Non-communicable diseases (NCDs) are responsible for 3.9 million deaths each year in the Region of the Americas, representing ¾ of all deaths.

An estimated 200 million people in the Americas are living with NCDs, which has a tremendous impact on their life, well-being, and ability to work. This, in turn, poses major challenges to the economy, the health system and other sectors of society.

Four main NCDs are responsible for the greatest burden: cardiovascular disease, diabetes, cancer, and chronic respiratory diseases.

NCDs are preventable by addressing the main and modifiable NCD risk factors: tobacco use, unhealthy diet, insufficient physical activity, and harmful use of alcohol.

It is estimated that if these modifiable risk factors were eliminated, 80% of all heart disease, stroke, and type 2 diabetes would be prevented and over 40% of cancer would be prevented.

The causes of NCDs and their risk factors are largely determined by the social, physical and economic environment. Thus, combating NCDs requires action on the social determinants of health and from all sectors, not only the health system. Sectors such as education, agriculture, trade, urban planning, and transportation, among others all play important roles in creating healthy environments and making healthy choices available.
NON-COMMUNICABLE DISEASES (NCDs) ARE THE LEADING CAUSE OF DEATH IN THE AMERICAS AND CONTRIBUTE TO DISABILITY AND ILLNESS DURING THE LIFESPAN.

An estimated 3.9 million people die each year from NCDs and approximately 200 million people in the Americas are living with NCDs.¹ This includes 100 million people living with diabetes and an estimated 2.5 million people newly diagnosed with cancer each year. These diseases, if not detected early and managed properly, can cause severe complications that threaten an individual’s health, ability to work, and overall well-being, posing significant burdens to families, communities, and countries. In Brazil, the Region’s second largest economy, the estimated loss in national income from heart disease, stroke, and diabetes in 2005 alone was $3 billion.²

NCDs AFFECT ALL SOCIOECONOMIC GROUPS, AGES, AND GENDERS.

Traditionally referred to as “diseases of affluence,” NCDs affect all countries in the Americas. In the Region’s low- and middle-income countries, an estimated 70% of deaths are from NCDs. These diseases are not just diseases of the elderly, since about 1/3 of NCD deaths in the Americas occur in people under 70 years of age. These diseases equally affect men and women in the Region, but more men are dying prematurely (< 70 years of age). Women are not only suffering from NCDs, but often face the double burden of also being the primary (and often unpaid) caregivers in society.
Four risk factors, tobacco use, physical inactivity, unhealthy diet, and harmful use of alcohol, all affect other biological risk factors, namely raised blood pressure, raised glucose levels, abnormal blood lipids, and obesity. The changes in lifestyle and these risk factors are a concern throughout the Region. Tobacco use is the single most important risk factor and a serious and growing concern in the Americas. Recent data indicate that rates of smoking in some urban areas in the Region are among the world’s highest, with smoking rates between one-fifth and one-half of adults across countries of the Americas.3

These lifestyle changes are influenced by global factors such as urbanization, globalization, technology growth and overall social and economic development. Urbanization has brought about an increase in service and manufacturing jobs, which are largely sedentary. Globalization of food has encouraged a shift in dietary preferences toward highly processed, energy-dense, and nutrient poor foods. The modern diet contains far too much fat, sugar and salt and the levels of salt are far beyond the recommended 5g/day. This excessive dietary salt comes from a variety of sources including ready-made meals and alone is responsible for approximately 10% of cardiovascular disease.3

These changing lifestyle patterns come with serious consequences; perhaps the most visible of these consequences is overweight and obesity. It is estimated that at least 50% of adults are overweight in all countries of the Americas and in some countries such as Jamaica, Mexico, Nicaragua, and the United States, more than 75% of adults are overweight.4 Women are especially affected by overweight and obesity. For every one percent of body weight a woman gains after her late teens, her risk for heart disease increases approximately five percent and her risk for diabetes increases by ten percent.5 The Region’s young are growing up overweight and obese; between 7–12% of children under-five in the Americas are overweight or obese.6

