Public Health Ontario
PARTNERS FOR HEALTH

Santé publique Ontario
PARTENAIRES POUR LA SANTÉ

Focus On: A Proportionate Approach to Priority Populations

Key Messages

- The Ontario Public Health Standards mandate the identification of priority populations by Boards of Health in order to deliver public health programs and services to meet the needs of their communities.
- The extent to which identification of priority populations should balance determinants of health and burden of disease considerations remains unclear.
- Proportionate universalism is an approach that balances targeted and universal population health perspectives through action proportionate to needs and levels of disadvantage in a population. It can address burden of disease across a number of determinants of health to narrow the gap in health inequality.

Introduction

The Ontario Public Health Standards (OPHS) mandate that public health units (PHUs) in Ontario assess local population needs, including the identification of priority populations. To assist PHUs in meeting the OPHS priority population mandate, Public Health Ontario (PHO) undertook (i) a scoping review of the literature, (ii) key informant interviews (KII) with policymakers and field practitioners, and (iii) a public health unit survey. These were done to determine the meaning of the term priority populations, the intent of this OPHS mandate, how Ontario PHUs are identifying priority populations, and how the concept of priority populations is being applied by PHUs.[1] A comprehensive report of these data collection activities, including a full description of methods and results, is available from Public Health Ontario.

What are priority populations?

According to the OPHS, priority populations are defined as "*those groups that would benefit most from public health programs and services… that are at risk and for which public health interventions may be reasonably considered to have a substantial impact at the population level*".[2] The OPHS state that priority populations are to be identified "*by considering those with health inequities including: increased burden of illness; or increased risk for adverse health outcome(s); and/or those who may experience barriers in accessing public health or other health services or who would benefit from public health action*".[3]

However, based on KII and public health surveys there is a lack of consensus among Ontario public health practitioners regarding how the determinants of health and burden of disease are to be specifically considered, weighted, and analyzed in the identification of priority populations. The literature does not clarify this issue to any great extent, linking the term priority populations to several criteria (in decreasing order) such as: social factors, behavioral risk factors, medical/biological factors or conditions, epidemiological burden of disease, health service access, and geographical factors.[1] Consistent with these findings, our key informant interviews identified that current Ontario public health approaches to addressing priority populations occur along a spectrum, ranging from a *health equity approach* at one end to a *burden of disease approach* at the other. The *health equity approach* considers the determinants of health to be the root causes of health inequalities and indicates that priority populations should be identified based on criteria of relative social disadvantage. The *burden of disease approach* identifies priority populations based on their relative contribution to overall population disease burden. Both approaches draw on epidemiology and surveillance data, and may be augmented with local engagement and other processes.

The main difference between the two approaches is as follows: using the *health equity approach*, a population cannot be called "priority" unless it is significantly disadvantaged with respect to one or more determinants of health, while the *burden of disease approach* does not use the determinants of health as the defining criteria for priority populations. While the OPHS also note that impact or benefit from public health interventions should be considered when identifying priority populations, this did not feature strongly in our literature, key informant interviews or survey.

How do we currently identify priority populations in Ontario?

Based on key informant interviews[1] the dominant interpretation of the OPHS priority populations mandate leans towards a highly-targeted approach in which a sub-group (i.e., the priority population) is chosen as a focus for public health unit resource allocation. Most commonly, Ontario public health practitioners use the term priority populations to refer to a subset of a target population for whom a specific program is tailored based on marginalization, vulnerability or other risk factors.

Public health units reported using a range of approaches to identify priority populations including use of quantitative data sets, mapping, qualitative methods, community consultations and practitioner experience. Examples of PHU actions to identify priority populations include designing methods for data collection and analysis, and the development of tools and checklists to support programs in choosing priority populations (see Additional Resources).

Why do we identify priority populations?

Key informant interviews with policy makers[1] identified the following objectives for the priority populations mandate:

- to strategically balance targeted and universal approaches in the OPHS,
- to allow for program specific, local-level decisions to maximize the benefit and impact of public health unit programs and services,
- to help identify areas of greatest need for resource allocation, and
- to operationalize public health action on the determinants of health.

