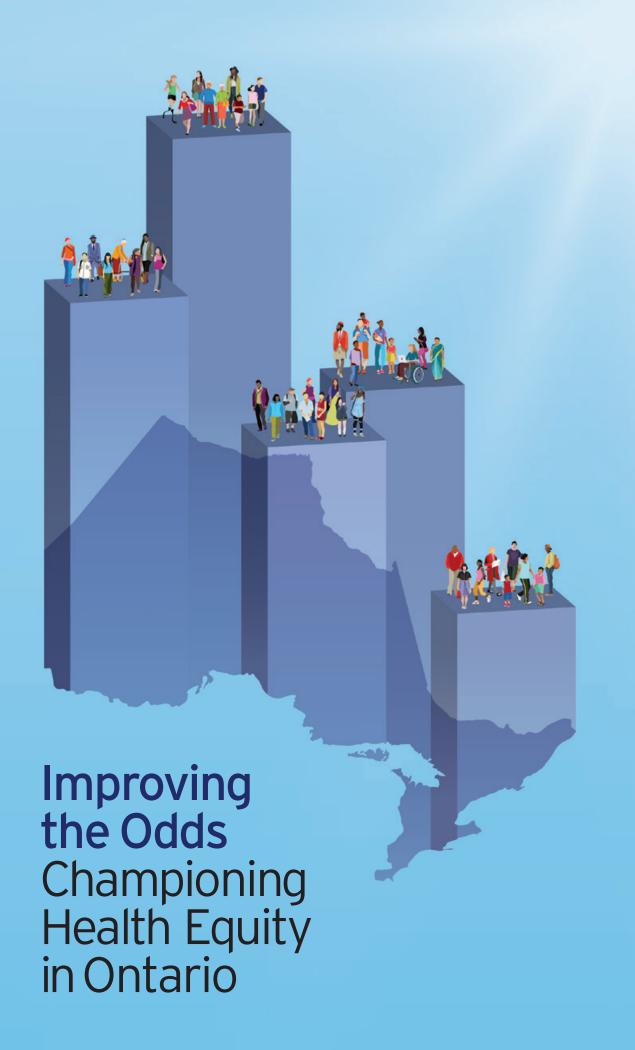
2016 ANNUAL REPORT









Chief Medical Officer of Health 21st Floor, 393 University Avenue Toronto Ontario, M7A 2S1 Telephone: (416) 212-3831 Facsimile: (416) 325-8412 Ministère de la Santé et des Soins de longue durée

Médecin hygiéniste en chef 393 avenue University, 21e étage Toronto Ontario, M7A 2S1 Téléphone: (416) 212-3831 Télécopieur: (416) 325-8412



February 2018

The Honourable Speaker Speaker of the Legislative Assembly of Ontario

Room 104, Legislative Building 111 Wellesley St. W Toronto, Ontario M7A 1A2



Dear Speaker,

I am pleased to provide the 2016 Annual Report of the Chief Medical Officer of Health of Ontario for submission to the Assembly in accordance with the provision of section 81.(4) of the Health Protection and Promotion Act.

Yours truly,

Dellelleans

David C. Williams, MD, MHSc, FRCPC Chief Medical Officer of Health





Executive Summary

All Ontarians should have the opportunity to be as healthy as possible, regardless of race, ethnicity, religion, gender, age, social class, geography, socioeconomic status or other social circumstances.

Yet many struggle with health inequities: systematic and unfair disadvantages that threaten their health, such as low incomes, lack of education and employment opportunities, lack of access to stable housing and healthy food, violence and social isolation.

As a society, there are many things we can do together to improve the odds of good health for everyone. To create healthy communities, it's time for the public health sector in Ontario to champion health equity: to bring a wide range of partners together to develop policies and programs that reduce or eliminate social, economic and environmental barriers to good health.

Public health units are well placed to facilitate partnerships at the local level and promote collective action. They can leverage their strong relationships with many organizations in their communities – municipalities, LHINs, Indigenous communities and other intersectoral partners, including social services, housing programs and shelters, and police services – to improve health equity.

We have the tools to make a difference:

- With Patients First, Ontario laid the groundwork for a system-wide approach to health equity. Health equity is now part of the mandate of Local Health Integration Networks (LHINs). As part of public health transformation, public health units will now be working much more closely with their LHINs and LHIN sub-regions to improve health equity.
- The updated Ontario Public Health Standards Requirements for Programs, Services and Accountability, which came into effect in January 2018, include a new Health Equity Standard and Guideline¹ that requires public health units to embed strategies to improve health equity in their everyday work.
- Different data sources and novel analytical approaches are now available to map health inequities, identify the complex factors that put people at risk and target interventions.

- The public health sector can apply and adapt its effective approach to managing outbreaks of infectious diseases to reducing or eliminating social inequities. That approach, which brings a greater sense of urgency and focus to solving health problems, can help public health units look beyond income inequality to other social, economic and environmental factors that may be easier to address in the short-term.
- Community development interventions can bring community members together to take collective action and solve common problems. They can also help build social cohesion, which, in turn, improves health.
- Strong partnerships with a wide range of local organizations both within and outside the health system – can make health equity initiatives more powerful and effective. Different players and levels of government have unique levers and opportunities to improve health. Working together as a system, they can reduce or eliminate health disparities.

Because the responsibility for achieving health equity reaches far beyond the public health sector and even the health sector, other sectors whose policies affect health, such as education, the environment and economic development, must be actively engaged.

To support the public health sector in championing health equity, the Chief Medical Officer of Health for Ontario recommends that government:

- 1 Support public health to identify "outbreaks" of health inequities and plan effective, sustainable interventions through community development
- 2 Work system-wide and government-wide to improve health equity
- 3 Provide data to understand health inequities and inform community development efforts

Strategic investments in health equity research, partnerships and data will help improve the odds for good health for all Ontarians. They will pay off in better health outcomes for individuals, healthier, happier, fairer communities, and lower health care and social costs.





Table of Contents

I	Health Equity: Improving the Odds of Good Health Definitions Social Determinants of Health Web of Being Public Health's Role in Improving the Odds	6 7 8
II	Measuring and Understanding Health Inequity Understanding Factors that Contribute to Premature Deaths Map of Ontario's Public Health Units Using Novel Approaches to Measure Health Inequity Relative Index of Inequality High Resource User Population Risk Tool	11 15 17 17 17
Ш	Adapting the Outbreak Approach to Reduce Health Inequities Using the Outbreak Approach to Look Beyond the Impact of Income on Health Equity	2 ⁻ 24
IV	Using Community Development to Reduce Inequities Community Development in Action	29 31
V	Pursuing Partnerships: A System-Wide Effort to Improve the Odds of Good Health Provincial Initiatives Local Initiatives	34 35 37
VI	Championing Health Equity: Recommendations	41
Ref	References	
Acl	knowledgements	46
αA	Appendix	





I. Health Equity: Improving the Odds of Good Health

All Ontarians should have the opportunity to be as healthy as possible.

But health is influenced by many factors, including genetics, lifestyle choices and social determinants of health, such as income, education, access to health services, and the social and physical environments where we live, learn, work and play.

Some of these factors are out of our individual control. In fact, for many Ontarians, the chances of living a long and healthy life can seem like a rigged lottery or a stacked deck.

If you are fortunate enough to be born into a family that has a high steady income and lives in a good neighbourhood and you have easy access to education, health care and other services, you are more likely to win the health lottery.

But if not, then what? Can Ontarians still aspire to be as healthy as possible?

Yes. As a society, community or neighbourhood, there are many things we can do together to improve the odds: to ensure everyone has a fair chance to lead a long, healthy life.

To achieve health equity, we must tackle health inequities that are systematic, unfair and avoidable: the ones caused by social, economic or environmental conditions (i.e., social determinants of health). We have to give all Ontarians the opportunity to live in social and economic conditions that support good health, regardless of race, ethnicity, gender, age, socioeconomic status, geography or other circumstances.

DEFINITIONS

Health is the physical, spiritual, mental, emotional, environmental, social, cultural and economic wellness of the individual, family and community.²

Health equity means all people can reach their full health potential and are not disadvantaged from attaining it because of their race, ethnicity, religion, gender, age, social class, socioeconomic status or other socially determined circumstance.²

Health inequality: refers to measureable differences in health between individuals, groups or communities. It is sometimes used interchangeably with the term "health disparities."²

Health inequity: refers to differences in health associated with social disadvantages that are modifiable and considered unfair.²

Priority populations are individuals or groups of people who are experiencing and/or at higher risk of poor health outcomes due to the burden of disease and/or factors for disease; the determinants of health, including the social determinants of health and/or the intersection between them. Priority populations are those who are more likely to benefit from public health interventions.³

Social Determinants of Health

Social determinants of health are the interrelated social, political and economic factors that create the conditions in which people live, learn, work and play. The intersection of the social determinants of health causes these conditions to shift and change over time and across the life span, impacting the health of individuals, groups and communities in different ways.²

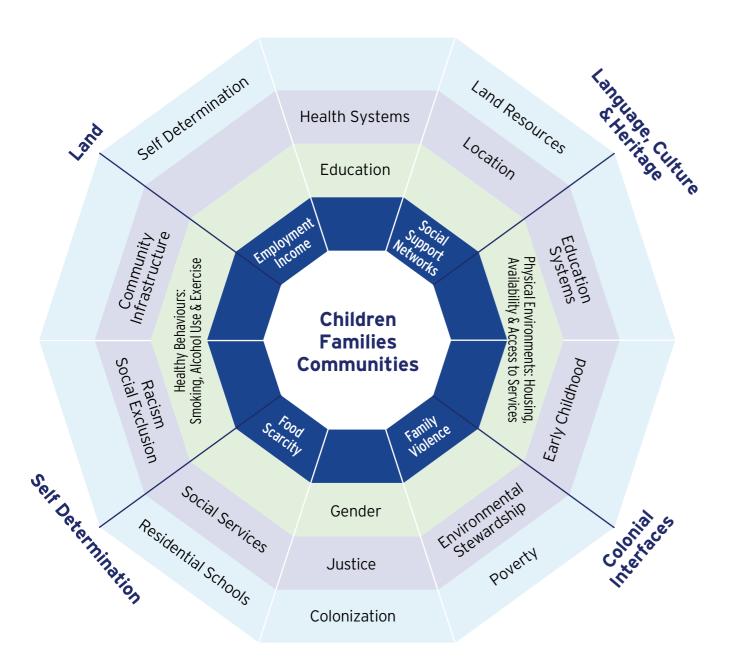
"I have come to learn that the dream that everyone in Ontario will have the same opportunity for health, no matter who they are, where they live and what they have, is at this time, still just a dream. ... However, despite the challenges, I remain convinced that health equity is possible for all. There are many things the health system can do to mitigate inequity ..."

