#### NON-COMMUNICABLE DISEASES ON GLOBAL AGENDAS

ISSUE BRIEF ON NON-COMMUNICABLE DISEASES

#### **KEY MESSAGES**

- Non-communicable diseases are crucial to the success of the global health agenda being pursued by world leaders, international agencies, donors, civil society, and other major stakeholder groups; likewise, supporting other global health agendas can strengthen the response to NCDs.
- Latin America and the Caribbean is a **rapidly aging** region; non-communicable diseases must be a central concern in the aging agenda, including dialogue on social protection, healthy and productive aging, long-term caregiving, and rights of the aged population.
- The impact of non-communicable diseases on women's health and economic participation must be considered.
- There are strong links between infectious and non-communicable disease: the two must be addressed in a complementary fashion by health financing and delivery systems.
- A focus on non-communicable diseases can contribute substantially to the **health systems strengthening** agenda; the elements required for adequate prevention and management of non-communicable disease are elements that can facilitate high-quality healthcare for a variety of conditions.
- Reorienting health systems toward primary healthcare requires attention to health promotion and disease prevention, two fundamental strategies for addressing non-communicable disease.
- Climate change has the potential to increase risk for non-communicable diseases, in particular respiratory diseases, and some types of cancer.
- Non-communicable diseases and poverty are interlinked; non-communicable diseases must be included into poverty reduction strategies and global dialogue surrounding renewal of the MDGs in 2015.







#### IMPORTANCE OF NON-COMMUNICABLE DISEASES TO HEALTH AND DEVELOPMENT AGENDAS

Global health agendas have organized efforts and funds from governments, donors, health professionals, and civil society around specific objectives and targets. In spite of the swirling attention around global health, it is only recently that due attention has begun to be paid to chronic diseases and their risk factors. In September 2011, Heads of State and Government will convene at the UN High-Level Meeting (UN HLM) on Non-communicable Diseases to take on this issue for the first time on such a grand stage.

With millions of people living with non-communicable diseases (NCDs) in the Americas, there is an urgent need for action from multiple stakeholders. The UN HLM has the opportunity to be a galvanizing moment. The Region of the Americas can take the lead in connecting this cross-cutting issue to other important global agendas, such as the Millennium Development Goals. Other worldwide health goals cannot be attained without addressing NCDs.

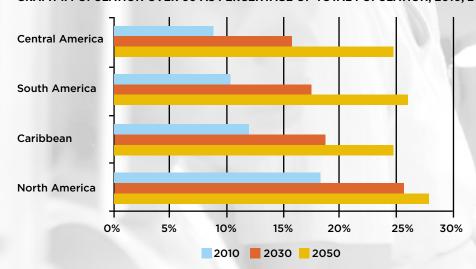


#### IMPORTANCE OF SOCIAL PROTECTION, HEALTHY AGING, AND RIGHTS OF OLDER PERSONS

The Region of the Americas is aging at a quicker pace than any developed region in the past. In Latin America and the Caribbean today, ten percent of the population is aged 60 and above. This percentage will rise to 17% by 2030 and 26% by 2050.

"Latin America and the Caribbean are aging at a quicker pace than developed countries experienced in the past."

GRAPH 1. POPULATION OVER 60 AS PERCENTAGE OF TOTAL POPULATION, 2010, 2030, 2050



As the Region's population ages over the next four decades, the number of older people with NCDs will rise if current trends continue. The Region will have to contend with the economic and social repercussions of an older population in poor health. A response to NCDs will need to recognize needs of the Region's aging population and include social protection, healthy and productive aging, and long-term caregiving.

