#### **STRATEGIC OBJECTIVE 1**

### To reduce the health, social and economic burden of communicable diseases

#### SCOPE

The activities related to this Strategic Objective (SO) focus on prevention, early detection, diagnosis, treatment, control, elimination, and eradication measures to combat communicable diseases that disproportionately affect poor and marginalized populations in the Region of the Americas. The diseases to be addressed include, but are not limited to: vaccine-preventable, tropical (including vector-borne), zoonotic and epidemic-prone diseases, excluding HIV/AIDS, tuberculosis and malaria.

#### **INDICATORS AND TARGETS**

- Reduction of the mortality rate in children under five years old due to vaccine-preventable diseases in the Region. Baseline: 47 per 100,000 children under five years old in 2002. Target: 31 per 100,000 by 2013.
- Number of countries maintaining certification of poliomyelitis eradication in the Region.
   Baseline: 38 countries in 2006. Target: 38 countries by 2013.
- Number of countries achieving and maintaining the elimination of measles, rubella, congenital rubella syndrome and neonatal tetanus in the Region. Baseline: 0 countries in 2006. Target: <u>38</u> countries by 2013.
- Number of countries that have fulfilled the core capacity requirements in surveillance, response and points of entry, as established in the 2005 International Health Regulations. Baseline: 0 countries in 2007. Target: 35 countries by 2013.
- Reduction in the lethality rate due to dengue (dengue hemorrhagic fever/dengue shock syndrome) in the Region. Baseline: 1.3% in 2006. Target: 1.0% by 2013.
- Number of countries with certification of Chagas disease vector transmission interrupted, in the 21 endemic countries in the Region. Baseline: 3 countries in 2006. Target: 15 countries by 2013.
- Number of endemic countries in the Region with onchocerciasis elimination certification.
   Baseline: 0 of the 6 endemic countries. Target: 1 country by 2013.

#### **ISSUES AND CHALLENGES**

In Latin America and the Caribbean more than 210 million people live below the poverty line, and they bear the greatest burden of communicable diseases. Communicable diseases account for 13.5% of deaths in all age groups, and 74% of deaths in children in the Region. The burden of communicable diseases is significant; WHO estimates that this group of diseases accounted for

the loss of 25,000 Disability Adjusted Life Years (DALYs) in 2005. Indigenous populations are especially vulnerable to this group of diseases; they deserve culturally appropriate interventions.

Vaccine-Preventable Diseases: Although national immunization programs (NIPs) have achieved high coverage at regional and country levels, reflected in a major impact on the reduction of cases and deaths due to vaccine-preventable diseases, NIPs must be prepared to face the following challenges: (1) maintaining achievements (poliomyelitis eradication, endemic measles elimination, and epidemiological control of diphtheria, pertussis, and Haemophilus influenza of type B pneumonias); (2) completing the unfinished agenda (improving coverage and the quality of immunization services, eliminating rubella and congenital rubella syndrome, eliminating neonatal tetanus, moving from child to family immunization, and administering vaccines against seasonal influenza and yellow fever); and (3) facing new challenges (strengthening operational capacity, epidemiological surveillance, including the laboratory network, information systems, and evidence-based decision-making; promoting technical excellence; strengthening the Revolving Fund to adjust to new market mechanisms, introducing new vaccines in support of MDG achievement, and promoting the sustainability of NIPs).

Emerging and Re-emerging Infectious Diseases: The international spread of infectious diseases continues to pose a problem for global health security due to factors associated with today's interconnected and interdependent world, such as: population movements, tourism, migration, or as a result of disasters; growth in international trade in food and biological products; social and environmental changes linked with urbanization, deforestation, and alterations in climate; and changes in methods of food processing, distribution, and consumer habits. These factors have reaffirmed that infectious disease events in one country or region are potentially a concern for the entire world. No country in the Region has all required core capacities to respond to these challenges. The need for a collective rapid response in the Region, especially for potential pandemics and outbreaks is a major challenge. Strategic planning in the Region is needed to avoid a drain on available resources, staff, and supplies away from well-defined public health priorities and routine disease control activities. PAHO has verified over 200 epidemics of international concern over the last five years.

Detection and response to epidemic-prone diseases – including pandemic (H1N1) 2009, SARS, and neuro-invasive syndromes caused by arboviruses such as West Nile – need to be addressed within the framework of the International Health Regulations (IHR).

Between 2001 and 2006, more than 30 countries of the Americas reported a total of 3,832,160 cases of **dengue**, of which 79,716 cases were dengue hemorrhagic fever and 93 deaths were reported.

