Looking Back, Looking Forward: Public Health Within a Federal-Provincial/Territorial Health Transfer Agreement

Presentation by the Canadian Public Health Association to the Standing Senate Committee on Social Affairs, Science and Technology

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The Canadian Public Health Association is a national, independent, not-for-profit, voluntary association representing public health in Canada with links to the international public health community. CPHA's members believe in universal and equitable access to the basic conditions which are necessary to achieve health for all Canadians.

CPHA's mission is to constitute a special national resource in Canada that advocates for the improvement and maintenance of personal and community health according to the public health principles of disease prevention, health promotion and protection and healthy public policy.

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Executive Summary

The anticipated renewal of the federal-provincial/territorial agreement on health/health care presents an opportune time to reconsider and reevaluate the factors that have, over the years, fostered success in the Canadian health system and those factors that can improve the system in the future. The relatively small section of the current health fund transfer agreement dedicated to public health serves as a reminder that there is still much room for improvement.

The old adage, "an ounce of prevention is worth a pound of cure", holds true for the health of Canadians; the multitude of studies concerning the cost-effectiveness of health prevention and promotion strategies are a testament to this notion. The question then becomes, why has public health not been granted greater attention in the Canadian health discussion and within agreements between the federal and other governments, including First Nations, Metis and Inuit? While we commend the progress that has been made in improving and expanding the capacity of our country's public health systems as a means to promote, improve and protect the health of Canadians, the emphasis of most agreements continues to be on health care services and primarily acute care services.

If we are to improve the health of all Canadians, address issues of health equity and the factors outside of the conventional health system which affect health, and strive to reduce the use of acute care services and hospitals, then substantial investments must be made "upstream" in support of public health and the sectors that have an impact on health. The World Health Organization (WHO) Commission on the Social Determinants of Health called for "closing the gap in a generation". We have the resources and the capacity to achieve this in Canada.

Some progress has been made in achieving the objectives and targets set out in the 2004 *10-Year Plan to Strengthen Health Care*. But few, if any, are directly related to "public health". CPHA presents the following recommendations for a stronger and more comprehensive public health component within a future federal-provincial/territorial agreement for the Senate Standing Committee's consideration:

- Shift the focus from "health care" to "health equity" as a guiding principle;
- Adopt a fulsome and comprehensive "public health" component, in any new agreement, that includes investments in disease and injury prevention, health promotion, health protection, population health assessment, health surveillance, and pandemic preparedness and response;[1]
- Adopt public health-related targets and indicators to monitor progress towards achieving better health equity outcomes, disaggregated for different population groups across socio-economic levels, ethnicity and by geographic regions;[2]
- Improve coordination for the expected results and areas of investment between the Canada Health Transfer and the Canada Social Transfer, in order to take into account and make investments in non-health sector determinants of health;
- Create a pan-Canadian, multi-sectoral public health human resources strategy to include a national secretariat to develop better baseline information about the workforce and enhance competence as well as a joint task force to advise on public health human resources;
- Invest to increase the pool of public health practitioners: the aging of the country's "public health workforce" is an issue that warrants immediate attention;[1]
- Address the "capacity issues" of the public health system to deal with multiple events simultaneously;
- Create a National Public Health Infrastructure Fund. The intent of this targeted investment would be to assist public health units across the country to hire additional staff, purchase equipment and supplies and to implement the programs required to meet their client populations' present needs and their potential surge capacity needs. An alternative approach could be a transfer payment scheme dedicated to public health that demands a certain percentage of matching dollars from the provinces and territories in order to ensure a stable level of funding for the public health system across the country.

[1] Countries such as the UK and Australia are adopting innovative strategies to improve health equity through a social determinants of health approach. See the UK Public Health White Paper *Fair Society Healthy Lives* (2011), http://www.marmotreview.org/media-events/public-health-white-paper.aspx

[2] For example, assuming a 10-year new F/P agreement time horizon, targets could include a 75% reduction in TB prevalence by 2025, all children in Canada vaccinated against all vaccine –preventable diseases by 2025, full harmonization of provincial and federal vaccination registries, a 60% reduction in the number of youth aged 12 – 19 years who smoke by 2025, closing the gap in health inequities by reducing to 10% the differential in child morbidity between indigenous and non-indigenous communities by the year 2025.