Dr. Jeffrey Turnbull, Health Quality Ontario's Health Equity Plan



Web of Being

First Nations, Inuit and Métis take a holistic approach to addressing risk factors, including determinants of health, based on the Indigenous view of wellness as a balance of the four dimensions of health – physical, mental, emotional and spiritual – throughout the stages of life.4 While traditional concepts of the social determinants of health seem to identify them as separate and sometimes cumulative forces, the Indigenous way of knowing sees them as more of an interconnected and interdependent web.



The National Collaborating Centre on Aboriginal Health has developed a Web of Being, which illustrates the determinants of health for First Nations, Inuit and Métis and shows how these factors form an interconnected web that affects Indigenous people's health and well-being. Indigenous health cannot be understood outside of the context of factors such as colonialism, racism and social exclusion, which act as barriers to accessing health care for Indigenous communities, families and individuals. Given the wide range of unique cultural, historical, geographical and socioeconomic challenges facing Indigenous communities, it is important to consider that each community is unique and may require different approaches. A bottom-up, community-centred approach to public health that reflects the Web of Being is most likely to provide meaningful, positive change.6

Public Health's Role in Improving the Odds

The public health sector has a long history of sustained initiatives that "powerfully and assuredly bolster life expectancy" including sanitation, water safety, food safety, immunization programs, efforts to control outbreaks of infectious diseases, smoking cessation programs, seatbelt laws and efforts to promote healthy eating and physical activity.

We know that the kind of lifestyle changes advocated by public health units - not smoking, maintaining a healthy weight, being physically active and eating more fresh fruits and vegetables - can dramatically reduce the risk of heart disease, a leading cause of premature deaths in Ontario. We know that policies that restrict smoking in public and tax tobacco have helped reduce deaths from lung cancer.8 However, not everyone benefits equally. Even with the best knowledge and intentions, it is not easy for people who face systematic and unfair disparities – such as having a low income, living far from services or being socially isolated - to stop smoking or eat healthfully.

Public health units can play a key role in creating healthier communities by working with partners to develop policies that reduce or eliminate those systematic social, economic and environmental barriers to good health.

Goal: Public health practice results in decreased health inequities such that everyone has equal opportunities for optimal health and can attain their full health potential without disadvantage due to social position or other socially determined circumstances.1





The updated Ontario Public Health Standards: Requirements for Programs, Services and Accountability (Ontario Public Health Standards),³ which came into effect in January 2018, include a new Health Equity Standard and Guideline that require public health units across the province to focus on health equity to help Ontarians reach their full health potential. They must work to:

- 1 Understand the Problem. Public health units will gather data to continually assess the health of local populations and identify:
 - health inequities
 - priority populations those at risk of poor health outcomes who would benefit most from public health interventions
- 2 Develop Targeted Universal Programs. Public health units will implement universal strategies designed to improve the health of the entire community while targeting those strategies to priority populations within that community experiencing health disparities.
- 3 Pursue Partnerships. Public health units cannot eliminate health inequities on their own. They must work closely with other local partners, such as municipal programs (e.g., housing, recreation, social services), LHINs, Indigenous communities, other federal and provincial government programs and services, civic society and the private sector. They must continue to build relationships with partners inside and outside the health system who can help reduce health disparities and improve health for those at risk.

The new Guideline also requires public health units to foster meaningful relationships with Indigenous communities and organizations, starting by engaging with those communities and then working to develop collaborative partnerships to reduce health disparities and improve health equity.

4 Champion Health Equity. Public health units, in collaboration with other partners, will provide data and health policy analyses and advocate for public policies that reduce or eliminate health inequities. They are a trusted voice in their communities and can champion the importance and benefit of health equity for the entire population.

II. Measuring and Understanding Health Inequity

The public health sector's ability to fulfill its role in improving health equity depends on its capacity to measure and understand health disparities. *Mapping Wellness*, the 2015 report of the Chief Medical Officer of Health, describes how local-level population health data can be used to make evidence-informed decisions to improve the health of communities. That report made a series of recommendations for collecting and using local data to map wellness community by community, neighbourhood by neighbourhood, and population by population. It also recognized the importance of connecting data from different sources to avoid unnecessary costly duplication.

Reducing premature mortality is one of the United Nations Sustainable Development Goals. Health care interventions can significantly reduce premature mortality. Many deaths can be prevented through effective public health and preventive care.

Understanding Factors that Contribute to Premature Deaths

One indicator of health equity is mortality and particularly premature mortality, which is the measure of unfulfilled life expectancy (i.e., the number of deaths that occur before the average age of death in a certain population).

The Population Health Analytics Laboratory, based at the University of Toronto's Dalla Lana School of Public Health, is developing innovative ways to link existing data to understand public health and improve health services. The OPTIMISE Project (Ontario Population Trends in Improved Mortality: Informing Sustainability and Equity of the health care system) uses comprehensive multi-linked mortality files to help guide health system planning. OPTIMISE can help answer questions such as: Is our health system reaching who it needs to? Who is being left behind?





OPTIMISE LINKS DATA FROM FOUR TYPES OF SOURCES:

Health Socioeconomic Administrative **Population Files Status Data Vital Statistics** Ontario Health claims Ontario Registrar Ontario Registered Persons Database Marginalization and utilization General's Death (RPDB) (ON-Marg) Index file (ORG-D) data (physician Citizenship and Census-based visits, hospital (includes **Immigration** demographic admissions, etc.) comprehensive Canada's Disease-specific profiles cause of death) Permanent Canadian registries Resident Database (diabetes, COPD, Community (CIC) Health Survey asthma, etc.) Indian Registry (CCHS) System (IRS) **LINKED DATASET**

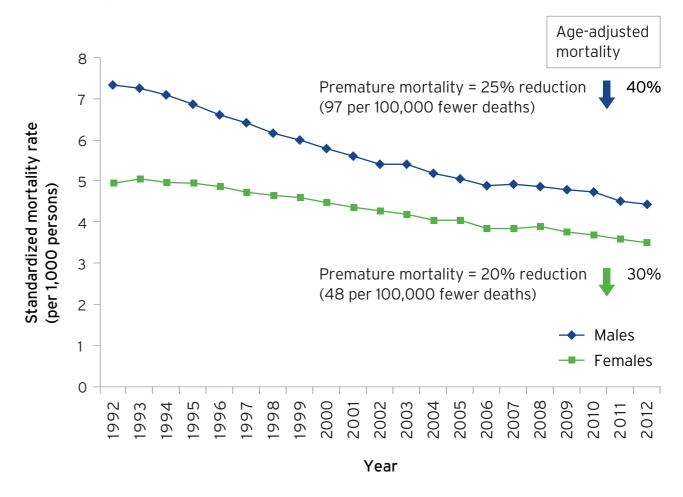
The OPTIMISE analyses⁹ reveal that, in general, Ontarians are living longer. Over the past two decades, mortality rates have steadily declined for both women and men, and the gap in life expectancy between women and men has narrowed.

However, trends for the overall population hide the fact that not everyone is benefitting equally. Some clusters of people are still dying young. For example, when we look at the impact of neighbourhood-level income on mortality (see Figure 2), the graph tells a different story. Just 25 years ago, sex was the key driver of deaths from all causes. Women, regardless of income, lived longer than men: in fact, low-income women lived longer than high-income men.

To achieve health equity, we must identify the priority populations most at risk and develop targeted interventions that work to reduce or eliminate health disparities.

