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PUBLIC HEALTH OBSERVATORIES: LEARNING FROM OUR WORLD NEIGHBOURS

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"Progress in reaching the Millennium Development Goals will not be measured by national averages. It will be measured by improvements in life for society's most miserable and least visible communities."

Dr. Margaret Chan

Director-General, World Health Organization (WHO)

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ABOUT THE NATIONAL COLLABORATING CENTRE FOR DETERMINANTS OF HEALTH

The National Collaborating Centre for Determinants of Health (NCCDH) was announced on May 1, 2004 along with five other National Collaborating Centres for Public Health and the creation of the Public Health Agency of Canada. These six National Collaborating Centres form a key part of the Government of Canada's commitment to renew and strengthen public health in Canada.

The National Collaborating Centre for Determinants of Health (NCCDH) focuses on the social and economic factors that influence the health of Canadians. The Centre translates and shares information and evidence with public health organizations and practitioners to influence interralated determinants and advance health equity.

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INTRODUCTION

In November 2008, seven representatives from Canada's Public Health Observatory (PHO) community attended the "Health Observatories: Learning from Our World Neighbours, 2008" meetings hosted by the London Public Health Observatory, in London and Newcastle, England. The purpose of the tour was twofold: to understand in greater depth Public Health Observatories; and, through sharing Canada's PHO progress to date, explore the possibility of establishing an Observatory network between Canada's nascent Association of Population Health Observatories (CaNPHO), the United Kingdom's established Association of Public Health Observatories (APHO), and APHO's European partners.

This report was jointly commissioned by the National Collaborating Centre for Determinants of Health (NCCDH) located in Antigonish, Nova Scotia, and the National Collaborating Centre for Healthy Public Policy (NCCHPP) located in Montréal and Québec, Quebec. The NCCs' support for and interest in the tour stemmed from their joint desire to better understand Public Health Observatories.

BACKGROUND

The trip was organized by Dr. David Strong, MD MHSc FRCPC, who at that time was the Deputy Medical Officer, Alberta Health Services, Calgary, Alberta, Canada. Dr. Strong had taken part in a preliminary Public Health Observatory tour sponsored by the Public Health Agency of Canada in 2006. In 2007 – 2008, Dr. Strong subsequently negotiated a secondment of Justine Fitzpatrick, Assistant Director, Data and Analysis, London Health Observatory, to what was then the Calgary Health Region and Capital Health Region (Edmonton) to help establish Public Health Observatories in these respective Regions. The fall 2008 PHO UK tour was a follow-up to those activities.

The trip began in London, England. Participants (Appendix A: Tour Participant List), met at the London Health Observatory (LHO) where they were given an overview of the National Health Service (NHS), Public Health Observatories (PHO), the Association of Public Health Observatories (APHO), Primary Care Trusts (PCT), Local Authorities, and the World Class Commissioning process (Appendix B: Itinerary and Agenda). Following this introduction, the group visited two Primary Care Trusts, Harrow and Islington. The group then proceeded to Newcastle, England where they attended a meeting of the Association of Public Health Observatories (APHO). In addition to the 12 APHO members, the meeting was attended by delegates from the Languedoc-Roussillon and Aquitaine regions in France, and from Hainaut, Belgium.

The context for England's Public Health Observatories, namely the National Health System, Primary Care Trusts, and World Class Commissioning Process are not covered in this report. The document does, however, provide an overview of England's Public Health and Theme-based Observatories, as well as the UK's Association of Public Health Observatories (APHO). The document also briefly profiles the Canadian Public Health Observatories and technologies showcased during the tour.

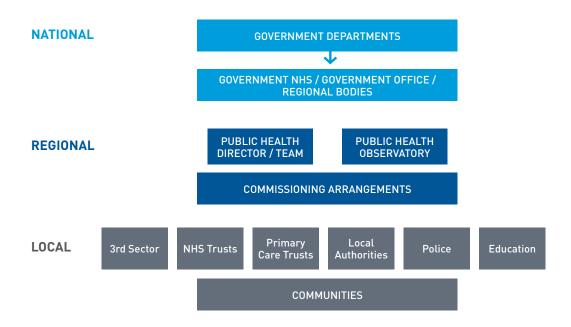
Content for this report came from a number of sources: presentations made by host organizations and tour participants, host and participant websites (specifically, the National Health Service, Association of Public Health Observatories, CaNPHO and the Saskatoon Health Region websites). Links for these sources are cited in the References and resources section of this document. Canadian participants' observations and 'lessons learned' are also reported on extensively in this report.

The document concludes with notes from the tour's closing discussion of opportunities around a global health observatory network. The discussion highlights Canadian participants' renewed appreciation of the need for, and power of meaningful, comparative local data and the steps and organizational structures Canada might consider to achieve that end.

PUBLIC HEALTH OBSERVATORIES (PHOs)

In 1999 the National Health Service took what was described as a 'centralist, top-down' approach and decreed that there would be a PHO in each region of the country. This move came out of the 1999 report, "Saving Lives: Our Healthier Nation", which includes a section on the role of observatories. This report marked a significant shift in emphasis from a focus on national targets to local needs. Concomitantly, there was a paradigm shift in health intelligence, notably from fact finding to monitoring and evaluation.

The resulting Public Health Observatories (PHOs), established in 2000, reside in the Regional layer of the health care delivery schema in Figure 1, and have an arms-length relationship with the NHS. The PHOs report functionally to the Regional Director of Public Health, but ultimately to the Chief Medical Officer in the Department of Health.



^{*} Modified slide from the March 13, 2007 slide presentation, "Introducing the LHO", by Director Bobbie Jacobson, Director, LHO

There are twelve PHOs in the UK and Ireland: one in Scotland; one in the Republic of Ireland and Northern Ireland; one in Wales; and nine in England. In 2001, the 12 PHOs formed an Association of Public Health Observatories (APHO). Each country in the association links to its own relevant national departments and agencies. However, all PHOs contribute to APHO lead work areas (Appendix: C. APHO Member List and Map). This report focuses solely on England's Public Health Observatories.

In his slide presentation, John Wilkinson, Director, North East Public Health Observatory (NEPHO) describes the PHOs as entities that:

- Monitor health and disease trends and highlight areas for action;
- Identify gaps in health information;
- Advise on methods for health and inequality health impact assessment;
- Draw together information from different sources to improve health;
- Carry out projects to highlight particular health issues;
- Evaluate progress by local agencies in improving health and cutting inequality;
- Look ahead to give early warning of public health problems.

