertension Facts

Nearly 15 million Canadians affected
7.2 million live with hypertension
7.5 million are at risk for hypertension

Males < 60 years
are less likely to be aware they live with hypertension

Women 60+ years
are less likely to have their blood pressure controlled

32% don’t have their blood pressure under control

16% living with hypertension are unaware that they live with it

1 in 4 adults live with hypertension

1 in 50 children live with or are at risk for hypertension
Hypertension Canada Guidelines
20-Year Impact

INPUT
$21.6 million

IMPACT
$4.5 billion
in preventing stroke and heart failure events

OUTPUT
Hypertension Canada Guidelines

- Prevented over 135,000 cardiovascular deaths
- Prevented over 27,500 hospitalizations for strokes
- Prevented over 31,500 hospitalizations for heart failure
- Over 500% improvement in hypertension control rates

3,300 hours annually from 130 hypertension experts

Education and implementation tools
Evidence-based, practical guidance for health care professionals
President’s Message

This year, we reach two key milestones — the 40th anniversary of Hypertension Canada, and the 20th anniversary of the Hypertension Canada Guidelines — and there is much to celebrate. We have grown from a professional society to a national charitable organization of significant impact and world-wide credibility. We’ve pushed hypertension control rates in Canada from 12% in 1999 to over 65% today, preventing hundreds of thousands of deaths and hospitalizations along the way, and vastly improving health outcomes for people living with hypertension. With just $21.6 million invested in our Guidelines in 20 years, we’ve saved the health care system over $4.5 billion in stroke and heart failure prevention alone. That is a serious return on investment.

Yet with all these advancements, there are reasons to be concerned. Research investment continues to lag behind other health areas. Funding is critically needed to arm professionals with best-practice guidance to manage hypertension, and to bring facts to patients. Perhaps most troubling and in a near-fully generic market, antihypertensive drug shortages are an emerging problem, already disrupting patients’ blood pressure control and threatening to unravel our progress in hypertension control.

We must not slide backwards on population hypertension control rates and research advances. With a full call to governments and stakeholders to work with us to relieve the pressure — in research, education, and access to secure medical treatment — we can continue to lead the world in the best managed blood pressure.

Dr. Nadia Khan, President & Chair of the Board, Hypertension Canada
Professor, General Internal Medicine, University of British Columbia
Creating Evidence-Based Guidelines

Canada’s hypertension control rates have improved over 500% since the inception of the Hypertension Canada Guidelines in 1999. Known for their rigour, the Hypertension Canada Guidelines Committee continues to examine new evidence and boldly innovate and reformulate to ensure both specialist and primary care professionals are equipped to move the needle on hypertension control.

2019 Guidelines website visits: 223,000
2019 Guidelines app downloads: 12,000

“We are immensely proud of our progress, yet there’s still so much road to cover. Over the next twenty years, we envision greater awareness, treatment and control, nudging control rates ever higher, and leading to longer, healthier lives for Canadians.”

Dr. Stella Daskalopoulou, Co-Chair, Hypertension Canada Guidelines Committee
Associate Professor, Department of Medicine, McGill University