FIGURE 1. NARROWING SEX DIFFERENCES IN MORTALITY

All-cause age-standardized* mortality rates for males and females

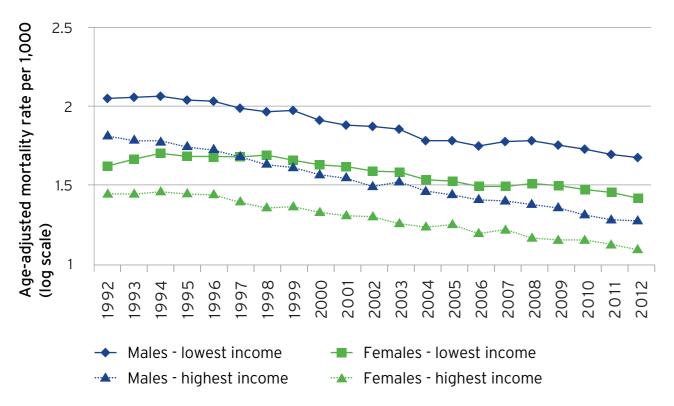


*Standardized to the 1991 Canadian population *Rosella LC, Calzavara A, Frank JW, Fitzpatrick T, Donnelly PD, Henry D. (2016). Narrowing mortality gap between men and women over two decades: a registry-based study in Ontario, Canada. BMJ Open, 6(11): e012564¹⁰





FIGURE 2. DIFFERENTIAL SOCIOECONOMIC STATUS-SEX TRENDS OVER TIME



Rosella LC, Calzavara A, Frank JW, Fitzpatrick T, Donnelly PD, Henry D. (2016). Narrowing mortality gap between men and women over two decades: a registry-based study in Ontario, Canada. BMJ Open, 6(11): e012564¹⁰

Today, low-income women have a higher mortality rate than high-income men and a much higher mortality rate than high-income women: in fact the gap between poorer and wealthier women has grown considerably – as has the gap between poorer and wealthier men. Socio-economic status is a key determinant of health inequity. When it comes to living longer in good health, many people with lower incomes are being left behind.

MAP OF ONTARIO'S PUBLIC HEALTH UNITS

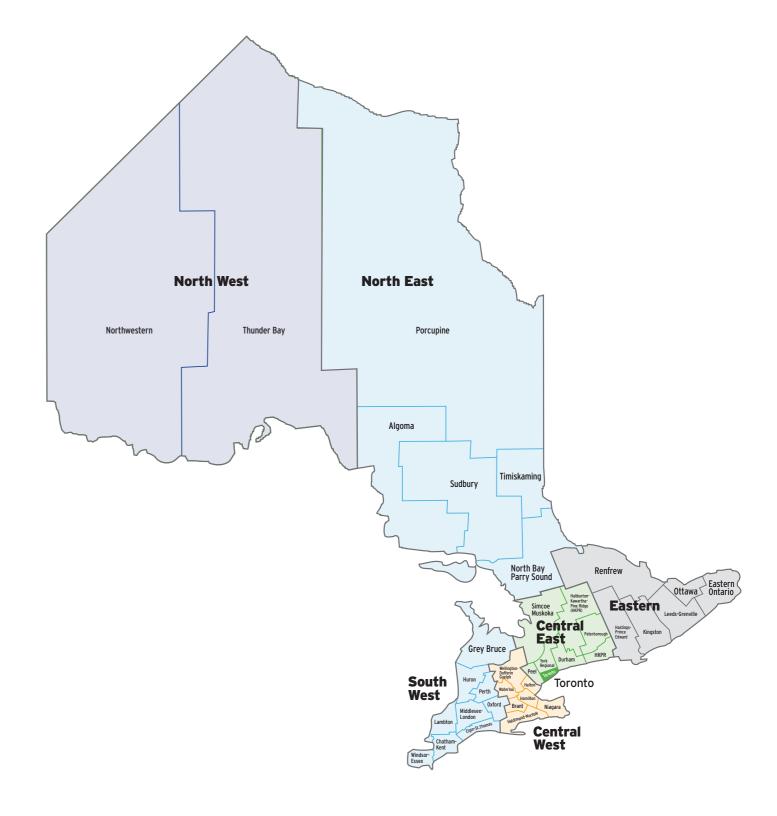
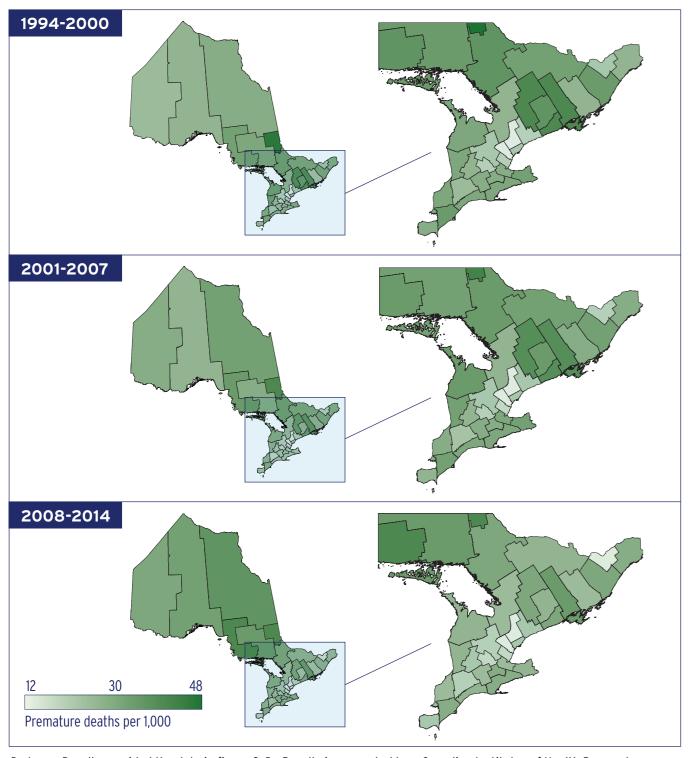






FIGURE 3. PREMATURE (AGE <75) MORTALITY RATES BY PUBLIC HEALTH UNIT



Dr. Laura Rosella provided the data in figure 3. Dr. Rosella is supported by a Canadian Institutes of Health Research Foundation Scheme Grant [FDN-148456] and by a Canada Research Chair in Population Health Analytics.

While there may be limitations in using premature mortality as a measure of health equity, it may help us to address factors that contribute to health disparities. As Figure 3 illustrates, some parts of the province – particularly those in the south – have seen marked improvements in premature mortality rates over time while many in the north have not. There appear to be systematic unfair barriers to health in the northern parts of the province that must be overcome.

Using Novel Approaches to Measure Health Inequity

Novel predictive data tools, such as the RII, the Ontario Marginalization Index and the High Resource User Population Risk Tool, may help communities measure and understand health inequity.

The Ontario Marginalization Index (ON-Marg) summarizes census data so it can be analyzed to understand how the key dimensions of social determinants play out in neighbourhoods and communities across the province and affect people's health. ON-Marg data and related maps for the 2001, 2006 and 2011 census are available on the PHO website. They can be used to track changes in marginalization and health equity over time. Data is available at the small area level as well as larger geographies such as public health units and LHINs. See:

https://www.publichealthontario.ca/en/DataAndAnalytics/Pages/ON-Marg.aspx

Relative Index of Inequality

The Relative Index of Inequality (RII) can help identify, within a given population, the impact of social, economic and environmental health disparities, where these disparities are occurring and who is most affected. The index compares the relative risk of inequality of people who are most advantaged socio-economically with those who are least advantaged and measures the equity gap. It can help public health planners understand how inter-related risk factors, such as low income, low level of education and cigarette smoking, affect health. A higher RII means less health equity. The goal is to have a relatively low RII and, when the index is high, understand the factors contributing to inequity and reduce or eliminate them.

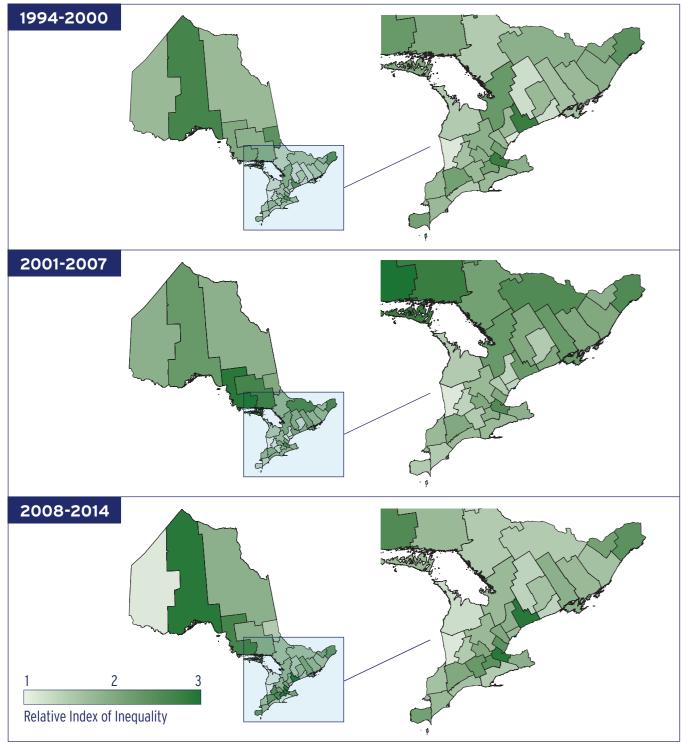
To calculate the RII, researchers categorize populations into levels of deprivation using the four material deprivation dimensions from the ON-Marg Index:

- residential instability including living alone, being single, widowed or divorced, not owning a home and moving frequently
- material deprivation including not having graduated from high school, being unemployed, being a single parent household, having a low income and living in a dwelling in need of repair
- dependency including being over 65 and the proportion of the population over age 15 not in the workforce
- **ethnic concentration** including people who are recent immigrants and the proportion who identify as part of a visible minority.

The result? Population Health and Analytics Laboratory was able to map the relative index of inequality for premature mortality by public health unit over a 20-year period. As these maps illustrate, health inequity shifts over time depending on a number of factors.