Moreover, the PHOs in England are involved in a number of additional complementary activities that include: drug and alcohol treatment and monitoring; congenital abnormality registries; cancer registries; and the National Library for Public Health.

PHO outputs include reports, websites, synthesized intelligence, training and development, as well as advocacy. Moreover, these outputs are operationalized through: networks; involvement of academic and private sector partners; commissioned research; and the provision of an 'in-house' training environment.

Structurally, each PHO has a different but complementary focus. For example, the London Health Observatory (LHO) provides information, data and intelligence on Londoners' health and health care for practitioners, policy makers and the public. In addition, the LHO takes the national lead in monitoring health inequalities, ethnicity, as well as health and tobacco. The PHOs are coupled with a designated Primary Care Trust population and receive their funding from both the Regional Director of Public Health and their designated Primary Care Trust. Generally, the PHOs geographically map directly onto the Strategic Health Authorities.

Of special interest to the Canadian contingent was the PHOs unique ability to provide timely, comparative information to the local Primary Care Trust and Local Authority, as well as to front line practitioners. The PHOs are designed to access and interpret local data and in the process, provide organizations and communities with up-to-date and locally relevant public health intelligence. This granular information and intelligence that the PHOs provide plays a seminal role in generating the Primary Care Trust profiles (APHO, 2011). These annual health profiles highlight health and social inequalities as well as show trends in key indicators. These profiles are in part a knowledge translation tool in that they demonstrate to practitioners, policy-makers, local communities and organizations the complex nature of health and its determinants. The PHOs also inform the commissioning process – a process whereby the PCTs contract health programs and services for their local community. The health intelligence provided by the PHOs is vital to ensuring effective implementation of evidence-based pathways of intervention and care provided by the PCTs. APHO's document detailing the core roles and functions of the PHOs is referenced at the end of this report.

Building on the PHOs core roles and competencies, the NHS has also created a number of theme-based observatories.

THEME-BASED OBSERVATORIES: THE NATIONAL OBESITY OBSERVATORY (NOO)

To date, there are five theme-based observatories funded directly by the Department of Health. Themes include: Mental Health, Dental, Obesity, Injuries, as well as Child and Maternal Care (CHIMAT). These theme-based observatories work across England, Scotland, Wales, Northern Ireland and the Rebublic of Ireland. Some of the theme-based PHOs are situated within regular PHOs. Others are co-located with universities enabling them to leverage resources as well as intelligence. We will look at the theme-based National Obesity Observatory (NOO) by way of example.

The NOO was established in 2007, in conjunction with a "Healthy Weight, Healthy Lives: A Cross-Government Strategy for England, 2008". The observatory came about because coverage by the national statistical agencies was deemed inadequate at the local level. The government and health sector needed to be able to create up-to-the-minute policy-focused statistical messages. They also recognized that statistics dealing with obesity are particularly complex and very much a moving target. According to the NOO's website, "The National Obesity Observatory was established to provide a single point of contact for wide-ranging authoritative information on data and evidence related to obesity, overweight, underweight and their determinants" (National Obesity Observatory, 2008).

Data garnered supports policy makers and practitioners involved in tackling obesity and its related issues. The National Obesity Observatory is staffed by a national team which includes director, deputy director, consultant in public health, public health specialist (intelligence), public health specialist, public health analyst, web developer, public health researcher (Oxford University), and administrator. The core NOO group is based at Oxford.

In 2008, the NOO was commissioned to support the "Healthy Weight, Healthy Lives: A Cross-Government Strategy for England" in six key areas: data and evidence, surveillance, data analysis, evaluation guidance, international links, and support expert panel. Outputs included: a comparison paper on different growth thresholds for children; annual detailed analyses of the National Child Measurement Program Data; guidance and tools to support local and regional analysis of the National Child Measurement Program; and a Standard Evaluation Framework for weight management interventions.

To summarize, theme-based national observatories such as the NOO were established to provide systematic, comprehensive, coordinated policy and practice approach to the regions most pressing health issues.

THE ASSOCIATION OF PUBLIC HEALTH OBSERVATORIES (APHO)

As noted earlier, the twelve Public Health Observatories belong to an Association of Public Health Observatories (APHO) established in 2001. Alison Paty, APHO's Network Manager, describes APHO's role as being at the heart of public health policy and practice, where it is ideally positioned to act as:

- An advocate for improvements in public health information and intelligence;
- A single point of contact for external partners;
- A learning network for members and participants.

Building a network like APHO requires: a shared need; clarity of purpose; a set of operating principles; establishment of an infrastructure; and strategic business priorities.

The APHO network manager noted that such an umbrella organization reduces the duplication of work and effort; enables economies of scale and the sharing of scarce health intelligence skills; enables greater consistency and coordination of PHO activities; increases the media profile and visibility of the PHOs; and potentially ensures greater accountability of work funded through national governments. A document generated by APHO detailing "The Core Role and Functions of PHOs" is referenced in the resource section at the end of this report (APHO, 2008).

To summarize, APHO's expertise lies in turning information and data into meaningful health intelligence or, as APHO co-chair, Dr. Bobbie Jacobson says, "APHO's job is to give frontline health and social care organizations, as well as government policy-makers, the information and evidence they need to make the best decisions about improving people's health and reducing health inequities."

To achieve this end, the Observatories are constructed in such a way as to facilitate true co-operation and collaboration. In order to collate and analyze public health data resulting in meaningful health intelligence for practitioners, commissioners and other front-line decision makers, the Observatories have to share health intelligence. For example, the annual Primary Care Trust Profiles (PCT) are jointly undertaken by the London Health Observatory which specializes in Health Profiles, and the remaining eleven regional PHOs. Furthermore, the PHOs have to collaborate and share data with the aforementioned theme-based observatories which report on specialized indicators within the Primary Care Trust Profiles

To elaborate, a Health Profile provides a snapshot of a Strategic Health Authority's health (APHO, 2011). These snapshots are prepared annually by APHO and partners for each Local Council in England. The Profiles are designed to help local councils and the NHS decide where to target resources in their local area with the intent of reducing health disparities. The Health Profiles provide information on a range of issues including life expectancy and smoking. Moreover, the Health Profiles use standardized key indicators, systematically organized for each local authority. This format enables comparisons locally, regionally, and nationally as well as facilitating comparisons over time.