Therefore, a framework to address priority populations needs to allow for the identification of priorities across a spectrum of need (disease burden *and* determinants of health), depending on the local context. Proportionate universalism offers a framework that meets these criteria.

What is proportionate universalism?

Proportionate universalism[4,5] is an approach that balances targeted and universal population health perspectives. In this way, it supports the vision of the OPHS priority populations mandate. In the words of Dr. Michael Marmot, proportionate universalism "*implies a need for action across the whole of society, focussing on those social factors that determine health outcomes*"[4] and "*…in addressing health inequity, the strategies that should be given priority are those that are universal but are resourced and delivered with an intensity that is related to the level of social need*."[5]

Proportionate universalism recognizes that, across the health gradient, programs, services and policies must include a range of responses to address different levels of disadvantage within the population, as opposed to solely targeting the least disadvantaged groups (see Figure 1). Proportionate universalism must also consider the larger societal organization and community structure, implying that efforts to reduce inequities in local determinants of health be made through the creation of partnerships.

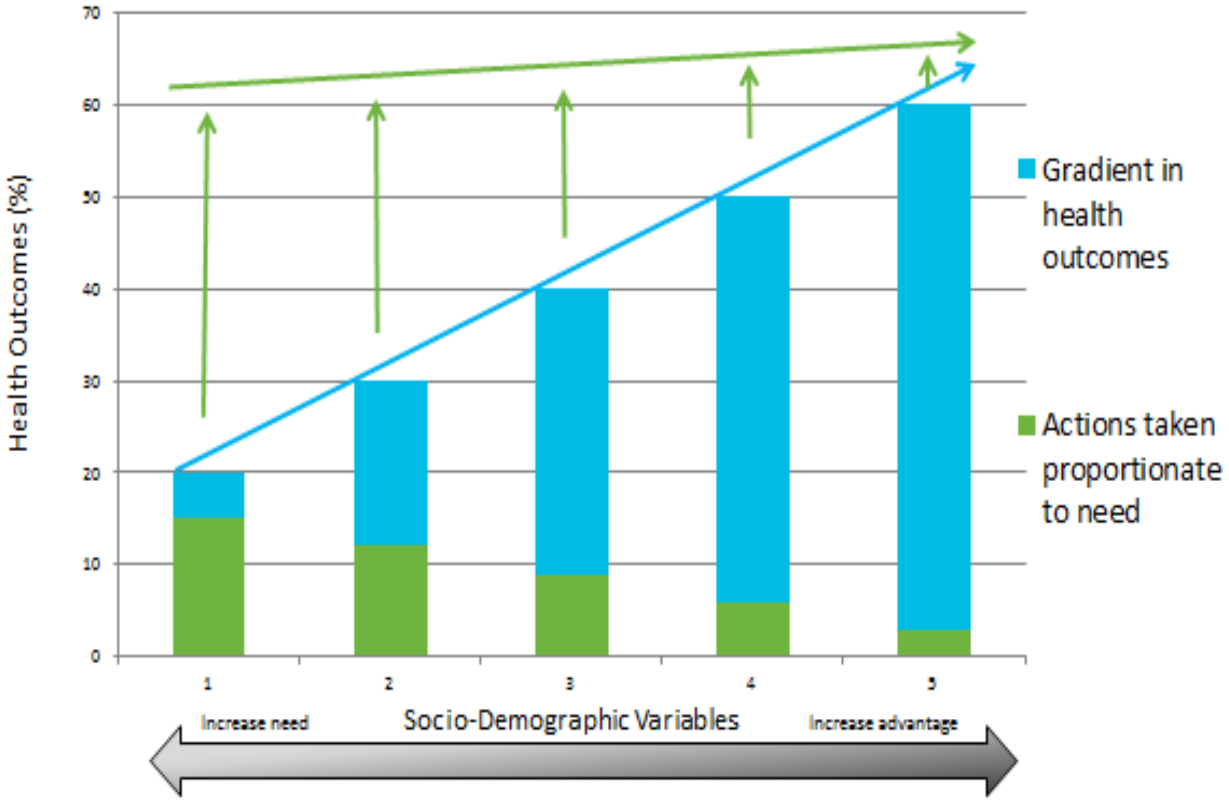

Figure 1: Schematic illustration of proportionate universalism

Identification of Priority Populations Using a Proportionate Universalism Lens

Proportionate universalism can address burden of disease across a number of determinants of health to narrow the health inequality gap. It strategically balances targeted and universal approaches by delivering universalism with an intensity related to the level of social need. Proportionate universalism also operationalizes public health action on the social determinants of health by placing focus on the social factors that determine health outcomes. By directly linking action to both reduced burden and a narrowed health inequality gap, proportionate universalism balances the *health equity* and *burden of disease* approaches to priority populations. Proportionate universalism can be applied in any context, allowing for program specific, local level decisions to maximize benefit and impact of public health unit programs and services.

Fictional Example

The figure below illustrates how a proportionate universalism approach to identifying priority populations could be applied. In this fictional population, Type 2 diabetes mellitus (DM) is strongly associated with low socioeconomic status (SES) and a clear gradient in the burden of disease is noted between the highest and lowest income groups.