Neglected diseases directly or indirectly influence the capacity of many countries of the Region to fulfill the Millennium Development Goals (MDG). These diseases, which arise from environmental problems, have adverse effects in the health and the well-being, in addition to increasing the school absenteeism and the poverty. Lack of routine epidemiological surveillance and data recordings of the neglected diseases in the Region makes it difficult to accurately estimate the disease burden. However, national surveys and special studies shed light on the burden of disease in some populations. PAHO/WHO estimated that 20% to 30% of Latin American are infected with one or more intestinal helminths or has schistosomiasis, two very important neglected diseases; among the most vulnerable populations are women and children who live in poor areas. Lymphatic filariasis puts at risk up to 11 million people; while onchocerciasis endangers 500,000 people in the Region. Both diseases are targeted for elimination. Chagas disease, leishmaniasis, trachoma, leprosy (Hansen's disease), and other skin infections and parasitic zoonoses also contribute to the heavy burden of the neglected diseases in

many countries of the Region. A study of cystic echinococcosis noted an estimated total of 52,693 Disability Adjusted Life Years (DAILYs) lost in the Region, while economic losses total more than \$120 million per year. Today, there is better knowledge of the extrinsic determinants of neglected diseases and the focalized distribution of several of the neglected diseases; furthermore, its prevention, control, and even elimination are now more feasible than ever due to the existence of new, safe and low-cost methods for monitoring these diseases and treating the infected people.

**Key Communicable Diseases**; the number of registered **leprosy** cases in the Region at the beginning of 2006 was 32,904, with a prevalence rate of 0.39 per 10,000 people. The number of new cases reported in 2005 was 41,789, around 20% less than in 2004. The global strategic target for leprosy elimination is less than one case detected per 10,000 people. All of the countries of the Region are under this rate, with the exception of Brazil, which traditionally accounted for the highest burden of leprosy in the Region and is now moving toward the goal of elimination.

The number of **Chagas**-infected persons in the Americas is estimated at 16 to 18 million. The estimated yearly incidence of vector-borne Chagas is 41,800 cases in the Region, while congenital Chagas is 13,550 cases. General seroprevalence in regional blood banks averages 1.28%. It is estimated that different chagasic cardiopathies occur in 4,600,000 patients, and 45,000 people die per year as a consequence of this disease.

Despite the challenges noted, major progress has been achieved in the Region: (a) Transmission of *T. infestans* has been interrupted in 80% of the endemic geographic surface of the Southern Cone countries; (b) in the country with highest domiciliary infestation (Bolivia), there has been a significant reduction in *T. infestans* infestation and pediatric seroprevalence; (c) transmission, by *R. prolixus* has been interrupted in some areas of Guatemala, Honduras and El Salvador; (d) the Andean countries are working on new (Ecuador, Colombia and Peru) and reactivated (Venezuela) national control programs; (e) Mexico has declared Chagas disease as a public health priority and is now implementing prevention and control activities; (f) Chagas-endemic countries have achieved a 98% coverage in blood bank serological screening; and (g) Amazonian countries have developed Chagas disease surveillance systems.

**Zoonotic Diseases:** There has been a reduction of 90% in the number of cases of **rabies** transmitted by dogs as a result of 20 years of effective control efforts. During 2005, only 11 cases were reported. However, some countries, mostly low income ones, have still not achieved these results. Other zoonotic diseases need to be addressed in the Region as well, due to the important link between human and animal health.

#### STRATEGIC APPROACHES

- Implementing the International Health Regulations (2005), this took effect in June 2007, in the Region.
- Implementing existing Regional plans and strategies agreed with Member States, including PAHO's Directing Council Resolutions.
- Establishing or maintaining effective coordination with other partners and across all relevant sectors at the country, subregional and regional levels, including other agencies in the United Nations and Inter-American Systems.
- Strengthening the network of WHO Collaborating Centers located in the Americas.

- Promoting research through adequate investment, capacity strengthening and effective partnership between the academic and public sectors.
- Exploring mechanisms to encourage transfer of technology and new modalities of technical cooperation (e.g. south-to-south).
- Implementing the PAHO/WHO *Integrated Strategy for Dengue Prevention and Control in the Region*, that includes six key components: mass communication, entomology, epidemiology, laboratory, patient care and environment.
- Making efforts to further reduce the leprosy burden through implementation of the WHO
   Global Leprosy Strategy, with emphasis on early detection and an integrated approach in
   primary health services.

#### **ASSUMPTIONS AND RISKS**

#### Assumptions:

- Member States will invest in human, political and financial resources to ensure and expand equitable access to high quality and safe interventions for the prevention, early detection, diagnosis, treatment and control of communicable diseases.
- Member States' political support to guarantee the sustainability of immunization programs will stay the same or increase.
- Member States fully utilize the PAHO Revolving Fund for the procurement of vaccines and syringes.
- The entry into force of the International Health Regulations in 2007 will translate into a renewed commitment by all Member States to strengthen their national surveillance and response systems.
- In developing and strengthening national health systems, the aim will continue to be universal and equitable access to essential health interventions.
- There will be a receptive and positive attitude towards coordination and harmonization of actions among the increasing number of actors in global public health.
- Effective communications mechanisms will be in place to maintain a strong and interactive coordination of efforts at the global, regional and subregional levels.
- Political commitment and resources will be in place to secure effective surveillance and adequate preparedness to prevent and control pandemics and vaccine-preventable actions related to threats of national and international concern.