To promote the PHOs individual development, as well as the vitality of the network as a whole, APHO has developed a robust suite of on-line services and tools hosted on their website. APHO has also implemented quality assurance programs so the Observatories can learn from each other and embrace best practices. APHO also produces publications (for example, annual reports, information briefings, technical briefings). As well, APHO has a number of specific work streams (for example, workforce capacity and capability, improved data and information provision). APHO's extensive list of web-based tools includes the Basket of Indicators, Commissioning Toolkit for Diabetes, Health Poverty Index, Health Inequalities Toolkit, Health Inequalities Intervention Tool, and Disease Prevalence Models. It is this web-based presence and extensive roster of validated tools that enable the PHOs to provide standardized services across the UK. This, in turn, enables APHO to fulfill its vision for public health, namely: "to provide better information that supports better decision making, leading to better health".

OBSERVATIONS AND LESSONS LEARNED FROM OUR WORLD NEIGHBOURS

Given that the administrative structures of the PHOs within APHO vary widely, there was much discussion and reflection on their relevance to PHO initiatives in Canada. The following is a list of 'systems-level' observations and 'cautionary notes' around founding PHOs and an umbrella organization such as APHO. These considerations arose out of presentations and informal conversations with our UK and European counterparts.

- In the UK, the government took a highly centralized, top-down approach when creating the PHOs. From the outset, there was a 'big picture' including an Association of Public Health Authorities (APHO). What is striking about the plan is the attempted balance between local needs and national targets.
- There is support for the UK PHOs, at the most senior levels, to act in quasi-independent, autonomous ways.
- The Directors of UK PHOs have expertise in Public or Population Health. Their background expertise is not first and foremost technology.
- UK PHOs are operating in a highly competitive, rapidly-evolving market for health intelligence.
 This has led to high staff turnover and stiff competition for analysts. Unfortunately, the NHS has been slow to invest in staff training and professional upgrading.
- The Health Intelligence Market is a burgeoning industry, and private companies have positioned themselves to compete with the health intelligence services provided by the Public Health Observatories. UK PHOs need to constantly articulate their added value, market themselves and leverage extant branding.

- As the London Health Observatory Newsletter says, it's not just the data it's the "This is what it means to you!" It is an observatory's layer of interpretation that adds real value to the data.
- If a health intelligence job goes to tender, the UK PHOs are not in a position to respond to the RFP because they are not a legal entity. There is some discussion around PHOs becoming NGOs in an effort to circumvent this barrier.
- Politics plays a significant role in the way the UK PHOs are evolving. We were reminded that
 data should be impartial, rather than being analyzed and presented by politicians with a vested
 interest. Mistrust is an ongoing issue. Yet some participants felt their PHOs should be more
 politically active. For example, why not present mortality rates around tobacco by constituency?
 In other words, PHOs have an opportunity to use a currency that the public and their politicians
 understand.
- There is significant value in having health services map directly onto existing geographic boundaries. For example, the PHOs map onto the Strategic Health Authorities, and the Primary Care Trusts map onto the boroughs which also form the boundaries for education and crime.
 In addition to shared geographic boundaries, it would be useful if the reporting structures for health, education and crime also mapped onto one another.
- The NHS's Department of Health has integrated analytical capacity at every level of the
 organization rather than housing it in a separate, arms-length organization. This in situ
 analytical capacity has been key to the NHS's success.
- Sustainability will depend on a PHO's ability to: become embedded in mainstream businesses; support innovation at every level; anticipate policy shifts and developments; be flexible and adaptable; and finally and most importantly, be bold and take risks. Yet, when it comes to the PHOs, there is no single model, no 'one-size-fits-all'.
- In his presentation, "Introduction to the European Observatory on Health Systems and Policies", Dr. Martin McKee, Professor of European Public Health at the London School of Hygiene and Tropical Medicine, Co-Director of the European Centre on Health of Societies in Transition (ECOHOST), and Research Director of the European Observatory on Health Systems and Policies, noted that ECOHOST spends approximately 70% of its budget on dissemination. Based on his experience, when building networks and working alliances, there was no substitute for getting people together and giving them an opportunity to solidify relationships.
- A network also requires harnessing and working with the differences across the member organizations. Not all members will contribute equally which undermines the principle of collaboration for mutual gain. In the case of APHO, a very small pool of APHO members does most of the strategic work.
- Key underpinnings of an APHO-like network include: trust; commitment; organic as well as structured processes; shared goals and objectives; space to negotiate; support and learning; and most importantly, adequate resources.

PROGRESS TO DATE IN CANADA: THE CANADIAN NETWORK OF POPULATION HEALTH OBSERVATORIES (CaNPHO)

Dr. David Strong, then Deputy Medical Officer, Alberta Health Services, Calgary, Alberta, presented an overview of PHO development in Canada and introduced the audience to the Canadian Association of Population Health Observatories (CaNPHO) website launched in 2009. As noted on the CaNPHO website (CaNPHO, 2009), from which the following has been guoted directly with CaNPHO's permission:

"These organisations have been independently established in many parts of Canada. Although each is unique in terms of governance, structure, and title, they share [a] common purpose [...] with a view to improving health and tackling health inequalities for defined populations.

The PHOs and allied organizations work in partnership through the Canadian Network of Population Health Observatories (CaNPHO). CaNPHO's role is to support the sharing of information and methodologies that may help their members fulfill their mission. CaNPHO links with relevant national and regional population health surveillance partners to develop common indicator sets, and to make sure that efforts from all are recognized and coordinated to produce data actionable at the regional and local level. This linkage helps ensure relevancy, efficiency, timeliness, and a reduced duplication of effort at all levels."

Again, according to CaNPHO's website, (CaNPHO, 2009), "CaNPHO members work collaboratively to do the following:

- Develop common sets of indicators for monitoring local burdens of disease and their determinants, and health inequalities
- Develop common methodologies for forecasting future local disease burdens and health inequalities
- Develop common methodologies for assessing the impact of policies and programs that target modifiable risk factors and health inequalities
- · Produce synthesis reports on public health issues that are important to local decision makers
- Develop continuous career development training and opportunities for PHO staff
- Develop and implement shared technologies for enhancing knowledge transfer
- Create international partnerships with PHOs in the United Kingdom, Ireland and continental Europe
- Conduct interventional research by collaborating with each other and academic partners
- Develop a network of interest sub-groups to enhance sharing of skills and expertise"

CaNPHO has a growing number of Partners and Associated Partners listed in Appendix E.

CHALLENGES SURROUNDING PHO DEVELOPMENT IN CANADA

Tour presentations and site visits resulted in an ongoing discussion amongst the Canadian contingent around some of the systems-level barriers impacting the development and deployment of Public Health Observatory programs and technologies across Canada.

