Climate Change Adaptation and Health Equity Workshop

Workshop Summary Report
Metro Hall, 55 John Street, Room 310, Toronto
May 24, 2011

Report Prepared By:
EXECUTIVE SUMMARY

On May 24, 2011, Clean Air Partnership (CAP) and Toronto Public Health (TPH) jointly organized and hosted a Climate Change Adaptation and Health Equity workshop in order to initiate a broader discussion and subsequent action toward climate change adaptation and health equity. The workshop results will be of use to municipalities, NGO’s and other sectors who work with vulnerable populations.

The workshop included a series of presentations, divided into two panels:

Panel #1: Climate Change and Health Equity
- Carol Mee, Toronto Public Health: Climate Change and Health Equity: What do we know for Toronto so far?
- Kaila-Lea Clarke, Health Canada: Vulnerability Assessments in Canada; and
- Tara Zupancic, Centre for Environmental Health Equity: SUCCEED program - Supporting Urban Communities’ Capacity to Promote Environmental Health Equity Through Dialogue-Centred Research.

Panel #2: Adaptation and Health Equity
- Bob Gardner, Wellesley Institute: Building Equity into Policy and Planning;
- Chris Buse, University of Toronto: Changing Climates, Changing the Way we Adapt Together: Public Health Practice and Community Collaboration; and
• Brian Hyndman and Ingrid Tyler, Ontario Agency for Health Protection and Promotion: Proposed Equity Assessment Frameworks for Ontario’s Public Health Units.

Following the morning panel, workshop participants had an opportunity to discuss the following questions:
- What is our vision for a healthy, resilient community?
- How can we measure the impacts of climate change on vulnerable populations?
- How can we better engage politicians, staff and communities around climate change and health equity?

The following were the recurring themes discussed:
- A healthy, resilient community has foresight; balances social, economic and environmental factors; is informed, accessible and inclusive; has high level adaptive capacity; and has strong trusted communication networks.
- We can measure the impacts of climate change on vulnerable populations by examining both qualitative and quantitative data; implementing surveillance tools; implementing surveys and focus groups; examining land use data and statistics; and working with vulnerable populations and community organizations directly.
- In order to achieve better engagement, we need to link into existing programs; show the solution, not just the problem; help people understand the issues; work with community champions; created targeted messaging; and show that helping vulnerable populations is good for the whole municipality.

Following the afternoon panel, workshop participants had an opportunity to discuss the following questions:
- What types of adaptation initiatives are already being implemented? To what extent do these incorporate health equity considerations? How can these be improved?
- How can we measure success?
- What are some of the challenges and barriers we need to overcome?

The following were the recurring themes discussed:
- There is a need to include climate change adaptation in existing programs and initiatives.
- Some successful programs include emergency heat response, green roofs, Tower Renewal, walking initiatives, bicycle paths, urban canopy renewal, Live Green Toronto, and the Air Quality Health Index (AQHI).
- We can measure success through behaviour change; mortality and morbidity data; whether there is uptake of the program or policy; sustainability of the program or initiative; community involvement; level of demand; success of pilot programs; media scans; examining whether the program can be scaled up; whether it is moving into other jurisdictions.
- Challenges and barriers include the availability of data, stigmatization, lack of communication, conflicting policies, outdated legislation, political resistance, and lack of evidence for invisible populations.

The workshop concluded with closing remarks from Eva Ligeti, Executive Director for Clean Air Partnership.
OVERVIEW

Background and Workshops Goals

The goal of the Climate Change Adaptation and Health Equity workshop was to encourage participants to include climate change adaptation into their portfolios. The workshop was the first in a series of five workshop funded by the Province of Ontario under the community initiatives partnership. Other workshop topics included critical infrastructure and management, climate change adaptation impact on high rise residential buildings, the urban forest, and climate change adaptation in the energy sector. As part of this initiative, Clean Air Partnership will also be implementing a series of training workshops on how to plan to incorporate climate change adaptation issues into existing programs and activities.

“Climate Ready” Report

The Ministry of the Environment (MOE) released a document entitled “Climate Ready”. This report is a strategic framework that lays out a suite of actions to help Ontario deal with the impacts of climate change. The document includes five goals, which encourage working together, enhanced data collection, collaboration, and mainstreaming climate change adaptation.

The combined goal of the report and the workshop was to spark interest and implementation of climate change adaptation.

HEALTH EQUITY: WHAT DO WE KNOW SO FAR? (Presentation #1)

Carol Mee, Toronto Public Health, opened the workshop with a presentation about climate change and health equity in the City of Toronto. During her presentation, Ms. Mee, discussed the following main points:

- The extreme weather expected with climate change is likely to test the resilience of all populations…but the ability of some groups to cope with extreme weather events may be especially limited.
- It is crucial to ensure that climate change adaptation efforts do not widen the health inequality gap.
- Health inequalities can arise when certain groups experience inequities and multiple stressors.
- Potential direct health impacts of climate change in urban areas include:
  - More extreme weather events (including heat waves);
  - Increased air pollution (e.g. ozone);
  - Increased vector-borne illnesses;
  - Increased illnesses from food and water contamination; and
  - More allergies from altered pollination seasons.
- Weather can interact with determinants of health. Low income groups may have difficulty recovering from losses, property damage, or displacement after an extreme event such as a storm (e.g. Hurricane Katrina).
Among homeless people, weather conditions such as extreme rain, heat and cold worsen pre-existing health conditions such as mental illness, respiratory and cardiovascular diseases, social isolation and drug use.

Heat vulnerability mapping in the City of Toronto indicates that the higher the income in a neighbourhood/community the higher the access to cooling. Also, those living in high-rise buildings are most likely to be exposed to higher temperatures. Most of these residents are low-income and new immigrants. This key group has less access to air conditioning (AC).

Vulnerability may be broken down into exposure, sensitivity, and adaptive capacity.

Challenges to climate change adaptation include:
- No local climate projections available;
- Trying to plan for predicted/future conditions that are uncertain;
- How to evaluate vulnerability given many disparate potential types of impacts?
- Indirect nature of some climate/health links; and
- This is still an emerging area of research.

**QUESTION and ANSWER PERIOD**

Following Ms. Mee’s presentation, Mr. Faught opened the floor to questions. The following is a summary of the Question and Answer period. Questions are noted with a Q, comments with a C, and answers with an A.

**Q** – Looking back at your heat vulnerability map, do you have data about whether AC units were available in the vulnerable high-rise areas?

**A** – We have some data but not a lot. In discussions with Toronto’s Municipal Licensing and Standards division, we learned that very few of the older buildings have central A/C. We did a cooling pilot in one of the older buildings with no central A/C, and we observed from the outside of the building that some units had window air conditioners. In discussions with tenants we learned that some people had window units that had not been installed because of personal safety concerns (for those people living on the ground floor), or difficulty arranging safe installation.

**Q** – Do you look at indicators other than age and number of trees?

**A** – We also look at exposure in terms of surface temperature, rented dwellings, high rise density, and population density. Sensitivity was captured using indicators such as low-income, children, recent immigrants, disability, seniors etc. These indicators are still being reviewed, and the mapping project is being further validated. We want to make sure the indicators are the right ones to be using.
HEALTH VULNERABILITY ASSESSMENTS IN CANADA
(Presentation #2)

Kaila-Lea Clarke, Health Canada, presented guidance and considerations for undertaking climate change and health vulnerability assessments. Ms. Clarke supplied examples illustrating the types of contextually rich information, as well as relevant and practical findings that assessments can uncover. The following main points were highlighted during her presentation:

- Climate change is happening. Climate change will have effects on human health as well as health care services.
- Canadians will have to adapt in order to protect their health and well-being in the presence of current and future climate stressors.
- A number of studies have documented the growing risks to the health of Canadians from climate change, including Human Health in a Changing Climate: A Canadian Assessment of Vulnerabilities and Adaptive Capacity released in 2008, which can be used to inform regional climate change and health vulnerability assessments and the development of adaptation options.
- Vulnerability assessments are undertaken to determine existing levels of risk, identify and better understand vulnerabilities, and stimulate actions to increase the resilience of individuals and communities.
- Health Canada is developing guidelines for public health officials to use to assess individual and community level vulnerabilities to extreme heat events. The document will be released later this year.
- The assessment guidelines provide information on assessment steps, research methods, data sources and stakeholder engagement strategies that can be used to identify heat-health vulnerabilities at the community or regional levels.
- Equity issues can be addressed within assessments by ensuring that the interests and unique characteristics of the most vulnerable are considered and addressed at the planning stages and throughout the entire assessment process.

SUCCEED PROGRAM
(Presentation #3)

Tara Zupancic, Centre for Environmental Health Equity, discussed the SUCCEED program - Supporting Urban Communities’ Capacity to Promote Environmental Health Equity Through Dialogue-Centred Research. Ms. Zupancic covered the following main points during her presentation:

- The SUCCEED program engaged 49 community researchers across Vancouver, Toronto, and Winnipeg.
- The program engaged low-income/marginalized communities.
- Community members worked in groups of 5 or 6, and went out to their neighbourhoods to photograph and discuss their environmental health challenges. They then went to other less
vulnerable parts of the city to see if those communities face the same challenges.

- Researchers found there were less greenspaces and trees in vulnerable communities. This lead to poor air quality and the heat island effect in vulnerable neighbourhoods.
- There was stigma associated with vulnerable communities. For example, greenspace was not considered to be tolerated or encouraged in these neighbourhoods due to the type of activities that may take place there – i.e. drug dealing, place for aggressor to hide, place for homeless people to sleep.
- Researchers found there was higher population density – high rise buildings – in vulnerable communities.
- Researchers found there were no places or much fewer places to sit and rest (i.e. benches) in vulnerable communities.
- Researchers found there was less access to healthy and affordable food in vulnerable communities – no bigger grocery stores, farmer’s markets or community gardens.
- Researchers found a lot of “wasted” land that could be used for community gardens or greenspaces in vulnerable neighbourhoods.
- Overall, there is a compounding of vulnerabilities such as high-rise living, exposure to air pollution, stressful environment, lack of greenspace, hot weather, stigmatization etc.

**QUESTION and ANSWER PERIOD**

Following Ms. Zupancic’s presentation, Mr. Faught opened the floor to questions. The following is a summary of the Question and Answer period.

Q – Any suggestions on how to make community initiatives successful? Without a community motivator how do we keep community gardens going? There was a large grocery store in the Finch and Jane area that failed, because people didn’t shop there, using smaller shops instead. Any hints on how to make it work?

A – The Greenest City initiative in Parkdale is successful. These kinds of initiatives need to be rooted in community and linked to existing community partners. This was a key suggestion from our community researchers. This type of network would also allow funding to be channelled more efficiently. It is important to work with existing relationships and networks. With respect to the grocery store issue, it is more complex, we discovered a lot of disagreement on solutions for food access issues. One proposed solution was a subsidized farmers market.

Q – With respect to overlapping vulnerabilities, I think it is difficult for communities like that to support each other. When there are so many vulnerable people how can we expect the vulnerable to have the time and resources to look after each other. How do communities manage? What strategies have emerged?

A – We found that in all the cities there is an interesting contrast – there was an understanding that their communities were different and they had a stronger sense of community due to a need to work together to meet basic needs. Many people help others who are in the “same boat”, despite their vulnerabilities and lack of resources. This was seen as a strength in comparison to other neighbourhoods. Community members had a lot of great ideas for changes, but the challenge is how to provide funding for small initiatives. We found there are administrative barriers to how money gets distributed for various smaller initiatives. We also found that community members want to appropriate unused space and transform it into community gardens or
greenspaces. However, if you are dealing with challenges related to poverty or mental illness, it is more difficult to come together as a community and galvanize. It is beneficial to the health of the entire city to rally together to support these communities’ health and aspirations for their neighbourhood.