What is public health? The long and short of it

The publicly-funded health system in Canada is highly valued by Canadians and is held up as a model in and for other countries. A health system includes all actors, organizations, institutions and resources whose primary purpose is to improve health.[2] Much of the attention and most of the investment made by the federal, provincial and territorial governments is directed at the "health care" component of this system, because of the acute and episodic nature of illness and the need for treatment.

An approach that focuses on health promotion, disease and injury prevention, health protection and population health surveillance – the hallmarks of public health – can achieve better health outcomes for Canadians, is cost-effective, and is the foundation of a sustainable health system. The health promotion, prevention and protection aspects of public health are particularly important as up to 80% of the current burden of disease in Canada is due to chronic diseases, the vast majority of which are preventable.[3] Investing in the "up-stream" population-based public health components of the health system is more cost-effective than continually increasing support to the "down-stream" (emergency and acute care services) components[4] and it serves to reduce the anticipated burden on these services.

> *…the best way to guarantee public health capacity … is to ensure that the public health system has a strong baseline capacity – a highly qualified workforce with transferable skills or competencies that can be called upon in times of need.*
>
> Dr. Cordell Neudorf
> Past Chair of the
> CPHA Board of Directors
> September 2009

Our health and well-being depend on a fully-resourced, well-functioning and effective public health infrastructure. As noted recently by Canada's Chief Public Health Officer, health promotion, disease prevention and health protection capacity can be built and maintained through collective will and leadership and by cultivating a whole-of-society approach.[5] Public health not only responds effectively and in a timely fashion to the factors that affect our health, it keeps the population healthy so that the impact of conditions that affect human health can be mitigated. If our goal is to be the healthiest nation with the smallest gaps in health then public health will be a vital contributor to this goal.

The old adage, "an ounce of prevention is worth a pound of cure", also holds true for the health of Canadians and the multitude of studies concerning the cost-effectiveness of health prevention and promotion strategies are a testament to this notion.[3] The question then becomes why public health has not been granted greater attention in the Canadian health discussion and within the federal-provincial/territorial health funding mechanisms and agreements?

Progress in Implementing the Public Health Elements of the 2004 10-Year Plan to Strengthen Health Care

The *2003 First Ministers' Accord on Health Care Renewal* focused its attention on improving the quality, sustainability of and accessibility to the publicly-funded health care delivery system. It sought to improve Canadians' access to primary health care and other diagnostic and therapeutic services, home-based and community care and access to prescription drugs. But the 2003 Accord makes no mention of public health (disease prevention, health promotion, health protection) per se, although it contains a passing reference to the need for improved population health surveillance.

The goal of the *2004 10-Year Plan to Strengthen Health Care* is to improve access to publicly-funded health care services and to reduce wait times. This goal is to be achieved through cooperation among governments, the participation of health care providers and patients, and strategic investments in areas such as: increasing the supply of health professionals (e.g., doctors, nurses and pharmacists); effective community based services, including home care; a pharmaceuticals strategy; effective health promotion and disease prevention, and adequate financial resources.

[3] The Canadian Public Health Association is conducting a comprehensive literature review of studies and documents about the cost-effectiveness of health prevention and promotion strategies/interventions, as part of the exercise to "build the case" for investing in public health.

The section on prevention, promotion and public health is sparse. It mentions four areas for future federal-provincial/territorial attention:

- further collaboration and cooperation in developing coordinated responses to infectious disease outbreaks and other public health emergencies through the new Public Health Network;
- expanding immunization through ongoing investments for needed vaccines through the National Immunization Strategy, thereby providing “new immunization coverage” for Canadian children;
- accelerating work on a pan-Canadian Public Health Strategy, which will set goals and targets for improving the health status of Canadians and include efforts to address common risk factors, such as physical inactivity, and integrated disease strategies; and
- working across sectors to support and promote healthy settings, through initiatives such as Healthy Schools.

All governments recognize that public health efforts on health promotion, disease and injury prevention are critical to achieving better health outcomes for Canadians and contributing to the long-term sustainability of Medicare by reducing pressure on the health care system. In particular, managing chronic disease more effectively maintains health status for individuals and counters a growing trend of increasing disease burden.