Challenges identified as being specific to the Canadian landscape include:

- Iterative reorganization of regional health authorities' geographic boundaries;
- Sparse population spread over a large geographic area;
- Health being partially funded by the Federal government but delivered by the provinces;
- Tool development and data collection still concentrated at the regional level;
- Need for engagement and enablement at the local level;
- Lack of support for local decision makers and communities;
- Need for standardized indicators and tools;
- Observatory brand is important, but in Canada may potentially be perceived as being too passive.

CANADIAN 'OBSERVATORY' SURVEILLANCE TECHNOLOGIES SHOWCASED ON THE TOUR

Despite the aforementioned challenges, Quebec, for example, developed and is realizing its Policy Framework for the Development and Evolution of Public Health Surveillance in Quebec (2007). As well, a growing number of observatory technologies have been developed and deployed in Canada. The following is a brief snapshot of the two observatory technologies showcased at the Gateshead meeting.

ALBERTA REAL TIME SYNDROMIC SURVEILLANCE NET

At the Gateshead Meeting in Newcastle, Dr. James Talbot, Associate Medical Officer of Health, Alberta Health Services, Edmonton, presented the Alberta Real Time Syndromic Surveillance Net (ARTSSN). According to Dr. Talbot, "ARTSSN is an automated public health surveillance system. The goal of ARTSSN is to enhance public health surveillance and rapid communication of the findings to public health decision-makers for actions.

ARTSSN is composed of an Oracle data repository containing data extracts from four source
databases and a user-interface built by Voxiva (a Washington D.C. information solutions
company) for data analysis, interpretation and dissemination. The sources include emergency
visits, school absences, calls to Health Link (a 24 hour nurse staffed health information service)
and notifiable disease lab testing.

- ARTSSN is used in public health for automatically detecting cases, clusters, outbreaks, and
 trends of communicable diseases, tracking environmental hazard exposure and injury, analyzing
 significant chronic diseases using a variety of tools available in the system. Timely reports of
 these events can be automatically disseminated to those who need to act on the information.
- ARTSSN may be used by data providers such as Health Link for service analysis, program evaluation, performance reporting, and other purposes.
- ARTSSN data repository can be used for research on public health, emergency medicine, policy development, health promotion, program planning and evaluation, population health and other purposes."

COMPREHENSIVE COMMUNITY INFORMATION SYSTEM (CCIS)

Also at the Gateshead meeting, Cristina Ugolini, Manager, PHO Saskatoon Health Region, presented the Canada Comprehensive Community Information System (CCIS), developed by the Public Health Observatory in Saskatoon (Saskatoon Health Region, 2011), The Public Health Observatory of Saskatoon Health Region is mandated to facilitate the development of a comprehensive community information system (CCIS). CCIS's objectives are to enhance economic, environmental, health and human services reporting and monitoring needs. CCIS is also designed to provide a common, intersectoral system for use in planning and policy-making. A foundational component of CCIS is the linkable (relational) database, which assembles data from multiple sources throughout the human service sector. It has a flexible geographic (GIS) and query interface and is capable of customized outputs for users. The broad, compatible subject data sets can be viewed individually or in combination in real time. CCIS is completely scalable: by neighbourhood, the province and Canada as a whole.

Acting as the hub for local data, CCIS will:

- Enhance strategic decision making and integrate planning;
- Ensure consistent, timely and efficient data delivery;
- Result in stronger capacity within communities, regions and the province (analysis, interpretation, application);
- Reduce cost, redundancy and effort in data acquisition;
- Automate collection, monitoring and dissemination of indicators for health status reporting within Health Regions;
- Promote partnerships within and among human services organizations;
- Contribute to research and dissemination;
- Enable the development of robust indicators;
- Facilitate targeted programs and services; and,
- Increase potential for intergovernmental efficiencies (programs and services).

CCIS itself will not make policy decisions, but will notably enhance the factual basis for each participating organization or agency for decisions regarding planning, allocation of resources, what services to provide, and what research areas to pursue.

MOVING FORWARD: OPPORTUNITIES AROUND A GLOBAL HEALTH OBSERVATORY NETWORK

The "Health Observatories: Learning From Our World Neighbours, 2008" tour concluded with a discussion around the value and feasibility of establishing a network of Public Health Observatories open to members globally.

Formal discussion amongst the attendees around a global PHO network focused on answering the following questions:

- How do we make a network sustainable within and across countries?
- How could we use the international network to carry forward the recommendations from the WHO Commission on Social Determinants of Health?
- Are there opportunities for 'twinning'? Is it useful to twin individual UK and Canadian observatories? How would we approach twinning regions/cities?
- What are the next steps with this work?

HOW DO WE MAKE A NETWORK SUSTAINABLE WITHIN AND ACROSS COUNTRIES?

Presently, England and France are the only countries in the European Union (EU) with established networks of regional observatories. Switzerland has a National Observatory. The city of Rome, Italy has a Public Health Observatory. Some other countries, Hungary for example, have a single observatory covering only one region.

Moreover, there are significant structural and cultural differences between the observatories in the UK and those in Europe to be taken into account when thinking about a global health observatory network. To elaborate, there are differences between the countries that make up the UK but, by and large, UK PHOs are highly centralized within regional boundaries. Moreover, Public Health has an established presence. By way of contrast, France, for example, takes a more federalist approach to its PHOs. Also, in France Public Health is not as central to the government's health agenda as it is in the UK. Another significant difference between the UK and France is that in France, boundaries (health, governance, education, crime) are more stable and map more closely onto one another. Interestingly, in France PHOs are less likely to be criticized by the media.

Despite the differences articulated, participants from the UK and France PHO associations, APHO and Fédération nationale des observatoires de santé (FNORS) respectively, could immediately see value in a global Public Health Observatory Network, namely: shared knowledge and expertise; shared data standards; a potential platform for health collaboration between regions; and most importantly for EU members, an opportunity to collaborate on bids for EU contracts.

HOW COULD WE USE THE INTERNATIONAL NETWORK TO CARRY FORWARD THE RECOMMENDATIONS FROM THE WHO COMMISSION ON SOCIAL DETERMINANTS OF HEALTH?

The second question received the most traction. The WHO's Commission on the Social Determinants of Health recommends that national governments establish national health equity surveillance systems that include social determinants of health equity (WHO, 2008). Moreover, the WHO proposes that it steward the creation of a global health equity surveillance system, building on existing national and international efforts. As well, the WHO wants to increase the capacity of existing health information systems.

In light of the above, members of the group proposed that the WHO take on a mentorship role and provide a 'Masters Class' on Observatories. Others felt that the WHO needs to work with regional and local level data as well as national level data. There was discussion as to how the PHOs might support that approach. APHO noted that is has offered to join the next WHO working group and wondered if CaNPHO would see value in following suit.