C – In Montreal there is an NGO that works to create greenspaces. They managed to get volunteers and planted hundreds of trees, and the City bought into this as part of their green strategy. The organization used most of their volunteers to promote this initiative, rather than plant trees. I was interested to see how many volunteers they had. They used their volunteers to get city support, zoning changes, lobby politicians etc.

C – We have to consider how certain parts of the city are stigmatized, and that it isn’t just getting people together to rally, but needing to change the perceptions people have of an area. We need to look at the community through a different lens. We have to recognize that there are compounded social issues that need to be addressed.

Q – Do you have plans to look outside the downtown core? The environment is different in Etobicoke or Scarborough than downtown Toronto.
A – It was hard to make a decision about which communities to work in. We chose Parkdale due to the relationships we had already established in that community. Inner city issues are different than suburban issues.

The presentations that were available at the time of report production can be found in Appendix B.

DISCUSSION ROUNDTABLES
(Morning)

Following the presentations, workshop participants had an opportunity to breakout out into working groups and provide feedback on the following questions:

1. What is our vision for a healthy, resilient community?
2. How can we measure the impacts of climate change on vulnerable populations?
3. How can we better engage politicians, staff and communities around climate change and health equity?

The following is a summary of the main discussion points per each question.

What is our vision for a healthy resilient community?

- A community that can learn and adapt.
- A community that has increased awareness, and decreased vulnerabilities and weaknesses.
- A community that is socially embedded and fighting social isolation.
- Foresight – ability to effectively capitalize on diverse community skills and knowledge.
- Capitalizing on common interests, but also in a more holistic way.
- Socially embedded in the wider community.
- Communities that are supportive and sustainable on their own.
• All community members are able to adapt without being stigmatized.
• Pride and connection to the community.
• Community cohesion, using existing rooted organizations.
• Diffusion of responsibility in the community.
• Informed, inclusive, accessible network where policy decisions are driven and evaluated at a community level and funding is available to guide processes in the community.
• Has strong community leaders.
• A resilient and healthy community has options – more than one way to address a problem.
• Overall trust and reciprocity.

How can we measure the impacts of climate change on vulnerable populations?
• Weigh the values of spending resources on impact assessments versus resources spent on adaptation projects → what is the right ratio of proof to action?
• We need to define what should we be measuring and how?
• Different forms of vulnerability – what vulnerabilities exist today versus what vulnerabilities will exist in the future.
• Health surveillance – documenting existing vulnerabilities in infrastructure, health and the natural world. – continue to push forward with this.
• Prioritization of needs – what gets subsidized, who gets access and how, social spending etc.
• Shifting value in measurement – economic versus other values.
• How do you measure interventions if it’s good when nothing happens?

How can we better engage politicians, staff and communities around climate change and health equity?
• Provide accurate data on heat mortality/morbidity; visits to emergency rooms; calls to Telehealth Ontario; increased incidence of emergency treatment; and EMS calls to seniors’ homes / health institutions.
• Use a collection of anecdotal data to make the business case/political argument for climate change action.
• Prioritize needs, funding and access in social spending.
• Express the needs in the language of the people – paying close attention to what matters to them and then demonstrate the link to climate change – using the language of the community to leverage political action.
• A lot of data is not being collected – emergency room visits, heat related deaths etc.
• We need detailed Statistics Canada census data.
• Look at both quantitative and qualitative data.
• Talk to agencies, organization and community groups about the data they already collect.
• Identify a process to identify vulnerable populations.
• Include qualitative processes in impact assessment.
• We can measure the levels of community engagement, toxicity, drainage, public access, public health impacts through fine-tuned surveillance tools.
• Create a clearing house for data.
• Perform focus groups and surveys with vulnerable populations.
• Engage in community-based research with respect to health surveillance, and infrastructure.
• Collaborate with other organizations.
• Bringing forward issues but also solutions.
• Use direct contact, and identify co-benefits.
• Speak to implementation – how to save $. Economics speak to politicians.
• Adapt to people’s needs, and be strategic.
• Identify the “worries” of your audience and create solutions related to climate change.
• Make climate change relatable.
• Targeted education campaigns.
• Get to all groups through their children. Children as the messengers.
• Show all segments of the population that helping the vulnerable is best for the entire city.
• Use key spokespeople and champions.
• Use numbers to show costs and health impacts.
• Avoid the debate on climate change, talk about the obvious issues such as health effects of extreme heat.
• Let communities use their voice, and define their terms.
• Support innovative work currently happening within communities, and draw attention and reinforce good work.

A summary of each table’s discussion can be found in Appendix C.

BUILDING EQUITY INTO POLICY AND PLANNING (Presentation #4)

Bob Gardner, PhD., Wellesley Institute, provided a presentation on the planning and strategy required to address complex social determinants of health. Mr. Gardner covered the following main points during his presentation:

▪ There is a clear gradient in health in which people with lower income, education or other indicators of social inequality and exclusion tend to have poorer health. In addition, there are systemic disparities in access to and quality of care within the healthcare system.
▪ Addressing health disparities has become a major priority within the health system.
▪ Overall health is shaped by factors well beyond health care such as income inequality, the jobs we have, racism, housing and living conditions, social connectedness. These are the social determinants of health.
▪ Reducing health disparities involves far more than health reform, it requires a comprehensive strategy to drive policy action and social change across the social determinants of health (SDoH).
▪ Environmental factors, such as air, water, built environment, communities we live in, are crucial components of the social determinants of health. Hence climate change and its effects on air, water, disasters and other environmental trends is a health issue.
Some health disadvantaged populations are far more vulnerable to the effects of climate change and other environmental driven problems. Some populations also have fewer resources and less capacity to cope with the impact of climate change and other emerging challenges.

Health Equity can be a unifying idea that enables us to see opportunities for good health and wellbeing as a basic right of all; recognize pervasive health disparities as an indictment of an unequal society; recognize that coming together to address the social determinants of health will pull together and benefit many other spheres such as building safe and healthy living environments and communities; and enable us to work together through collaboration and mobilization.

Determinants interact and intersect with each other, and have a reinforcing and cumulative effect on individual and population health.

The goal is to ensure equitable access to high quality healthcare regardless of social position. We can do this through a multi-pronged strategy/framework that can be adapted to any sector:

- Building health equity into all health care planning and delivery;
- Aligning equity with system drivers and priorities;
- Embedding equity in provider organizations’ deliverables, incentives and performance management;
- Targeting some resources or programs specifically to addressing disadvantaged populations or key access barriers; and
- Thinking up-stream to health promotion and addressing the underlying determinants of health.

In order to address social determinants of health we must start with a clear strategy: make population health and equity one of driving public policy priorities; have a clear vision of success of what health equity looks like; identify key levers or drivers for change; identify a coherent and coordinated set of programs and activities; and identify the principles, assumptions, ambitions and activities that will lead to the changes we want.

Population health and health disparities – and climate change – and their interaction – are classic “wicked” policy problems.

Equity focused planning tools include:

- Simple equity lens;
- Health Equity Impact Assessment (HEIA);
- Equity audit;
- Equity-focused needs assessment; and
- Equity-focused evaluation.

Embed equity into targets, incentives and ongoing performance management.

The key to success involves cross-sectoral collaboration such as the work being done by the public health departments and local health integration networks (LHINs); and the development of cross-sectoral policy frameworks and/or action plans.

Conclusions:

- Health disparities are pervasive and deep-seated – but we can’t let that paralyze us.
- We need a comprehensive and coherent health equity strategy – but we can’t wait for perfect strategy.
- We need to think big and think strategically – but get going.
• There is a solid base of evidence, provider experience, commitment and community connections to build on.
• Any policies addressing climate change, air and other environmental issues need to take health impact and determinants into account.

**QUESTION and ANSWER PERIOD**

Following Mr. Gardner’s presentation, Mr. Faught opened the floor to questions. The following is a summary of the Question and Answer period.

C – I just wanted to share that Toronto Public Health has great partnerships in place, so our heat maps are part of the Toronto community health profiles. We will have more interactive mapping with the community as we move forward.

C – That kind of mapping is a great starting point.

**PUBLIC HEALTH PRACTICE AND COMMUNITY COLLABORATION (Presentation #5)**

Chris Buse, University of Toronto, discussed the need to build equity into the collaborative process in communities in order to achieve climate change adaptation goals. Mr. Buse covered the following main points during his presentation:

- Most of what influences our health is outside the Health sphere, such as social and economic factors. Many communities have already taken up climate change as part of their work.
- Collaboration needs to be undertaken at multiple levels throughout the health services industry. Local Health Integration Networks (LIHNs) and community health centres have the benefit of being situated within a broader community, but Public Health Agency of Canada (PHAC), Health Canada, and other public health agencies (local or regional) are also important actors at the local level as well.
- The scope and scale of the problem – climate change, energy insecurity and environmental degradation – demonstrate the interconnected nature of these threats and the requirement for an intersectoral and holistic response, thus collaboration is key to the solution.
- The challenges for the public health sector include:
  - Communities are culturally and geographically specific, and climate change will also have geographic specificity, the extent to which we are only beginning to uncover;
  - Little is known about working effectively with communities in a participative way;
  - The need to address current state of health equity while adapting to new challenges;
  - Requirement to engage in practices that are on the fringes of conventional public health practice; and
• Intersectoral collaboration holds the potential to address pathways to health equity but may require significant resources.

• The challenges for communities include:
  • Climate change holds the potential to exacerbate existing health inequalities;
  • Requires time and energy; and
  • Requirement to capture the diversity within communities.

• Options for working together include:
  • Networking;
  • Consultation/Advisory;
  • Cooperation;
  • Coordination;
  • Coalition; and
  • Collaboration.

• Collaboration is a form of power-sharing that allows for equity, inclusivity, empowerment, strong decision-making, generating social capital, cultural capital, two-way learning, and breaking down institutional silos.

• Collaboration holds the potential—if done well—to allow for greater power sharing between and within organizations. Valuing community knowledge as equal to our own ‘scientific’ knowledge or rationality is of central importance if power-sharing and empowerment (i.e. ‘power with’ rather than ‘power over’) are to be central goals of collaborations between communities of practice and public health institutions.

QUESTION and ANSWER PERIOD

Following Mr. Buse’s presentation, Mr. Faught opened the floor to questions. The following is a summary of the Question and Answer period.

Q – In the context of making change happen you need to share successful examples. Where can we find these success stories?
A – Keeping in mind the infancy of this field, one example comes to mind, specifically the Toronto Food Strategy, which was developed in collaboration. I also wanted to mention that I live in Parkdale and I see what an engaged community Parkdale is, as discussed in Tara’s presentation.

Q – I was thinking about overcoming apathy. Every time we develop a plan we consult with the public and stakeholders. Some people go to all consultations and give the same complaint, but it is not constructive feedback. It is very expensive to do consultations. How do we overcome this problem? How do we engage the whole community?
A – I want to start off by saying that we have to respect the democratic right of stakeholders and the public to choose not to participate. We have to ask ourselves: how do we invite people? Who do we invite? We need to do an evaluation to see what is causing the problem. It isn’t easy, and intersectoral engagement is very resource intensive. We may need new and innovative ways to engage communities and reach out.

Q – Is there a difference between consulting and engaging a community? I think there is a complicated spectrum about how we engage the community, and how they chose to participate.
A – You are right, we will always run up against this idea of the disengaged citizen.
Q – Are you or your group engaged in the collaboration process in your current research projects?
A – We are engaged in a number of research projects. We have an energy justice project, and we are working collaboratively with NGOs and champions as part of this project. We are hoping to work with ‘transition towns’ in the future to see how they address climate change and energy use. What we are doing has to have a benefit to the community; we need to be able to offer something to the community as part of the process. We also want to create long-term well-established working relationships.