Dr. Doreen Rabi, Co-Chair, Hypertension Canada Guidelines Committee
Assistant Professor, Department of Medicine, Community Health Services, Cardiac Sciences, Libin Cardiovascular Institute
Sofia B. Ahmed, MD, MSc
Jeffrey E. Alfonsi, MD
JoAnne Arcand, PhD, RD
François Audibert, MD
Simon L. Bacon, PhD
Alan D. Bell, MD
Geneviève Benoît, MD
Jesse Bittman, MD
Peter Bolli, MD
Ellen Burgess, MD
Sonia Butalia, BSc, MD, MSc
Tavis S. Campbell, PhD, RPsych
Lyne Cloutier, RN, PhD
Anne-Marie Côté, MD, MHSc
Stella S. Daskalopoulou, MD, MSc, DIC, PhD
Janis Dionne, MD
George K. Dresser, MD, PhD
Sandra Dumanski, MD
Cedric Edwards, MD
Ross D. Feldman, C.M., MD
Tabassum Firoz, MD, MSc
Anne Fournier, MD
Jonathan Gabor, MD, MSc
Richard E. Gilbert, MBBS, PhD
Jean C. Grégoire, MD
Steven Grover, MD, MPA
Steven E. Gryn, MD
Milan Gupta, MD
Fady Hannah-Shmouni, MD
Kevin C. Harris, MD, MHSc
Robert J. Herman, MD
Robert A. Hegele, MD
Michael D. Hill, MD, MSc
Swapnil Hiremath, MD, MPH
George Honos, MD
Jonathan G. Howlett, MD
Gregory L. Hundemer, MD, MPH
Charlotte Jones, MD, PhD
Janusz Kaczorowski, PhD
Nadia Khan, MD, MSc
Laura Kuyper, MD
Maxime Lamarre-Cliché, MD
Kim L. Lavoie, PhD
Lawrence A. Leiter, MD
Alexander A. Leung, MD, MPH
Richard Lewanczuk, MD, PhD
Patrice Lindsay, RN, PhD
Alexander G. Logan, MD
Laura A. Magee, MD, MSc
Birinder Mangat, MD, MPH
Kerry McBrien, MD, MPH
Phillip A. McFarlane, MD, PhD
Donna McLean, RN, NP, PhD
André Michaud, RN, PhD
Alain Milot, MD, MSc, MD
Gordon W. Moe, MD, MSc
William Mundle, MD
Meranda Nakhla, MD, MSc
Kara Nerenberg, MD, MSc
S. Brian Penner, MD
Andrew Pipe, C.M., MD
Alexandre Y. Poppe, C.M., MD
Ally Prebtani, MD
Doreen M. Rabi, MD, MSc
Simon W. Rabkin, MD
Evelyne Rey, MD, MSc
Michael Roerecke, PhD
Marcel Ruzicka, MD, PhD
Ruth Sapir-Pichhadze, MD, MSc, PhD
Ernesto L. Schiffrin, C.M., MD, PhD
Peter Selby, MBBS, MHSc
Mike Sharma, MD, MSc
Ashkan Shoamanesh, MD
Praveena Sivapalan, MD
Sheldon W. Tobe, MD, MSc (HPTE)
Raymond R. Townsend, MD
Karen C. Tran, MD
Luc Trudeau, MD
Ross T. Tsuyuki, BSc (Pharm), PharmD, MSc
Michel Vallée, MD, PhD
Andrew Don-Wauchope, MD
Vincent Woo, MD
Kelly B. Zarnke, MD, MSc
Strengthening Research

Aiming to strengthen the funding environment, Hypertension Canada expands resources through partnerships, identifies priority research questions, and fosters new careers for a bright future in hypertension research.

- Second-year funding of Hypertension Canada’s New Investigator award **Dr. Alex Leung** for his project “Prospective Evaluation of Confirmatory Tests For Primary Aldosteronism”
- Funded partnership of the CIHR-Hypertension Canada Early Career Investigator Award in Hypertension to **Dr. Glen Jickling** for his project “Hypertension in Small Vessel Lacunar Stroke”
- Funded partnership for the five-year CIHR-H&S-Hypertension Canada Chair in Hypertension Prevention & Control, **Dr. Janusz Kaczorowski**, with staff support as the Chair’s secretariat
- With CIHR’s Institute of Circulatory and Respiratory Health, held an exploration meeting with researchers at all career stages to inform strategic approaches to enhance research capacity
- Partnered with CIHR’s Institute of Circulatory and Respiratory Health and the Canadian Vascular Network on the 2019 Young Investigator Forum and over $40,000 in trainee travel awards
- Supported the Canadian Vascular Network to deploy their 2019-2020 Scholar Award competition, with staffing and communication resources

In 2020:

- Deploy new partnership under the National Dementia Strategy for trainee attendance at the Canadian Consortium on Neurodegeneration in Aging’s Science Day
- Refresh and prioritize the unanswered research questions to advocate for increased funding to advance prevention and control of hypertension and its complications
- Develop a trainee-focused research strategy to increase hypertension research capacity
- Release the 2020 Hypertension Framework Report card, evaluating progress against health outcome targets and exploring markers for the next decade
Providing Leading-Edge Education

Recognizing that hypertension rarely occurs in isolation, Hypertension Canada leverages its clinical practice guidelines to meet primary care needs for practical, implementable guidance in more complex medical management.

- Transformed our Guidelines booklets to one practical pocket guide focused on key clinical actions for all primary care providers in measurement, diagnosis and treatment
- Educated more than 10,000 health care professionals through workshops and presentations
- Redesigned posters, postcards and tear-off logs to cover best-practices in both in-office and at-home measurement
- Expanded awareness of national and regional pharmacies on the Blood Pressure Measurement Device Recommendation Program, aligned inventory selection, and promotion to pharmacists
- Redesigned our Canadian Hypertension Congress with input from a multidisciplinary panel to address education needs most critical to primary care
- Hosted over 315,000 visitors on our education pages at hypertension.ca

In 2020:
- Launch our professional education series on primary-care requested topics “In Practice”, such as diabetes, obesity, sleep apnea, and dementia and the hypertensive patient
- Launch the Pharmacist Designation Program to provide pharmacists with the skills and confidence to identify and manage patients with hypertension

“Hypertension arises and is treated in the community, therefore efforts to support our primary care practitioners is paramount to Hypertension Canada’s goal for Canada to have the best managed blood pressure in the world.”