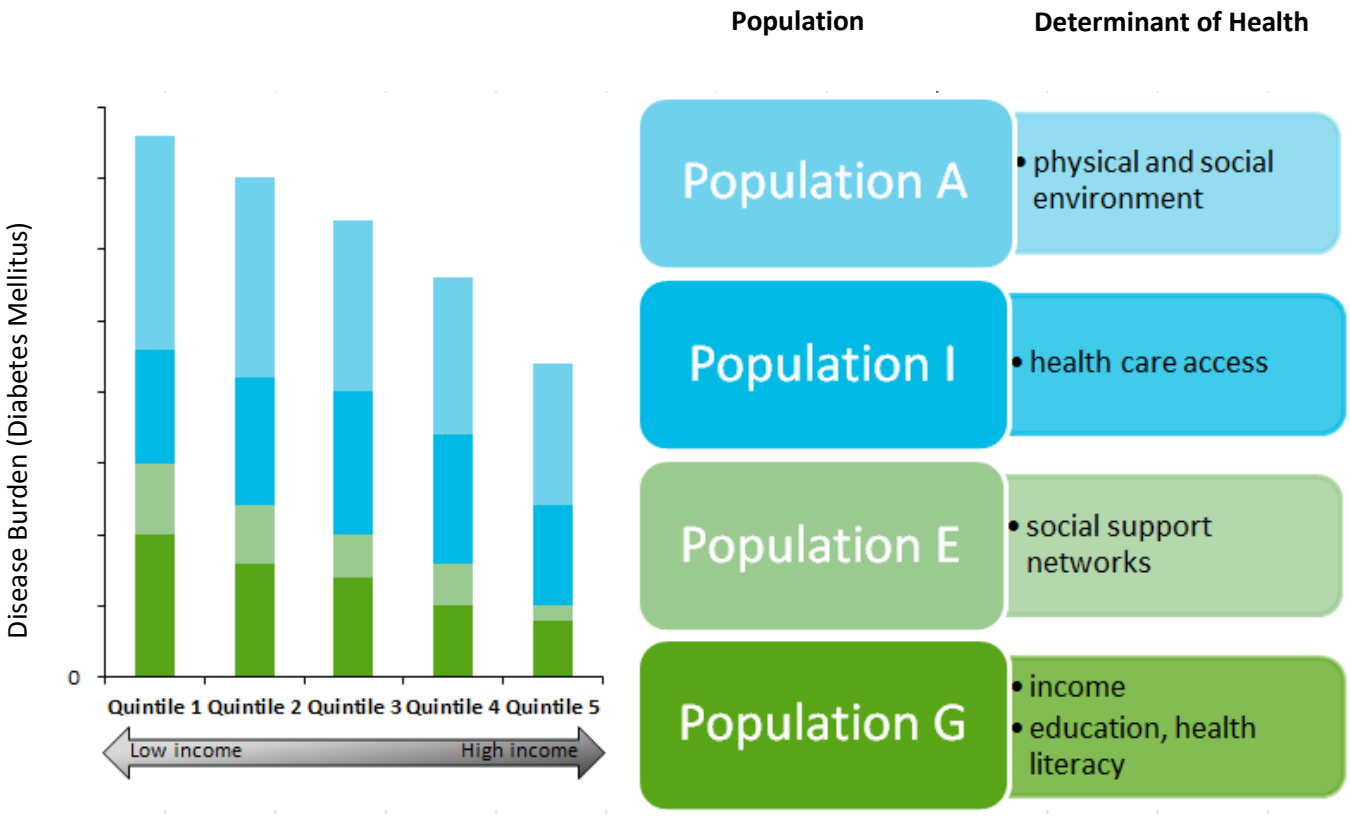

Figure 2: Prevalence of Type 2 Diabetes Mellitus (DM): Fictional example

Taking a proportionate universalism approach to identify priority populations, one would consider:

1. What is the health issue affecting the whole of the population?
2. How is the burden dispersed across relevant measures of the determinants of health (such as income, gender, education, geography, race/ethnicity/Aboriginal identity, access, etc.)?
3. What are the strategies for action across the whole of society, focussing on those social factors that determine health outcomes?
4. Who are the priority populations and how do we serve them across a spectrum of need?
5. Who are the target populations where focussed intervention(s) addressing specific issues of burden or need are required?

When the burden is disaggregated by subpopulations with known social risk factors (for which illustrative examples only are listed):

- Overall there is a health gradient, with higher incidence of disease in the lower income groups
- There is a disproportionately higher prevalence among Population A (light blue) across all income groups.
- Population I (dark blue) also experience a high burden, which decreases progressively with increasing income.
- In Population E (light green) the prevalence of DM is significantly higher in the lowest income quintile.

- For Population G (green), the highest disease burden is distributed comparably between the poorest and the middle income groups.

A proportionate universalism approach would consider taking action to reduce disease burden for all four of these populations at every socioeconomic level. However, given prevalence is highest for Population A (light blue) across all income gradients, this population could be considered a priority population. Specific public health actions to address diabetes in this population could include the development of local community partnerships for nutrition and physical activity classes, specifically designed to be supportive of this population. Addressing the local obesogenic food environment by advocating for policy changes would be another possible public health intervention.

Depending on local contextual factors, the poor elderly could be considered a target population within this framework, given the prevalence of DM is significantly higher among the lowest income quintile. For this population, public health actions might include interventions to improve compliance and adherence to diet and medication use through education, and increased screening of this group at higher risk of acquiring diabetes.

Next Steps

In order for public health practice in Ontario to move toward a consistent approach for priority populations across the province, the following next steps were suggested by practitioners' and experts' key informant interviews and surveys.[1]

- Continue to ensure strong leadership commitment to the OPHS priority populations mandate to operationalize action on the determinants of health.
- Establish a consistent understanding of the priority population term and intended outcomes to support operationalizing the priority populations mandate.
- Address data challenges in measuring population health status, disaggregation of data and evaluation of implemented programs and services.
- Consider data sharing for the identification of priority populations among health units, agencies and community organizations.
- Build public health practitioner capacity to understand and identify priority populations, and to operationalize proportionate universalism as a means of addressing health inequalities and determinants of health.
- Partner with other sectors and stakeholder groups to address the root causes of health inequities leading to increased burden of disease.

A key informant noted "*we knew that nobody had the answer on how to deal with the determinants of health explicitly…. But we need to do that journey together."* The priority populations mandate is one of several important vehicles to address health inequities in Ontario.