RIGHTS OF OLDER PERSONS. The most serious challenges to older people's rights come in the form of age discrimination, elder abuse, barriers to workforce participation, chronic poverty, and importantly, little or no access to health and social services suitable for their needs. Advocates are campaigning for a United Nations convention on the rights of older persons that would protect the right to health for older persons, guide policymaking, and establish standards for service delivery for older persons. Non-communicable diseases deserve particular emphasis in this discussion, as current systems are ill-prepared to address them adequately. As a first step, in November 2010, the UN adopted Resolution 65/182, calling upon governments to ensure "conditions that enable families and communities to provide care and protection to persons as they age, and to evaluate improvement in the health status of older persons, including on a gender-specific basis, and to reduce disability and mortality."2

**SOCIAL PROTECTION.** Pensions and health systems can be crippled by the increase in the magnitude of beneficiaries with NCDs, beneficiaries who may require costly and complicated treatments. For example, the cost to care for a person with diabetes and end-stage kidney disease (a serious complication of diabetes) is 3–4 times the cost of care for a person with diabetes and no complications.<sup>3</sup> By shifting focus to prevention, early detection, and healthy aging, systems can prevent the high medical costs incurred by an aging population with high incidence of noncommunicable disease.

Social protection systems in the Americas to reorient themselves toward facilitating healthy aging. Some clear ways forward are training of health workers to address non-communicable disease risk factors and developing financial support mechanisms to cover preventive treatments and facilitate savings for longterm care. Interventions should target older women, who are more likely to be widowed and less likely than men to have access to either formal or informal social protection, pension, or health insurance plans.<sup>4</sup>

For those older adults not covered under social protection systems, older individuals with poorly managed non-communicable diseases can put financial pressure on families. Two-thirds of adults over age 60 in Latin America live with their adult children.<sup>5</sup> These working-age adults bear the brunt of caregiving, which is disproportionately carried out by women and can be complicated by non-communicable diseases that require daily attention. There is policy relevance to extend the coverage of social protection systems and increase support for caregivers, who often must leave the formal workforce to provide unremunerated care.

**HEALTHY AND PRODUCTIVE AGING. The World** Economic Forum reports on the importance of healthy lifestyles to the aging process; "A healthy lifestyle can reduce the effects of aging because the speed at which humans age is only 25% dependent on genes and 75% on the individual."6 In addition to investments to promote healthy lifestyles, investments must be made to match improvements in physical and mental health to increased opportunities to remain engaged in decent employment and contribute to society. One clear example of an area for action is retirement age: While male life expectancy has increased by an average of 13 years in Latin America and the Caribbean over the past four decades the legal age of retirement has not followed suit. The legal age of retirement calculated for a subset of 8 countries of the Region has only increased by three years over the same time period.<sup>7</sup>



## WOMEN, HEALTH, AND DEVELOPMENT: NON-COMMUNICABLE DISEASES ARE A PRIORITY AREA WITHIN THIS AGENDA.

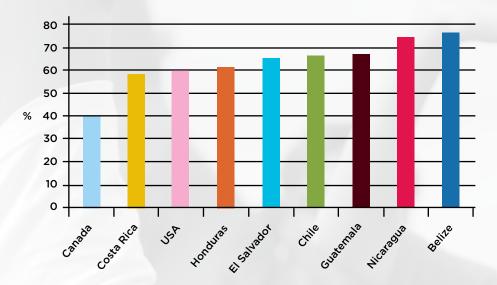
The global agenda on women, health, and development centers on elevating the status of women and girls. Within this agenda are both attention to the particular health needs of women and girls, as well as recognition of the contribution of women and girls to overall development objectives. In 2010, the UN launched the Global Strategy for Women's and Children's Health which received \$40 billion in pledges to support its implementation over a five-year period. The 2010 establishment of UN Women, the United Nations organization for gender equality and the women's empowerment, gave this agenda even further momentum and ability to garner human and financial resources to make substantial improvements in women's health and status.

The report *Non-communicable Diseases: A Priority* for *Women's Health and Development* calls for gender-responsive health systems, greater involvement of women and girls in policy development, and greater attention to the unique role of gender in the design of non-communicable disease research. The Global Strategy also calls for integrated care to improve prevention and treatment of a multitude of health conditions, including non-communicable diseases. There is scope to strengthen these links at the country level, including risk assessment, screening, and education for non-communicable disease into existing structures for maternal and women's health.