FIGURE 4.
RELATIVE INDEX OF INEQUALITY (RII) BY PUBLIC HEALTH UNIT



Dr. Laura Rosella provided the data in figure 4. Dr. Rosella is supported by a Canadian Institutes of Health Research Foundation Scheme Grant [FDN-148456] and by a Canada Research Chair in Population Health Analytics.

The RII tool provides a more nuanced look at the causes of premature mortality. For example, the maps on page 16 that looked only at mortality trends seemed to show that the entire north faced larger disparities, while the RII maps displayed on page 18 indicate that certain northern regions, such as Northwestern and Timiskaming, have seen a decrease in their RII. There is a smaller gap between the most and least disadvantaged in those and other regions. It appears that some measures of equity in those regions are improving.

High Resource User Population Risk Tool

Health inequities are devastating for the people who experience them. Over a lifetime, they reduce opportunities for health, increase health problems such as chronic diseases and shorten lives. In fact, almost one in four premature deaths among people who are most disadvantaged (high RII) could be avoided if we could reduce or eliminate inequities, which would also eliminate about one in six premature deaths among people who are the least disadvantaged.

The impact of health inequities is not limited to the individuals and their families who face them. There are ripple effects throughout society, including lower productivity, more use of health services, and higher health care and other social costs. People who experience high rates of health inequities and poorer health outcomes are more likely to become high users of health services. The top five per cent of service users account for 55 per cent of health care spending. If we don't invest in upstream policies, programs and services to improve health equity for everyone, we will pay more downstream for preventable emergency, hospital and other health services.

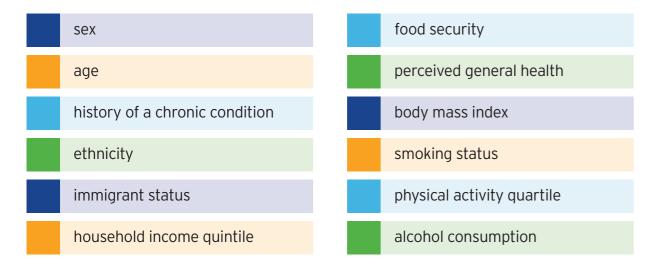
To help identify populations at high risk of poor health outcomes over the next five years, Ontario researchers have developed the High Resource User Population Risk Tool (HRUPORT), which takes into account both the clinical and social determinants that contribute to people developing the kind of health problems that make them high users of health services.





To develop the tool, the researchers looked at the clinical, sociodemographic and health behavioural characteristics of the top five per cent of health care service users over a five-year period. The factors most likely to predict high use of services were:

RISK FACTORS FOR HIGH RESOURCE USERS



Public health units can use the HRUPORT to help identify priority populations and target interventions. This analysis can complement other information on priority populations.

III. Adapting the Outbreak Approach to Reduce Health Inequities

The new Health Equity Standard sets out an ambitious role for public health units. The challenge will be putting the standard into action.

Are there lessons from other areas of public health practice that we can modify and apply to reduce or eliminate health inequities? We think so. When faced with outbreaks of infectious and communicable diseases, public health immediately uses a well-established outbreak approach and protocol.

That approach is based on the fact that – left unchecked – infectious diseases and water and foodborne illnesses will spread within communities. Can that same approach also be applied to non-communicable health risks? There is evidence that some non-communicable threats to health, such as homicides, suicides, drug and alcohol use, smoking, depression, sleep disorders and even obesity, can also spread or be shared between people in a neighbourhood or community^{12,13,14,15} – as can happiness and healthy behaviours such as self-care, healthy eating and physical activity. The actions of a person's social network, as well as other pressures in the socio-economic environment, can have a significant effect on her or his choices and behaviours.

What would happen if public health units approached clusters of health inequities with the same sense of urgency as infectious diseases and applied the outbreak approach to improve health in neighbourhoods and populations?





THE OUTBREAK APPROACH

CONFIRM THE OUTBREAK

Are there more cases than expected in a given area over a given time period among a specific group of people?

2

ASSEMBLE AN OUTBREAK RESPONSE TEAM

Identify experts who can lead, organize and deliver the response.

3

ESTABLISH COMMUNICATIONS

Put in place a system to keep all partners – everyone who has a role to play – informed.



DEFINE THE PROBLEM/THREAT

Establish a case definition that includes standard criteria to determine whether someone is part of the outbreak (e.g., signs, symptoms, demographics). Understand the factors contributing to the outbreak.



IDENTIFY CASES AND CONTACTS

Who is directly affected (cases)?
Who has had contact with
those affected?

ADAPTED TO HEALTH INEQUITIES

Are certain neighbourhoods or populations facing health challenges that are systematic, unfair and avoidable? One suicide in a community may be an isolated problem, but a cluster of suicides may be a sign of social, economic and environmental disparities that are threatening mental health.

The causes of health inequity are often complex and inter-related: poverty plus lack of access to housing, services, healthy foods, employment and/or recreation. To respond, a social determinants of health outbreak team must draw experts from the community or population itself as well as city planners, a wide range of health, municipal and social services, and employers/the private sector.

Effective initiatives to end unfair health disparities have formal working groups that bring all partners together as well as other strategies, such as a lead agency and web sites, to keep everyone engaged and informed.

To reduce or eliminate disparities, it is critical to understand the signs, symptoms and risk factors. "Surveillance" for health disparities means understanding not only who is currently part of the outbreak, but who is at risk. For example, a community may identify a serious problem with obesity in children between the ages of eight and 14. However, to address the problem the community must look upstream to also identify younger children exposed to the same environmental factors who – if nothing is done – are at high risk of becoming obese.

With social determinants of health, cases and contacts are likely to include broader social networks. The problem, such as high alcohol use, may affect an entire community or certain groups or populations within that community based on age, gender, income, geography, ethnicity or other factors.

6

ORGANIZE DATA

Map the progress of the outbreak. When did it start? When will it peak? What is the epidemiologic curve? Mapping infectious diseases relies heavily on diagnoses.

Mapping social health threats means looking at a
wider range of data sources and understanding how
social disadvantage will affect the "spread" of the health
problem. For example, high rates of depression in
a rural community may be associated with a lack of
employment opportunities as well as increasing
social isolation.

7

DEFINE THE POPULATION AT RISK

Use the surveillance and other data to identify who you need to engage.

Effective interventions target specifc priority groups, neighbourhoods or communities – focusing on those who are most likely to benefit.

8

DEVELOP AND TEST HYPOTHESES

Determine what factors are driving the outbreak and how to reduce or eliminate them. Armed with a good understanding of the inter-connected factors that drive health disparities, the outbreak team can develop and test hypotheses. For example, if homicide rates are higher in communities where there is an increased likelihood of violence (e.g., access to guns, places where alcohol and drugs are misused), then reducing those other forms of violence may result in fewer homicides.

9

IMPLEMENT STRATEGIES

Implement strategies that will reduce the risk or enhance health. With an infectious or communicable disease, strategies might be immunization, treatment, isolation, education and/or measures to reduce or eliminate the causes of the outbreak (e.g., a food recall). With health inequities, strategies might be community engagement/development, education, new services, better housing, recreation programs, social enterprises, economic development and structural/environmental changes.

10

IDENTIFY CASES AND CONTACTS

Continually collect data on cases to measure the impact of the strategies used and adjust them as required.

The right data are key to monitoring the response to health inequities. Public health units will need regular information on both the determinants of health and health outcomes.



Using the Outbreak Approach to Look Beyond the Impact of Income on Health Equity

Low income is a key driver of health disparities – largely because it limits access to things that improve health, such as healthy food and stable housing. We are all aware of the growing gap between rich and poor in Ontario and most of the rest of the world. Work is currently underway at both the federal and provincial levels to try to reduce the income gap (see page 34). However, if we focus only on income as the driver of health equity, we risk missing other opportunities to improve health equity for people with low incomes.

AN OUTBREAK APPROACH TO REDUCING YOUTH ALCOHOL USE

When Iceland faced an outbreak of youth alcohol and drug use and public disorder, the country gathered data that identified the extent of the problem as well as factors that protected youth, including participating in organized activities such as sports and music three or four times a week, spending more time with their parents, feeling cared about at school and not being outdoors in the late evenings.

Working closely with political leaders, schools and the parent organizations required by law in every school, the Youth in Iceland initiative developed a range of interventions that included:

- more funding for organized sport, music, art, dance and other clubs
- banning tobacco and alcohol advertising
- raising the age limit to buy tobacco and alcohol
- an evening curfew for kids between the ages of 13 and 16
- agreements that parents signed saying they would, for example, spend more time with their children, not allow their kids to have unsupervised parties, not buy alcohol for minors and keep an eye on the well-being of other children

The impact? From 1998 to 2016, the percentage of 15- to 16-year-old Icelandic youth who were inebriated in the past 30 days dropped from 42 per cent to five per cent. Among youth, daily cigarette smoking dropped from 23 per cent to three per cent; and having used cannabis one or more times, fell from 17 per cent to five per cent.¹⁶

Health behaviours and outcomes in communities change over time but those changes can be difficult to detect or understand. For example, a neighbourhood survey may reveal that a significant proportion of residents have low incomes and there are high rates of alcohol use. However, a more detailed assessment might reveal that it is people in the neighbourhood with higher incomes who are drinking more¹⁷ and that the increase is associated with a recent

recession, a growing number of wealthy people retiring to the community and zoning changes that led to an increase in the number of restaurants and bars in the neighbourhood.