#### Risks:

- Emergence of parallel, uncoordinated health agendas.
- Low or insufficient investment in research activities that might impact adversely on health interventions.
- Influenza or other pandemic-prone diseases may cause unprecedented morbidity and mortality, as well as grave economic harm in the countries.

#### **REGION-WIDE EXPECTED RESULTS**

RER 1.1 Member States supported through technical cooperation to maximize equitable access of all people to vaccines of assured quality, including new or underutilized immunization products and technologies; strengthen immunization services; and integrate other essential family and child health interventions with immunization.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
1.1.1	Number of countries achieving more than 95% vaccination coverage at national level (DPT3 as a tracer)	17	20	<u>22</u>	25
1.1.2	Percentage of municipalities with vaccination coverage level less than 95% in Latin America and the Caribbean (DPT3 as a tracer using baseline of 15,076 municipalities in 2005)	38%	36%	34%	32%
1.1.3	Number of countries that have included pneumococcal and/or rotavirus sentinel surveillance in their national epidemiological system	0	5	<u>10</u>	15
1.1.4	Number of countries that purchase the vaccines for their National Immunization Program through the PAHO Revolving Fund for Vaccine Procurement	32/38*	<u>32/38</u>	33/38	34/38

<sup>\*</sup> Denominator excludes Puerto Rico and the US Mexico-Border

RER 1.2 Member States supported through technical cooperation to maintain measles elimination and polio eradication; and achieve rubella, congenital rubella syndrome (CRS) and neonatal tetanus elimination.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
1.2.1	Number of countries with surveillance activities and vaccination to maintain the polio eradication	<u>38/38*</u>	<u>38/38</u>	<u>38/38</u>	38/38
1.2.2	Number of countries that have implemented interventions to achieve rubella and Congenital Rubella Syndrome (CRS) elimination	<u>35/38*</u>	<u>36/38</u>	38/38	38/38

<sup>\*</sup> Denominator excludes Puerto Rico and the US-Mexico Border

RER 1.3 Member States supported through technical cooperation to provide access for all populations to interventions for the prevention, control, and elimination of neglected communicable diseases, including zoonotic diseases.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
1.3.1	Number of countries that have eliminated leprosy at national and sub-national levels as a public health concern	<u>16/24*</u>	<u>17/24</u>	<u>19/24</u>	<u>24/24</u>
1.3.2	Number of countries that have eliminated human rabies transmitted by dogs	<u>11</u>	<u>14</u>	<u>16</u>	<u>18</u>
1.3.3	Number of countries that maintain surveillance and preparedness for emerging or re-emerging zoonotic diseases	<u>11</u>	<u>12</u>	<u>19</u>	<u>23</u>
1.3.4	Number of countries with Domiciliary Infestation Index by their main Triatominae vectors lower than 1%	3/21**	11/21	<u>15/21</u>	18/21
1.3.5	Number of countries which have adopted programs or strategies for the surveillance, prevention, control or elimination of the neglected diseases	0	3	7	<u>11</u>

<sup>\*</sup> Denominator refers to countries where Leprosy is endemic

RER 1.4 Member States supported through technical cooperation to enhance their capacity to carry out communicable diseases surveillance and response, as part of a comprehensive surveillance and health information system.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
1.4.1	Number of countries with a surveillance system for all communicable diseases of public health importance for the country	<u>14</u>	<u>16</u>	<u>18</u>	<u>20</u>
1.4.2	Number of countries that submit the joint reporting forms on immunization surveillance and monitoring to the Pan American Sanitary Bureau, in accordance with established timelines	<u>15/38*</u>	18/38	19/38	20/38
1.4.3	Number of countries routinely implementing antimicrobial resistance (AMR) surveillance and interventions for AMR containment, including health care associated infections	17/35**	22/35	<u>24/35</u>	<u>27/35</u>

<sup>\*</sup> Denominator excludes Puerto Rico and the US-Mexico Border

RER 1.5 Member States supported through technical cooperation to enhance their research capacity and to develop, validate and make available and accessible new knowledge, intervention tools and strategies that meet priority needs for the prevention and control of communicable diseases.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
1.5.1	Number of countries that have implemented operational research in accordance with the research priorities in communicable diseases	0/33*	<u>2/33</u>	<u>3/33</u>	<u>5/33</u>

<sup>\*</sup> Denominator refers to PAHO Member States excluding USA and Canada

<sup>\*\*</sup> Denominator refers to countries where Chagas disease is endemic

<sup>\*\*</sup> Denominator refers to the PAHO Member States (countries of the Americas)

RER 1.6 Member States supported through technical cooperation to achieve the core capacities required by the International Health Regulations for the establishment and strengthening of alert and response systems for use in epidemics and other public health emergencies of international concern.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
1.6.1	Number of countries that have achieved the core capacities for surveillance and response, in line with their obligations under the International Health Regulations (2005)	<u>0</u>	<u>10</u>	<u>17</u>	<u>25</u>
1.6.2	Number of countries that maintain training programs focusing on the strengthening of outbreak response capacities	<u>16</u>	<u>17</u>	<u>21</u>	<u>23</u>

# RER 1.7 Member States and the international community equipped to detect, contain and effectively respond to major epidemic and pandemic-prone diseases (e.g. influenza, dengue, meningitis, yellow fever, hemorrhagic fevers, plague and smallpox).