Specific ways in which PHOs could help the WHO realize its recommendations included:

- Assistance developing indicators to be used to measure inequalities across countries;
- Developing clearer internationally-based promising practices for addressing health inequalities;
- Development of a guide to support countries that are thinking about setting up PHOs and sharing data.

The WHO's endorsement of the London Health Observatory's Local Basket of Indicators and the Spectrum of Inequality (gender, geography, sexuality, socio-economic group, disability, age, ethnicity) was not discussed in detail. Moreover, opportunities to discuss the WHO's themes for indicator sets, proposed indicator areas and equity stratifiers (income, education, sex, ethnicity/race, place of residence, occupation) did not present themselves due to the conference's tight timeline. However, it was generally recognized that these are the very tools that would result in meaningful data being shared across a global health observatory network.

ARE THERE OPPORTUNITIES FOR 'TWINNING'?

Initially, the questions around cross-country comparisons and 'twinning' proved difficult to answer and in fact generated even more questions, such as: What does 'local' mean across countries? Is it useful to compare health in regions/cities in different countries? How could we approach twinning by regions, by cities? What do we mean by twinning? and so on. Questions were interspersed with discussion around standardized indicators and challenges around monitoring the same issues with the same tools. It was also pointed out that if the PHO network were to take on twinning alone, the undertaking might have limited impact. In the end, participants agreed that there was value in comparing the health of regions or cities in different countries at one point in time as well as comparing trends over time. It was suggested that a designated lead PHO would provide the much needed context and leadership for such an undertaking. Furthermore, it was suggested that groupings of regions with similar characteristics might also be useful. Finally, it was proposed that there could be different twins for different purposes.

WHAT ARE THE NEXT STEPS WITH THIS WORK?

At the close of the tour, the opportunity to join together and create powerful dissemination networks was recognized by all. The outstanding questions were: how was this going to happen and who was going to take the lead? Participants cited a number of next steps for the group's consideration.

- Observe other PHOs' websites/tools/development and provide feedback so we can develop "best practices" and learn how to better display health information.
- Post presentations from the conference up on the APHO website.
- Consider technical briefings: could APHO produce a technical briefing on interoperability and make it understandable for lay people? Could APHO widen the consultation process, entertain international technical briefings, and translate the briefings into multiple languages?
- Pursue work with the WHO on implementing the findings from the Commission on the Social Determinants of Health report.
- Develop initial criteria for twinning/working together.
- Share evidence of impact assessment and frameworks supporting the same. This could evolve
 into evidence for best practices in health intelligence.
- Develop a taxonomy of observatories. Such a tool would help demonstrate both the similarities and differences between PHOs, and between theme-based observatories.
- Create a global partnership that would recognize that not all partners are at the same stage of development or called the same thing (PHOs)
- Share individual contacts between PHOs.
- Make evidence of PHO evaluation or peer review available within the network to reduce unnecessary duplication.
- Convene further meetings to explore the development of best practices, namely: to
 examine particular projects; develop ongoing collaboration; and to facilitate whole network
 collaborations.
- Develop a network of networks to share, to learn and to teach.

THE CANADIAN CONTINGENT REFLECTS ON THE OPPORTUNITIES AND CHALLENGES AROUND A GLOBAL HEALTH OBSERVATORY NETWORK

Following the formal presentations, Canadian participants voiced the following challenges around Canada's participation in a global health observatory network:

- Need for the National Collaborating Centres for Public Health (NCCPHs) and PHOs and their partners to address interoperability in the broadest sense;
- Difficulty building a brand given that they are independent 'bits' across the country;
- Issues around nominating a PHO locally and having it recognized as the 'network' at regional, provincial and national levels;
- Need for the network to be an organization with clear responsibilities and roles;
- Need for the network to meet the needs of all Canadians;
- Need to include in the network Canada's First Nations and other groups which fall under Federal jurisdiction;
- Need to ensure that Canada's Aboriginal populations are visible when measuring health inequalities within Canada as well as when carrying out cross-country comparisons;
- Need for distal centres to have their own staff in order to provide information when and to the degree of granularity needed;
- Real need to inform policy, promote health in all policy, and health in all sectors.

CONCLUSION

The "Public Health Observatories Learning from Our World Neighbours, 2008" tour generated a number of seminal questions for participants, namely:

- Should we be taking a more systematic approach to PHO research and development in Canada?
- Would PHOs enable us to identify, track and ameliorate health inequalities in Canada?
- Is there value in being a member of a global health observatory network?

At the WHO Conference on Health Inequalities, held in London, November 2008, then Prime Minister Gordon Brown appeared to have the overarching answer to these questions. The London Health Observatory's November 2008 Newsletter reports that, "Using the LHO's analysis of health inequalities in London, [Brown] said that 'strategic action and sharing global best practice' was the best way of maintaining the focus on tackling health inequality" (London Health Observatory, 2008).

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APPENDIX A: TOUR PARTICIPANT LIST

CHRISTINA UGOLINI

Manager, Public Health Observatory, Saskatoon Health Region

DAVID STRONG

Deputy Medical Officer, Alberta Health Services, Calgary

JAMES TALBOT

Associate Medical Officer of Health, Alberta Health Services, Edmonton

JOSEE BOURDAGES

Chef du Service de la surveillance de l'état de la santé, Ministère de la Santé et des Services sociaux, Québec

MICHAEL GODDARD

Director, Knowledge Information and Data Systems Division, Public Health Agency, Canada

STEVE WHITEHEAD

Head of Saskatoon Public Health Observatory, Saskatoon Health Region

VERLÉ HARROP

Consultant, National Collaborating Centre for Determinants of Health

JIM CODDE

Director of Public Health, Western Australian Department of Health

MARTIN MCKEE

European Observatory on Health Systems and Policies

APPENDIX B: ITINERARY AND AGENDA

PUBLIC HEALTH OBSERVATORIES: LEARNING FROM OUR WORLD NEIGHBOURS 2008

Monday 24th November to Tuesday 25th November 2008 London, United Kingdom

AGENDA

INVITED ATTENDEES:

- » Christina Ugolini, Manager, Public Health Observatory, Saskatoon Health Region
- » David Strong, Deputy Medical Officer, Alberta Health Services, Calgary
- » James Talbot, Associate Medical Officer of Health, Alberta Health Services, Edmonton
- » Josée Bourdages, Chef du Service de la surveillance de l'état de la santé, Ministère de la Santé et des Services sociaux, Québec
- » Michael Goddard, Director, Knowledge Information and Data Systems Division, Public Health Agency, Canada
- » Steve Whitehead, Head of Saskatoon Public Health Observatory, Saskatoon Health Region
- » Verlé Harrop, Consultant, National Collaborating Centre for Determinants of Health
- » Jim Codde, Director of Public Health, Western Australian Department of Health
- » Martin McKee, European Observatory on health systems and policies

MONDAY 24 th NOV	EMBER					
Date & Time:	Monday 24 th November 09:30am – 13:30pm					
Venue:	Meeting room 5, London Health Observatory (LHO) 4th Floor, Southside 105 Victoria Street London, SW1V 6QT					
Chair:	Justine Fitzpatrick					
LHO attendees:	Bobbie Jacobson, Director, LHO Justine Fitzpatrick, Assistant Director (Data and Analysis), LHO Kathleen Dalby, Assistant Director (Corporate Management), LHO Nick Coyle, Public Health Information Analyst, LHO					
09:30am	ARRIVAL AND COFFEE					
10:00am	Welcome & introduction to the next few days	Justine Fitzpatrick				
10:20am	Introduction to London's NHS	Kathleen Dalby				
10:40am	Introduction to Health in London Islington Harrow					
11:00am	COFFEE BREAK					
11:30am	Questions	All				
12:00pm	Introduction to the European Observatory on health systems and policies	Martin McKee				

APPENDIX B: ITINERARY AND AGENDA – CONT

12:30pm	LUNCH
13.15pm	TRAVEL TO ISLINGTON PCT
Date & Time:	Monday 24 th November, 14:00pm – 16:30pm
Venue:	Islington Primary Care Trust 338-346 Goswell Road London, EC1V 7LQ
Chair:	Edwina Affie, Consultant in Public Health / Assistant Director - Public Health, Islington PCT
LHO attendees:	Justine Fitzpatrick, Assistant Director (Data and Analysis), LHO Allan Baker, Senior Public Health Information Analyst, LHO
14.00-16.30	Topics to be covered include: Introduction to the PCT and its role in public health, primary care and commissioning. Public health intelligence and knowledge management in the PCT. Introduction to Joint Strategic Needs Assessment Public health and work with clinical networks - cancer, mental health, children's services.
TUESDAY 25th NO	VEMBER
Date & Time:	Tuesday 25 th November, 10:00am - 12.00pm
Venue:	Harrow Primary Care Trust The Heights, 59 - 65 Lowlands Road, Harrow-on-the-Hill Harrow, Middlesex HA1 3AW
Chair:	Carole Furlong, Consultant in Public Health, Harrow PCT
LHO attendees:	Justine Fitzpatrick, Assistant Director (Data and Analysis), LHO
10:00-12.00	 Topics to be covered include: Introduction to the PCT and its role in public health, primary care and commissioning. Overview of World Class Commissioning. Overview of Local Strategic Partnerships, Local Area Agreements and joint working with the local authority

APPENDIX B: ITINERARY AND AGENDA – CONT

PUBLIC HEALTH OBSERVATORIES: LEARNING FROM OUR WORLD NEIGHBOURS 2008

Wednesday 26th November to Thursday 27th November 2008 Gateshead, United Kingdom

The Barbour Room, The Sage Gateshead, St Mary's Square, Gateshead Quays, Gateshead, NE8 2JR

AGENDA

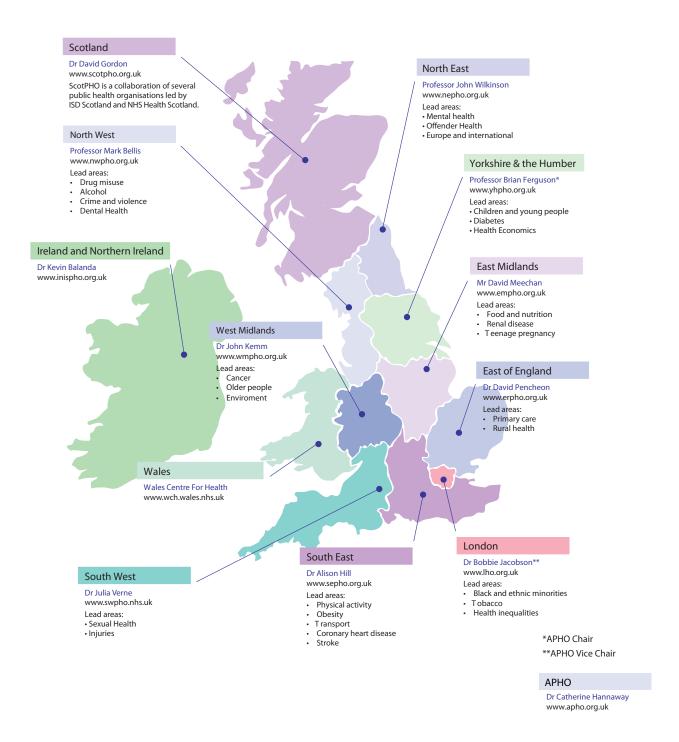
WEDNESDAY 26th NOVEMBER						
12.30-13.15	ARRIVAL AND LUNCH					
13:15-14:40	Introductory session	Chair (Bobbie Jacobson)				
13:15	Welcome and introduction to APHO	Bobbie Jacobson				
13:20	PHO development in Canada	David Strong				
13:50	Comparing and contrasting PHO development in the UK and Europe	John Wilkinson				
14.20	Questions	All				
14.40	TEA BREAK					
15:00-17:00	Theme 1 Sharing best practice	Chair (Claire Bradford)				
15:00	Building a network and making it sustainable - APHO	Alison Patey				
15:15	Building a network and making it sustainable - FNORs	André Ochoa				
15:30	Recommendations from the Commission on Social Determinants of Health and ongoing work by WHO.	Jennifer Lee				
16:10	DISCUSSION	All				
	How do we make a network sustainable within and across countries? How could we use the network to carry forward the recommendations from the Commission on Social Determinants of Health?					
16.50	Close day one	Bobbie Jacobson				
19.30 – 22.00	 19.00 Gather in Jury's Inn for evening dinner 19.30 Evening dinner Gusto Restaurant, The Quayside, Newcastle-Upon-Tyne, NE1 3DX 					

