

Body Count

The human cost of financial barriers
to prescription medications

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CANADIAN FEDERATION
OF NURSES UNIONS
LA FÉDÉRATION CANADIENNE
DES SYNDICATS D'INFIRMIÈRES
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Canadian Federation of Nurses Unions (CFNU)

We are Canada's nurses.

We represent close to 200,000 frontline care providers and nursing students working in hospitals, long-term care facilities, community health care and our homes. We speak to all levels of government, other health care stakeholders and the public about evidence-based policy options to improve patient care, working conditions and our public health care system.



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Message

FROM LINDA SILAS,
CFNU PRESIDENT

Up to 640 Canadians die each year from ischemic heart disease alone because of shortfalls in prescription drug coverage.



Stories of patient heartbreak due to the rising costs of prescription medications and patchy coverage are familiar to many Canadians. For decades, these stories have been exposed by journalists, health policy experts, patient advocates and health care workers. Known as cost-related non-adherence (CRNA), the financial barriers that prevent patients from properly following prescription regimens have a significant impact on both the health of individuals and our health care system. Emblematically, according to a 2011 report by the Canadian Diabetes Association, 57% of Canadians with diabetes reported failing to adhere to their prescribed therapies due to affordability issues related to medications, devices and supplies.¹ It is projected that by 2020 approximately 4.2 million Canadians will have diabetes.²

The Canadian Federation of Nurses Unions has advocated for nearly twenty years for the implementation of a universal pharmacare plan in Canada. Our pharmacare position stems from the compassionate grassroots activism of our nearly 200,000 frontline nurse and student nurse members. In Canada, it is a fundamental value that access to health care must be based on need and not ability to pay. Yet, day and night, Canada's nurses bear witness to the failing health of their patients who cannot afford the prescriptions they need to stay healthy. Similarly, nurses regularly describe discharging patients who, they know, will not be able to afford the prescriptions needed to stay out of the hospital.

Exasperated by this unnecessary suffering, and in the midst of a rising tide of support for meaningful change to Canada's current system of prescription drug coverage, the CFNU decided it was time to put numbers to the story of human suffering from CRNA.

To this end, our research team set out to calculate the body count, or yearly number of CRNA-related deaths in Canada, for specific age cohorts and conditions. Although data scarcity makes it impossible to estimate total mortality for the entire population, the figures in *Body Count* nevertheless provide a meaningful catalyst for discussion.

Our research found that CRNA contributes to the premature deaths of up to 640 working-age Canadians with ischemic heart disease per year. Similarly, CRNA contributes to up to 420 premature deaths among working-age Canadians with diabetes. Further tens of thousands of Canadians, 55 years and older, suffer CRNA-related health deterioration each year.

This tragedy is entirely preventable. What's more, the aforementioned numbers represent just part of the picture, when factoring in CRNA-related mortality and morbidity across the entire population and for all conditions, from asthma to major depression. Indisputably,

Body Count further emphasizes the urgent need for law and policy makers to put an end to this preventable daily loss of Canadian lives.

As we turn our attention towards solutions to this preventable tragedy, we must be reminded that Canada remains the only country in the world with universal health care that does not provide universal prescription drug coverage to its people. It is time to fix this. According to myriad sources, CRNA-related mortality is greatly reduced in countries where universal pharmacare plans exist.

As the federal government launches the high-level Advisory Council on the Implementation of National Pharmacare, Canada's nurses believe that the policy discussion must remain firmly focused on those that matter most: our patients.

Body Count calls attention to the daily occurrence of Canadians who die or fall sick both from curable illnesses and a patchy pharmaceutical insurance system that can be fixed. These are people with families and loved ones in neighbourhoods and communities across our country. With a universal pharmacare plan, Canada can, once and for all, prevent these avoidable tragedies.

Let's not let the clock tick any longer, while thousands of Canadians suffer.