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
1.7.1	Number of countries that have national preparedness plans and standard operating procedures in place for <u>rapid response</u> <u>teams against</u> pandemic influenza	17/35*	23/35	<u>31/35</u>	35/35
1.7.2	Number of countries with basic capacity to detect epidemic prone viral pathogens according to the PAHO/WHO's epidemiological surveillance guidelines	2	<u>4</u>	<u>10</u>	<u>12</u>
1.7.3	Number of countries implementing interventions and strategies for dengue control according to PAHO/WHO guidelines	<u>14</u>	<u>19</u>	<u>21</u>	<u>23</u>

<sup>\*</sup> Denominator refers to the PAHO Member States (countries of the Americas)

## RER 1.8 Regional and Subregional capacity coordinated and made rapidly available to Member States for detection, verification, risk assessment and response to epidemics and other public health emergencies of international concern.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
1.8.1	Percentage of public health events of international importance verified in the time recommended by the International Health Regulations	<u>85%</u>	<u>90%</u>	<u>95%</u>	<u>98%</u>

### RER 1.9 Effective operations and response by Member States and international community to declared emergencies situations due to epidemic and pandemic prone diseases.

I	nd.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
1.9.1	-	Percentage of PASB International Health Regulations compliant responses based on requests for support from Member States during emergencies or epidemics	90%	100%	100%	100%

#### STRATEGIC OBJECTIVE 2

#### To combat HIV/AIDS, tuberculosis and malaria

#### **S**COPE

This Strategic Objective (SO) focuses on interventions for the prevention, early detection, treatment and control of HIV/AIDS, sexually transmitted infections (STI), tuberculosis and malaria, including elimination of malaria and congenital syphilis. Emphasis is placed in those interventions that can reduce regional inequities, addressing the needs of vulnerable and most at-risk populations.

#### **INDICATORS AND TARGETS**

- Reduction of the incidence rate of HIV infections in the Region. Baseline: 24 new HIV infections per 100,000 inhabitants (2006 data for estimated new infections using 2005 population data). Target: 23/100,000 or less by 2013 (in accordance with MDGs).<sup>7</sup>
- Access to antiretroviral treatment in Latin America and the Caribbean, based on needs assessments. Baseline: Access to antiretroviral treatment was 72% in 2006. Target: 80% by 2013 (per Regional HIV/STI Plan for the Health Sector 2006-2015).<sup>8</sup>
- Number of countries that have achieved less than 5% incidence of mother-to-child transmission of HIV. Baseline: 3 countries in 2006. Target: 16 countries by 2013 (Per Regional HIV/STI Plan for the Health Sector 2006-2015).
- Number of countries that have an incidence of congenital syphilis of less than 0.5 cases per 1,000 live births. Baseline: 2 countries in 2006. Target: 26 countries by 2013 (Per Regional HIV/STI Plan for the Health Sector 2006-2015).
- Reduction of tuberculosis incidence in the Region. Baseline: 39 cases per 100,000 inhabitants in 2005. Target: 27 per 100,000 by 2013 (in accordance with MDGs).
- Reduction of the number of annually reported cases of malaria in the Region. Baseline: 903,931 cases in 2006. Target: 402,536 by 2013.
- Number of countries retaining their malaria non-endemic status. Baseline: 19 countries in 2007. Target: 19 countries by 2013.

#### **ISSUES AND CHALLENGES**

#### HIV/AIDS

To halt and reverse the spread of the HIV epidemic by 2015 will only be possible when a comprehensive response to the epidemic is developed and implemented in each Member State.

<sup>&</sup>lt;sup>7</sup> This indicator relates to Target 1 in the *Regional HIV/STI Plan for the Health Sector 2006-2015*, for which data is not currently available: "By 2010, there will be a 50% reduction in the estimated number of new HIV infections followed by a further 50% reduction in new infections by the end of 2015"

This indicator relates to Target 2 in the Regional HIV/STI Plan for the Health Sector 2006-2015, for which data is not currently available: "By 2010, there will be universal access to comprehensive care including prevention, care, and antiretroviral treatment." A WHO monitoring and evaluation framework for universal access is under development

This requires addressing the growing demands for health care services. Within the health sector, this translates into a commitment to achieve universal access to comprehensive prevention, care and treatment for HIV that can be met with the implementation of the WHO Public Health Approach, consisting in the provision of integrated and decentralized HIV/AIDS services and interventions, with particular emphasis on prevention and treatment in vulnerable populations.

In addition, primary and secondary prevention actions have not yet been adequate to halt or bring down the growing trend in new HIV infections, including reinfections, and co-infections, that are being reported in several countries in the Region. In LAC, an estimated 167,000 new HIV infections occurred in 2006, representing 8.6% of the total population with HIV, and underscoring the need for scaling-up prevention. Comprehensive and effective means of HIV prevention include preventing, diagnosing and adequately treating STIs.