Glossary

Burden of disease is a measure of the severity of a health setback for an individual or population, measured by cost, mortality, morbidity, and other key indicators. Source: Adapted from Population Health Impact of Disease in Canada (PHI) Glossary. Ottawa, ON: Public Health Agency of Canada; 2006.[6]

Determinants of health, as per the OPHS, refer to the factors which "play a key role in determining the health status" of the individual and population. These include the following: income and social status, social support networks, education and literacy, employment/working conditions, social and physical environments, personal health practices and coping skills, health child development, biology and genetic endowment, health services, gender, culture and language. Source: Ontario Public Health Standards, revised May 2014.[2]

Health inequality can be defined as differences in health status or in the distribution of health determinants between different population groups. Source: World Health Organization. Health impact assessment: glossary.[7]

Health inequity is the unnecessary, avoidable, unjust and unfair differences in health status or in the uneven distribution of health determinants between different population groups resulting in health inequalities. Source: World Health Organization. Health impact assessment: glossary.[7]

Marginalization refers to a population, a group or individual who is on the periphery of mainstream society or who is a part of neither of two cultures. Source: Alexander GL et al. Journal of Biomedical Informatics 2003;36(4-5):400-407.[8]

Ontario Public Health Standards (OPHS) are published guidelines developed by the Minster of Health and Long-Term Care, pursuant to Section 7 of the Health Protection and Promotion Act, R.S.O. 1990, c. H.7., for the provision of mandatory health programs and services. They are legal mandates that every board of health must comply with in Ontario. Source: Ontario Public Health Standards, revised May 2014[2]

Population health is the state of health of the population, or a specified subset of the population, measured by health status indicators. Source: Last J, editor. A Dictionary of Public Health. New York: Oxford University Press; 2007.[9]

Priority populations, as defined by the OPHS, "are those populations that are at risk and for whom public health interventions may be reasonably considered to have a substantial impact at the population level". Source: Ontario Public Health Standards, revised May 2014.[2]

Proportionate universalism refers to the concept that people across the whole population gradient are entitled to social benefits proportionate to their needs. For policy, it encompasses both targeted and universal approaches to ensure the population as a whole is proportionately allocated benefits and services. Source: Marmot M, Bell R. Public Health 2012;**126**(1):S4-S10.[4]

Public health sector refers collectively to organizations responsible for protecting and promoting the health of a community population. Source: Make No Little Plans. Ontario's Public Health Sector Strategic Plan. 2013.

Targeted approach applies to a sub-group priority population whose eligibility and access to services are determined by selection criteria, such as income, health status, employment status or neighbourhood. It is based on a belief that social constructs are barriers to equitable access to the determinants of health, and that interventions directed to disadvantaged members of society are needed to close the health gap. Source: National Collaborating Centre for Determinants of Health 2013.[11]

Targeted population refers to a priority sub-group within the broader, defined population. Source: National Collaborating Centre for Determinants of Health 2013.[11]

Targeted universalism refers to the eligibility of a population for social benefits involving some type of criteria to determine the true worthiness of this group. Source: United Nations Research Institute for Social Development 2005.[12]

Universal approach refers to the concept that eligibility and access to services such as health are based simply on being part of a defined population without any further qualifiers such as income, education, class, race, place of origin, or employment status. It is based on the belief that each member should have equal access to basic services. Source: National Collaborating Centre for Determinants of Health 2013.[11]

Universalism refers to the eligibility of an entire population to social benefits as part of a basic right. Source: United Nations Research Institute for Social Development 2005.[12]

Additional Resources

Niagara Region (homepage on the Internet). Niagara Falls, ON: Niagara Region; c2013. Priority populations for health story of Niagara; 2013. Available from: http://www.niagararegion.ca/living/health_wellness/health-story/demographics/priority-populations.aspx.

Middlesex-London Health Unit. Identifying priority populations: process, recommendations, and next steps [Internet]. London, ON: Middlesex-London Health Unit; c2012 [cited 2015 Apr 16]. Available from: https://www.healthunit.com/uploads/identifying-priority-populations.pdf

Stratton J, Region of Peel Public Health. Priority populations: method for identifying priority populations in Peel. In: Applying the four P's of the foundational standard: examples from the GTA health units [Internet]. Presented at: 2010 APHEO workshop. 2010 Sep 20 [cited 2015 Apr 16]; Toronto, ON. Available from: http://www.apheo.ca/resources/events/2010/Session1B%20-%20GTA.pdf