Sincerely,



Linda Silas

*President
Canadian Federation of Nurses Unions*

Summary

Canadians suffer avoidable loss of life because of difficulties paying for prescription medicines

Since Medicare was established half a century ago, prescription medicines have become an increasingly important component of Canadian health care. Approximately half of all adult Canadians take at least one prescription medicine regularly, and possibly as many as two thirds of those aged 65 and over take five or more each day.^{3,4} Today's medicines help patients with conditions such as heart disease, diabetes, HIV/AIDS, cancer, depression and many other conditions live longer, healthier and more productive lives.

But ensuring that all patients get, and take, the medicines they need can be challenging, especially when out-of-pocket costs are perceived to be onerous.^{5,6} Several surveys have found that about one in every ten Canadians doesn't take their medications as prescribed because of the out-of-pocket costs – a phenomenon known as cost-related non-adherence (CRNA).⁷ Some patients delay filling their prescriptions, while others don't fill them at all. Still others skip doses or cut their pills in half.

In fact, Canadian patients are more likely to experience CRNA than their counterparts in other wealthy countries where prescription medicines are included in their covered health benefits. This is particularly true of older working-age Canadians, who are more than twice as likely to report CRNA as similarly aged residents in countries such as Germany, France, the UK and the Netherlands.⁸

This leads to the urgent question: how many Canadian lives are lost as a result of shortfalls in prescription drug coverage?



In this report – the first of its kind in Canada – we use existing research to assess the impact of inadequate drug coverage on the health and well-being of Canadians. The report finds that hundreds of lives end prematurely each and every year, resulting from the difficulties Canadians experience in paying for their prescription medicines.

To date, there have been no studies that have directly measured the population-level health impacts of Canada's lack of universal drug coverage. We aimed to bridge that knowledge gap with estimates of the potential scale of the health impacts of inadequate drug coverage in Canada.

We used a variety of indirect approaches, drawing on existing research and focusing on specific cohorts for whom the lack of adequate prescription drug coverage in Canada is likely to have the greatest impact, such as patients with ischemic heart disease and diabetes. Ischemic heart disease is both the leading cause of death and the leading cause of 'amenable mortality' – death considered avoidable with appropriate health care – in Canada, accounting for 55% of all such potentially avertable premature deaths.⁹ And both ischemic heart disease and diabetes are in the top five conditions causing the most death and disability combined.¹⁰

In calculating premature deaths that may arise from Canada's lack of universal drug coverage, we also focused our analysis on working-age Canadians (20–64 years), who don't qualify for the age-based public drug coverage plans available to older residents in many provinces.

From our analyses we estimate that hundreds of lives end prematurely each year because of the difficulties many Canadians experience in paying for their prescription medicines. Because there is some overlap among the population groups we studied, our estimates cannot simply be added together to arrive at the total number of lives lost. However, as we did not have the data needed to examine all the population sub-groups likely to be affected, the total number of Canadians suffering the adverse effects of shortfalls in prescription drug coverage is likely to be larger than the ranges we report.



Despite these limitations, the results are sobering, with our estimates indicating that inadequate drug coverage in Canada leads to hundreds of avoidable, premature deaths annually, specifically:

- Using population-level data on the number of deaths that are preventable with effective and timely health care, we estimate that shortfalls in Canadian prescription drug coverage are responsible for, in the range of, **370 to 640 premature deaths of Canadians with ischemic heart disease every year.**
- Using an Ontario study of diabetes-related mortality, we estimate that cost-related non-adherence to prescribed drug regimens in Canada contributes to, in the range of, **270 to 420 premature deaths of working-age Canadians with diabetes every year.**
- Using US data on the effects of expanded drug coverage, we estimate that shortfalls in drug coverage in Canada lead to, in the range of, **550 to 670 premature deaths from all causes among older working-age (55–64) Canadians every year.**

But the body count is not limited to premature deaths, as shortfalls in prescription drug coverage undermine not only the length but also the quality of many Canadian lives. We also found that as many as **70,000 older Canadians (55+)** suffer avoidable deterioration in their health status every year, and as many as **12,000 Canadians with cardiovascular disease aged 40+ require overnight hospitalization.**

Given the pivotal role of medicines in modern health care – and their ever-increasing costs – the proportion of Canadians experiencing difficulties in affording necessary prescription medicines can only be expected to increase. As we have estimated, a policy that resolves Canada's patchy drug coverage system could avert the premature deaths of many hundreds of Canadians each year and improve the quality of the lives of many, many more.