**FIGURE 1. KEY DETERMINANTS OF NCDs**

<table>
<thead>
<tr>
<th>CHRONIC DISEASES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular diseases including hypertension, cancers, diabetes, and chronic respiratory diseases.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIOLOGICAL RISK FACTORS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modifiable: overweight/obesity, high cholesterol levels, high blood sugar, high blood pressure</td>
</tr>
<tr>
<td>Non-modifiable: age, sex, race, genetics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BEHAVIORAL RISK FACTORS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco use, unhealthy diet, physical inactivity, alcohol use</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENVIRONMENTAL DETERMINANTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social, economic, political conditions, such as income, living and working conditions, physical infrastructure, environment, education, access to health services and essential medicines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GLOBAL INFLUENCES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Globalization, urbanization, technology, migration</td>
</tr>
</tbody>
</table>
TURNING THE TIDAL WAVE; NCDs ARE PREVENTABLE.

Although NCDs pose a serious burden to the Americas, prevention is possible. It is estimated that if the four major behavioral risk factors were eliminated, 80% of all heart disease, stroke, and type 2 diabetes would be prevented and over 40% of cancer would be prevented. Cost-effective prevention options exist.

MANY SECTORS HAVE A STAKE IN PREVENTING AND ADDRESSING NCDs.

Left unchecked, NCDs will threaten the health and well-being of countries in Latin America and the Caribbean, with consequences felt beyond the health sector. The burden to health systems, economies, educational systems, and taxpayers can be tremendous. In Mexico—the Region’s third-largest in population and economy—it is estimated that if diabetes and hypertension continue to increase as projected, the health budget would have to grow by 5–7% each year.

To achieve reductions in new cases of NCDs and mitigate the consequences of existing disease, actions across sectors are required. The health and social protection systems are directly responsible for treating individuals with NCDs and risk factors. However, the main risk factors for NCDs are influenced by social determinants of health and a myriad of interrelated factors beyond the health system. There is a need for all sectors to deal with the causes and consequences of NCDs. There are roles for private and public sector actors, as well as civil society organizations.
HEALTH AND SOCIAL PROTECTION SYSTEMS
Keeping beneficiaries healthy throughout the lifecourse.

**Why it’s important:** The illness and disability caused by NCDs threaten the stability and sustainability of health and social protection systems. These systems have an interest in keeping everyone, especially working-age individuals in the labor force, healthy during the retirement years.

**Opportunities for this sector:** With the move toward universal health coverage and expansion of social protection systems in the Region, there is an unprecedented opportunity for these systems to influence health throughout the lifecourse. By promoting access to preventive health services, screening and early detection, and healthy aging, health and social protection systems can save money on costly treatments and reduce periods of disability among beneficiaries.

FOOD AND AGRICULTURE
Nourishing the Region.

**Why it’s important:** Unhealthy diet is a key risk factor for development of NCDs and progression of existing disease to serious complications. In particular, processed foods and those high in fat, sugar, and salt, and low in essential nutrients, are becoming the preferred and cheapest food options in the Region. This is contributing to an obesity epidemic.

**Opportunities for this sector:** The food and agriculture industry has a range of options for addressing NCDs, including production, trade, manufacturing, retail, labeling, pricing, and taxation options. For example, large food manufacturers have been able to reduce salt, sugar, and saturated fat in prepared foods through a combination of product reformulation, ingredient substitution, and the launch of new product lines. Healthy food is an area of emerging market potential for the food and agriculture industry.

URBAN TRANSPORT AND URBAN DESIGN
Creating spaces and environment for physical activity and movement, leading to better health.