Morbidity and mortality associated with HIV infection in Latin America and the Caribbean have not declined as expected, given the effectiveness of treatments and other interventions for HIV/AIDS. In spite of efforts to expand access to antiretroviral treatment and comprehensive care, in 2006 an estimated 84,000 people died of AIDS-related conditions in Latin America and the Caribbean. Limited access to affordable drugs and commodities to reduce sexual, bloodborne and perinatal transmission persists, as well as insufficient reorientation of services to the needs of members of vulnerable groups, and incomplete or inadequate capacity of care providers.

Limitations exist in monitoring, forecasting, and understanding the dynamic of the epidemic due to inadequate use of strategic information, including insufficient surveillance, and monitoring and evaluation of the response.

The persistence of stigma and discrimination (including attitudes and values arising from healthcare providers) hamper prevention efforts and constitute barriers to care and treatment. Social attitudes and values neglect or disregard the risk associated with certain behaviors and practices, leading to insufficient awareness of the problem and possible solutions among the general public.

The engagement of communities, affected persons, civil society organizations, the private sector and other relevant stakeholders in a coordinated and unified response continues to be a challenge, and is necessary to ensure effectiveness, local ownership and sustainability.

Interventions to improve sexual and reproductive health are incomplete and insufficient, despite the fact that the majority of infections result from unprotected sex. Gender inequities and inequalities lead to augmented vulnerability to HIV and reduced access to comprehensive care.

In 2005, a rationale for the division of labor within UN agencies in the area of HIV response was agreed upon, signifying improved coordination and alignment of efforts for regional, subregional and national responses to HIV. In this context, the PASB, as the UNAIDS cosponsor for the health sector response, focuses on scaling up HIV/AIDS services to achieve universal access. This effort encompasses prevention and treatment, as well as monitoring and evaluation of the health sector response. Nevertheless, the challenge remains to attain greater alignment and harmonization of actions at the various levels, in order to ensure that the global and regional efforts to support national responses are adequate and timely. The harmonious implementation of existing UN directives (e.g. the Three Ones) will prove to be a critical factor in the overall efficiency, effectiveness and impact of the UN system's efforts to support national responses.

There are many partners working to control HIV/AIDS in the Americas, such as UNAIDS, United Nations agencies, the World Bank, USAID, and the Global Fund (GF), among others. The main challenge is the coordination and harmonization of the programs of these institutions.

#### Malaria

Malaria is a preventable and treatable vector-borne disease that afflicts approximately a million people in the Americas each year. Thirty percent of the inhabitants of the Region are considered at risk of infection. Five percent of the Region's inhabitants live in moderate and high risk areas. Twenty-one countries in the Region have areas where malaria is considered endemic, while other nations report imported cases which can potentially cause re-introduction of local transmission if not managed appropriately.

Pregnant women and children are considered vulnerable to malaria worldwide. In addition, the vulnerable population in the Americas includes people with HIV/AIDS, travelers, miners, loggers, banana and sugarcane plantation workers, indigenous groups, and populations in areas of social or armed conflict and border areas.

Malaria-related illness and deaths are a great burden to the economy of the Americas, as 55% to 64% of cases are among people in their most economically productive years of life.

Control and prevention efforts need to be maintained, because the nature of the disease, its vectors, and other factors that affect transmission are complex. A proactive approach and better foresight is needed so that emerging and re-emerging challenges related to the disease are averted, including outbreaks and epidemics. Advocacy to control malaria must be intensified so that stakeholders are able to act, contribute concretely, and effect positive changes within their spheres of influence. Furthermore, stakeholders must align and harmonize efforts, practice intersectoral approaches, and actively engage the community and affected populations to ensure local ownership and sustainability of efforts.

There are many stakeholders working to control malaria in the Region, such as United Nations Agencies, the Global Fund, USAID, CIDA, WHO Collaborating Centers, CDC, the United States Pharmacopeia, the Special Program for Research and Training in Tropical Diseases, and the International Development Research Center, among others. The main challenge is maintaining the coordination and harmonization of these institutions' programs.

#### **Tuberculosis**

Tuberculosis (TB) is a preventable and curable disease that is far from being eliminated as a public health problem in the Region. Despite progress in the Americas in the last decade, estimates indicate more than 447,000 cases and approximately 50,000 deaths occur every year. TB predominantly affects the economically-productive adult population: 61% of the 2005 reported infectious cases were among 15 to 44-year-olds. Even though TB can affect everyone, there are specific vulnerable groups with the highest burden of the disease: the poor, migrants, marginalized populations, prisoners, people with HIV/AIDS and the indigenous population. There are marked differences in the burden of disease among countries in the Region; twelve countries accounted for 80% of the total burden of TB in the Americas.

The implementation of the DOTS strategy has contributed to advances in controlling TB. A total of 33 countries applied this strategy in 2005, reaching 88% coverage. The challenge is to reach 100% coverage in high burden countries like Brazil and Colombia.