There are several reasons why focusing on women and girls is crucial to the success of the NCD agenda. First, there are specific non-communicable conditions that affect women and their offspring. As one example, women who develop gestational diabetes are at greater risk of type 2 diabetes later in life, as are their offspring. Second, women are experiencing NCDs and risk factors at staggering rates. A visible example of this is the burden of overweight and obesity among women in the Americas; graph 2 illustrates that from 40% of women in Canada to over 70% of women in Nicaragua and Belize are overweight or obese. Overweight and obesity lead to major non-communicable diseases: diabetes, heart disease, and some types of cancer. These serious threats to the health of women in the Americas deserve special attention. Third, women not only live with non-communicable disease, but are the primary caretakers of others with noncommunicable disease, both formally as health workers and informally with family or community members. The support of female caregivers can be extended through renumeration, skills training, and opportunities for labor force advancement.8

A regional response to NCDs must take into account women's rights. Countries party to the Convention on Elimination of All Forms of Discrimination Against Women (CEDAW) are obligated to address high rates of overweight and obesity in women which result in women's sickness and death. All NCD policy initiatives should address how to target responses to women's specific needs.

GRAPH 2. OVERWEIGHT (BMI > 25 KG/M²) AMONG WOMEN, SELECTED COUNTRIES OF THE AMERICAS



Source: Pan American Health Organization (2007). Health in the Americas. Volume I: Regional. Scientific and Technical Publication No. 622.

Available: http://www.paho.org/hia/vol1regionaling.html.

Note: The age range this graph covers is 20 years of age and older, except the data from Canada, which cover women ages 12 and older.



# INFECTIOUS DISEASES AND NON-COMMUNICABLE DISEASES ARE NOT MUTUALLY EXCLUSIVE.

Global health efforts in recent decades have brought resources and attention to diseases such as HIV/AIDS, malaria, and tuberculosis (TB), while leaving non-communicable diseases out of the dialogue. Such global agendas must recognize links between the development and treatment of infectious and non-communicable diseases.

Cancer offers a clear example; it is estimated that 15%–20% of cancers worldwide are linked to infections. Human papillomavirus (HPV), Hepatitis C, HIV, and Helicobacter pylori bacteria are all infectious agents linked to various cancers.

Cancer is not the only NCD with infectious connections; research has emerged to demonstrate that diabetes increases risk of developing TB.<sup>12</sup> This relationship appears especially strong among Hispanic people in Latin America and in the United States and among young people under 40 years of age.<sup>12, 13</sup> The rising tide of diabetes may contribute to a re-emergence of TB as an endemic disease in the Americas.

This is a two-way relationship, in that infections of all types, including TB, can worsen glycemic control in people with diabetes. Not only are there linked origins, but the systems to address non-communicable diseases such as cancer and diabetes also share many similarities with the systems platform needed to address conditions such as HIV/AIDS. These examples demonstrate that addressing NCDs deserves a central place in the discussion of infectious disease.

Finally, the progress made by the Region in eliminating infectious disease, particularly vaccine-preventable disease through efforts such as Vaccination Week in the Americas, should not be reversed by an increase in NCDs or by the shift in global health attention toward NCDs. Childhood infectious disease cannot be replaced by an increased incidence of childhood NCDs and successes in preventing and treating childhood infectious diseases, such as measles or polio, cannot be threatened by increased adult mortality due to tobacco-addiction, sedentary lifestyle, and overweight.



#### HEALTH SYSTEMS STRENGTHENING AND ADDRESSING NCDs: COMMON BENEFITS.

Delivering and scaling up non-communicable disease interventions can contribute to strengthening health systems. Management of NCDs and risk factors requires daily attention to diet, activity level, and other behaviors such as tobacco use, and harmful use of alchohol. The health system plays a crucial role in educating and empowering women and men to change behavior and manage NCDs. Reinforcing health systems to address non-communicable disease will assist systems to also respond to other existing or emerging diseases.<sup>14</sup>

A health system that can adequately address NCDs has a set of functioning fundamental services for primary prevention, screening and early detection, diagnosis and treatment, as well as systems for referral and follow-up, and a health workforce with adequate training. There is scope for health systems to focus on specific system-level interventions—such as improving efficiencies in the medication supply chain and promoting communication between levels of care—that will offer benefits to the health system as a whole.