Dr. Ross Tsuyuki, Co-Chair, Education and Implementation Committee
Impact of Antihypertensive Drug Shortages

Hypertension Canada’s August 2019 survey of health care professionals
[489 respondents (specialists, primary care physicians and pharmacists)]

Have antihypertensive drug shortages:

- Affected your practice? 93%
- Disrupted your patients’ blood pressure control? 57%

- Yes 6%
- No 1%
- Don’t Know 27%
Improving Patient Access to Tools and Treatment

Acutely aware of hypertension’s damaging force, Hypertension Canada seeks to create supportive environments in which patients are active participants in their care, supported by the professionals who treat them, to prevent disease and sustain wellness long into the future.

- Expanded our Blood Pressure Measurement Device Recommendation Program to include 55 validated blood pressure devices
- As active members of the Health Charities Coalition of Canada and Best Medicines Coalition, contributed to collaborative statements on patient access to care and treatments
- Surveyed health care professionals to determine if antihypertensive drug shortages impacted patients’ blood pressure control

In 2020:

- Support expanded scope of pharmacy in aspects of hypertension treatment to increase patient access to professional monitoring and management
- Work with federal and provincial governments and stakeholders to ensure an uninterrupted supply of blood pressure medications for Canadians
- Advance accuracy in blood pressure measurement through active engagement in international standards and their application and surveillance in the Canadian marketplace

“It’s been established that blood pressure control is associated with better outcomes, but recommendations and guidance do not always reflect the complexity of real-world cases primary care providers face.”

Dr. Alan Bell, Co-Chair, Education and Implementation Committee
In 2019, we celebrated Hypertension Month throughout May, focused on the theme #KnowYourNumbers to encourage Canadians to measure their blood pressure.

www.hypertension.ca/hypertension-month

Events & Promotion:

- Blood pressure screening in 1,400 community pharmacies and hypertension clinics
- Pharmacy locator map hosted on hypertension.ca for blood pressure screening events
- Multi-media awareness campaign
- Billy Bishop Airport passenger screening events

19 MILLION media impressions
25,000 health care professionals reached
$55,000 raised through sponsorship

11 MONUMENTS nationally lit in red

Calgary Tower, High Level Bridge, BC Stadium Place, Fitzsimmons Creek Bridge, BC Parliament Building, BC Science World, Newfoundland Confederation Building, Niagara Falls, CN Tower, Peace Bridge, 3D TORONTO sign
Forty years ago, in January 1979, Drs. Jiri George Fodor, Jacques André de Champlain, and Martin George Tweeddale became the first Directors of the Canadian Hypertension Society, a Hypertension Canada heritage organization. With Blood Pressure Canada and the Canadian Hypertension Education Program, Hypertension Canada was born in 2010.

Hypertension Canada is Canada’s only national non-profit organization dedicated solely to the prevention and control of hypertension and its complications. Holding true to our heritage organization’s collective vision, our clinical and scientific network comprises the nation’s leading experts, and forms our core strength of knowledge and continual innovation, sought after both at home and around the globe. We publish the country’s clinical practice guidelines on hypertension, and seek to educate health care professionals on best practices to close the gaps in hypertension control.

Our **mission** is to advance health through the prevention and control of high blood pressure and its complications.

Our **vision** is that Canadians will have the healthiest and best managed blood pressure in the world.

We measure our **impact** against two visionary outcomes: reduced cardiovascular mortality in Canada, and improve vascular health among Canadians. We measure **progress** toward those outcomes using the indicators in the 2011 - 2020 Pan Canadian Hypertension Framework.

Visit [hypertension.ca/framework](http://hypertension.ca/framework) for an executive summary and the full report.
Who We Are
Officers and Directors of the Board

PRESIDENT AND CHAIR OF THE BOARD
Dr. Nadia Khan
Vancouver, British Columbia

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Ottawa, Ontario

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Kimberly Brathwaite, Administrative Coordinator
Paul Landers, Manager, Meetings & Events

Nancy Beshay, Director, Business Development
Crystal Ceres, Communications Manager
Rebecca Sedore, Education Manager
Financial Summary
For the Fiscal Year ended April 30, 2019

Revenue by Source

- Grants and sponsorships (45%)
- Investments (29%)
- Registration fees and other income (22%)
- Memberships, Corporate & Individual (4%)

Expenses by Program

- Education (52%) includes:
  - Professional Education (46%)
  - Guidelines (24%)
  - Canadian Hypertension Congress (15%)
  - Public Education (15%)
- Fund Development and Admin (31%)
- Research (10%)
- Advocacy and Public Policy (7%)

Our Audited Financial Statements are available by request. Visit the Canada Revenue Agency website to view Hypertension Canada’s annual T3010 returns. Hypertension Canada is a registered charity, number 89701 6275 RR0001.
Thank you to all of our volunteers, members, and partners for a highly successful year. We’re looking forward to working together to advance health through the prevention and control of high blood pressure and its complications.
Hypertension Facts References