Body Count

How many Canadians lose their lives without pharmacare?



370 to 640

premature deaths of Canadians with ischemic heart disease every year



270 to 420

premature deaths of working-age Canadians with diabetes every year



550 to 670

premature deaths from all causes among older working-age (55–64) Canadians every year

+



Up to 70,000

older Canadians (55+) suffer avoidable deterioration in their health status every year



Up to 12,000

Canadians with cardiovascular disease aged 40+ require overnight hospitalization

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About the Authors

Ruth Lopert



Ruth Lopert, MD, MMedSc, FAFPHM, is a public health physician, pharmaco-epidemiologist and consultant in pharmaceutical policy and health technology assessment. She is a *chercheur associé principal* at the University of Strasbourg, France, and holds adjunct professorial appointments in the Department of Clinical Research & Leadership in the School of Medicine & Health Sciences and the Department of Health Policy & Management in the Milken Institute School of Public Health at George Washington University, where she was a Visiting Professor in 2011–2012 and a Harkness Fellow in Health Policy in 2006–2007. Ruth has worked in over 15 countries on assignments for the World Bank, IADB, PAHO, WHO, NICE–International, Oxford Policy Management and Management Sciences for Health, as well as for various national ministries of health. From 2008–2011 Ruth was the chief medical officer in the Australian therapeutics regulatory agency, the Therapeutic Goods Administration. Previous roles include establishing and directing the pharmaceutical policy unit in the Australian Department of Health, managing the operations of the national drug coverage program, and as a clinical and policy advisor to the national formulary committee. She is the author of more than 70 journal articles, monographs and book chapters, and is a Fellow of the Faculty of Public Health of the Royal Australasian College of Physicians, a foreign corresponding member of *l'Académie Nationale de Pharmacie* of France, and a former member of the WHO Expert Advisory Panel on Drug Policies & Management.

Elizabeth Docteur



Elizabeth Docteur, MSc, has 25 years of experience improving health care systems and programs. She is an internationally recognized expert on the cost and quality performance of health systems, and in policies to promote efficiency in health care delivery. She has worked with international organizations and on assignments in 18 countries, and held positions in the U.S. federal government, the private sector and civil society. Consulting clients include the World Bank, the Swiss Federal Office of Public Health, Sweden's Dental and Pharmaceutical Benefits Agency, the Institute of the Americas, and Friends of Europe. Ms. Docteur worked at the OECD between 2001 and 2009, as part of the Health Policy Unit and as Deputy Chief of the Health Division.

Steve Morgan



Steve Morgan, BA, MA, PhD, is a Professor of Health Policy in the School of Population & Public Health at the University of British Columbia. An expert in pharmaceutical policy, Dr. Morgan's research helps governments balance three goals, which are sometimes competing: providing equitable access to necessary medicines, managing health care spending responsibly, and providing incentives for valued innovation. Dr. Morgan has published over 100 peer-reviewed research papers on pharmaceutical policies. He has advised governments in Canada and abroad and has produced work for the World Health Organization and the Organization for Economic Cooperation and Development. Dr. Morgan earned degrees in economics from the University of Western Ontario, Queen's University, and the University of British Columbia. He received post-doctoral training in health care policy at McMaster University and UBC. He has received career awards from the Canadian Institutes of Health Research, the Michael Smith Foundation for Health Research, the Commonwealth Fund, McMaster University and the University of British Columbia.

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