Using an outbreak approach to understand the problem will encourage us to look at all the inter-related social, economic and environmental factors that drive health inequities as well as the full range of strategies that could reduce or eliminate them. Armed with the right data, public health units can, for example, identify an outbreak of harmful alcohol use, its causes and strategies to reduce it. Using a community development approach to the situation described above, the public health unit would partner with key individuals, groups or organizations to assess the factors driving the increase in alcohol use and identify social network strategies to reduce alcohol consumption while also working with the municipality and community to develop more recreation opportunities for retirees and change zoning by-laws.

While income is a key driver of health inequity, some causes of premature death are not as income-sensitive as others. Figure 5 compares mortality rates for people in the second, third, fourth and fifth (most deprived) quartiles with those in the first (least deprived) quartile. It illustrates that deaths from homicide, suicide, cardiovascular disease and cancer occur across all socio-economic groups – from least deprived to most deprived. Rates of cardiovascular disease and cancer appear to be less affected by income than rates of suicide and homicide – perhaps due to more equitable access to treatment for those conditions.

Even though rates of suicide increase with material deprivation, they are still relatively high among people who are not socio-economically disadvantaged, which indicates that more than income is driving the risk of suicide.

In fact, many of the inequities that put people at risk are outside the health system and involve more than income. A recent study on homicides in Ontario¹⁸ revealed that Canada ranks 5th in homicide rates among developed countries in the world. Between 1999 and 2012, Ontario lost 63,512 person years of life for males and 24,066 for females from homicide. Those most at risk are young males, between the ages of 15 and 29 – particularly those who live in socially disadvantaged neighbourhoods. Public Health Ontario identified a number of different cross-cutting social conditions and factors (in addition to income) that contribute to high rates of homicide, including low levels of education, more socially deprived neighbourhoods (e.g., poor housing, few jobs), exposure to places where alcohol and drugs are used in harmful ways, contact with people who have access to firearms and regular use of violence to solve conflicts. Some of those inequities may be more amenable to public health interventions than income gaps.

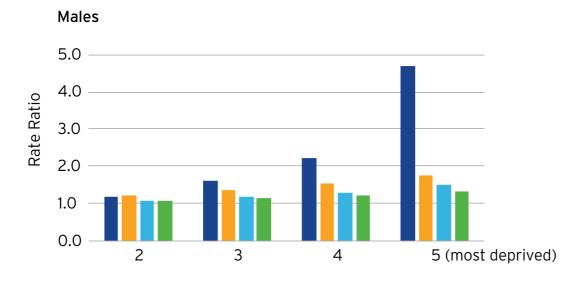




FIGURE 5. CAUSE-SPECIFIC MORTALITY & SOCIOECONOMIC STATUS

Homicide, suicide, cardiovascular disease, and cancer mortality rate ratios in Ontario by ON-Marg material deprivation index, 1999-2012.

Material Deprivation



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Lachaud J, Donnelly PD, Henry D, Komas K, Calzavara A, Bornbaum C, Rosella L. (2017). A population-based study of homicide deaths in Ontario, Canada using linked death records. Int J Equity Health, 16:133.¹⁸
Lachaud J, Donnelly PD, Henry D, Kornas K, Fitzpatrick T, Calzavara A, Bornbaum C, Rosella L. (2017). Characterising violent deaths of undetermined intent: a population-based study, 1999-2012. Inj Prev, pii: injuryprev-2017-042376 [epub ahead of print].¹⁹

THE COST OF THE HEALTH DISPARITIES

In the case of homicides, the individual, community and societal costs are high. They include loss of life for the people killed and loss of opportunity – a future – for those who commit homicides. Family members and friends also experience high rates of depression, anxiety and post-traumatic stress among themselves. At the community level, high homicide rates generate fear, which keeps people from participating in social activities and leads to poorer mental health: homicides have a negative effect on sense of community and community cohesion. For society, high numbers of homicides increase costs for medical care, police and legal services and correctional services.

Faced with concerns about high rates of homicides, public health units could work with partners such as family members, community leaders, schools, social services agencies, police and correctional institutions to raise awareness of the problem and develop a mix of strategies to reduce homicides and related forms of personal violence, such as:

- reducing or eliminating environmental factors that may contribute to homicides such
 as inadequate housing, high social/cultural rates of alcohol or drug use, few places in
 the community for young men to go for healthy activities, a built environment that
 encourages or at least turns a blind eye to violence and/or lack of community policing
- offering programs/incentives to keep young men in school and teach them how to manage conflict
- creating more opportunities for young men to work and participate in non-violent social activities
- working with families of youth at risk to enhance parenting skills and develop a community-wide response to the problem
- providing upstream preventive programs, such as support for new moms, early childhood development programs and evidence-informed school-based programs such as "Roots of Empathy",²⁰ a program offered across Canada for children from kindergarten to grade 8, which has been shown to significantly reduce levels of aggression and bullying among children while building social/emotional competence and increasing empathy





Greater health inequities in some neighbourhoods and populations may be partly explained by factors such as higher crime rates, few community resources, few stores selling affordable healthy foods, high rates of mental health issues and more social isolation – all problems that may be structurally easier and faster to "fix" than income gaps.

IMPROVING MENTAL HEALTH, REDUCING SUICIDES

In the spring of 2015, a local employer contacted the Windsor-Essex County Health Unit for support in addressing suicide. That workplace had lost several workers to suicide and was concerned about the mental health of its employees. The health unit looked at the data; there had been more than 200 deaths by suicide in the region between 2007 and 2011 – or about 40 a year. Most were males between the ages of 45 and 64. Between 2010 and 2015, the region also saw a marked 143 per cent increase in the number of youth (10 to 19 years old) visiting the emergency department to be treated for self-harm.

The health unit partnered with the Canadian Mental Health Association (CMHA) Windsor-Essex to launch a suicide prevention effort. They started with a workplace intervention and quickly expanded to a whole community approach that involved more than 50 partners (public and private). In September, they organized a Suicide Prevention Week to align with World Suicide Prevention Day, which was followed by other awareness events throughout the year. Different strategies were developed to reach populations at high risk, including first responders (police, paramedics, fire services), the LGBTQ community, post-secondary students, school-age kids and those in certain workplaces.

The group continues to meet, discussing ways to bring evidence-informed programs like *zero suicide* to the community and to create a suicide surveillance and response system. In addition, the public health unit, which coordinates the initiative with CMHA, will be monitoring the impact of the initiative and other efforts on suicide rates in the local community.

IV. Using Community Development to Reduce Inequities

Community development interventions that improve social connection and reduce isolation may have the potential to improve health and well-being and reduce health disparities – even in the absence of interventions that address underlying economic disparities. For example:

- People in disadvantaged neighbourhoods who are socially active and have many friends do not experience the same mental health problems or decrease in quality of life as those who are socially isolated.²¹
- The Toronto Neighbourhood Effects on Health and Well-being study found that women who were more socially connected (regardless of age, race, income, household size, education) were less likely to be overweight or obese – even when they lived in neighbourhoods that were less walkable or safe. That sense of belonging may create a sense of safety within the neighbourhood and encourage more outdoor physical activity.²²
- Higher levels of social connection can encourage positive behaviours and health outcomes: people who feel more socially connected are more likely to take steps to protect their health, such as getting their flu shot, having a mammogram and having their lipid levels tested.²³

Community development: The United Nations defines community development as "a process where community members come together to take collective action and generate solutions to common problems."

The Health Benefits of Social Cohesion

Newcomers are less likely than long-term residents to die prematurely – even though they are more likely to have lower incomes (see Figure 6). While many newcomers benefit from the "healthy immigrant effect",²⁴ social cohesion may also have a powerful impact on newcomers' ability to thrive in Ontario.

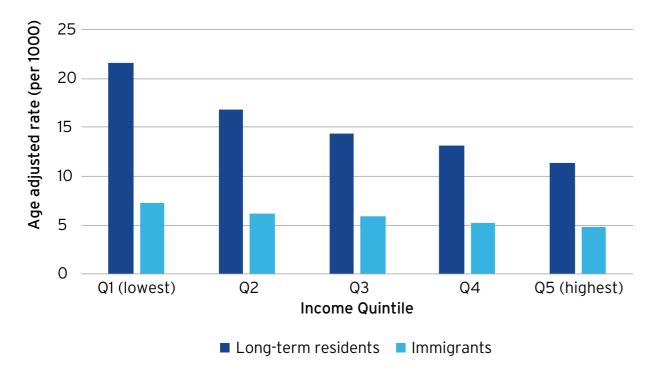
Neighbourhood cohesion is the perceived degree of connection among neighbours and people's willingness to intervene for the common good. It is broader than individual social networks because it involves the community as a whole: residents feel they belong and trust their neighbours.²⁵





FIGURE 6. MORTALITY TRENDS BY IMMIGRANT STATUS

Premature mortality (death before age 75) rate (per 1,000 population) in Ontario, according to income quintiles and immigrant status, 2002-2012



Khan AM, Urquia M, Kornas K, Henry D, Cheng SY, Bornbaum C, Rosella LC. (2017). Socioeconomic gradients in all-cause, premature and avoidable mortality among immigrants and long-term residents using linked death records in Ontario, Canada. J Epidemiol Community Health, 71(7):625-632.26

Social cohesion – a sense of belonging – is protective, even in the presence of other threats, such as low incomes.