10-Year Plan to
Strengthen Health Care
September 2004

We should bear in mind that the 2004 agreement was formulated subsequent to the SARS outbreak in Canada. The previous year saw the release of the report of the National Advisory Committee on SARS and Public Health[6] which made several recommendations aimed at strengthening the capacity of the country’s multiple public health systems and to enhance coordination among the federal and provincial/territorial levels. The federal government of the day moved forward by putting into place responses to several of the Naylor Commission’s recommendations[4], including:

- establishing the Public Health Agency of Canada (PHAC);
- creating the position of Chief Public Health Officer of Canada;
- improving national surveillance of and response to pandemic outbreaks;
- establishing new programs and schools of public health within the country’s universities as a means of increasing the pool of qualified professional public health practitioners and researchers, and,
- establishing National Collaborating Centres for Public Health, the purpose of which are to provide national focal points for key priority areas in public health and contribute to the development of a pan-Canadian public health strategy.

So, what has been achieved in terms of the public health-related elements in the 2004 10-Year Plan?

- *Further collaboration and cooperation in developing coordinated responses to infectious disease outbreaks and other public health emergencies through the new Public Health Network*

Much effort, time and resources were dedicated to improving the pan-Canadian capacity to respond to infectious disease outbreaks and other public health emergencies. A Public Health Network was created, and the Public Health Agency of Canada assumed a much-needed leadership role in coordinating with the provinces and territories the design and implementation of a more robust national disease outbreak surveillance and response system. The pH1N1 outbreak in 2009 demonstrated the effectiveness of the improved system and at the same time offered valuable lessons in terms of improvements that are still needed.

- *Expanding immunization through ongoing investments for needed vaccines through the National Immunization Strategy, thereby providing “new immunization coverage” for Canadian children*

The National Immunization Strategy (NIS) was launched in 2003. Its goal was to provide an optimal level of immunization for all Canadians, with complete coverage of all children for routinely recommended childhood vaccines. Through the NIS, access was improved across all jurisdictions to four recently

[4] CPHA and other health sector organizations have published and presented to various fora, including Parliamentary hearings, their concerns about the failure to and the consequences of not fully implement all of the Naylor Commission’s recommendations.

developed vaccines (acellular pertussis, meningococcal C conjugate, pneumococcal conjugate and varicella).

Despite these achievements, the NIS lags behind in the development of a national immunization registry network, a national immunization research plan, training programs for health professionals, educational programs for the public, and a nationally harmonized paediatric immunization schedule.[7]

Although public consultations took place recently on a renewed NIS, there has been no public announcement as to when a new NIS will be announced, its goals/objectives/targets, the means to achieve them, and funding.

- *Accelerating work on a pan-Canadian Public Health Strategy, which will set goals and targets for improving the health status of Canadians and include efforts to address common risk factors, such as physical inactivity, and integrated disease strategies*

A pan-Canadian Public Health Strategy has never been formulated, despite the recommendations in this Senate Committee's own Subcommittee on Health 2009 report *A Healthy Productive Canada: A Determinant of Health Approach*[8] which called for the formulation of a pan-Canadian population health strategy as a means to address health inequities and disparities, especially those found in First Nations and Inuit communities. This includes the setting of goals and targets for improving the health status of Canadians and includes efforts to address common risk factors. Several other countries, including the United States of America (e.g., the US Healthy People 2020[9] strategy with goals, indicators and supporting actions to achieve them) have moved ahead in this regard.

Although the excellent annual reports released by our country's Chief Public Health Officer do provide an analysis of the state of public health, including health equity, in Canada[10], the 2004 10-Year Plan did not define or include any public health-related goals or indicators. Hence, there are no means through this national agreement to monitor and report on "success" to achieve good health status for all Canadians. It is basically impossible to ascertain the impact of the Canada Health Transfer on public health outcomes – was there value for money?

- *Working across sectors to support and promote healthy settings, through initiatives such as Healthy Schools.*

A number of single-focus programs and mechanisms, including income tax credits, have been launched to address issues such as physical inactivity and obesity. However, no comprehensive national approach has been implemented. A national injury prevention strategy, although announced by the Government of Canada in the Speech from the Throne in March 2010, has never materialized. Additionally, the Federal Tobacco Control Strategy, probably one of this country's most effective means to address one of the primary causes of diseases in Canada, will end on March 30, 2012. Although the data indicate reductions in smoking prevalence in the general population, the FTCS did not reach its target of a 12% smoking prevalence rate and there remain close to 6 million smokers in Canada. As with the NIS, the Government of Canada recently launched a public consultation seeking input into a new FTCS. However, as with the NIS, the direction, content and funding for a new FTCS has not been discussed publicly.