PROPOSED EQUITY ASSESSMENT FRAMEWORK FOR ONTARIO’S PUBLIC HEALTH UNITS (Presentation #6)

Brian Hyndman and Ingrid Tyler, Ontario Agency for Health Protection and Promotion, presented their proposed health equity assessment framework for Ontario’s public health units. Mr. Hyndman and Dr. Tyler discussed how the proposed equity assessment framework can assist health units with implementing the requirements of the Ontario Public Health Standards (OPHS) Foundational Standard, and illustrated how the framework can be used to guide the planning, implementation and/or assessment of public health unit initiatives. The following are the main points covered during their presentation:

- **Health Equity** is the absence of systematic and potentially remediable differences in one or more aspects of health across populations or population groups defined socially, economically, demographically, or geographically.
- **Health Inequalities** are differences in health status experienced by various individuals or groups in society. These can be the result of genetic and biological factors, choices made or by chance, but often they are because of unequal access to key factors that influence health like income, education, employment and social supports.
- **Health Inequities** are differences in health which are not only unnecessary and avoidable, but in addition are considered unfair and unjust.
- There are three basic types of equity public health impact assessments (EPHIA):
  - Desk-based EPHIA
  - Rapid EPHIA
  - In-depth EPHIA
- The proposed Health Equity Assessment Frameworks consist of the following three steps:
  - **Step 1**: Identify and assess health inequities/inequalities related to the issue(s) addressed by your program/policy.
  - **Step 2**: Determine changes to your program/policy to reduce the health inequities identified above and modify your program/policy through incorporation of these actions.
  - **Step 3**: Evaluate the impact of the above work on the reduction of health inequities to guide further
modifications to the programs/policies under consideration.

- The framework is meant to be a helpful tool, and can be adjusted to any situation. It is not meant to be dogmatic.

Dr. Tyler and Mr. Hyndman then provided a detailed example of how the framework can be applied to sun exposure health risks.

**QUESTION and ANSWER PERIOD**

Following Mr. Hyndman and Dr. Tyler’s presentation, Mr. Faught opened the floor to questions. The following is a summary of the Question and Answer period.

**C** – The sun exposure example you provided is an interesting challenge for us to look at. I think for the high-income correlation it is not really “unjust” and “unfair” so it’s not an inequity. We want to look at vulnerable populations not people who go on vacation in Cuba and don’t wear sunscreen.

**A** – This example showed us that we definitely need more research and data on homelessness and people with disabilities in relation to sun exposure and melanoma.

**Q** – As part of the sun exposure example, did you look at artificial tanning?

**A** – No, and none of the data lead me to it. It is an emerging issue.

**Q** – How do you proceed when there is no data? That is a major challenge. How do you overcome that?

**A** – As part of this example, I did an avid search of Google Scholar and academic literature, but I did not look at grey literature. There is nothing stopping you from collecting additional data through focus groups, stakeholder consultations etc. if it is an important issue to you or your organization. I think the data is an important place to start but it is not limiting. Just because it is not available in scientific data, doesn’t mean you can’t look for additional information, although it would be more research intensive.

**Q** – Where do policies from other Ministries fall in here? For example for day care centres, teachers can’t put sunscreen on the child, and a 4 year old can’t put sunscreen on themselves. I think there are programs that hinder these positive steps.

**A** – There is a question in Step 2 of the framework that addresses other Ministries and programs. We did not have enough time to delve into that level of detail in this example.

**Q** – In your first table there is mention that there is a higher level of melanoma in high-income groups. How does that touch on equity?

**A** – We talked about levelling up. You want to move those that are lower on the social or economic ladder and move them up. We want to bring everyone to one level, to create an equal playing field.

The presentations that were available at the time of report production can be found in Appendix B.
DISCUSSION ROUNDTABLES

(Afternoon)

Following the presentations, workshop participants had an opportunity to break out into working groups and brainstorm and provide feedback on the following questions:

- What types of adaptation initiatives are already being implemented? To what extent do these incorporate health equity considerations? How can these be improved?
- How can we measure success?
- What are some of the challenges and barriers we need to overcome?

The following is a summary of the main discussion points per each question.

**What types of adaptation initiatives are already being implemented? To what extent do these incorporate health equity considerations? How can these be improved?**

- Current initiatives in Toronto include: Urban Canopy Renewal/tree planting. It’s easier to increase urban shade where greenspace/parks already exist; rather than re-appropriating paved/built areas for tree planting; more intensive resource use.
- City of London “Million Trees Program” is a good example of subsidizing costs. Private partners purchase trees (i.e. buying a $100 tree for only $10).
- Programs can be improved by breaking down silos to look at supports that are required for effective intervention e.g. need transportation to get to cooling centres.
- Successful example is Heat Response program in Toronto, which targets vulnerable populations through community agencies, and drop-ins with extended hours. The program also provides TTC tokens to get to cooling centres. There is also a Parkdale drop-in and heat registry to acquire air conditioners.
- With respect to flooding, more vulnerable groups live in areas that are at higher risk of flooding but information is not targeted.
- Leveraging local resources – need to find out where people get their information and how they communicate.
- Need to link to existing personal social networks, not only mass media/internet.
- Important that public health is out in the community doing hands-on work rather than emphasizing evidence-based practice.
- Incorporating equity into planning.

**How can we measure success?**

- Defining what “success” is.
- Application of assessment protocols/tools/case studies to other communities following a pilot project.
- Evaluate if a program or initiative can maintain its momentum?
- Measure participation and use of interventions.
- Using proxy indicators that have been identified in the literature.
- Monitor indicators of the built environment such as tree cover, green roofs, public transit, bicycle paths etc.
• Measure outputs and impacts of interventions.
• New technique – syndrome surveillance system (KFLA) e.g. infectious disease, heat monitors etc.
• Bring in the idea of multiple vulnerabilities identifying the need to develop indicators beyond considerations of Climate Change to include the complexity of the picture.
• Monitor behaviour change, uptake of programs and policies, momentum and sustainability.
• Document and learn from pilot programs.
• Look at other ways to measure success, such as storytelling.
• Measure mortality and morbidity changes.
• Evaluate media attention through media scans.
• The ease of promoting new climate change policies to politicians and their uptake.
• Uptake of programs from community agencies

What are some of the challenges and barriers we need to overcome?
• Red tape translation/navigation → can’t always eliminate municipal/provincial processes and regulations (i.e. approvals and regulations re: starting a community garden), but having an ally on “the inside” can help community groups through the process quickly to minimize frustration.
• Maintaining momentum - short-term pilot projects can sit in limbo in between funding cycles.
• It is a challenge to tease out confounding factors for morbidity/mortality e.g. no code for poverty, heat etc.
• Lack of research on some public health impacts related to climate change.
• Public opposition to adaptation measures.
• Communication in a 2 tier system can be a challenge.
• Political resistance to health impact assessment.
• Lack of evidence – especially for “invisible populations”.
• How to reach different ethno linguistic groups? May not have as much research into this.
• Climate change is uncertain, abstract and esoteric.
• The need for incentives to make programs more adaptable.
• Need to overcome cost associated with retrofits and other programs.
• Gaining the trust of community groups.
• Conflicting policies (e.g. heat must be on from Sept 15 to June 1 in high rises).
• Sustained funding / resources.
• Outdated legislation and policies.
• Lack of local updated data to base policy on or create policy change.
• Unintended outcomes of policies/legislation.
• Challenge of time, funding and human resources to gather data at community/organization level.
• Making everyone happy.
• Lack of data about the impact on ecology and migration patterns.
• Need room for innovation.
• Slow, long-term processes versus immediate crisis.
• Giving voice to communities that are designated as vulnerable.
• Maintaining momentum post funding.

Table Discussion summaries can be found in Appendix C.
CLOSING REMARKS & NEXT STEPS

Eva Ligeti, Clean Air Partnership, closed the workshop by thanking the speakers. Ms. Ligeti also thanked the Ministry of the Environment for their contributions and funding, and Toronto Public Health, who partnered with Clean Air Partnership to organize the workshop. Ms. Ligeti noted that health equity is an emerging movement, and the purpose of the workshop was to start a discussion. Clean Air Partnership is trying to challenge the governments to move into areas that are not necessarily easy, specifically at the municipal level. Ms. Ligeti stated that by helping the most vulnerable, we are helping all of us. She also noted that we need to be aligning equity with system drivers.

Before closing, Ms. Ligeti asked workshop participants “How do we move forward and set targets, and get recognition for climate change adaptation? How do we acquire more knowledge?”

Workshop participants suggested the following:

- Lobby to keep green energy initiatives and legislation strong in Ontario.
- Development new assessment and surveillance tools.
- Continue with more workshops to maintain the momentum of collaboration.
- Create fact sheets for public health units.
- Complete health equity assessments for climate change adaptation.
- Increase awareness and communication about climate change adaptation.
Contact Information
Should you have any comments or questions about this workshop report, please contact

Caroline Rodgers
Clean Air Partnership
Email: crodgers@cleanairpartnership.org

or

Carol Mee
Toronto Public Health
Email: cmee@toronto.ca

~~ ~~~

Important Note:
While every effort has been made to reflect actual comments, this report should not be considered to contain verbatim records. Questions and answers that were repetitive have been summarized for ease of reading. Should you find that a comment does not reflect the original intended idea, please notify:
Lura Consulting
Phone: (905) 527-5499 or email: phalajski@lura.ca
Appendix A: Workshop Agenda
Climate Change Adaptation and Health Equity

Metro Hall, Room 310
55 John St. Toronto, ON
May 24, 2011

8:30 – Registration (coffee & continental breakfast provided)

9:00 – Welcome: Toronto Public Health & Ontario Ministry of Environment

9:20 – **Climate Change and Health Equity**: Current state of policy, programs and research -Panel presentations

- **Stephanie Gower**, Toronto Public Health: Climate Change and Health Equity: What do we know for Toronto so far? (30 min)
- **Kaila-Lea Clarke**, Health Canada: Vulnerability Assessments in Canada (30 min)
- **Tara Zupancic**, Centre for Environmental Health Equity: SUCCEED program - Supporting Urban Communities’ Capacity to Promote Environmental Health Equity Through Dialogue-Centred Research. (30 min)

11:00 – Break

11:15 – Climate Change and Health Equity Discussion Roundtables

12:00 – Lunch (Provided)

12:45 – **Adaptation and Health Equity**: Panel Presentations

- **Bob Gardner**, Wellesley Institute: Building equity into Policy and Planning (30 min)
- **Chris Buse**, University of Toronto: Changing Climates, Changing the Way we Adapt Together: Public Health Practice and Community Collaboration (30 min)
- **Brian Hyndman and Ingrid Tyler**, Ontario Agency for Health Protection and Promotion: Equity Tools Available and Exercises (1 hr)

2:45 – Break

3:00 – Local Adaptation and Health Equity Discussion Roundtables

3:45 – Closing remarks & next steps – Clean Air Partnership

4:00 - Adjourn
Appendix B: Presentation Slides
Climate Change and Health Equity: What do we know so far?

Presented by:
Carol Mee
Stephanie Gower
Healthy Public Policy
Toronto Public Health

May 24, 2011

There is strong consensus that climate change is happening.

The extreme weather expected with climate change is likely to test the resilience of all populations…

…but the ability of some groups to cope with extreme weather events may be especially limited.

It is crucial to ensure that climate change adaptation efforts do not widen the health inequality gap.
Background

- Significant health inequalities according to socioeconomic status have already been documented in Toronto and across the globe.