For example, those who move into a neighbourhood with others who share their language and culture may have the additional advantage of feeling more connected. Their neighbours help them navigate the health and other systems.

On the other hand, newcomers who move into neighbourhoods where they do not feel as though they belong socially or ethnically are often isolated. They don't have as many friends, are less likely to be connected to their community, are more likely to be high users of health care services²⁷ and have poorer health outcomes.

Given the relationship between social cohesion and health, well-designed community development initiatives that improve social cohesion may help reduce the impact of social inequities.

Community Development in Action

Many Ontario public health units already take a community development approach to health equity. Examples are highlighted throughout this report. Here are three initiatives that targeted priority populations experiencing health disparities:

SUPPORTING YOUNG DADS: NIAGARA REGION PUBLIC HEALTH

According to a 2013 literature review, many young men under age 24 who become fathers want to maintain a relationship with the child's mother and be actively involved in their child's life. Fathers play a vital role in supporting their child's health and development, but becoming a father is challenging for young men, particularly those with low incomes: they report feeling alone. An environmental scan revealed a lack of information and services for these young fathers.

The public health unit asked young dads what they would find helpful. They wanted a free program that was flexible, frequent, provided incentives and opportunities to learn from other young dads and was led by a dad facilitator. The health unit worked with Strive Niagara (formerly Adolescent's Family Support Services of Niagara) to develop a 15-week peer-to-peer parenting and life skills program for young dads, which also provided transportation, childcare and food. The organizations reached out to community agencies to recruit participants.

An advisory committee of community partners, Dad Central Niagara, provides guidance.

"Once you are a father a lot of your real friends back off, so it's nice to make some friends that are actually in the same shoes as you and that have a child 'cause they will really understand you, regardless."

The program, which has been running continuously since 2014, works because it takes a peer-based youth engagement approach and is facilitated by male and female staff who model a healthy relationship and have experience working with the youth population. Flexible and accessible (locations based on community consultation and capacity, later reinforced by mapping analytics), the program tries to reduce the stigma young dads feel by acknowledging their struggles. It also provides referrals to other community services if needed.

According to the evaluation of the pilot program, the young dads made significant gains in terms of knowledge, skills, confidence, stress reduction and support. They reported:

- being able to identify and respond to their children's needs
- knowing age-appropriate activities for their child
- being confident they could respond to situations that might arise
- learning new things and being more connected to community supports
- feeling supported by fellow participants





EMPOWERING ISOLATED WOMEN: HURON COUNTY HEALTH UNIT

The Huron County Health Unit identified isolated rural communities that were experiencing the impact of low income, social isolation, food insecurity, unstable housing and precarious employment. Working with the county's 40+ member anti-poverty coalition, Poverty to Prosperity, the public health unit identified and engaged women, as heads of households and potential community leaders, to identify priorities for themselves, their families and their communities. The public health unit then helped the women build their capacity to address those priorities. By removing barriers such as transportation and the cost of child care, the public health unit was able to engage the women in a range of planning and community development activities that have markedly decreased their sense of social isolation.

The women have formed a working group to realize their community goals. In addition, four of the women are now employed, one is enrolled in an early childhood education program and one has trained to be a Zumba instructor in the community. The women, who are working with community partners to develop a childcare facility, have also:

- developed connections and leadership skills
- formed relationships with municipal leaders
- participated in training and workshops
- developed and delivered a community survey
- felt supported by fellow participants
- helped the community legal clinic host a public meeting on tenant issues
- held a safe food handling course
- developed a plan for recreation activities for children and families
- held fundraisers to support recreation activities
- partnered with local service clubs and firefighters
- found a building to develop for community space

According to the public health unit, when communities are organized (social cohesion) and work in partnership to increase fairness, equity and social justice, it is possible to reduce the impact of the most detrimental social determinants of health. In this case, the women are more socially connected and less isolated, and the work-sharing and bartering that arises from trusting relationships has helped reduce the negative impacts of low incomes.

PROVIDING STIGMA-FREE SERVICES FOR GAY MEN: SUDBURY & DISTRICT HEALTH UNIT

Gay men living in smaller communities often face stigma and do not disclose their sexual orientation to their family physicians, many of whom are not aware of gay men's health needs. To improve access to services for gay men, the Sudbury & District Health Unit offers a range of confidential services, including sexual health counselling, testing for HIV and other sexually transmitted infections, free treatment for chlamydia, gonorrhea and syphilis, and referrals. The health unit delivers services at the men's clinic offered at Réseau ACCESS Network, the community-based HIV organization. It also collaborates with other organizations that serve gay men, such as PRIDE events and transgender support groups.

To reach gay men, the health unit has a presence on Grindr, a geosocial media app used by gay, bisexual and other men who have sex with men. A public health nurse is available two to three days a week online to chat with the men, answer questions related to sexual health and encourage them to be tested regularly. The online outreach provides a safe, comfortable way for men to get information. Many men who access services at the health unit's sexual health clinic report that they first talked to the nurse on Grindr before going to the clinic.

The impact? Services are more accessible. Men who are concerned about stigma can receive services online. Clients are referred to other services and community partners as needed. In the year after the health unit started this initiative, the number of men who have sex with men seeking point-of-care HIV testing increased by 133 per cent.





V. Pursuing Partnerships: A System-Wide Effort to Improve the Odds of Good Health

Public health units have a strong role to play in championing health equity at the local level. However, to achieve province-wide goals of good health for all, public health units must engage a wide range of partners and work together as a system.

The factors that influence health are complex, and each player and level of government has different levers and opportunities to improve health equity. The following are examples of steps that federal, provincial and municipal governments can or have taken to reduce or eliminate health disparities:

FEDERAL

- Use tax policies including tax credits - to close the income gap
- Develop a national housing policy that will reduce housing instability and improve access to affordable housing
- Increase the time allowed for parental leave to support early childhood development
- Offer unemployment insurance benefits to provide a social safety net when people are unemployed

MUNICIPAL

- Mixed income housing developments as well as emergency housing services
- Youth centres and programs that help young people stay active and in school
- Recreation programs, parks, bike lanes and other environmental changes that promote physical activity and make cities more walkable
- By-laws and policies that reduce smoking and harmful use of alcohol

HEALTH EQUITY

PROVINCIAL

- Raise the minimum wage to help close the income gap
- Fund subsidized housing

and supportive housing programs

- Provide student loans and other programs to keep youth in school
- Support full-day kindergarten to enhance early childhood development
- Use tax policies, regulations and enforcement to discourage smoking and harmful alcohol use

Provincial Initiatives

PROMOTING EQUITY IN THE WORKPLACE

Ontario's Fair Workplaces, Better Jobs Act, 2017 takes several steps to enhance health equity, including raising the minimum wage to \$14 on January 1, 2018, and to \$15 an hour on January 1, 2019, and mandating equal pay for part-time, temporary, casual and seasonal employees doing the same work as full-time employees. The legislation also gives workers up to 10 days' personal leave per calendar year and bans employers from requiring a note from employees who take personal emergency leave. It brings Ontario's vacation time in line with the national average and requires employers to pay employees for three hours of work if their shift is cancelled within 48 hours of its start time. These initiatives will reduce many of the structural inequities faced by people who have less education, work part-time and head single parent families.

REDUCING INCOME INEQUITIES

Ontario is pilot testing the impact of a basic income in three communities across Ontario.

Following a tax credit model, selected low-income families and individuals will receive a basic income (regardless of their employment status) of up to:

- \$16,989 for a single person, less 50 per cent of any earned income
- \$24,027 per year for a couple, less 50 per cent of any earned income
- an additional \$6,000 per year for a person with a disability.

"Engagement will continue with First Nations and Provincial and Territorial Organizations on a First Nations Basic Income Pilot."

In Hamilton, Brantford, Brant County, and Thunder Bay and surrounding area, the Pilot will select two groups of eligible applicants who will be asked to participate in the research study:

- 1 The Basic Income Group will receive monthly basic income payments for up to a three-year period.
- **2** The Comparison Group will not receive monthly basic income payments, but will actively participate in the research study.





In Lindsay, all eligible participants will be selected to participate in the Pilot. This will allow the researchers to study community-level impacts.

In all three sites, the Pilot will assess the impact of a basic income on:

- food security
- stress and anxiety
- mental health
- health and health care usage
- housing stability
- education and training
- employment and labour market participation

What we learn from the Ontario Basic Income Pilot will help inform the province's longer-term plans for income security reform.

Municipal governments, local health systems, local public health units and other community partners can implement targeted universal community development initiatives that reduce the impact of low incomes, social isolation and other health disparities, such as:

- Community gardens and farmers' markets that make healthy foods more accessible
- The Healthy Babies, Healthy Children program that helps families at risk develop parenting skills
- Youth centres and programs that help young people stay active and in school
- Mixed income housing developments as well as emergency housing services
- Recreation programs, parks, bike lanes and other environmental changes that promote physical activity and make cities more walkable
- Services for victims of domestic violence
- Community policing and crime prevention programs
- By-laws and policies that reduce smoking and harmful use of alcohol

Local Initiatives

BRINGING SERVICES TO A VULNERABLE NEIGHBOURHOOD: ALGOMA PUBLIC HEALTH

In 2014, the Sault Ste. Marie Police Service received a high volume of calls from people within a 1,000 metre radius of one intersection – mainly to deal with landlord and tenant disputes, domestic violence and child welfare issues. When the public health unit looked at data from local studies, it was clear that many people living in the downtown core had limited incomes, supports and resources. Many lived in substandard housing and had little access to recreational facilities. There was little business activity in the area, which only made the social problems worse. The answer? A long-term, comprehensive, social development approach to crime prevention.