Opportunities, Challenges and Threats to our Country's Public Health System

The National Advisory Committee on SARS and Public Health (2003) highlighted several critical issues facing our country's public health system:

- The country cannot afford to have any weak links in a pan-Canadian chain of health protection and disease control;
- Investments in public health are modest. At the time of the Naylor Commission, perhaps 2-3% of health spending, depending on how one defines numerators and denominators was ear marked for public health. The Canadian Institutes for Health Information has since estimated spending on public health to be in the order of 5-6% of total health spending;[11] and
- no federal transfers are earmarked for local and provincial/territorial public health activities. Public health competes against personal health care services for health dollars in provincial/territorial budgets.

The investments over the past several years made in public health at the federal and provincial/territorial levels have made a difference – they are good value for money. For example, the Canadian Strategy for Cancer Control (CSCC),[12] investments made towards the prevention and management of diabetes, hepatitis C and HIV/AIDS[13], the Drinking Water Safety Program for First Nations communities, the First Nations Water Management Strategy[14], the Public Health Agency of Canada's Public Health Scholarship and Capacity Building Initiative, the Public Health Human Resources (PHHR) Task Group, and the Integrated Strategy on Healthy Living and Chronic Disease[15] represent some of the initiatives launched over the past several years that bear witness to the importance of investing "up stream" in public health as a means of reducing the load on the acute health care system and reducing overall health care costs.

The November 2010 *Declaration on Prevention and Promotion* from the FPT Ministers of Health is a step forward towards developing a pan-Canadian public health strategy.[16] It is an important instrument to garner political, public and multi-sector support for action on priority public health issues facing our citizens. The Council of the Federation's July 2011 declaration highlighted the concern of the provincial and territorial First Ministers about rising health costs and the urgency of expanding and improving disease prevention, health promotion and health protection services.[17]

The H1N1 outbreak in 2009 once again tested the country's public health systems at all levels. The systems responded well to the two waves of H1N1 and the country was, overall, better prepared to respond. There was better coordination between the federal government agencies (PHAC) and the P/T ministries of health and other agencies.

Nevertheless, the redeployment of staff and resources to deal with the pandemic came at the cost of other public health activities. Public health human resources were stretched to the limit. Not only did they deal with the largest-scale urgent national immunization program, with public health workers across the country largely deployed to the H1N1 campaign, but some of their usual activities had to be postponed or cancelled.[18] Once the pH1N1 situation was under control, public health workers had to deal with the backlog and reschedule missed public health services and appointments. In fact, some of these services were never "caught up". There was no assessment of the impact that the H1N1 situation had on the cohort of people affected by deferred, delayed or cancelled public health interventions (missed or delayed screening, lower coverage rates, prevention campaigns delayed or cancelled). If any additional demands had been placed on the public health system, the result could have been "system collapse".[19] The public health system was stretched to its response limit and there was no surge capacity.

> *The concept of surge capacity must be based on a sufficiency of capacity for business as usual, thereby allowing effective redirection of resources in times of need.*
>
> Testimony of CPHA to the National Advisory Committee on SARS and Public Health, 2003
>
> *There is a need for greater surge capacity at the front lines of the health care system and of public health. This was a significant issue for us and for our partners.*
>
> Testimony of CPHA member, Dr. Isra Levy, Medical Officer of Health for Ottawa to the Standing Senate Committee on Social Affairs, Science & Technology hearings on H1N1, October 22, 2010

We already have a burdened health system. The country's public health system is no exception. Many local public health units are under considerable strain to respond to the "normal" demands for public health services. We have known for several years that the public health infrastructure is under-resourced and inadequately funded. The economic situation that continues to affect our country, the influenza pandemic, and the scarcity of public health resources add additional burdens to the system and are harbingers of a public health emergency in the making. Canada must move from a "just-in-time" approach to one which is well-prepared and sustainable. Consistent and long-term investment in health promotion, disease prevention, health protection, and emergency preparedness are needed now to avoid system collapse and to ensure the sustainability of our overall health system for future generations.