The main identified challenges for TB control in the Region are the HIV/AIDS epidemic, TB multidrug resistance (MDR) and extensively multi-drug resistant TB, along with weaknesses in the health systems and the human resource crisis. In new cases of TB, HIV prevalence ranges from 8% to 10%, and the primary TB-MDR is 1.2%, with important variations among countries. These challenges are negatively impacting national programs for TB control, since the burden of the disease may increase, including its mortality.

An important challenge is the poor engagement of communities, affected persons and civil society organizations in TB control, as well as the weak participation of the private sector and some institutions of the public sector in not adhering to the International Standards for Tuberculosis Care (ISTC).

In 2006, WHO adopted the new strategy STOP TB to deal with the identified problems. Several partners and donors have come together under the new Stop TB strategy to support the countries in the Region, such as USAID, the Union (former International Union against Tuberculosis and Lung Disease), Centers for Disease Control (CDC), KNCV Tuberculosis Foundation, the Tuberculosis Coalition for Technical Assistance (TBCTA), Academy for Educational Development (AED), American Thoracic Society, the Spanish Agency for International Cooperation (AECI), and the Global Fund, among others. Despite their support, there are still challenges in coordinating and harmonizing their programs, as well as involving potential national partners that do not follow national norms and ISTC.

#### STRATEGIC APPROACHES

- Implementing the Regional HIV/STI Plan for the Health Sector, 2006-2015; the Regional Plan for Tuberculosis Control, 2006-2015; and the Regional Plan for Malaria in the Americas, 2006-2010. These plans inform the approaches below, and are to be implemented at all levels.
- Enhancing strategic decision-making at the national level through strengthening and promoting the development and use of information on HIV/AIDS, TB and malaria, including surveillance, and monitoring and evaluation systems, as well as improved information and knowledge management. This includes promoting the exchange of strategic information among key health partners.
- Strengthening health systems to effectively combat HIV/AIDS/STI, TB and malaria.
- Participating in global, regional, subregional and country-level mechanisms established by WHO, UNAIDS and the Regional Director's Group on HIV.
- Ensuring the availability of data to measure trends in the HIV/AIDS epidemic in the Region, including data to establish base lines for the indicators in the Regional HIV/STI Plan for the Health Sector, 2006-2015.
- Strengthening health services by:
  - Expanding, integrating and reorienting services for the delivery of gender-sensitive, cost-effective interventions addressing HIV, TB and malaria through prevention, diagnosis, treatment, care and support.
  - o Ensuring services for hard-to-reach populations and vulnerable groups, including indigenous populations.
  - Addressing human resources issues.

- Ensuring the availability and proper use of high quality medicines, quality laboratory networks, diagnostics, and health commodities, with continued support from the Strategic Fund for public health supplies.
- Strengthening the national capacity to prepare and implement projects for which resources can be mobilized for HIV/AIDS, TB and malaria control from partners such as the Global Fund.
- o Providing technical cooperation for the development and implementation of approved Global Fund proposals, contributing to the relationship between the principal recipient and sub-recipients, while ensuring coherence with national programs.
- o Strengthening national and international alliances and partnerships to combat HIV/AIDS, tuberculosis, and malaria at the regional, subregional, national and local levels.

#### **ASSUMPTIONS AND RISKS**

#### Assumptions:

- HIV/AIDS, TB and malaria will continue to be recognized as priorities in the national, subregional, regional and global health agendas, and receive adequate resource allocations.
- National health systems will correspondingly be strengthened to realize universal access to essential health services and care.
- Strategic approaches are based on the hypothesis that interventions can be scalable, even in the most resource-challenged settings, with sound planning, sustainable financing and well-supported infrastructures; as well as intersectoral actions.

#### Risks:

• Effective leadership and coordination of programs may not be maintained because of the growing number of partners and increasing competition for resources.

#### **REGION-WIDE EXPECTED RESULTS**

RER 2.1 Member States supported through technical cooperation for the prevention of, and treatment, support and care for patients with HIV/AIDS, tuberculosis and malaria, including innovative approaches for increasing coverage of the interventions among poor people, hard-to-reach and vulnerable populations.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
2.1.1	Number of countries that provide prophylactic antiretroviral treatment to at least 80% of the estimated HIV positive pregnant women	9	<u>10</u>	<u>12</u>	<u>17</u>
2.1.2	Number of countries that provide antiretroviral treatment to at least 80% of the population estimated to be in need as per PAHO/WHO guidelines	<u>6</u>	<u>7</u>	<u>12</u>	<u>15</u>
2.1.3	Number of countries implementing components of the Global Malaria Control Strategy, within the context of the Roll Back Malaria initiative and PAHO's Regional Plan for Malaria in the Americas 2006-2010	20	23	<u>28</u>	33
2.1.4	Number of countries detecting 70% of estimated cases of pulmonary tuberculosis through a positive TB smear test	<u>12/27 *</u>	<u>20/27</u>	23/27	<u>26/27</u>
2.1.5	Number of countries with a treatment success rate of 85% for tuberculosis cohort patients	<u>6/27 *</u>	<u>11/27</u>	<u>16/27</u>	<u>23/27</u>
2.1.6	Number of countries that have achieved the regional target for elimination of congenital syphilis	<u>2</u>	<u>7</u>	<u>15</u>	<u>26</u>
2.1.7	Number of countries with quantifiable targets in their health plans for prevention and control of HIV and other sexually transmitted infections	<u>4</u>	<u>6</u>	<u>11</u>	<u>14</u>