**Why it’s important:** There is increasing evidence about the linkages between place, movement, and health. In the past decade, the world passed a milestone in which, for the first time in history, more people live in cities than in rural areas. Urban design now has an unprecedented place of importance in the lives of more than half the world’s population. Therefore, rapid mass transit, safe biking and walking paths, car-free solutions, and other urban transport initiatives hold more promise than ever before to influence health and the environment. For example, research has demonstrated that use of Transmilenio, the rapid mass transport system in Santiago, Chile, increases by 70% the possibility that an individual will walk more than 30 minutes per day. The benefits of active transport reach beyond health; car-free transport is good for climate change and energy security, as it reduces fuel emissions, air pollution, and dependence on fuel.
Opportunities for this sector: There is great market potential for companies that produce bikes, walking shoes, rollerblades, and mass transport vehicles. The rapid expansion of ciclovias (bike paths) and car-free days across the Region points to increasing public interest.

Why it's important: Treating advanced NCDs is complex and costly; preventing disease or screening for and detecting disease at an early stage is advantageous for better health outcomes and cost reduction.

Opportunities for this sector: The private healthcare industry—including private providers, pharmaceutical companies, and medical device manufacturers—has a role in all aspects of disease prevention and management. From research and development to screening and diagnostic tools, to disease management techniques and treatments, the private healthcare industry has much to offer and can be a leader in this space. Private healthcare is an active market in the Region; the “reach” of private providers can be leveraged to identify patients at-risk for NCDs, educate on healthy lifestyles, and deliver a standard package of care for chronic conditions.

Why it’s important: NCDs are increasingly affecting the young. With one in three children in the United States overweight or obese, if we are not careful, the next generation could be the “O” generation: the obese generation. Overweight and obese children can experience discrimination and social isolation that can lead to depression and other conditions that impede a child’s ability to learn and thrive in the school setting.

Opportunities for this sector: The progress in educational attainment in the Region means that youth across the Americas spend the majority of their day at school. This opportunity can be leveraged to create healthy environments, educate children about healthy living, provide safe spaces for physical activity, and offer nutritious foods.

Why it’s important: Our current development paradigm has failed to adequately address NCDs, which are the leading cause of death and disability in low and middle income countries. NCDs have the potential to drive households into poverty due to premature death or disability of wage-earners and costly treatments. In addition, the poorest have the most exposure to the risk factors. The NCD epidemic is undermining attainment of the Millennium Development Goals (MDGs). There are links between NCDs and the MDGs, thus
a reduction in NCDs would indeed have an impact on attainment of MDGs 4 (on reducing child mortality), 5 (on improving maternal health), and 6 on HIV/AIDS, TB and Malaria.

**Opportunities for this sector:** As the MDGs come due, and the development community comes together to plan the next set of targets, chronic diseases must have a place in the agenda.

**Why it’s important:** NCDs affect worker productivity via absenteeism or costly presenteeism. With NCD deaths in the Region occurring among people younger than 70 years of age, employers have an interest in maintaining the health of their employees.

**Opportunities for this sector:** Workplace health promotion programs can promote healthy behaviors through incentives such as worksite wellness checks and screening, smoke-free workplaces, healthy food options in the worksite, health education workshops, or providing employees with facilities and time to make exercising during work hours easier. Employers benefit from these programs by increased employee productivity, improved corporate image, and reduced healthcare costs.

**Why it’s important:** Information and a well-informed public are essential for NCD prevention and control. The telecom and media sectors have important roles to play in providing information and promoting social networking for a better informed and educated public.

**Opportunities for this sector:** Media can feature stories about healthy living, NCD prevention and control. Telehealth and mobile medicine have emerged as important tools to improving health. Mobile phones are being used across the developing world for delivering health promotion messages, treatment reminders, and connecting individuals with the information and resources they need to lead healthier lives. We have only reached the tip of the iceberg of the potential of this sector to enable the Region’s families to live healthier lives.
REFERENCES/SOURCES CONSULTED:

8. UNFPA 2007 annual report.