The future responsiveness of the health system is highly dependent on the capacity of the country's public health system to function effectively and efficiently. We learned many lessons from the SARS outbreak, the

contaminated water supply situations in Walkerton and North Battleford, and from the recent listeriosis and H1N1 outbreaks. Despite the many recommendations and actions taken to address these situations, the capacity of our public health "system" to respond to protect the health of Canadians remains an issue warranting attention by all levels of government.

Health Care, Health or Health Equity for All?

The federal-provincial/territorial health transfer agreement should focus on strategic investments through federal funding transfers to the provinces to improve, promote and protect the health of all Canadians, no matter where they live or the circumstances and contexts that define their lives.

The landmark report of the WHO Commission on the Social Determinants of Health,[20] the annual reports to the Parliament of Canada on the state of public health by the Chief Public Health Officer,[21] and the report of the Senate Subcommittee on Health (also known as the Keon Report)[22] have all called for a population health approach to achieve health and health equity for all Canadians. The WHO Commission on the Social Determinants of Health called for "closing the gap in a generation". We have the resources and the capacity to achieve this in Canada. What is needed is the political will to make this happen.

Numerous studies have shown the links between socio-economic status and health outcomes. Social determinants of health such as education, housing conditions, unemployment manifest themselves in many of the adverse health conditions and challenges faced today. One recent research study in Canada showed the health impacts of precarious employment and income insecurity on racialized people.[23] These included mental health issues (e.g., depression, addictions), digestive disorders (e.g., ulcers, constipation), physiological impacts (e.g., chronic exhaustion, weight gain/loss, chronic pain), cardiovascular impacts (e.g., hypertension, high blood pressure) and direct workplace injuries. A large percentage of study participants (40%) self-rated their current health as "fair" or "poor", a rate 4 to 5 times higher than that of average Canadians.

As several recent studies and reports point out, there is a strong relationship between income, socio-economic status and health.[24, 25] These include a strong link between:

- income and rates of suicide (particularly among Aboriginal youth);
- income, education, housing conditions, unemployment and health outcomes; and
- income and early childhood development.[26]

The Health Council of Canada has also pointed out that governments must change their approach to addressing the needs of poorer and socially disadvantaged Canadians as a means of controlling health care costs.[27] The Conference Board of Canada has echoed this sentiment in calling for a shift to strategic investments in the socio-economic determinants of health that will deliver improvements in health outcomes as well as cost savings and economic benefits.[28]

On October 21, 2011, at the end of the WHO Conference on the Social Determinants of Health, over 110 WHO Member States, including Canada, acknowledged through the "Rio Declaration" the urgent need for real action on the fundamental and structural "determinants of health", most of which lie outside of the purview of conventional health care systems.[29] Although a non-binding declaration, the Government of Canada acknowledged that "health inequities … are politically, socially and economically unacceptable, as well as unfair and largely avoidable, and that the promotion of health equity is essential to sustainable development and to a better quality of life and well-being for all." The Government also reaffirmed its resolve "to take action on social determinants of health to create [a] vibrant, inclusive, equitable, economically productive and healthy society."

A new federal-provincial/territorial agreement on health transfer agreements should reflect a fundamental shift in the mindset with which we view the health system. It should no longer be one intended merely to treat ill people but rather one that also seeks to prevent Canadians from getting sick in the first place. This can be accomplished by taking health equity into account and placing greater attention on disease and injury prevention, health promotion and health protection. This sentiment is reflected in the Chief Public Health Officer 2010 Report on the State of Public Health in Canada, in which he notes: "Health promotion, injury prevention, and efforts to encourage and increase social participation and inclusion should be seen

as essential investments that can save money, maintain and improve quality of life, and drive healthy economies."[30]

Quo Vadis? The Place of Public Health in a New Federal-Provincial/Territorial Health Transfer Agreement

In its 2000 issue paper, *An Ounce of Prevention: Strengthening the Balance in Health Care Reform* [31], the CPHA Board of Directors outlined the various building blocks required for a strong Canadian health system, including a call for:

- federal leadership and intergovernmental cooperation to create appropriate solutions to immediate issues as well as the need to modernize the system and ensure its sustainability;
- a broad vision for health care that identifies an integrated continuum of services and is focused on population health and the full range of factors that affects it;
- enriched public health-specific funding and the development of an appropriate escalator to ensure ongoing, adequate financing of and stability for the health care system;
- federal financial participation in non-insured services including public health, primary care, and community and home care – all essential components of a comprehensive health system;
- strategies to strengthen the transparency and accountability of government health care funding including measures to strengthen information-sharing and best practices, services and system performance and public reporting on outcomes;
- measures to strengthen the development and delivery of public health within the broader health services continuum, including knowledge and skills development, human resources development and utilization strategies, alliance-building and inter-sectoral collaboration, performance and outcome indicators, and community-based governance systems;
- strategies for allocating more appropriate levels of public resources for public health and disease and injury prevention, health protection and promotion activities, from within global government budgets; and,
- a moratorium on further privatization of Canada's health system until there has been a public analysis of the appropriate mix of public and private funding and delivery that is desirable and sustainable within a renewed health care system.

CPHA is of the opinion that these elements are still applicable to the challenges public health faces today and are worth revisiting as we consider what should be included within a new federal-provincial/territorial health fund agreement.

While we agree with a guaranteed 6% annual escalator of federal transfers to the provinces and territories in support of a range of health care services, CPHA calls for a more robust comprehensive population health–based public health component within a future "Health Accord". If not, then we are concerned that the investments made by FPT governments will continue to focus on medically insurable services and not address the "upstream" factors that impact the health of Canadians.

"We also need to match the resources we have to the policy agendas we are talking about. We talk about improving population health, moving to more disease prevention and so on, yet we're utilizing most of our health care providers in the disease management basket, rather than looking at which of our health care providers really could add and advance the health promotion agenda, the population focus, and so on."

Dr. Jeanne Besner
Chair, Health Council of Canada
in her presentation to the Standing Committee on Health related to health human resources.
April 23, 2009

CPHA presents the following recommendations for consideration within a new federal-provincial/territorial health fund agreement:

- Shift the focus from "health care" to "health equity" as a guiding principle;
- Adopt a fulsome and comprehensive "public health" component, in any new agreement, that includes investments in disease and injury prevention, health promotion, health protection, population health assessment, health surveillance, and pandemic preparedness and response;[5]

[5] Countries such as the UK and Australia are adopting innovative strategies to improve health equity through a social determinants of health approach. See the UK Public Health White Paper *Fair Society Healthy Lives* (2011), http://www.marmotreview.org/media-events/public-health-white-paper.aspx

- Adopt public health-related targets and indicators to monitor progress towards achieving better health equity outcomes, disaggregated for different population groups across socio-economic levels, ethnicity and by geographic regions;[6]
- Improve coordination for the expected results and areas of investment between the Canada Health Transfer and the Canada Social Transfer, in order to take into account and make investments in non-health sector determinants of health;
- Create a pan-Canadian, multi-sectoral public health human resources strategy to include a national secretariat to develop better baseline information about the workforce and enhance competence as well as a joint task force to advise on public health human resources;
- Invest to increase the pool of public health practitioners: the aging of the country's "public health workforce" is an issue that warrants immediate attention;[32]
- Address the "capacity issues" of the public health system to deal with multiple events simultaneously;
- Create a National Public Health Infrastructure Fund. The intent of this targeted investment would be to assist public health units across the country to hire additional staff, purchase equipment and supplies and to implement the programs required to meet their client populations' present needs and their potential surge capacity needs. An alternative approach could be a transfer payment scheme dedicated to public health that demands a certain percentage of matching dollars from the provinces and territories in order to ensure a stable level of funding for the public health system across the country.

Concluding Remarks

It is imperative that Canada be prepared to respond in a timely and effective manner to existing and potential threats to the well-being, health and prosperity of its citizens. It is equally vital to put in place policies and strategies that will improve health for all and decrease health inequities for future generations. An effective health system includes a robust public health component. Neglecting the needs of the public health component will make our responses to health threats merely reactive. As a provincial premier noted, not being prepared for public health threats, now and for the future, is like witnessing a multi-vehicle health care pileup in the making.[33]

[6] For example, assuming a 10-year new F/P agreement time horizon, targets could include a 75% reduction in TB prevalence by 2025, all children in Canada vaccinated against all vaccine –preventable diseases by 2025, full harmonization of provincial and federal vaccination registries, a 60% reduction in the number of youth aged 12 – 19 years who smoke by 2025, closing the gap in health inequities by reducing to 10% the differential in child morbidity between indigenous and non-indigenous communities by the year 2025.