<sup>\*</sup> Denominator refers to countries where tuberculosis is endemic

RER 2.2 Member States supported through technical cooperation to develop and expand gender-sensitive policies and plans for HIV/AIDS, malaria and TB prevention, support, treatment and care.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
2.2.1	Number of countries with health sector policies and medium-term plans in response to HIV in accordance with the Universal Access Framework	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>
2.2.2	Number of countries implementing the WHO 12 collaborative activities against HIV/AIDS and tuberculosis	<u>3</u>	9	<u>20</u>	<u>30</u>

RER 2.3 Member States supported through technical cooperation to develop and implement policies and programs to improve equitable access to quality essential medicines, diagnostics and other commodities for the prevention and treatment of HIV, tuberculosis and malaria.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
2.3.1	Number of countries implementing <u>WHO</u> revised/updated diagnostic and treatment guidelines on tuberculosis	0/27*	<u>3/27</u>	10 <u>/27</u>	<u>14/27</u>
2.3.2	Number of countries that participate in the Strategic Fund mechanism for affordable essential medicines for HIV/AIDS	<u>19</u>	19	<u>20</u>	21
2.3.3	Number of countries implementing quality- assured HIV screening of all donated blood	32	34	<u>37</u>	40

<sup>\*</sup> Denominator refers to countries where tuberculosis is endemic

RER 2.4 Regional and national surveillance, monitoring and evaluation systems strengthened and expanded to track progress towards targets and resource allocations for HIV, malaria and tuberculosis control; and to determine the impact of control efforts and the evolution of drug resistance.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
2.4.1	Number of countries reporting HIV surveillance data disaggregated by sex and age to PAHO/WHO	<u>25</u>	<u>27</u>	<u>32</u>	<u>33</u>
2.4.2	Number of countries reporting tuberculosis surveillance data disaggregated by sex and age to PAHO/WHO	<u>27</u>	30	<u>34</u>	<u>37</u>
2.4.3	Number of countries reporting malaria surveillance data disaggregated by sex and age to PAHO/WHO	21/21*	21/21	<u>21/21</u>	21/21
2.4.4	Number of countries reporting HIV drug resistance surveillance data to PAHO/WHO, as per PAHO/WHO guidelines	1	2	7	<u>16</u>
2.4.5	Number of countries reporting tuberculosis drug resistance surveillance data to PAHO/WHO, as per PAHO/WHO guidelines	14/27**	19/27	<u>22/27</u>	<u>27/27</u>
2.4.6	Number of countries reporting malaria drug resistance surveillance data to PAHO/WHO, as per PAHO/WHO guidelines	9/21*	13/21	<u>17/21</u>	20/21

<sup>\*</sup> Denominator refers to countries where malaria is endemic

<sup>\*\*</sup> Denominator refers to countries where tuberculosis is endemic

RER 2.5 Member States supported through technical cooperation to:
(a) sustain political commitment and mobilization of resources through advocacy and nurturing of partnerships on HIV, malaria and tuberculosis at country and regional levels; (b) increase the engagement of communities and affected persons to maximize the reach and performance of HIV/AIDS, tuberculosis and malaria control programs.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
<u>2.5.1</u>	Number of countries with functional coordination mechanisms for HIV/AIDS	40	40	<u>40</u>	40
2.5.2	Number of countries with functional coordination mechanisms for tuberculosis	5/27*	8/27	<u>12/27</u>	15/27
2.5.3	Number of countries with functional coordination mechanisms for malaria	21/21**	21/21	<u>21/21</u>	21/21
2.5.4	Maintain the number of countries involving communities, persons affected by the disease, civil-society organizations and the private sector in planning, design, implementation and evaluation of programs against HIV/AIDS	40	40	<u>40</u>	40

<sup>\*</sup> Denominator refers to countries where tuberculosis is endemic

RER 2.6 New knowledge, intervention tools and strategies developed, validated, available, and accessible to meet priority needs for the prevention and control of HIV, tuberculosis and malaria, with Latin American and Caribbean countries increasingly involved in this research.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
2.6.1	Number of new or improved interventions and implementation strategies for tuberculosis whose effectiveness has been determined and evidence made available to appropriate institutions for policy decisions	1	2	2	3
2.6.2	Number of new or improved interventions and implementation strategies for malaria whose effectiveness has been determined and evidence made available to appropriate institutions for policy decisions	0	1	2	2

<sup>\*\*</sup> Denominator refers to countries where malaria is endemic

#### **STRATEGIC OBJECTIVE 3**

To prevent and reduce disease, disability and premature death from chronic non-communicable conditions, mental disorders, violence and injuries

#### **S**COPE

This Strategic Objective (SO) focuses on prevention and reduction of the burden of disease, disabilities, and premature deaths from the major chronic non-communicable diseases, including cardiovascular diseases, cancer, chronic respiratory diseases, diabetes; hearing and visual impairment; oral diseases; mental disorders (including psychoactive substance use); violence; and injuries, including road traffic injuries.