APPENDIX B: ITINERARY AND AGENDA – CONT

THURSDAY 27th	NOVEMBER					
09.00- 09.15	ARRIVAL AND COFFEE					
09:15-09:30	Theme 1 Sharing best practice	Chair (Claire Bradford)				
09:15	Introduction to theme based observatories	Louisa Ells, Gyles Glover				
09:30-10.45	Theme 2 Comparison of health in participating regions/cities	Chair (Bernard Ledésert)				
09:30	A comparison of health in participating regions/cities.	Justine Fitzpatrick				
09:55	DISCUSSION IN SMALL GROUPS:	All				
	 Is it useful to compare health in regions/cities in different countries? How would we approach twinning regions/cities? What do we mean by twinning? What are the next steps with this work? 					
10:35	Feedback from small groups	All				
10:45	COFFEE BREAK					
11.00-12.30	Theme 3 Spreading innovative technical developments	Chair (Steve Whitehead)				
11.00	New technical initiatives in Canada: Alberta Real Time Syndromic Surveillance System Canada Comprehensive Community Information System (CCIS)	James Talbot, Christina Ugolini				
11.30	Questions	All				
11.40	New technical initiatives in English PHOs.	Paul Fryers, Peter Cornelisson				
12.10	Questions	All				
12.20-13.20	LUNCH					
13.20-14:35	Theme 3 Spreading innovative technical developments (continued)	Chair (James Talbot)				
13:20	New technical initiatives in Scotland	Jennifer Bishop				
13:35	Health indicators to support local action – development of the Health Poverty Index on the Island of Ireland	Lorraine Fahey				
13:50	Questions	All				
13:55	New technical initiatives in FNORS	Bernard Ledésert				
14:25	Questions	All				
14:35 – 15:30	Next steps	Chair (Bobbie Jacobson				
14:35	Discussion about next steps and future action in small groups	All				
15:15	Feedback from small groups	All				
15:30	Close from APHO	Bobbie Jacobson				
15:30	TEA AND COFFEE AVAILABLE					

APPENDIX C: APHO MEMBER LIST AND MAP

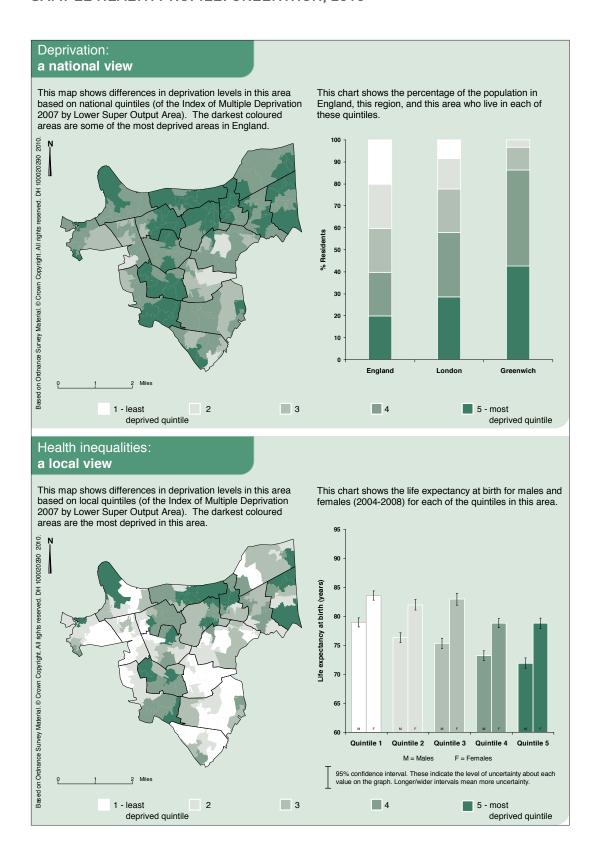
THE APHO NETWORK AND LEAD AREAS



SAMPLE HEALTH PROFILE: GREENWICH, 2010



SAMPLE HEALTH PROFILE: GREENWICH, 2010



SAMPLE HEALTH PROFILE: GREENWICH, 2010

Health inequalities: changes over time

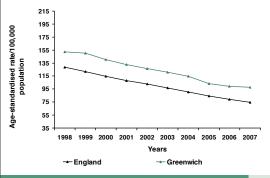
These graphs show how changes in death rates for this area compare with changes for the whole of England. Data points on the graph are mid-points of 3-year averages of yearly rates. For example the dot labelled 2003 represents the 3-year period 2002 to 2004.

Trend 1 compares rates of death, at all ages and from all causes, in this area with those for England.

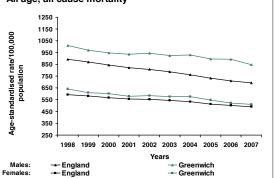
Trend 2 compares rates of early death from heart disease and stroke (in people under 75) in this area with those for England.

Trend 3 compares rates of early death from cancer (in people under 75) in this area with those for England.

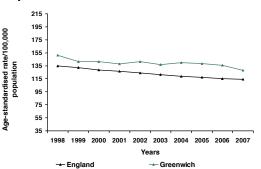
Trend 2: Early death rates from heart disease and stroke



Trend 1: All age, all cause mortality



Trend 3: Early death rates from cancer

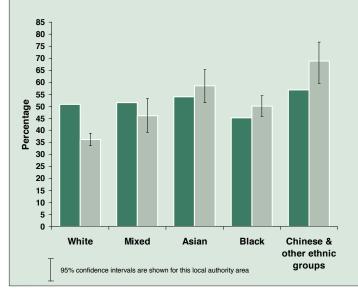


England

Greenwich

Health inequalities: ethnicity

This chart shows the percentage of pupils by ethnic group in this area who achieved five GCSEs in 2008/09 (A* to C grades including English and Maths). Comparing results may help find possible inequalities between ethnic groups.



Ethnic Groups	% pupils achieved grades	No. of pupils achieved grades
White	36.2	496
Mixed	46.1	88
Asian	58.5	114
Black	50.1	261
Chinese/other	68.8	75

If there are any empty cells in the table this is because data has not been presented where the calculation involved pupil numbers of 0, 1 or 2. Some further groups may not have data presented in order to prevent counts of small numbers being calculated from values for other ethnic groups or areas.

SAMPLE HEALTH PROFILE: GREENWICH, 2010

Health summary for Greenwich

The chart below shows how the health of people in this area compares with the rest of England. This area's result for each indicator is shown as a circle. The average rate for England is shown by the red line, which is always at the centre of the chart. The range of results for all local areas in England is shown as a grey bar. A red circle means that this area is significantly worse than England for that indicator; however, a green circle may still indicate an important public health problem.