## STRENGTHENING PRIMARY HEALTH CARE: A KEY WAY FORWARD FOR ADDRESSING NON-COMMUNICABLE DISEASE.

Since the 1978 Declaration of Alma-Ata, primary health care has occupied an important place in the global health dialogue. Now, more than ever, strengthening primary healthcare is needed to address the growing burden of NCDs in the Americas. Reorienting health systems toward primary health care necessitates a focus on health promotion and disease prevention, two elements which are at the crux of non-communicable disease prevention and management. To address conditions such as cardiovascular disease, diabetes, and chronic respiratory disease, a primary healthcare-

oriented system must include patients and communities more in the identification of risk factors, prevention of disease, and development of solutions. The set of core principles, activities, and strategic imperatives in the Alma-Ata Declaration and WHO's Corporate Strategy align with what is needed to address noncommunicable diseases in the Americas. 14, 15 From a focus on equity and inclusiveness to developing sustainable health systems, there is a role for non-communicable disease prevention and control in the primary healthcare agenda.



#### CLIMATE CHANGE AND NON-COMMUNICABLE DISEASES: MAJOR GLOBAL RISKS WITH SOME SHARED SOLUTIONS.

Dialogue on global warming has projected increases in infectious disease and undernutrition due to changes in the environment that will affect infectious disease vectors and food yields. The links between climate change and non-communicable diseases have been under-emphasized, even though both challenges have been ranked as top global risks by world leaders and decision makers.<sup>17, 18</sup>

The projected changes in the earth's climate may have serious impacts for development of non-communicable diseases and mental health.<sup>19</sup> For example,

increased temperatures coupled with less rainfall may cause increases in airborne pollen and pollutants, which increase risk for respiratory disease such as bronchitis and asthma. Changes in the ozone layer may alter UV exposure, with implications for development of skin cancers. The two agendas are even further linked, as some interventions to address noncommunicable diseases may also help mitigate negative impacts on the climate. For example, increased walking and bicycling will not only increase physical activity, but will also reduce greenhouse gas emissions and pollution.



## POVERTY REDUCTION, ECONOMIC DEVELOPMENT, AND THE MILLENNIUM DEVELOPMENT GOALS.

Non-communicable diseases undermine efforts at poverty reduction and development in three principal ways. First, NCDs strike in the productive years, removing working-age adults from the labor force and placing undue financial and caretaking burdens on families and communities. In the Americas, forty percent of NCD deaths occur in people under 70 years of age and twenty percent of all NCD deaths occur in working-age individuals under 60 years old. Premature death and disability due to non-communicable diseases challenge economic development and poverty reduction for both households and societies. Costly treatments for late-stage non-communicable diseases can put households at risk for catastrophic medical spending, plunging families into poverty in order to save the life of a loved one.

Poverty also worsens non-communicable disease. Across the Americas, the poor and less-educated are at greater risk for NCDs. With the exception of Haiti, poor people are more likely to develop non-communicable diseases than rich people within the same country. Poor people are also more likely to be exposed to NCD risk factors. Smoking offers a clear example: smoking rates differ 5-fold in Brazil between uneducated and secondary-school educated adults, 3.4-fold in Mexico between workers and professionals, and 3-fold in Guatemala between unskilled and skilled workers. 21 A similar pattern is found for alcohol use; for example, in Brazil, 14% of those in the lowest income group have alcohol use disorders compared to 3% in the highest income group.

The increase in non-communicable diseases and risk factors threatens progress toward meeting MDG targets. As one example, there is a strong connection between TB and non-communicable disease. Active smoking, alcohol use, and diabetes are all associated

with TB cases. Non-communicable diseases must be inserted into poverty reduction strategies, and become part of the global development dialogue after the MDGs come due in 2015. Any renewal of global development goals must include non-communicable diseases and risk factors; the September 2011 UN Summit is a major step in that process.

Addressing non-communicable diseases is crucial to the achievement of numerous global health and development goals ranging from aging and gender to health systems and climate change. NCDs affect people in all countries of the Region, and implementing or scaling up strategies to prevent and control NCDs will have far-reaching impact.