Determinants of Health

Health inequalities can arise when certain groups experience inequities and multiple stressors.
Vulnerability in Toronto

Nearly 47% of Toronto’s population identifies as a “visible minority, up 11% since 2001

47% of the population has a first language other than English or French

Half of Toronto’s population was born outside Canada

In 2006, there were 13,605 aboriginal persons living in the City, up 20% since 2001

Seniors make up 14% of the City’s population. This is expected to increase to 17% by 2031

From 2000-2005, the number of low-income individuals grew by 23,776

The incidence of low income families and individuals is almost double that in the rest of the GTA, Ontario, and Canada

Poverty is becoming concentrated in certain neighbourhoods

Potential Direct Health Impacts in urban areas

• More extreme weather events, including heat waves

• Increased air pollution (eg. ozone)

• Increased vector-borne illnesses

• Increased illnesses from food and water contamination

• More allergies from altered pollination seasons
Climate Change and Inequity

• Weather can interact with determinants of health
  • Storms can cause property damage, forcing people to leave their homes or communities
  • Low income groups may have difficulty recovering from losses, property damage, or displacement after a storm
  • Extreme weather events can cause disruption of established social networks and community organizations

Weather and Equity - examples

Photo credit: Infrogmation

Hurricane Katrina

• ~67% of the victims from New Orleans were 65 years and older; the death rate for elderly was 15 times that of nonelderly
• Victims were more likely to be African Americans – a group more likely to lose their jobs after the storm (Sharkey, 2007; Elliott and Pais, 2006)
• Among homeless people, weather conditions such as extreme rain, heat and cold worsened pre-existing health conditions such as mental illness, respiratory and cardiovascular diseases, social isolation and drug use (Wandel et. Al., 2010)
### Access to Cooling in Toronto

#### Percent of respondents in various at-risk groups with in-home air conditioning, compared with general population

<table>
<thead>
<tr>
<th>Population</th>
<th>% With A/C</th>
<th>% Without A/C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors (Age 65+)</td>
<td>86%</td>
<td>14%</td>
</tr>
<tr>
<td>People Living Alone</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>Low Income Households (households earning &lt; $40,000)</td>
<td>82%</td>
<td>18%</td>
</tr>
<tr>
<td>Renter Households</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td>Household in Community Housing</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Apartment/Condo</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td><strong>General Population in Toronto</strong></td>
<td><strong>85%</strong></td>
<td><strong>15%</strong></td>
</tr>
</tbody>
</table>
Highrise communities in Toronto

Rapid Transit Expansion Study Follow-up Report

Heat and Life in Older Highrise Buildings
Challenges Facing Tenants in Toronto

- Restrictions on windows opening
- Costs related to ensuring safe installation for window A/C units
- Challenges regulating temperatures in large buildings

Climate Change … indirect impacts?

Climate Change

Overflow of combined sewers
Beach Contamination
Flooding
Restricted access to recreational areas and recreational water during hot summer days

Heavy Rainfall and Extreme Weather events

Photo: Leslie Mateus, 2005
Climate Change …. indirect impacts?

Changes in Ocean’s
• Salinity
• Temperature
• Dissolved Oxygen

Loss of some species
of fish
Changes in species and quantities of fish available for consumption

Changes to eating patterns
in some populations?

Measurement and Evaluation

• Vulnerability may be broken down into
  • Exposure
  • Sensitivity
  • Adaptive Capacity

• More information is needed:
  – Indicators of vulnerability
  – Indicators of preparedness
  – Surveillance data on climate-sensitive health outcomes

Photo Credit: John Vetterli
Healthy, Resilient Communities

“A resilient community is able to use the experience of change to continually develop and to reach an improved state of functioning.

Rather than just simply ‘surviving’ the stressors or changes it faces, a resilient community responds in creative ways that transform the basis of the community.”

Adaptation in Urban Environments

- General adaptation to reduce health risks
  - Eg., incorporating climate information into standards, policies and codes

- General adaptation measures for the health sector
  - Eg., mapping health hazards related to climate variability, early-warning systems, surveillance, health communications

- Adaptation measures for specific health risks
  - Warning systems to reduce impacts of heat, vaccination programs to reduce incidence of vector-borne disease, education to alert public about threats of food contamination
Challenges

- No local climate projections available yet
- Trying to plan for predicted/future conditions that are uncertain
- How do we evaluate vulnerability given many disparate potential types of impacts?
- Indirect nature of some climate/health links
- Still an emerging area of research…
  – Applicability of American examples to Canada??

Finding the next steps…

How can we help decision-makers in first world countries ensure that their decisions result in **equitable, healthy** climate change adaptation?
Acknowledgments

Carol Mee, Toronto Public Health
Clean Air Partnership, with special thanks to Erica Pinto

With federal funding support through Natural Resources Canada's Regional Adaptation Collaboratives Program

For more information about Natural Resources Canada's Regional Adaptation Collaboratives Program, please visit http://adaptation.nrcan.gc.ca/collab/index_e.php
HEALTH VULNERABILITY ASSESSMENTS IN CANADA

This presentation was not available at the time of the report production. Please contact Kaila-Lea Clarke if you have any questions about her presentation.

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Climate Change Adaptation and Health Equity Workshop

Overview of Presentation
- Brief background on project
- Community researcher findings
  - Heat exposure and air pollution
  - Food access
- Discussion
SUCCEED: Supporting Urban Communities’ Capacity to promote Environmental health Equity through Dialogue-centred research

- University of Manitoba
- Ryerson University
- University of Toronto
- University of British Columbia
- Community Partners

49 Researchers, Vancouver, (DTES), Toronto (Parkdale), Winnipeg (North end, West Broadway, Mainstreet)

Climate Change and the Inner City

- Protection from Heat Exposure and Air Pollution
- Access to food
“When I look at the pictures in my neighbourhood and then these [in other parts of the city] I see the space that we have to live in seems to be getting smaller and smaller ... When you have little money or no money or pressures and problems, you can go to these areas like the beach and look out at the horizon and you can see how this beautiful stretch of land has always been there and it was there long before any of us were here and will likely be here long after. When I look out at this vastness I realize there is more to life than my own experiences and problems and somehow, after a while it doesn’t matter as much, in terms of my own problems. I think here, you can get more of that kind of feeling.”

Heat: Access to Water

Parkdale, photo credit: Steve
Heat: Access to a place to sit/rest

It’s a safety mechanism for us to pull the benches out of the neighbourhood, but that’s not going to solve anything, right? That’s just going to push it deeper into hiding and then when it gets to that point it makes it really difficult to address, because there’s a lot of stigma and a lot of other things that start to compound on top of it... So I mean it’s not about the benches, the benches are just symbolic of some values that these different neighbourhoods have...the bench only serves as a way to highlight it, so I would say yes, we should put benches everywhere and see what our problems are and work at the solution, because getting rid of a bench just forces people into alleys right? It doesn’t solve anything except for saying not in my space.
Air Pollution: pedestrian lifestyles

Access to food

“Even like Safeway, if you want good food, it is way out of the way. And you have so many kids and you don’t have vehicle. So people just go to the corner store and you just try to pick out what is good and what will last a long time. A big box of kraft dinner or a big box of noodles stuff like that. Something that is easy to cook and that will last a long time.”
Access to food

"Well the fact that there is tons of unused land and lack of political will to turn that into usable urban agricultural land."

“One of the many skills that new comers bring is the ability to grow very nutritious food very intensively in very small spaces. So a lot of folks come here and they have and they already know a sort of economy for growing very simple foods, growing very simply but very well."

Experience of the whole person

- No shade
- No ‘escape’: Stay at home or walk on street
- Grocery store is far away
- Lack of trees
- Lack of mental peace
- Air pollution
- Lack of green space
- Intensive traffic
- Cramped housing
- No place to sit/rest
- Stressful or no housing
- Can’t afford to sit at a coffee shop
- Nowhere to grow vegetables
For more information download full report at: [www.cehe.ca](http://www.cehe.ca)
Driving Health Equity Into Action: Planning and Strategy to Address Complex Social Determinants of Health

Bob Gardner
Climate Change Adaptation and Health Equity Workshop
May 24, 2011

Context = Health Disparities in Ontario

• there is a clear gradient in health in which people with lower income, education or other indicators of social inequality and exclusion tend to have poorer health
• major differences between women and men
• the gap between the health of the best off and most disadvantaged can be huge – and damaging
• in addition, there are systemic disparities in access to and quality of care within the healthcare system
Impact of Disparities

inequality in how well people live:
- clear gradient of health in chronic conditions in Ontario
- ¼ of low income people report that their activities are prevented by pain – 2X that for high income
  Power Study

inequality in how long people live
- difference between life expectancy of top and bottom income decile = 7.4 years for men and 4.5 for women
- more sophisticated analyses add the pronounced gradient in morbidity to mortality → taking account of quality of life and developing data on health adjusted life expectancy
- even higher disparities between top and bottom = 11.4 years for men and 9.7 for women
  Statistics Canada Health Reports Dec 09

Building Solutions → Comprehensive Health Equity Strategy

- addressing health disparities has become a major priority within the health system:
  - from the prov Ministry of Health and Long-Term Care, through LHINs and PHUs to many providers
  - some promising equity strategy, planning and operationalization
- but overall health is shaped by factors well beyond health care – income inequality, the jobs we do, racism, housing and living conditions, social connectedness – the social determinants of health
- and reducing health disparities involves far more than health reform
- we need comprehensive strategy to drive policy action and social change across these determinants
Foundations of Health Disparities Roots Lie in Social Determinants of Health

• clear research consensus that roots of health disparities lie in broader social and economic inequality and exclusion

• impact of inadequate early childhood development, poverty, precarious employment, social exclusion, inadequate housing and decaying social safety nets on health outcomes is well established here and internationally

• real problem is differential access to these determinants – many analysts are focusing more specifically on social determinants of health inequalities

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Meets Climate Change Strategy

• environmental factors – air, water, built environment, communities we live in – are crucial components of these determinants

• so climate change and its effects on air, water, disasters and other environmental trends is very much a health issue

• but these health disparities and their underlying determinants also mean:
  • some health disadvantaged populations are far more vulnerable to the effects of climate change and other environmental driven problems
  • some populations have fewer resources and less capacity to cope with the impact of climate change and other emerging challenges
  • so climate change and clean air are very much a health equity issue
  • understanding how to address these and other determinants of health in all their complexity and inter-dependence is a crucial problem across all the spheres in which we work

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SDoH As a Complex Problem

- Determinants interact and intersect with each other
- In constantly changing and dynamic system
- In fact, through multiple interacting and inter-dependent economic, social and health systems
- Determinants have a reinforcing and cumulative effect on individual and population health

Three Cumulative and Inter-Dependent Levels Shape Health Inequities

1. because of inequitable access to wealth, income, education and other fundamental determinants of health →

2. also because of broader social and economic inequality and exclusion →

3. along very similar lines, disadvantaged and vulnerable populations face systemic barriers within the health and other systems →

1. gradient of health in which more disadvantaged communities have poorer overall health and are at greater risk of many conditions

2. some communities and populations are more vulnerable and have fewer capacities, resources and resilience to cope with the impact of health challenges

3. these disadvantaged and vulnerable communities tend to have inequitable access to services and support they need
Planning For Complexity of SDoH

POWER Study
Gender and Equity
Health Indicator Framework

‘Wicked’ Policy Problems

- population health and health disparities – and climate change – and their interaction – are classic ‘wicked’ policy problems:
  - shaped by many inter-related and inter-dependent factors
  - in constantly changing social, economic, community and policy environments
  - action has to be taken at multiple levels, by many governments, service providers, other stakeholders and communities
  - solutions are not always clear and policy agreement can be difficult to achieve
  - effect takes years to show up – far beyond any electoral cycle
- need comprehensive strategy to tackle the underlying roots of health inequality in the wider social determinants of health
  - from high-level national social and policy change to reduce inequality through community-based innovation, cross-sectoral collaborations and mobilization
  - that can identify the lines of connection between all these factors and identify the crucial leverage points for change
Part of Addressing these ‘Wicked’ Problems Is Making the Connections