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[1] As noted by a witness in March 2008 before the House of Commons Standing Committee on Health review of the 10-year plan to strengthen health care, the average age of individuals in health occupations was 41.9 years in 2005 – 2.3 years older than the average age of the general Canadian workforce. Over the next five years, 1/5 of physicians and 1/3 of nurses will be ready to retire. Although there is no evidence to date, local anecdotal information from the field indicates that this is equally true for the public health workforce.

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[17] The Council of the Federation, July 2011. Premiers Focus on Families. Available at: http://www.councilofthefederation.ca/pdfs/Communique_and_Backgrounder_Families_July21.pdf.

[18] Debra Lynkowski, oral presentation before the Standing Committee on Health: Session on H1N1 Preparedness and Response, October 21, 2009.

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[22] Parliament of Canada, The Standing Senate Committee on Social Affairs, Science and Technology, *A Healthy Productive Canada: A Determinant of Health Approach. Final Report of the Senate Subcommittee on Population Health*, June 2009. Available at: http://www.parl.gc.ca/Content/SEN/Committee/402/popu/rep/rephealth1jun09-e.pdf.

[23] RM Wilson, P Landolt, YB Shakya, G-E Galabuzi et al. *Working Rough, Living Poor: Employment and Income Insecurities face by Racialized Groups in the Black Creek area and their Impacts on Health. Income Security, Race and Health Working Group, Access Alliance Multicultural Health and Community Services. 2011.* Downloaded at: http://accessalliance.ca/content/launch-working-rough-living-poor-report .

[24] World Health Organization. *Final Report of the Commission on Social Determinants of Health.* Ibid.
A Healthy Productive Canada: A Determinant of Health Approach. Final Report of the Senate Subcommittee on Population Health. Ibid.

[25] A study carried out in the UK demonstrated that each 1% increase in unemployment was associated with a 0.79% rise in suicides and an increase in alcohol abuse. See Stuckler D et al. The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. *Lancet early on-line publication* July 8, 2009 cited at http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61124-7/fulltext (downloaded July 9, 2009).
The Public Health Leadership Institute and the North Carolina Institute for Public Health held an on-line webcast session at which public health leaders discussed issues related to the capacity of public health systems to function effectively in an economic recession. One of the concerns expressed was the capacity of public health services to respond adequately given that the number of people adversely impacted by the economic decline will be expected to rise significantly, thereby increasing the demand on public health at all levels. North Carolina Institute for Public Health, Public Health Survival: Leadership in a Falling Market, December 15, 2008. Cited at http://www.sph.unc.edu/nciph/public_health_survival_leadership_in_a_falling_market_8968_9396.html (downloaded December 19,2008).

[26] Chief Public Health Officer. Ibid.

[27] Health Council of Canada. Stepping it up: Moving the Focus from Health Care in Canada to a Healthier Canada. December 2010. Downloaded at: http://www.healthcouncilcanada.ca/docs/rpts/2010/promo/HCCpromoDec2010.pdf.

[28] The Conference Board of Canada. Healthy People, Healthy Performance, Healthy Profits. 2008.

[29] World Health Organization. WHO Conference on the Social Determinants of Health. Available at http://www.who.int/sdhconference/declaration/Rio_political_declaration.pdf.

[30] Chief Public Health Officer. Report on the State of Public Health in Canada 2010; i.

[31] Canadian Public Health Association. *An Ounce of Prevention: Strengthening the Balance in Health Care Reform.* Ottawa, 2009.

[32] As noted by a witness in March 2008 before the House of Commons Standing Committee on Health review of the 10-year plan to strengthen health care, the average age of individuals in health occupations was 41.9 years in 2005 – 2.3 years older than the average age of the general Canadian workforce. Over the next five years, 1/5 of physicians and 1/3 of nurses will be ready to retire. Although there is no evidence to date, local anecdotal information from the field indicates that this is equally true for the public health workforce.

[33] The Premiers and the flu. *The Globe and Mail*, August 7, 2009.