Guarda B, Simcoe Muskoka District Health Unit. Identification of priority populations in Simcoe Muskoka [Internet]. Presented at: The Association of Public Health Epidemiologists in Ontario. 2013 Jun 10 [cited 2015 Apr 16]; Toronto, ON. Available from: http://www.apheo.ca/resources/events/2013/conf2013/5_325-430_BGuarda_IdentificationPriorityPopulationsSimcoeMuskoka.pdf

Sudbury & District Health Unit. Priority populations primer: a few things you should know about social inequities in health in SDHU communities [Internet]. Sudbury, ON: Sudbury & District Health Unit; 2009 [cited 2015 Apr 16]. Available from: http://www.sdhu.com/uploads/content/listings/prioritypopprimer.pdf

Region of Waterloo Public Health. Process to determine priority populations [Internet]. Waterloo, ON: Region of Waterloo Public Health; [cited 2015 Apr 16]. Available from: http://chd.region.waterloo.on.ca/en/researchResourcesPublications/resources/Link3.pdf

alpha-OPHA Health Equity Workgroup. Health equity indicators: draft for consultation [Internet]. Toronto, ON: Association of Local Public Health Agencies; Ontario Public Health Association; 2013 [cited 2015 Apr 16]. Appendix B: methods for identifying priority populations; p. 14-5.Available from: http://c.ymcdn.com/sites/www.alphaweb.org/resource/collection/822EC60D-0D03-413E-B590-AFE1AA8620A9/HE_Indicators_Draft_for_Consultation.pdf

Ontario. Ministry of Health and Long-Term Care. First steps to health equity: your guide to equity-based program planning [Internet]. Toronto, ON: Queen's Printer for Ontario; [cited 2015 Apr 16]. Available from: http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/first_steps_to_health_equity_executive_summary.pdf

Association of Ontario Health Centres. Toward equity in access to community-based primary health care: a population needs based approach [Internet]. Toronto, ON:, Association of Ontario Health Centre; 2012 [cited 2015 Apr 16]. Available from: http://aohc.org/sites/default/files/documents/towards-equity-in-access.pdf

Gardner B. Building on the evidence: advancing health equity for priority populations [Internet]. Presented at: OPHA/HPO Fall Forum. 2011 Oct 5 [cited 2015 Apr 16]; Toronto, ON. Available from: http://www.ahrni-irras.ca/index.php?option=com_sobipro&task=download.file&fid=269.8288&sid=102&Itemid=115

References

1. Tyler I, Hassen N. Priority Populations Project: Understanding and Identifying Priority Populations in Ontario. Public Health Ontario. 2015.
2. Ontario. Ministry of Health and Long-Term Care. Ontario public health standards, 2008. Revised May 1, 2014 [Internet]. Toronto, ON: Queens Printer for Ontario; 2014 [cited 2015 Apr 16]. Available from: http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/ophs_2008.pdf
3. Ontario. Ministry of Health and Long-Term Care. Ontario public health standards and protocols : documents [Internet]. Toronto, ON: Queens Printer for Ontario; c2009-2010 [updated 2014Dec 30;cited 2015 Apr 16]. Available from: http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/ophsprotocols.aspx
4. Marmot M, Bell R. Fair society, health lives. Public Health. 2012;126 Suppl 1:S4-10.
5. Marmot M, Allen J, Bell R, Bloomer E, Goldblatt P; Consortium for the European Review of Social Determinants of Health and the Health Divide. WHO European review of social determinants of health and the health divide. Lancet. 2012;380(9846):1011-29.
6. Public Health Agency of Canada. Population health impact of disease in Canada (PHI): glossary [Internet]. Ottawa, ON: Public Health Agency of Canada; 2006 [cited 2015 Apr 16]. Available from: http://www.collectionscanada,gc.ca/webarchives/20071225073933/http://www.phac-aspc.gc.ca/phi-isp/gloassarty.html
7. World Health Organization. Health impact assessment (HIA): glossary of terms used [Internet]. Geneva: World Health Organization; c2015 [cited 2015 Apr 16]. Available from http://www.who.int/hia/about/glos/en/
8. Alexander GL, Kinman EL, Miller LC, Patrick TB. Marginalization and health geomatics. J Biomed Inform. 2003;36(4-5):400-7. Available from: www.sciencedirect.com/science/article/pii/S1532046403001023
9. Last JM. A dictionary of public health. New York: Oxford University Press; 2007.
10. Ontario. Ministry of Health and Long-Term Care; Public Health Leadership Council. Make no little plans: Ontario's public health sector strategic plan. Toronto, ON: Queen's Printer for Ontario; 2013. Available from: http://www.health.gov.on.ca/en/common/ministry/publications/reports/make_no_little_plans/docs/make_no_little_plans.pdf.
11. National Collaborating Centre for Determinants of Health. Let's talk: universal and targeted approaches to health equity. Antigonish, NS: National Collaborating Centre for Determinants of Health, St. Francis Xavier University; 2013. Available from: nccdh.ca/images/uploads/Approaches_EN_Final.pdf
12. Mkandawire T. Targeting and universalism in poverty reduction. Social Policy and Development Programme Paper Number 23 [Internet]. Geneva: United Nations Research Institute for Social Development; 2005 [cited 2016 Apr 16]. Available from http://www.unrisd.org/unrisd/website/document.nsf/462fc27bd1fce00880256b4a0060d2af/955fb8a594eea0b0c12570ff00493eaa/$FILE/mkandatarget.pdf