- climate change is also a complex social problem -- and ‘wicked’ policy challenge
- will weave in and out in this talk:
  - some lessons learned from working to develop equity strategy, planning and implementation within the health system
  - links between environmental and climate issues as determinants of health – fleshed out in your Backgrounder
  - benefits of thinking of these issues in inter-connected ways, so:
    - climate change is defined as a critical health equity issue – and this is built into strategy and planning
    - health reform is always connected to bigger picture of addressing underlying determinants of health
    - those addressing complex issues can learn from each other and build momentum to address the root issues

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SDoH → Gradient of Health → Inequitable Risks and Vulnerabilities

DATA SOURCE: Canadian Community Health Survey (CCHS), Cycle 3.1
* Obstructive lung disease includes asthma, chronic bronchitis, emphysema or chronic obstructive pulmonary disease
NOTE: See Appendix 3.1 for definitions of annual household income categories

POWER Study
Think Big, But Get Going

• the point of all this analysis is to be able to identify policy and program changes needed to reduce health disparities

• but health disparities can seem so overwhelming and their underlying social determinants so intractable → can be paralyzing

• think big and think strategically, but get going
  • make best judgment from evidence and experience
  • identify actionable and manageable initiatives that can make a difference
  • experiment and innovate — learn lessons and adjust
  • gradually build up coherent sets of policy and program actions – and keep evaluating

• need to start somewhere — and focus today is on
  1. how population health and health equity are shaped by range of complex factors — including air quality
  2. addressing the social determinants of health through planning and policy change

Equity Into Health System

while health disparities are pervasive and deep-rooted, they can be changed through policy and program action

comprehensive strategy developed in 2008 for Toronto Central LHIN

many recommendations have been acted on

other LHINs are also prioritizing and moving to address health disparities
Lessons Learned: Health Equity Strategy Into Action

• **goal is to ensure equitable access to high quality healthcare regardless of social position**
• **can do this through a multi-pronged strategy:**
  1. **building health equity into all** health care planning and delivery
     • doesn’t mean all programs are all about equity
     • but all take equity into account in planning their services and outreach
  2. **aligning** equity with system drivers and priorities
  3. **embedding** equity in provider organizations’ deliverables, incentives and performance management
  4. **targeting** some resources or programs specifically to addressing disadvantaged populations or key access barriers
     • looking for investments and interventions that will have the highest impact on reducing health disparities or enhancing the opportunities for good health of the most vulnerable
  5. **while thinking up-stream** to health promotion and addressing the underlying determinants of health

Start From a Clear Strategy

• **need to make population health and equity one of driving public policy priorities**
  • within health system, equity and a population health focus are among key principles enshrined in new Excellent Care for All Act = opening and context
  • public health standards highlight population health
  • need prioritization of equity – from province, cascading down to LHINs, PHUs and other agencies, and to providers
• **need to develop clear overall strategy:**
  • clear vision of success – of what health equity looks like
  • identify key levers or drivers for change
  • coherent and coordinated set of programs and activities
  • grounded in a clear ‘theory of change’ – the principles, assumptions, ambitions and activities that will lead to the changes we want
• **but this is an iterative process – strategy will grow and shift through experience**
Powerful Starting Point = Equity As a Fundamental Priority Within Public Health

Start from Solid Evidence

• analyze best available medical, health and community-based research:
  • links between air quality and asthma, lung disease and other chronic conditions
  • links between inequitable prevalence and impact of these chronic conditions and wider social determinants of health – at the multiple levels:
    1. exposure to poor air quality and attendant health risks varies inequitably by populations and neighbourhoods
    2. capacity of communities and residents to cope with poor air and adverse health impacts also in turn shaped by wider social determinants of health
    3. compounded by inequitable access to remedial health, social and environmental services
  • to build the case that poor air quality and other environmental factors are population health issues
Align and Embed Equity Into Health System

- **align equity with system drivers:**
  - equity is pre-condition to quality and efficiency agendas
  - essential part of high-performing health system, now enshrined in new *Excellent Care for All* act
- **use levers to hand:**
  - hospitals and eventually other providers have to do Quality Improvement Plans – build equity into them
  - some LHINs have required their providers to develop equity plans
- **re-define quality to include equity:**
  - some health leaders emphasize ‘for all’ part of Act
  - recognizing that high quality patient-centred care has to take account of the wider social circumstances in which people live
- **align with system priorities:**
  - can’t solve wait times, re-admission or chronic conditions without addressing inequitable risks and health burdens, living conditions, and access to services
Into Practice Through Equity-Focused Planning

• addressing health disparities requires a solid understanding of:
  • the specific needs of health-disadvantaged populations
  • key barriers to equitable access to high quality care
  • gaps in available services for these populations
• this requires sophisticated analyses of the bases of disparities:
  • i.e. is the main problem language barriers, lack of coordination among providers, sheer lack of services in particular neighbourhoods, etc.
  • what is the immediate environment in different communities and how does this affect health and health disparities?
  • which requires good local research and detailed information – speaks to great potential of community-based research
  • involvement of local communities and stakeholders in planning and priority setting is critical to understanding the real local problems
• and requires an array of effective and practical equity-focused planning tools

Equity-Focused Planning Tools

1. quick check to ensure equity is considered in all service delivery/planning
2. take account of disadvantaged populations, access barriers and related equity issues in program planning and service delivery
3. assess current state of provider organization
4. determine needs of communities facing health disparities
5. assess impact of programs/interventions on health disparities and disadvantaged populations

1. simple equity lens
2. Health Equity Impact Assessment – has been piloted in Toronto and MOHLTC is considering wider roll-out
3. equity audits and/or HEIA
4. equity-focused needs assessment
5. equity-focused evaluation
Health Equity Impact Assessment

- increasing attention to potential – from WHO, through most European strategies, PHAC, to MOHTLC and LHINs
  - OAHPP has developed equity planning lens or framework
  - a number of PHUs have developed and use equity lens
- planning tool that analyzes potential impact of program or policy change on health disparities and/or health disadvantaged populations
  - can help to plan new services, policy development or other initiatives
  - can also be used to assess/realign existing programs
  - intended to be relatively easy-to-use tool
  - essentially prospective, helping plan forward
- piloted in Toronto in 2009 by MOHTLC, Toronto Central LHIN and WI, final version of template and workbook released by Ministry in 2011
  - HEIA is being used in Toronto Central and other LHINs
  - by many hospitals and other providers across Toronto
  - Toronto Central has required HEIA within recent funding application process for Aging at Home, and refreshing hospital equity plans

MOHLTC HEIA Template

Using this HEIA Tool: The numbered steps in the tool correspond with sections in the accompanying Workbook. The Workbook is designed to lead assessors through conducting an HEIA step by step.

<table>
<thead>
<tr>
<th>Positive Impacts</th>
<th>Negative Impacts</th>
<th>More Information Needed</th>
</tr>
</thead>
</table>
| 1. How does your program/service affect health equity for these vulnerable or disadvantaged populations? | Newborns and young children | Adolescents (13-19 years): youth who identify as being gay, lesbian, bisexual, or transgender (GLBTQ);
| Controls that are in place to protect vulnerable or disadvantaged populations | Violence, gender, poverty, mental health, substance abuse, or climate change | Vulnerability and exposed populations: e.g., skin, gender, poverty, mental health, substance abuse, or climate change |
| Vulnerable or disadvantaged populations that are targeted by the program/service | Other vulnerable or disadvantaged populations: e.g., women, people of color, low-income individuals, or individuals with disabilities | Vulnerable or disadvantaged populations that are targeted by the program/service |
| Social determinants of health: e.g., income, social status, education, social support networks, personal expenditures, or social exclusion | Impacts on social determinants of health: e.g., Income/Social Status; Social Support Networks; Employment; Education; Social Environment; Physical Environment; etc. |

1. This list is not exhaustive and uses terminology that may or may not be preferred by members of the communities in question. It is important to consider the range of populations an individual could be part of.

2. This list is not definitive. There may be other populations you wish to add, such as people without health insurance or a family doctor.

3. For more information on OAHPP please refer to the Definitions section and step 2 of the Workbook.
Beyond Planning: Embed Equity in Targets, Incentives and Ongoing Performance Management

- clear consensus from research and policy literature + consistent feature in comprehensive policies on health equity from other countries =
  - setting targets for reducing access barriers, improving health outcomes of particular populations, etc
  - developing realistic and actionable indicators for service delivery and outcomes
  - closely monitoring progress against the targets
  - disseminating the results widely for public scrutiny
  - tying funding and resource allocation to performance
- build into performance management:
  - explicit equity targets and incentives
  - cascading through the system -- Prov → LHINs, agencies, etc. → providers
  - within providers → into specific programs and depts.

Up-Stream Through an Equity Lens: Chronic Disease Prevention and Management

- vital element of health reform
- very clear gradient in incidence and impact of chronic conditions
- chronic disease prevention and management programs cannot be successful unless they take health disparities and wider social conditions into account
- some populations and communities need greater support to prevent and manage chronic conditions
- up-stream initiatives need to be planned and implemented through an equity lens
- necessarily involves multi-disciplinary partnerships and collaborations
Cross-Sectoral Planning: Health Promotion

- **cross-sectoral coordination and planning are much emphasized in public health and health policy circles**
  - public health departments and LHINs are pulling together or participating in cross-sectoral planning tables on health issues
  - Local Immigration Partnerships, Social Planning Councils, etc on many other connected issues
- **the Ministry of Health Promotion and Sport is developing a healthy communities strategic approach**
  - cross-sectoral planning to ground health promotion
  - anti-smoking, exercise and other health promotion programmes need to explicitly foreground the particular social, cultural and economic factors that shape risky behaviour in poorer communities— not just the usual focus on individual behaviour and lifestyle
  - need to customize and concentrate health promotion programs especially for most disadvantaged
  - if this isn’t done → can unintentionally widen disparities as better off take up programs more
- **addressing wider SDoH is the glue for collaboration into action – at best, this is all about community capacity building**
- **ensuring healthy environments with clear air can be part of all these changes to build healthier communities**

Back Up to High-Level Strategy: Addressing the Social Determinants of Health

- **increasing international and high-level attention:**
  - WHO Commission on Social Determinants of Health
  - European Union, with its Closing the Gap and other projects to tackle health disparities
- **a number of countries have made lessening health disparities a top national priority and have developed cross-sectoral policy frameworks and/or action plans:**
  - England, Scotland, Australia, New Zealand
  - many European countries, with Nordic ‘welfare’ states leading
- **all about reducing structured inequality and underlying determinants of health:**
  - focus on inclusive labour market, anti-discrimination, childcare, affordable housing, social security and other policies
  - equitable access to improved health care was seen to be just one part of this broader package
  - emphasized partnerships with community service providers and organizations — in both policy development and service delivery
Policy Coordination

- addressing these ‘wicked’ policy challenges \(\rightarrow\) requires a significant commitment and re-orientation of social and economic policy + more ‘joined-up’ policy:
  - more coordinated, cross-departmental and cross-government policy development and coordination
- growing interest in a ‘health in all policies’ approach:
  - Quebec requires any laws or regulations that could have health implications to be reviewed by the Ministry
  - Ontario has done policy research on HIAP and developed several tools
- policy forums have been developed:
  - Saskatchewan has provincial and regional forums of all ministries involved in human and social services
- innovative planning processes have been developed
  - in Peel planners and public health staff work together to ensure health impact is considered in planning decisions
  - long experience with health impact assessment -- more recently, health equity impact assessment

Back to Community: Building on Potential of Community-Based Service Initiatives and Innovation

- huge number of community and front-line health initiatives addressing equity across province
  - Community Health Centres, community mental health, community organizations based out of specific ethno-cultural communities
  - e.g. many community providers have established ‘peer health ambassadors’ to provide system navigation, outreach and health promotion services to particular communities
  - not being systemically shared or built upon \(\rightarrow\) need to create forums and infrastructure to identify, assess and adapt this potential
- this progressive service delivery = beacon of inspiration for other sectors + constant living demonstration that action is possible
  - look for insight and inspiration from ‘out of angle’ sources:
    - e.g. community gardens and kitchens can contribute to food security to some degree, but they can also help build social connectedness and cohesion
    - what are clean air equivalent initiatives that could capture imagination and build initiative?
Back to Community Again: Build Momentum and Mobilization

- sophisticated strategy, solid equity-focused research, planning and innovation, and well-targeted investments and services are key
- but in the long run, also need fundamental changes in over-arching state social policy and underlying structures of economic and social inequality
- these kinds of huge changes come about not because of good analysis, but through widespread community mobilization and public pressure
- key to equity-driven reform will also be empowering communities to imagine their own alternative vision of different health futures and to organize to achieve them
- we need to find ways that governments, providers, community groups, unions, and others can support each others’ campaigns and coalesce around a few ‘big ideas’

Health Equity

could be one of those ‘big’ unifying ideas...