"They treat you like a person when you come in. Have a cup of coffee, sit down, talk to us, what's your problem? Well, we can hook you up with this person or that person. They are actually picking up the phone saying we need someone from your department here now...They're actually working together."

Eight agencies, including Algoma Public Health, initially agreed to participate with police in the initiative. Now, more than 30 service providers are involved. An existing building has been renovated and is now a Neighbourhood Resource Centre. The goal is to increase well-being in the neighbourhood and reduce/prevent crime by developing stronger relationships among neighbours, between neighbours and service organizations, and between organizations.

On an average day, the centre will respond to a range of individual needs, such as:

- an elderly woman in need of food workers call the soup kitchen, pick up a box of food and deliver it to her home
- a young man who needs housing workers give him an updated list of vacant apartments and a referral to the Ontario Works worker, who makes an appointment onsite to complete intake forms with him
- a sex trade worker seeking medical help workers refer her to the health unit's clinic
- an older gentleman who doesn't have a doctor and needs care workers refer him to the medical clinic

The impact? Services are more accessible and person-centred. Agencies work better together. Vulnerable residents face fewer barriers and feel more accepted. The community has a more positive perception of the neighbourhood.

In the public health unit's view, the initiative is successful because there is a community champion (Sault Ste. Marie Police Services), the neighbourhood residents have a strong voice, the process is not bureaucratic and the partners have created an environment of trust. Although the initial impetus for resource centre was crime prevention, the project has had a positive impact on access to services, health and well-being, and social cohesion.





PRESCRIPTIONS FOR SOCIAL DETERMINANTS OF HEALTH: NIAGARA REGION PUBLIC HEALTH

Paramedics called to deal with a medical problem often see vulnerable people struggling with social issues but do not have the time or resources to respond. To fill this gap, Niagara Region Public Health collaborated with Niagara Emergency Medical Services and INCommunities, the organizations that handle 211 calls from Niagara and the Central South area of Ontario. Paramedics were surveyed to measure their knowledge and awareness of the social determinants of health and health equity and given education, training and some new tools.

Paramedics now go out with a better understanding of the services in the community that can help people deal with social issues and a referral "prescription pad." When they see someone with an unmet need, they can quickly write a "prescription" for the person to contact the 211 helpline. Paramedics report that they now regularly make 211 referrals as part of their calls. The process doesn't add to their workload but it does connect vulnerable people with services. For example:

- A middle-aged woman with respiratory problems frequently called 911 because she was unable to afford her medications and puffers and had transportation issues accessing health care. Although she had refused a referral to the community care access centre (CCAC, now LHIN), she accepted the 211 referral.
- Paramedics saw an elderly man who fell because of physical problems accessing his home.
 Although the man was already a CCAC client for personal care and mobility issues, he and his family were willing to talk to 211 about other services that could help with the cost of accessibility equipment.
- A young couple that had just moved to Ontario were struggling to afford food because
 of the cost of over-the-counter insulin for the woman, who has diabetes. The 211 referral
 helped them find a family physician as well as financial assistance with medications and
 food stamps.
- Paramedics visited an ill, elderly woman who had become increasingly unable to perform daily tasks and is dependent on her children who had to visit more frequently. Paramedics referred the family to the 211 services and the CCAC for home care visits, respite care, personal care and meals. The family had no idea these services were available. They were grateful to be connected with these services.

This new 211 referral resource reduces health inequities by connecting vulnerable people to local programs and services they might not have known existed. It empowers people and allows them to reach out for confidential help when they are ready. It also helps paramedics recognize and address complex social issues and provide better customer service.

CHALLENGING A COMMUNITY TO IMPROVE CHILD HEALTH: THUNDER BAY DISTRICT HEALTH UNIT

Concerned about the health of children in some parts of the community, the Thunder Bay District Health Unit in partnership with the Thunder Bay HKCC Steering Committee used data from several sources (the Census, the Canadian Community Health Survey, the BORN information system on newborn health and local surveys) to paint a profile of child health by neighbourhood. The public health unit identified one particular neighbourhood that was struggling with high levels of social risk: limited access to healthy food, housing, transportation or recreation services and high rates of mental health problems, addictions and racism. To try to close the health gaps and improve the neighbourhood's odds of good health, the public health unit brought neighbourhood champions, community organizations, health organizations, the local school board, police and researchers together. The Neighbourhood Community Partnership Program developed a mix of inter-related interventions including:

- working with the local Community Action Group to provide training and support community-driven initiatives
- offering capacity-building programs, such as cooking classes and a community kitchen
- subsidizing the cost of transportation to programs
- building on the local Good Food Box program to distribute locally produced vegetables and fruit to about 100 families in the neighbourhood

The program is currently being evaluated; however, early signs are that it is contributing to well-being. Said one community member:

"When there's a community kitchen, many of the people who come are the ones that are involved ... the hope is that it creates a community where everybody is looking out for everyone's best interest, and they're all interested in the development of the community both spiritually and materially: that the interactions are positive and the physical hardships are lessening."





WORKING TOGETHER TO ADDRESS FOOD INSECURITY: PETERBOROUGH PUBLIC HEALTH

Curve Lake First Nation was facing a growing problem with food insecurity and high rates of type 2 diabetes, exacerbated by few good quality job opportunities. The Band Council responded by developing a food bank at its health centre but members recognized that more needed to be done to address the underlying factors. The Band Council also wanted to respond to its residents' desire for increased access to healthy foods including more locally grown vegetables and fruit.

Curve Lake First Nations staff worked with Nourish, a collaborative partnership of the YWCA Peterborough Haliburton, Peterborough Public Health (PPH) and GreenUP, which uses food to build healthy inclusive communities through eating, cooking, growing and advocating. Nourish, which grew out of the Peterborough Food Action Network (a working group of the Peterborough Poverty Reduction Network, chaired by the local medical officer of health), tries to increase access to healthy foods. Peterborough Public Health supports Nourish by co-leading the initiative, helping to develop the programs, establishing food literacy standards and sharing a teaching kitchen facility. Public health unit staff have also offered a five-week food literacy program called Come Cook With Us and food handler training/certification at Curve Lake First Nation.

The Nourish program at Curve Lake First Nation, developed with the community, included:

- community dinners to bring people together to discuss ideas for interventions and encourage a sense of belonging
- monthly Just Food boxes, which are now coordinated by Band staff
- a pop-up farmers' market that featured less commonly known local produce as well as how to use those products to make healthy, easy-to-make meals
- incentives such as Nourish Market Dollars given to people who participate in food literacy activities, which encourage them to try activities at home and nudge them to join other food programs
- growing, cooking and canning activities/workshops including collective kitchens
- programs for youth on healthier eating
- Nibi Giinwiindawan We Are Water, an Indigenous Youth and Water Curriculum for children in grades 4 to 6 developed by Curve Lake Elders and other partners with financial support from Healthy Kids Community Challenge Peterborough

The impact? Services are more accessible and person-centred. Agencies work better together. Vulnerable residents face fewer barriers and feel more accepted. The community has a more positive perception of the neighbourhood.

Grounded in the principle of working with and not for communities, the Curve Lake Nourish collaboration ensures that both community members and decision-makers have a say and can shape the activities to meet the community's needs. The activities are also continually modified based on feedback from the community. A report card documenting the impact of Nourish at Curve Lake First Nation, along with three additional sites, will be released in November 2019.



The new Ontario Public Health Standards set out a clear role for the public health sector in health equity. Public health units, in collaboration with other local partners, are expected to champion and facilitate the types of analyses and public policies that reduce health inequities. Medical officers of health – the spokespeople for health in their communities – will actively promote health equity for the entire population. The Ministry of Health and Long-Term Care and Public Health Ontario will champion health equity at the provincial level and provide research, analyses and other supports to public health units.

However, the responsibility for achieving health equity reaches far beyond the public health sector and even the health sector. Other sectors, such as education and the environment, whose policies affect health, must be actively engaged.

With Patients First, Ontario has laid the groundwork for a system-wide approach to health equity. Health equity is now part of the mandate of LHINs. As part of public health transformation, public health units will now be working much more closely with LHINs and the LHIN sub-regions, providing data on the health of local communities and integrating population health initiatives into the health care system. To build on that foundation and enable the public health sector – in collaboration with other partners – to improve the odds of good health for everyone, the Chief Medical Officer of Health for Ontario recommends that the Government of Ontario take the following steps:

1 Support public health to identify "outbreaks" of health inequities and plan effective, sustainable interventions through community development

The goals are to understand the complex, inter-related factors that drive health disparities and find, adapt and adopt effective interventions that will improve health for the entire population/community while targeting those at highest risk. The public health sector should explore a wide range and mix of community development interventions that can influence the behavioural, economic, social and structural drivers of health and well-being. The impact of these interventions should be monitored and measured over time for their individual and combined impact.

2 Work system-wide and government-wide to improve health equity

We must work across the health system, across governments and across other sectors – break down silos – to achieve health equity. We need effective collaborative partnerships across all ministries and organizations that can help reduce or eliminate health disparities. This will mean reaching out and establishing new relationships: different parts of the health system must be able to talk to one another and to other sectors whose actions can influence health. As one of the case studies in this report noted, success depends on avoiding bureaucratic processes that, themselves, contribute to health inequity.