#### REFERENCES/SOURCES CONSULTED:

- 1. United Nations Population Division. (2008). World Population Prospects: The 2008 Revision. CD Rom.
- United Nations General Assembly (2011). Sixty-fifth session Agenda item 27 (c). Resolution adopted by the General Assembly [on the report of the Third Committee (A/65/448)] 65/182. Follow-up to the Second World Assembly on Ageing. Available: http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N10/523/46/PDF/N1052346.pdf?OpenElement
- 3. Songer T. (2003). The costs of kidney disease. Diabetes Voice 48: 39-40. Available: http://www.diabetesvoice.org/files/attachments/article\_54\_en.pdf
- 4. WHO, Gender and Ageing (2003), http://whqlibdoc.who.int/gender/2003/a85586.pdf.
- 5. United Nations Department of Economic and Social Affairs (2007). World Economic and Social Survey 2007: Development in an Ageing World. Overview. Avail able: http://intergenerational.cas.psu.edu/Docs/GlobalAgeing.pdf
- 6. World Economic Forum (2010). Rethinking the ageing population. Available: http://www.weforum.org/sessions/summary/rethinking-ageing-population
- 7. Harvard School of Public Health (unpublished data).
- 8. World Health Organization (2009). Women and health: today's evidence tomorrow's agenda. Geneva: World Health Organization. Available: http://www.who.int/gender/documents/9789241563857/en/index.html
- 9. UN Secretary-General Ban Ki-moon (2010). Global Strategy for Women's and Children's Health. Available: http://www.who.int/pmnch/activities/jointactionplan/en/index.html
- 10. See, e.g., Committee on the Elimination of Discrimination Against Women, Report on Barbados (2002).
- 11. American Cancer Society (2010). Infectious Agents. Available: http://www.cancer.org/Cancer/Cancer/CancerCauses/OtherCarcinogens/InfectiousAgents/index
- 12. Dooley KE & Chaisson RE. (2009). Tuberculosis and diabetes mellitus: convergence of two epidemics. Lancet Infectious Diseases 9:737-746.
- 13. Jeon CY & Murray MB. (2008). Diabetes mellitus increases the risk of active tuberculosis: A systematic review of 13 observational studies. *PLoS Medicine* 5(7):e152.
- 14. Samb B, Desai N, Nishtar S, Mendis S, Bekedam H, Wright A, et al. (2010). Prevention and management of chronic disease: a litmus test for health-systems strengthening in low- income and middle-income countries. *Lancet* 376:1785-1797.
- 15. World Health Organization. (2003). A Global Review of Primary Health Care: Emerging Messages. A Global Report. Geneva: World Health Organization. Available: http://whqlibdoc.who.int/hq/2003/WHO\_MNC\_OSD\_03.01\_eng.pdf
- 16. Pan American Health Organization. (2007). Renewing Primary Health Care in the Americas. A Position Paper of the Pan American Health Organization/World Health Organization (PAHO/WHO). Washington DC: PAHO.
- 17. World Economic Forum (2011). Global Risks 2011. Sixth Edition. An initiative of the Risk Response Network. Geneva: World Economic Forum.
- 18. World Economic Forum. (2010). Global Risks 2010: A Global Risk Network Report. Geneva: World Economic Forum.
- 19. Friel S, Bowen K, Campbell-Lendrum D, Frumkin H, McMichael AJ, & Rasanathan K. (2011). Climate change, noncommunicable diseases, and development; The relationships and common policy opportunities. *Annual Review of Public Health [advance]* 32:4.1-4.15.
- 20. World Health Organization. (2008). The global burden of disease: 2004 update. Geneva: World Health Organization.
- 21. Bloomberg School of Public Health, Johns Hopkins University (2009). Non-Communicable Chronic Diseases in Latin America and the Caribbean. Available: http://www.healthycaribbean.org/publications/documents/NCD-in-LAC-USAID.pdf
- 22. World Health Organization (2010). Background paper: Raising the priority accorded to non-communicable diseases in development work and related invest ment decisions. Geneva: World Health Organization.