- if we see opportunities for good health and wellbeing as a basic right of all
- if we see these pervasive health disparities as not only incredibly damaging to so many, but also as an indictment of an unequal society
- if we recognize that coming together to address the social determinants that underlie health inequalities will pull together and benefit many other spheres – such as building safe and healthy living environments and communities
- if we see that addressing the roots of so many of our social problems requires broad collaboration and mobilization
- we can start to connect these ideas – so being able to live in a safe and healthy environment can be seen as an essential building block of health and healthy communities
- thinking of what needs to be done to create healthy and equitable communities is a way of imagining and forging a powerful vision of a progressive future
- and showing that we can get there from here
Inter-Connected Messages

• health disparities are pervasive and deep-seated – but can’t let that paralyze us
• do need a comprehensive and coherent health equity strategy – but don’t wait for perfect strategy
• think big and think strategically – but get going
• there is a solid base of evidence, provider experience, commitment and community connections to build on

• poor quality air has an adverse impact on health
• because of overall health disparities, this impact is inequitable and places a greater burden on the most vulnerable
+ these disadvantaged populations have less capacity to cope with adverse climate impacts to come
• any policies addressing climate change, air and other environmental issues need to take health impact and determinants into account

Key Messages II

• have set out a roadmap of strategies, principles and tools to drive health equity into action through policy change and community mobilization
• many within the health system and beyond have long experience and strong commitment to equity → build on this to drive coordinated and coherent system-wide equity agenda into action
• work in broad partnerships and collaborations to address the underlying determinants of health inequalities
• clean air and environmental quality are critical parts of these overall determinants of health – can be one key site of mobilization
• making connections between all the issues/determinants is needed to build healthy and equitable communities
Following Up

• these speaking notes and further resources on policy directions to enhance health equity, health reform and the social determinants of health are available on our site at http://wellesleyinstitute.com
• my email is bob@wellesleyinstitute.com
• I would be interested in any comments on the ideas in this presentation and any information or analysis on initiatives or experience that address health equity

Wellesley Roadmap for Action on the Social Determinants of Health

1. look widely for ideas and inspiration from jurisdictions with comprehensive health equity policies, and adapt flexibly to Canadian, provincial and local needs and opportunities;
2. address the fundamental social determinants of health inequality – macro policy is crucial, reducing overall social and economic inequality and enhancing social mobility are the pre-conditions for reducing health disparities over the long-term;
3. develop a coherent overall strategy, but split it into actionable and manageable components that can be moved on;
4. act across silos – inter-sectoral and cross-government collaboration and coordination are vital;
5. set and monitor targets and incentives – cascading through all levels of government and programme action;
Wellesley Roadmap II

6 rigorously evaluate the outcomes and potential of programme initiatives and investments – to build on successes and scale up what is working;

7 act on equity within the health system:
   • making equity a core objective and driver of health system reform – every bit as important as quality and sustainability;
   • eliminating unfair and inefficient barriers to access to the care people need;
   • targeting interventions and enhanced services to the most health disadvantaged populations;

8 invest in those levers and spheres that have the most impact on health disparities such as:
   • enhanced primary care for the most under-served or disadvantaged populations;
   • integrated health, child development, language, settlement, employment, and other community-based social services;

Wellesley Roadmap III

9 act locally – through well-focussed regional, local or neighbourhood cross-sectoral collaborations and integrated initiatives;

10 invest up-stream through an equity lens – in health promotion, chronic care prevention and management, and tackling the roots of health disparities;

11 build on the enormous amount of local imagination and innovation going on among service providers and communities across the country;

12 pull all this innovation, experience and learning together into a continually evolving repertoire of effective programme and policy instruments, and into a coherent and coordinated overall strategy for health equity.
The Wellesley Institute advances urban health through rigorous research, pragmatic policy solutions, social innovation, and community action.
Changing climates, changing the way we adapt together: Public health practice and community collaboration

Chris Buse, Ph.D. Candidate
Social and Behavioural Health Sciences Unit
Dalla Lana School of Public Health

Health Equity and Climate Change Adaptation Workshop
Metro Hall, Toronto, ON
May 24, 2011

Outline

1. Scope and scale of the problem

2. The challenge for public health and community-based practice

3. Identifying different ways of working together

4. Barriers

5. Opportunities
The scope and scale of the problem

THE ‘TRIPLE THREAT’
TO SOCIAL/ECONOMIC STABILITY
AND HEALTH EQUITY

CLIMATE CHANGE
ENVIRONMENTAL DEGRADATION
ENERGY INSECURITY
The challenge for public health

• Communities are culturally and geographically specific
• Little known about working effectively with communities in a participative way (German and Wilson, 2004)
• Address current state of health equity while adapting to new challenges
  — Define, predict and control health risks is a reactive rather than proactive framing of climate change response
• Requirement to engage in practices that are on the fringes of conventional public health practice
  — Requires funding; agreement on importance of climate change
• Intersectoral collaboration holds the potential to address pathways to health equity but may require significant resources (PHAC & WHO, 2008)

The challenge for communities

• Climate change holds the potential to exacerbate existing health inequalities
• Age of declining social services yields less resources passed on to communities
• Time and energy
• Requirement to capture the diversity within communities
So why not work together?

<table>
<thead>
<tr>
<th>Push Factors</th>
<th>Pull Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welfare State Retrenchment</td>
<td>Resource and Information Sharing</td>
</tr>
<tr>
<td>Organizational Mandates</td>
<td>Contextual Understanding of Place</td>
</tr>
<tr>
<td>Intersecting Challenges</td>
<td>Democratic Participation</td>
</tr>
</tbody>
</table>

How should we work together?
Let us count the ways…
(Winer and Ray, 1994)

- Network
  - to share information/expertise
- Consultation/Advisory
  - to receive input
- Cooperation
  - informal work-share with organizational independence
- Coordination
  - planned activities and a division of roles; resources can be made available to others
- Coalition
  - collective action towards social change to increase power and influence of members
- Collaboration
  - formally sharing resources, risks and decision-making; longer-term with new organizational structures

Scenarios for adapting together
(adapted from Gray, 1989)

<table>
<thead>
<tr>
<th>Motivating Factors</th>
<th>Expected Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision-Sharing</td>
<td>Information Exchange</td>
</tr>
<tr>
<td>Conflict Resolution</td>
<td>Appreciative Planning Meetings</td>
</tr>
<tr>
<td></td>
<td>Research and Policy Dialogues</td>
</tr>
</tbody>
</table>
**Intersectoral action**  
Collaboration = Interdependence

- Stakeholders are interdependent
- Solutions emerge by dealing constructively with differences
- Joint ownership of decisions is required
- Stakeholders assume collective responsibility for the future direction of the project
- Collaboration is an emergent process

-Gray, 1989

---

**Public health and community collaboration**

- Builds on assets, strengths and capacities of collaborative actors to generate solutions to complex health issues like climate change (i.e. adaptation and mitigation strategies)

**Process:**  
Problem Specification ➔ Methodology ➔ Implementation

Which stakeholders are ‘legitimate’?  
Who’s understanding of ‘adaptation’ gets put forward?
Barriers and challenges

Collaboration as power relations

• Elitism and technocracy
  – O’Neil et al., 1997; Corburn, 2005
  – Reasserting social hierarchy
• Language and communication
  – Different conception of risks, strategies
• ‘Ownership’ and cooptation
  – Labonte, 1994; McCubbin, Labonte, Dallaire, 2001
• Institutional and societal cultures
  – Individualism, institutional silos
• Technical complexities
  – Funding, logistics
Opportunities

Working alone (competing) vs. Working together (collaborating)

Collaboration as power-sharing

• Equity
  – Participation, language, resource-sharing
  – Access and ownership
• Inclusivity
  – To understand, accept and respect diversity (see Eichler & Burke, 2006)
• Strength in decision-making
  – Representation vis-à-vis inclusivity (see Ontario Health Communities Coalition, 2004)
• Empowerment
  • Power over vs. power for vs. power with
Opportunities, continued

• Improving/generating social capital
  – i.e. extending network ties, building trust

• Cultural capital and two-way learning
  – Learning from and capitalizing on the embodied competencies of community members

• Breaking institutional silos

• Pushing the climate change agenda
  – Cachet for programming, funding
  – Improving awareness

Addressing ‘the public good’

Compromise > Inaction
Multisectoral > Uni- or bi-sectoral

• Collaboration requires relevant stakeholders to approach a shared understanding of suitable climate change adaptation and mitigation strategies in a democratic way
  – Wide array of interests included
  – Potential to change the process in which parties exert influence over each other
The Role of ‘Champions’

Please see:

• Poland, B.D., Fell, L., Graham, H., Lum, J., Walsh, E., Williams, P. et al. (2001). ‘We’re hired by the hospital, but we work for the community’: Examining hospital involvement in community action. *Hospital Quarterly, Spring*, 52-59.


Tools, frameworks and a few useful resources...

• Participatory action research
  – Brydon-Miller, Greenwood & Maguire, 2000; Chandler & Torbert, 2003; Masters, 1995

• Participatory evaluation
  – Brisolara, 1998; Cousins & Whitmore, 1998; Cousins and Earl, 1992

• Developmental evaluation
  – Patton, 1994; Patton, 2011
Acknowledgements

• Blake Poland, Ph.D.
• Cameron Norman, Ph.D.

My coordinates: chris.buse@utoronto.ca

References

Objectives

• To present the proposed Equity Assessment Framework for Ontario’s Public Health Units

• To discuss how the proposed equity assessment framework can assist health units with implementing the requirements of the OPHS Foundational Standard

• To illustrate how the framework can be used to guide the planning, implementation and/or assessment of public health unit initiatives
Summary of Presentation

<table>
<thead>
<tr>
<th>Introduction of Health Equity Tools</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of Health Equity Assessment Tool</td>
<td>Brian Hyndman</td>
</tr>
<tr>
<td>Case Study: Application of Framework</td>
<td>Ingrid Tyler &amp; Brian Hyndman</td>
</tr>
</tbody>
</table>

Health Equity
- The absence of systematic and potentially remediable differences in one or more aspects of health across populations or population groups defined socially, economically, demographically, or geographically.

Health Inequalities
- Differences in health status experienced by various individuals or groups in society. These can be the result of genetic and biological factors, choices made or by chance, but often they are because of unequal access to key factors that influence health like income, education, employment and social supports.