Ministries and organizations must be willing to reach beyond narrow mandates to create healthy communities. Community development solutions require engagement, first and foremost, of priority populations: those clusters of people most vulnerable to health disparities. They also require the active involvement of all other partners, and a willingness to look at all policies, programs and services through a health equity lens. The public health sector can champion a system-wide and government-wide approach by working with partners to identify the factors that influence health and engaging them in implementing effective interventions.

The goal of these partnerships is to implement effective community development interventions that reduce health disparities and even the odds for health for everyone.

Public health units are uniquely positioned to facilitate partnerships at the local level and promote collective action. They already have strong relationships with many organizations in their communities and can leverage these – building closer ties with their municipalities, LHINs, Indigenous communities and other intersectoral partners, including social services, housing programs and shelters, and police services – to improve health equity.

3 Provide data to understand health inequities and inform community development efforts

As part of their new relationship with LHINs and the LHIN sub-regions, public health units will be responsible for bringing information about community health to LHIN planning tables and advocating for the health care system to look beyond traditional health measures to the socio-economic factors that influence health.

To fulfill this role, public health units will need strong local data. In the 2015 report, the Chief Medical Officer of Health recommended that Ontario establish an ongoing health survey that will give all public health units, regardless of size or resources, access to timely high-quality information. Survey data will help public health units understand the complexity of health equity issues, identify priority issues and populations, and plan and evaluate public health programs and interventions.

In addition, the public health sector should make more effective use of other data to understand and improve health equity. Public health units will also need the capacity to apply new tools, such as the Relative Inequality Index (RII) and High Resource User Population Risk Tool (HRUPORT), so they can develop health profiles for their communities that identify clusters of health disparities.

Armed with this information, public health units can work with their partners to reduce health disparities and improve health equity.

Strategic investments in health equity research, partnerships and data will help improve the odds for good health for all Ontarians. They will pay off in better health outcomes for individuals, healthier, happier, fairer communities and lower health care and social costs.

Every effort should be made to ensure the public health sector has the data, knowledge, skills and resources to champion health equity within the health system, with other ministries and levels of government and within communities.

References

- ¹ Ontario Ministry of Health and Long-Term Care. (2018). Health Equity Guideline. Queen's Printer for Ontario. Toronto, ON.
- ² National Collaborating Centre for Determinants of Health. (2014). Glossary of essential health equity terms. Antigonish, NS: National Collaborating Centre for Determinants of Health, St. Francis Xavier University.
- ³ Ontario Ministry of Health and Long-Term Care. (2018). Ontario Public Health Standards: Requirements for Programs, Services and Accountability. Queen's Printer for Ontario. Toronto, ON.
- ⁴ Ontario Ministry of Health. (1994). New Directions Aboriginal Health Policy for Ontario. Queen's Printer for Ontario. Toronto, ON.
- ⁵ Allan B, & Smylie J. (2015). First Peoples, second class treatment: The role of racism in the health and well-being of Indigenous peoples in Canada. The Wellesley Institute. Toronto, ON.
- ⁶ Lavoie J, Gervais L, Toner J, Bergeron O, Thomas G. (2011). The Aboriginal health legislation and policy framework in Canada. National Collaborating Centre for Aboriginal Health. Prince George, BC.
- ⁷ Epstein D and Propublica. (2017). When Evidence Says No, but Doctors Say Yes. The Atlantic.
- ⁸ Smoke-Free Ontario Scientific Advisory Committee, Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2017). Evidence to guide action: Comprehensive tobacco control in Ontario (2016). Queen's Printer for Ontario. Toronto. ON.
- ⁹ Population Health Analytics Laboratory. (2017). Ontario Atlas of Adult Mortality 1992-2014. Trends in Local Health Integration Networks. University of Toronto.
- ¹⁰ Rosella LC, Calzavara A, Frank JW, Fitzpatrick T, Donnelly PD, Henry D. (2016). Narrowing mortality gap between men and women over two decades: a registry-based study in Ontario, Canada. BMJ Open, 6(11): e012564
- ¹¹ T, Wodchis WP, Calzavara A, Manson H, Goel V. (2014). High-cost health care users in Ontario, Canada: demographic, socio-economic and health status characteristics. BMC Health Serv Res, 14:532.
- ¹² Rosenquist JN, Murabito J, Fowler JH, Christakis NA. (2010). The spread of alcohol consumption behavior in a large social network. Ann Intern Med, 152(7):426-33.
- ¹³ Christakis NA, Fowler JH. (2008). The collective dynamics of smoking in a large social network. N Eng J Med, 358(21):2249-58.
- ¹⁴ Mednick SC, Christakis NA, Fowler JH. (2010). The Spread of Sleep Loss Influences Drug Use in Adolescent Social Networks. PLoS ONE, 5(3):e9775.

- ¹⁵ Christakis NA, Fowler JH. (2007). The Spread of Obesity in a Large Social Network over 32 Years. N Engl J Med, 357:370-379.
- ¹⁶ Young E. (2017). How Iceland Got Teens to Say No to Drugs: Curfews, sports and understanding kids brain chemistry have all helped dramatically curb substance abuse in the country. The Atlantic.
- ¹⁷ Cancer Care Ontario, Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2012). Taking action to prevent chronic disease: recommendations for a healthier Ontario. Queen's Printer for Ontario. Toronto, ON.
- ¹⁸ Lachaud J, Donnelly PD, Henry D, Komas K, Calzavara A, Bornbaum C, Rosella L. (2017). A population-based study of homicide deaths in Ontario, Canada using linked death records. Int J Equity Health, 16:133.
- ¹⁹ Lachaud J, Donnelly PD, Henry D, Kornas K, Fitzpatrick T, Calzavara A, Bornbaum C, Rosella L. (2017). Characterising violent deaths of undetermined intent: a population-based study, 1999-2012. Inj Prev, pii: injuryprev-2017-042376 [epub ahead of print].
- ²⁰ Roots of Empathy. (2017). Accessed 2017 from: http://www.rootsofempathy.org
- ²¹ Klijs B, Mendes de Leon CF, Kibele EU, Smidt N. (2017). Do social relations buffer the effect of neighborhood deprivation on health related quality of life? Results from the LifeLines Cohort Study. Health Place, 44: 43-51.
- ²² Guilcher SJ, Kaufman-Shriqui V, Hwang J, O'Campo P, Matheson FI, Glazier RH, Booth GL. (2017). The association between social cohesion in the neighborhood and body mass index (BMI): An examination of gendered differences among urban-dwelling Canadians. Prev Med, 99:293-298.
- ²³ Kim ES, Kawachi I. (2017). Perceived Neighborhood Social Cohesion and Preventive Healthcare Use. Am J Prev Med, 53(2):e35-e40.
- ²⁴ Vang ZM, Sigouin S, Flenon A, Gagnon, A. (2017). Are immigrants healthier than native-born Canadians? A systematic review of the healthy immigrant effect in Canada. Ethn Health, 22(3):209-241.
- ²⁵ Kawachi I, Berkman L. (2000). Social cohesion, social capital and health. In Social Epidemiology. (pp. 174-190). Oxford University Press. New York, NY.
- ²⁶ Khan AM, Urquia M, Kornas K, Henry D, Cheng SY, Bornbaum C, Rosella LC. (2017). Socioeconomic gradients in all-cause, premature and avoidable mortality among immigrants and long-term residents using linked death records in Ontario, Canada. J Epidemiol Community Health, 71(7):625-632.
- ²⁷ Fitzpatrick T, Rosella L, Calzavara A, Petch J, Pinto A, Manson H, Goel C, Wodchis WP. (2015). Looking beyond income and education Socioeconomic status gradients among future high cost users of health care. Am J Prev Med, 49(2):161-71.

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Lead Staff: Elizabeth Choi, Daniel Warshafsky

Staff: Catherine Fraser, Fiona Kouyoumdjian, Gillian MacDonald, Laura Seeds

Writer: Jean Bacon

Publishing: Leora Conway

Contributing Public Health Units: Algoma Public Health, Huron County Health Unit, Niagara Region Public Health, Peterborough Public Health, Sudbury & District Health Unit, Thunder Bay District Health Unit, Windsor-Essex Country Health Unit

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Appendix

Ontario Health Units with Vacant Medical Officer of Health (MOH) Positions* Filled By Acting MOHs as of January 9, 2018

- Grey Bruce Health Unit
- Haldimand-Norfolk Health Unit
- Hastings & Prince Edward Counties Health Unit
- Huron County Health Unit
- City of Ottawa Health Unit
- Oxford County Health Unit
- Porcupine Health Unit
- Renfrew County & District Health Unit
- Timiskaming Health Unit
- Windsor-Essex County Health Unit

Total = 10 Health Units with MOH Vacancies

*Under 62. (1)(a) of the Health Protection and Promotion Act, every board of health shall appoint a full-time medical officer of health. **Vacancies may include positions filled by qualified physicians awaiting appointment by boards of health and ministerial approval.

Ontario Public Health Units with vacant AMOH positions* as of January 9, 2018

- Durham Region Health Department
- Grey Bruce Health Unit
- City of Hamilton Health Unit
- City of Toronto Health Unit
- York Region Health Unit

Total = 5 Health Units with AMOH Vacancies**

*Under 62. (1)(b) of the Health Protection and Promotion Act, every board of health may appoint one or more associate medical officers of health. **Vacancies may include less than or more than one FTE position per health unit and include positions filled by qualified physicians awaiting appointment by boards of health and ministerial approval.





Notes