Authors

Diane Lu, MD, PhD, FCFP, MPH, PHPM Resident, Queen's University
Ingrid Tyler, MD, CCFP, MHSc, MEd, FRCPC, Public Health Physician, HPCDIP

Reviewers

Donna Caputo, Donna Caputo, Public Health Nurse, Algoma Public Health
Erika Haney, SDOH Public Health Nurse, Simcoe Muskoka District Health Unit
Brian Hyndman, PhD Candidate, University of Waterloo
Marty Mako, Health Promoter, Chronic Disease and Injury Prevention Division, Niagara Region Public Health

Acknowledgements

Nadha Hassen**,** HBSc, MPH, Research Assistant, Health Promotion Chronic Disease and Injury Prevention, Public Health Ontario

Tiffany Oei, HBSc, MSc, Research Assistant*,* Health Promotion Chronic Disease and Injury Prevention, Public Health Ontario

Special thanks to the Joint Association of Local Public Health Units and Ontario Public Health Association (alPHa-OPHA) Health Equity Working Group and all its members for their engagement and commitment to this project. The authors also wish to express their sincere appreciation for the effort and cooperation of all of those respondents who participated in the key informant interviews and surveys from Ontario's 36 Public Health Units (PHUs).

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario), Lu D, Tyler I. Focus on: A proportionate approach to priority populations. Toronto, ON: Queen's Printer for Ontario; 2015.

ISBN: 978-1-4606-5724-9

Source Material

The material in this document is based on Ontario Agency for Health Protection and Promotion (Public Health Ontario) Tyler I, Hassen, N. Priority Populations Project: Understanding and Identifying Priority Populations for Public Health in Ontario. Toronto, ON: Queen's Printer for Ontario; 2015. Please refer to this source for detailed methods, results, and analysis.

Disclaimer

This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario's government, public health organizations and health care providers. PHO's work is guided by the current best available evidence.

For Further Information

Knowledge Synthesis and Evaluation Services, Health Promotion, Chronic Disease and Injury Prevention
Email: hpcdip@oahpp.ca

Public Health Ontario

Public Health Ontario is a Crown corporation dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. Public Health Ontario links public health practitioners, front-line health workers and researchers to the best scientific intelligence and knowledge from around the world.

Public Health Ontario provides expert scientific and technical support to government, local public health units and health care providers relating to the following:

- communicable and infectious diseases
- infection prevention and control
- environmental and occupational health
- emergency preparedness
- health promotion, chronic disease and injury prevention
- public health laboratory services

Public Health Ontario's work also includes surveillance, epidemiology, research, professional development and knowledge services. For more information about PHO, visit www.publichealthontario.ca.

Public Health Ontario acknowledges the financial support of the Ontario Government.