- Significantly worse than England average
- O Not significantly different from England average
- Significantly better than England average
- O No significance can be calculated



⁺ In the South East Region this represents the Strategic Health Authority average

Domain	Indicator	Local No. Per Year	Local Value	Eng Avg	Eng Worst	England Range	En Be
	1 Deprivation	94305	42.6	19.9	89.2	• •	0.
ties	2 Children in poverty	18228	39.6	22.4	66.5	• •	6
communities	3 Statutory homelessness	299	3.05	2.48	9.84	♦ ●	0.
LIO3	4 GCSE achieved (5A*-C inc. Eng & Maths)	1048	43.4	50.9	32.1	◆	76
Our	5 Violent crime	6738	30.2	16.4	36.6	• •	4
	6 Carbon emissions	1182	5.3	6.8	14.4	♦ ○	4
	7 Smoking in pregnancy	511	12.6	14.6	33.5	O \$	3
p.s.	8 Breast feeding initiation	3322	81.3	72.5	39.7	○ ◆	92
Children's and young people's health	9 Physically active children	15376	51.4	49.6	24.6	○	79
ung p	10 Obese children	315	12.0	9.6	14.7	• •	4
ਹ ਨੂ	11 Tooth decay in children aged 5 years	n/a		1.1	2.5	♦	0
	12 Teenage pregnancy (under 18)	243	62.9	40.9	74.8	◆	14
_	13 Adults who smoke	n/a	24.1	22.2	35.2	○ ◆	10
h and	14 Binge drinking adults	n/a	18.3	20.1	33.2	○ ◆	4
s' health lifestyle	15 Healthy eating adults	n/a	33.0	28.7	18.3	• ♦	4
Adults' health and lifestyle	16 Physically active adults	n/a	9.5	11.2	5.4	• ♦	16
∢	17 Obese adults	n/a	23.4	24.2	32.8	○ ◆	1:
	18 Incidence of malignant melanoma	11	5.5	12.6	27.3	♦ 0	3
	19 Incapacity benefits for mental illness	5018	34.5	27.6	58.5	• • • •	9
and it	20 Hospital stays for alcohol related harm	2809	1320	1580	2860	♦ 0	7
Disease and poor health	21 Drug misuse						
Dise	22 People diagnosed with diabetes	9381	4.21	4.30	6.72	♦ 	2.
	23 New cases of tuberculosis	114	51	15	110	•	
	24 Hip fracture in over-65s	200	572.2	479.2	643.5	♦	27
	25 Excess winter deaths	60	10.5	15.6	26.3	○	2
	26 Life expectancy - male	n/a	75.4	77.9	73.6	◆	84
and	27 Life expectancy - female	n/a	81.7	82.0	78.8	○ ◆	8
fe expectancy and causes of death	28 Infant deaths	20	4.59	4.84	8.67	©	1
xbec xbec	29 Deaths from smoking	343	272.4	206.8	360.3	♦	11
Life e.	30 Early deaths: heart disease & stroke	175	97.6	74.8	125.0		4
	31 Early deaths: cancer	229	127.9	114.0	164.3	♦ ♦	7
	32 Road injuries and deaths	126	56.5	51.3	167.0	00	14

Indicator Notes

Indicator Notes

1 % of people in this area living in 20% most deprived areas of England 2007 2 % of children living in families receiving means-tested benefits 2007 3 Crude rate per 1,000 households 2008/09 4 % at Key Stage 4 2008/09 5 Recorded violence against the person crimes crude rate per 1,000 population 2008/09 6 Total end user CO₂ emissions per capita (tonnes CO₂ per resident) 2007 7 % of mothers smoking in pregnancy where status is known 2008/09 8 % of mothers initiating breast feeding where status is known 2008/09 9 % of year 1-13 pupils who spend at least 3 hours per week on high quality PE and school sport 2008/09 10 % of school children in reception year 2008/09 11 Weighted mean number of teeth per 5 yr old child sampled that were actively decayed, missing or filled 2007/08 12 Under-18 conception rate per 1,000 females aged 15-17 (crude rate) 2006-2008 (provisional) 13 % adults, modelled estimate using Health Survey for England 2006-2008 16 % aged % adults, modelled estimate using Health Survey for England 2007-2008 18 % adults, modelled estimate using Health Survey for England 2006-2008 18 % adults, modelled estimate using Health Survey for England 2006-2008 18 Directly age standardised rate per 100,000 population under 75 2004-2006 19 Crude rate per 1,000 working age population 2008 20 Directly age and sex standardised rate per 100,000 population 2008/09 (rounded) 21 New Problematic Drug User estimates were not available in time for inclusion 22 % of people on GP registers with a recorded diagnosis of diabetes 2008/09 23 Crude rate per 100,000 population 2006-2008 24 Directly age-standardised rate per 100,000 population for emergency admission 2008/09 25 Ratio of excess winter deaths (observed winter deaths minus expected deaths based on non-winter deaths) to average non-winter deaths 1.08.05-31.07.08 26 At birth, 2006-2008 27 At birth, 2006-2008 28 Rate per 1,000 live births 2006-2008 29 Per 100,000 population age 35+, directly age standardised rate 2006-2008 30 Directly age standardised rate per 100,000 population under 75, 2006-2008 31 Directly age standardised rate per 100,000 population 2006-2008

More indicator information is available in The Indicator Guide: www.healthprofiles.info For information on your area contact your regional PHO: www.apho.org.uk

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APPENDIX E: CaNPHO MEMBERS AND ASSOCIATED MEMBERS

PARTNERS

Vancouver Island Health Authority (VIHA)

Vancouver Coastal Health Authority (VCH)

Provincial Health Services Authority (PHSA)

Alberta Health Services (Calgary Health Region)

Alberta Health Services (Capital Health)

Saskatoon Health Region (SHR)

Winnipeg Regional Health Authority (WRHA)

Manitoba Centre for Health Policy (MCHP)

Ministère de la Santé et des Services sociaux - Quebec (MSSS)

Toronto Public Health

Sudbury & District Health Unit

Toronto Community Health Profiles Partnership

ASSOCIATED PARTNERS

National Collaborating Centre for Determinants of Health (NCCDH) National Collaborating Centre for Healthy Public Policy (NCCHPP) National Collaborating Centre for Methods and Tools (NCCMT)

NOTES	

NOTES			



National Collaborating Centre for Determinants of Health

Centre de collaboration nationale des déterminants de la santé

NATIONAL COLLABORATING CENTRE FOR DETERMINANTS OF HEALTH (NCCDH)

St. Francis Xavier University Antigonish, NS B2G 2W5 tel: (902) 867-5406 fax: (902) 867-6130 email: nccdh@stfx.ca web: www.nccdh.ca