Health Inequities
- Health inequities are differences in health which are not only unnecessary and avoidable, but in addition are considered unfair and unjust.
**Scale of Health Equity Impact Assessments**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desk-based EPHIA</td>
<td>Provides a broad overview of possible health impacts. Could be used at early policy development stage (e.g., green paper) or where limited resources are available.</td>
</tr>
<tr>
<td>Rapid EPHIA (appendix)</td>
<td>Provides more detailed information of possible health impacts. Typical or most frequently used HIA approach. Allows more thorough investigation of health impacts, increases reliability of impacts. Involves collecting and analysing existing data and some new qualitative data from stakeholders and key informants. Takes approximately 2-6 weeks (for one assessor).</td>
</tr>
<tr>
<td>In-depth EPHIA</td>
<td>Provides comprehensive assessment of potential health impacts. Most robust definition of impacts, but least frequently used - the ‘Gold standard’ of HIA. Involves collecting and analysing data using multiple methods and sources (quantitative and qualitative, including participatory approaches involving stakeholders and/or their representatives and key informants). Takes approximately 12 weeks (for one assessor).</td>
</tr>
</tbody>
</table>


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**Equity Assessment Framework for Ontario’s Public Health Units**

www.oahpp.ca
3-Step Equity Assessment

• Step 1: Identify and assess health inequities/inequalities related to the issue(s) addressed by your program/policy.

• Step 2: Determine changes to your program/policy to reduce the health inequities identified above and modify your program/policy through incorporation of these actions.

• Step 3: Evaluate the impact of the above work on the reduction of health inequities to guide further modifications to the programs/policies under consideration.
Purpose of Equity Assessment Framework

To facilitate:
• implementing the requirements of the OPHS Foundational Standard
• the planning and implementation of programs and services designed to reduce health inequities among priority populations
• assessing the extent to which current programs and policies may be contributing to the reduction or exacerbation of health inequities

Related to Foundational Standard

OPHS Mandate to Reduce of Health Inequity

“Public health interventions shall acknowledge and aim to reduce existing health inequities. Furthermore, Boards of Health shall not only examine the accessibility of their programs and services to address barriers (e.g., physical, geographic, social and economic), but also assess, plan, deliver manage and evaluate programs to reduce inequities in health while at the same time maximizing the health gain for the whole population.”

Ontario Public Health Standards (2008), p.13
What can the Framework do for you?

- If equity considerations are already a part of your daily work:
  - helps organize equity considerations

- If this is the first time that you are considering equity issues:
  - identify “hidden” populations,
  - ensures that such populations are not overlooked
  - helps to identify other provincial or community partners.
Requires Situational Assessment

- "Analysis of combined information from a variety of sources" including:
  - Literature review
  - Environmental scan
  - Analysis of existing data
  - Stakeholder/Expert consultation
  - Common knowledge and working experiences
  - Knowledge and experience of your working group, team or manager
Applying the Equity Assessment Framework for Ontario’s Health Units

**Step 1:** Identify and assess health inequities related to the health issue addressed by your program/policy.

1. *Is there clear evidence of inequities related to the health issue?*
2. *Is it feasible to modify the program/policy under consideration?*

   - **IF NO:** Program/policy remains an & pending possible further analysis.
   - **IF YES:**

**Step 2:** Determine changes to your program/policy to reduce health inequities as identified above and modify the program or policy through incorporation of these actions.

**Step 3:** Evaluate the impact of the above work on the reduction of health inequities to guide further modifications to the program/policy for re-evaluation.

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ONTARIO’S PUBLIC HEALTH AGENCY

Applying the Equity Assessment Framework

www.eohpp.ca
Case Study – Sun Safety

- Stratospheric ozone depletion is also caused by the GHGs which lead to global warming and climate change.
- Leads to increased UV exposure which could increase cases of sunburn, melanoma, other skin cancers, cataracts, eye damage and immune disorders; UV exposure also catalyst for Vitamin D production in the skin.
- Melanoma is now the 8th most common cancer in Canada. Approximately 5,000 Canadians will be diagnosed with melanoma in 2009 and 940 will die of it. (CDA 2009)
Common Sun Safety Messages

• **Consider time of day.** Plan your outdoor activities before 11 a.m. or after 4 p.m., when the sun is not at its strongest, or any time of the day when the UV Index is 3 or less.

• **Find Shade.** If you can’t find shade, create your own.

• **Cover up.** Choose clothing that is loose fitting, tightly woven and lightweight

• **Wear a hat and sunglasses.** Choose a wide brim that covers your head, face, ears and neck. Keep your shades on and make sure your children wear them too.

• **Apply Sunscreen.** Your sunscreen should have a sun protection factor (SPF) 15 or higher, and if you work outdoors or are planning to be outside most of the day, use an SPF 30.

• **Avoid indoor tanning**

• **Check your skin regularly**

Source: Canadian Cancer Society, 2011

Assume you are currently delivering “traditional” health promotion messages, through “traditional” modes of delivery (pamphlets, posters, internet), and have chosen to address the issue through the Equity Assessment Framework....
Step 1 - Purpose

- To identify the presence health inequities/inequalities and potentially vulnerable groups.
- To identify key factors or ‘pathways’ contributing to these inequities/inequalities.
- To identify practical considerations that determine the feasibility of efforts to reduce health inequities, such as time, resources, organizational factors the broader political climate.

SCOPING STEP: If the questions you work through in Step 1 lead you to determine that steps can be taken to modify your initiative to reduce health inequities then you may choose to proceed to Step 2.
Step 1 - Outcomes

By the End of Step 1 you will have:

• identified the groups affected by your program/policy;
• identified the inequalities/inequities affecting these groups in relation to the issue(s) addressed by your program/policy;
• identified the factors or pathways contributing to these inequities/inequalities;
• identified practical considerations influencing attempts to modify your program/policy to reduce health inequities/inequalities;
• determined the feasibility of proceeding to the next step of the framework.

Step 1: Assessment

1. What is the primary public health issue you are addressing through your program/policy?
   • Traditional sun safety messages are aimed at reducing overall sun exposure in attempt to reduce burns, melanoma, other forms of skin cancer, and possibly cataracts
   • This analysis will focus on exclusively on melanoma risk due to overall more data available in this area, with the assumption that other risks would also be mitigated
   • Sun exposure can be beneficial through the production of Vitamin D in the skin
   • This analysis will not address Vitamin D
Step 1: Assessment

2. Referring to Table 2, identify population groups that may be affected by your program or policy

3. For each of these groups, what health inequalities/inequities exist in relation to (the ISSUE(s) addressed through the program or policy under consideration)?

4. What are the factors or pathways that may lead to the existence of these inequalities/inequities you have identified?

<table>
<thead>
<tr>
<th>Groups</th>
<th>Inequalities/Inequities</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age/Children</td>
<td>Risk of melanoma increases with excessive sun exposure during the first 10 - 18 years of life (CCS, 2013)</td>
<td>Different physiological factors between children and adults</td>
</tr>
<tr>
<td>Physical Disability</td>
<td>No data found</td>
<td>Those with certain physical disabilities may have more difficulty with classic sun protective behaviours, such as sunscreen application. (No data found)</td>
</tr>
<tr>
<td>Ethnic/racial</td>
<td>Increase skin cancer in light skinned/Caucasian individuals (Ortiz, 2003)</td>
<td>Genetically more susceptible due to lower levels of skin pigmentation.</td>
</tr>
<tr>
<td>Homeless</td>
<td>No data found</td>
<td>May have more difficulty with classic sun protective behaviours, such as access to sunscreen, seeking shade. (No data found)</td>
</tr>
<tr>
<td>Linguistic</td>
<td>No data found</td>
<td>Low literacy or non-English speakers may have less access to traditional sun safety messages, often presented in written English.</td>
</tr>
<tr>
<td>Income</td>
<td>Increase skin cancer in high income (Ortiz, 2003); Prevalence of melanoma increased by 22.9% in higher income group (Haider, 2007)</td>
<td>May be related to increased travel, increased leisure time in sun. (Purdue, 2002)</td>
</tr>
<tr>
<td>Rural/Isolated/Northern</td>
<td>Overall prevalence rate was 90% (p = .01) higher in rural areas compared with urban areas (Haider, 2007)</td>
<td>Possibly due to increased outdoor work. (No data)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher education linked with higher melanoma</td>
<td>Higher education also associated with wearing protective clothing. (Purdue, 2002)</td>
</tr>
<tr>
<td>Gender</td>
<td>More common in men in Canada, the lifetime risk of melanoma for men is now 1 in 74. For women, it is 1 in 90. (CMAJ, 2009)</td>
<td>Men report are less likely to engage in sun protection. (Purdue, 2002)</td>
</tr>
</tbody>
</table>
If there is clear evidence of inequities in relation to the issue addressed by your program/policy, and if time, resources and the political climate are favourable, then you are well positioned to move on to Step 2.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Inequalities/Inequities</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age; Children</td>
<td>Risk of melanoma increases with excessive sun exposure during the first 10 - 18 years of life (CCS, 2013)</td>
<td>Different physiological factors between children and adults. Children tend to spend more time outside.</td>
</tr>
<tr>
<td>Physical Disability</td>
<td>No data.</td>
<td>Those with certain physical disabilities may have more difficulty with classic sun protective behaviours, such as sunscreen application. (No data)</td>
</tr>
<tr>
<td>Ethno-racial</td>
<td>Increase skin cancer in light skinned/Caucasian individuals (Ortiz 2005)</td>
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<td>Increase skin cancer in high income (Ortiz, 2005); Prevalence of melanoma increased by 22.5% in higher income group (Haider A, 2007)</td>
<td>May be related to increased travel, increased leisure time in sun. (Purdue, 2002). Sunscreens use is associated with university education and higher levels of income adequacy. (Purdue, 2002)</td>
</tr>
<tr>
<td>Rural/Isolated/Northern</td>
<td>Overall prevalence rate was 30% (p &lt; .01) higher in rural areas compared with urban areas (Haider A, 2007)</td>
<td>Possibly due to increased outdoor work. (No data). Expect less overall sun exposure in northern populations, in some cases reported to lead to vit D deficiency. (CMAJ 2002)</td>
</tr>
<tr>
<td>Education</td>
<td>Higher education linked with higher melanoma</td>
<td>Higher education also associated with wearing protective clothing (Purdue, 2002). As with income, may be related to increased travel, increased leisure time in sun. (No data)</td>
</tr>
<tr>
<td>Gender</td>
<td>More common in men: In Canada, the lifetime risk of melanoma for men is 1 in 74. For women, it is 1 in 90. (CDA, 2009)</td>
<td>Men report are less likely to engage in sun protection (Purdue 2002)</td>
</tr>
</tbody>
</table>
Step 2 - Purpose

- To identify ways that the health inequities identified in Step 1 could be reduced or mitigated through modifications to your program/policy.
- To align your program/policy more closely with complementary initiatives aimed at reducing health inequities
- To identify further actions that could be taken by your health unit in reducing health inequities related to the issue(s) addressed by your program/policy.
Step 2 - Outcomes

By the End of Step 2 you will have:

• identified modifications to ensure that your program/policy has a greater impact on the reduction of health inequities;
• identified how your program/policy could more closely align with or complement other initiatives aimed at reducing health inequities related to the issue(s) addressed by your program/policy;
• determined further actions that can be taken by your health unit to reduce health inequities related to the issue(s) addressed by your program/policy.

Step 2 - Assessment

1. List the ways in which your program or policy:
   • is currently affecting the factors or pathways identified in Step 1
   • could potentially affect these factors/pathways
Step 2 - Assessment

4. How can your program or policy be modified to further support or supplement a reduction in health inequities?

5. What further action could be taken by your health unit in reducing health inequities related to the issue(s) addressed by your program/policy?
### Program/Policy Elements

<table>
<thead>
<tr>
<th>Program/Policy Elements</th>
<th>Possible Modifications</th>
<th>Evidence/Impact/Evaluation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>...in terms of access to programs/services</td>
<td>Could distribute sunscreen to low-income/homeless populations.</td>
<td>Not found.</td>
</tr>
<tr>
<td>...in terms of program delivery or policy implementation</td>
<td>Could increase targeting of specific settings.</td>
<td>Community Guide (2010) finds insufficient evidence to support mass media campaigns or community-wide multicomponent interventions that seek to increase preventive behaviors (e.g., covering up, using shade, avoiding sun during peak UV hours), indirectly supports development of more targeted approaches.</td>
</tr>
<tr>
<td>...in terms of reducing barriers to benefit from the program/policy</td>
<td>Could revise materials to be more relevant to certain subpopulations (homeless, physically disabled).</td>
<td>Community Guide (2010) finds insufficient evidence to support mass media campaigns or community-wide multicomponent interventions that seek to increase preventive behaviors (e.g., covering up, using shade, avoiding sun during peak UV hours), indirectly supports development of more targeted approaches.</td>
</tr>
<tr>
<td>...in terms of additional supports</td>
<td>Enhancing built environment through increased access to shade, particularly in low-income areas.</td>
<td>Not found.</td>
</tr>
<tr>
<td>...in terms of communication</td>
<td>Could include messages to alternative Vitamin D sources, such as fortified milks (e.g., infant drops).</td>
<td></td>
</tr>
<tr>
<td>...in terms of internal health unit policies and procedures</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>OTHER...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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#### An Equity Assessment Framework for Ontario’s Health Units

**STEP 1**

1. Is there clear evidence of inequities related to the health issue?
2. Is it feasible to modify the program/policy under consideration?

**IF NO**

Program/policy remains as is pending possible further analysis.

**IF YES**

**STEP 2**

Evaluate the impact of the above work on the health inequities to guide further modifications to the program/policy under consideration.

**STEP 3**

1. What modifications were made to your program/policy to further support those populations in health inequities?
2. What if any further actions were carried out by your health unit to reduce health inequities (in the issue/area) addressed by your program/policy?
3. What impacts resulting from these actions did you observe or measure?
4. Based on your findings, what further modifications to your program/policy would you need to make in order to address health inequities?
Step 3 - Purpose

- To evaluate the ways in which modifications to your program/policy resulting from Step 2 have had an impact on the reduction of health inequities.
- To share evaluation results with relevant groups and stakeholders who would benefit from the information you have collected. Your evaluation contributes to the growing body of knowledge on the reduction of health inequities through public health initiatives.

Step 3 - Outcome

By the End of Step 3 you will have:
- identified the impacts, including a reduction in health inequities, of changes to your program/policy as well as other actions you have undertaken as a result of Step 2
- determined further modifications to your program/policy as needed
Step 3 - Assessment

1. What modifications were made to your program/policy to further support or supplement reduction in health inequities? What impacts resulting from these modifications have you observed or measured?

2. What (if any) further actions were carried out by your health unit to reduce health inequities related to the issue(s) addressed by your program/policy? What impacts resulting from these modifications have you observed or measured?

3. Based on your findings, what further modifications to your program/policy are needed in order to reduce health inequities?

Next Steps

• Further consultations with public health professional associations and other key stakeholder groups
• Possible pilot testing of the framework with 2-3 volunteer health units
Acknowledgements

• APHEO Workshop participants, September 2010
• OPHA-SDOH Working Group members
• SFO-SAC Workshop participants, March 2011
• TOPHC Workshop participants, April, 2011
• H. Manson, Director, Health Promotion, Chronic Disease and Injury Prevention, OAHPP
• A. Pinto, Community Medicine Resident, University of Toronto

Sources

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Appendix C: Table Discussion Summaries
The following is a summary of what each table had discussed during the morning roundtable.

**Table #1:**
- A healthy resilient community balances social, economic and environmental factors, and takes a balanced approach to infrastructure changes and planning initiatives.
- To measure the impacts of climate change we need to be looking at qualitative and quantitative data, and work with health care practitioners and community organization staff to do data collection and measuring.
- To engage politicians we need to understand their perspective and adapt/tailor our message to what they are looking for. For staff we need to identify what they “worry” about and make the link to climate change adaptation.

**Table #2:**
- A healthy resilient community has a high level adaptive capacity to adapt to any situation, is resilient, uses the social indicators approach, has a healthy built environment, and has strong trustworthy communication networks.
- To measure the impacts of climate change we need good surveillance tools, different lenses to apply to different adaptation measures, links between different surveillance tools and sources, land use data, tax data, and statistics data. We should aim to remove duplication, and make a clearing house of data. We may also want to implement focus groups for vulnerable populations, and include those populations in the research.
- In order to increase engagement we need a grassroots perspective, local examples, real life stories about impacts and benefits of interventions. We need to link climate change to other initiatives – such as the aging strategy in York Region. Use health impact and health cost numbers to engage key decision makers. Educate people about the impacts and interventions and leave out the debate about climate change.

**Table #3:**
- A healthy resilient community is informed, inclusive and accessible; has strong existing networks, is an integrated community, and policy decisions are driven and funded at the community level.
- To measure the impact of climate change we felt that we should quantify impacts, and look at quantitative and qualitative data.
- To increase engagement we should implement targeted education, with varied messaging depending on who you talk to. Make messaging less overwhelming, and try to get the message out through the use of champions and/or children (i.e. anti-smoking campaign). Be sure to use real life examples with costing. Show that helping vulnerable populations if good for the whole city.

**Table #4:**
- A healthy resilient community has foresight, takes advantage of existing resources and knowledge, tackles vulnerabilities in addition to climate change, and encounters less social isolation.
To measure the impacts of climate change we need to implement health surveillance, measure upgrades in infrastructure, and track protection/rehabilitation of the natural environment. It would be great to develop a forecasting model. We also need to be reflexive on how we use existing data, and shift our values and measurements beyond dollars and cents.

In order to increase engagement we need to voice the concerns of communities in their own voice and on their own terms. We need to bring to the front the great work being done by community champions, and learn from them. There is also an impetus to collaborate with other organizations, and leverage politicians from many different angles.

Table #5:
- A healthy resilient community is one where everyone knows each other, a community that can help support itself from within and looks out for each other.
- To measure the impacts of climate change we need to ask various populations what they need, survey them, engage in discuss with them, and define what we are looking for.
- In order to increase engagement we should link into existing programs; show the solution, not just the problem; help people understand the issues; and get into their ear with the message.

The following is a summary of what each table had discussed during the afternoon roundtable. Please note the tables were consolidated from 5 tables to 4 tables for the afternoon discussion.

Table #1:
- We need to extend existing programs to include climate change adaptation. Effective adaptation initiatives include bicycle paths, sustainable development strategies, walking initiatives, urban forests, green roofs etc. It is important for public health staff to be out in the community as part of health equity and climate change adaptation programs.
- Success needs to be defined and contextualized, based on multiple fronts. Use “carrots” to implement and move initiatives forward.
- Challenges include multi vulnerabilities, and a general lack of communication. It is also challenging that climate change is abstract and uncertain. We need to develop a common language and common goals for climate change adaptation. Retrofits often marginalize the marginalized since they can’t afford to participate. We need to treat each community as unique.

Table #2:
- The types of adaptations that are already being implemented include early warning systems related to heat or extreme weather events, urban canopy renewal, and green roofs. Initiatives such as green roofs have the potential to address vertical poverty.
- We can measure success through behaviour change, look at whether there is uptake of the program or policy, does it have momentum and is it sustainable, and whether we can scale up the program. A good measure of success would also be if it is moving into other jurisdictions.
We need to negotiate the challenge of engagement and collaboration by working with champions and leaders who can take a stand and make good changes. Challenges and barriers include a lack of data, and the fact that it is hard to determine impacts of climate change adaptation measures – e.g. PVC waste from solar panels.

Table #3:
- Some examples of programs in the City of Toronto that try to incorporate climate change adaptation include Live Green Toronto, Tower Renewal, cool roofs, eco roofs, Healthy Canada by Design, and the Toronto Green Standards.
- The best ways to measure success include getting the trust of community groups and the general public, evaluating pilot programs, undertaking media scans, and monitoring the uptake of programs from community agencies.
- Some challenges and barriers include too many conflicting policies, outdated legislation, the unintended outcome of policies, lack of data, and a lack of community involvement. Another major challenge is that communities and the public too often look to the government for solutions and actions, without starting at the grassroots level with community-made solutions.

Table #4:
- A good example of climate change adaptation is the heat response program, which targets vulnerable populations by providing bus tokens to get to cooling centres. An unsuccessful initiative was the flooding resources that were given out but not targeted for vulnerable groups. The Air Quality Health Index (AQHI) is targeted to some vulnerable groups such as the elderly, but not all groups may have access to the information. All these programs can be improved by leveraging social resources and networks, and aligning with emergency responders.
- We can measure success through data availability, mortality and morbidity data, proxy indicators, increased tree cover, green roofs, better transit, immediate impacts and long-term effects.
- Challenges and barriers include the availability of data, stigmatization, communication in a two tier system, political resistance, and lack of evidence for invisible populations.
Appendix D: List of Attendees
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Amanda Powers</td>
<td>Strategic Policy Branch of the Ontario Ministry of the Environment</td>
</tr>
<tr>
<td>Anna Yusa</td>
<td>Health Canada</td>
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<tr>
<td>Anthony Di Pietro</td>
<td>Regional Municipality of Durham, Health Department</td>
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<tr>
<td>Antoinette A. Davis</td>
<td>John Howard Society</td>
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<tr>
<td>Barry Smit</td>
<td>University of Guelph</td>
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<tr>
<td>Bob Gardner</td>
<td>Wellesley Institute</td>
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<tr>
<td>Brian Hyndman</td>
<td>Ontario Agency for Health Protection and Promotion</td>
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<tr>
<td>Bryon Clarke</td>
<td>Emergency Planning Unit, City of Toronto</td>
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<tr>
<td>Carol Mee</td>
<td>Toronto Public Health</td>
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<tr>
<td>Caroline Rodgers</td>
<td>Clean Air Partnership</td>
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<tr>
<td>Cathrin Winkelmann</td>
<td>City of Toronto</td>
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<tr>
<td>Cathy Zhau</td>
<td>City of Toronto</td>
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<tr>
<td>Chris Buse</td>
<td>University of Toronto</td>
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<tr>
<td>Ciara De Jong</td>
<td>Toronto Environment Office</td>
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<tr>
<td>Debbie Ramsay</td>
<td>Ministry of the Environment</td>
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<tr>
<td>Donna Churipuy</td>
<td>Peterborough County-City Health Unit</td>
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<tr>
<td>Dr. David Williams</td>
<td>Ministry of Health and Long-Term Care</td>
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<tr>
<td>Elise Hug</td>
<td>Tower Renewal</td>
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<tr>
<td>Eleanor Glor</td>
<td>Public Health Agency of Canada (PHAC)</td>
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<tr>
<td>Eva Ligeti</td>
<td>Clean Air Partnership</td>
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<tr>
<td>Helen Doyle</td>
<td>York Region Public Health Branch</td>
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<tr>
<td>Ingrid Tyler</td>
<td>Ontario Agency for Health Protection and Promotion</td>
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<tr>
<td>Iqbal Kalsi</td>
<td>Middlesex-London Health Unit</td>
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<tr>
<td>Jim Faught</td>
<td>Facilitator, Lura Consulting</td>
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<td>Jim Kroesen</td>
<td>Social Housing, Unit City of Toronto</td>
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<tr>
<td>Kaila-Lea Clarke</td>
<td>Health Canada</td>
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<td>Kelly Hogan</td>
<td>Canadian Institute for Health Information</td>
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<td>Kevin Behan</td>
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<td>Kim Perrotta</td>
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<td>Kiran Ghai</td>
<td>Peel Public Health, Environmental Health</td>
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<td>Laura Freeland</td>
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<td>Linsey MacPhee</td>
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<td>Louise Aubin</td>
<td>Peel Public Health</td>
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<td>Mary Ellen Starodub</td>
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<td>Mira Shnabel</td>
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<td>Toronto and Region Conservation</td>
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<tr>
<td>Susan Chalmers</td>
<td>Toronto and Region Conservation</td>
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<tr>
<td>Tara Zupancic</td>
<td>Centre for Environmental Health Equity</td>
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