#### **INDICATORS AND TARGETS**

- Reduction in the estimated annual number of deaths related to major chronic noncommunicable diseases (cardiovascular diseases, cancer, chronic respiratory diseases and diabetes) in Latin America and the Caribbean. Baseline: 2.4 million deaths in 2000. Target: 2.1 million deaths by 2013.
- Reduction in the treatment gap in persons suffering from mental disorders (psychosis, bipolar disorder, depression, anxiety, and alcoholism). Baseline: 62% of persons suffering from mental disorders who do not receive treatment. Target: 47% by 2013.
- Halt the current increasing trends in mortality rates due to road traffic injuries in the Region.
   Baseline: 16.7 per 100,000 inhabitants in 2000-2004 (estimated average). Target: 14.7 per 100,000 inhabitants by 2013.
- Number of countries/territories in the Region that have reduced the Decayed, Missing, Filled, Teeth at age 12 Score (DMFT-12). Baseline: DMFT-12 scores of >5: 2 countries/territories, 3-5: 8 countries/territories, <3: 29 countries/territories, in 2004. Target: DMFT-12 scores of >5: 0 countries/territories, 3-5: 2 countries/territories, <3: 37 countries/territories, by 2013.</li>

#### **Issues and Challenges**

Chronic non-communicable diseases, (including cardiovascular diseases, cancer and diabetes), mental disorders, violence and injuries are rapidly increasing and are the major causes of death and disability in the Region.

Data and information for setting baselines and monitoring progress, especially for risk factors, are not well developed. Furthermore, country capacities to collect, analyze, report, and use non-communicable disease data in developing programs and policy varies widely.

In some countries, the true magnitude of the non-communicable disease burden, as well as the opportunities to improve health promotion and disease prevention, are unknown. In addition to

political will, international partnerships and multisectoral collaboration are necessary to generate increased synergies and ultimately additional resources.

**Chronic diseases** account for over 60% of all deaths and a large proportion of the healthcare costs. Low- and middle-income countries and poor populations in the Region are the most affected. Disease management is fragmented and third level care still consumes most of the resources. There is a wide range of cost-effective and proven solutions to deal with health promotion, disease prevention and management that have not been implemented.

The burden of chronic diseases is increasing with an ageing population, changing lifestyles, and interventions which often do not have a public health approach. The problem is caused by shared risk factors – unhealthy diet, physical inactivity, tobacco use, and harmful use of alcohol, associated with socio economic and environmental trends, some public policies and private sector practices, and lack of access to quality health services.

Countries have only limited capacity to respond to the chronic disease burden and have competing public health priorities. The challenge is to improve the effectiveness of chronic disease programs so that interventions for prevention, early detection and disease management can have an impact on disease burden.

There are more than 1 million deaths annually due to **cancer**, and this is expected to double by 2020. Thirty-five million people in the Region have **diabetes**, and an estimated 70,000 annual deaths are attributable to this disease. Predictions are for a near tripling of **cardiovascular disease** (CVD) deaths in the next 20 years. It is estimated that 80% of CVD and diabetes <u>type 2</u> and 1/3 of all cancers can be prevented, and an additional 1/3 of cancers controlled, using available cost-effective public health policy, prevention and early detection and treatment interventions.

According to relevant epidemiological studies in **mental health** conducted in Latin America and the Caribbean in the past 20 years, non-affective psychoses (among them schizophrenia) have an estimated average prevalence of 1.0%, major depression 4.9%, and anxiety disorders 3.4%. However, more than one third of the people affected by non-affective psychoses, more than half of those affected by major depression and almost two thirds of those who suffer anxiety disorders do not receive any specialized treatment, whether from a psychiatric service or other type of general or primary care service. The challenge is to reduce these treatment gaps in the Region.

Lack of data and adequate information on mental disorders in the majority of the countries does not allow for the establishment of appropriate policies and plans with well-defined baselines and targets. The challenge is to establish baselines in the countries of the Region based on a broad and comprehensive assessment of mental health systems, using a standardized methodology and indicators.

More than 70% of the countries in the Region have policies and national mental health plans, often with greater emphasis on health services than on prevention. In many cases the implementation rate of these plans is low. The challenge is to strengthen the prevention component and improve the plans' implementation with emphasis on the decentralization of specialized services, and the insertion of mental health as a component of primary health care.

In most countries in the Region, health care models for people with **disabilities** continue to be essentially institutional, at the third level of care. The challenge is to develop networks of rehabilitation services, incorporating community health care systems, for individuals at risk or with disabilities; these networks should support caregivers, be organized per the therapeutic

cycle, and promote social inclusion. Reorganization of integrated health services should be structured from the third level of care, basically biomedical, to the first level of care, where not only health promotion and prevention and treatment of disabilities are developed, but also where individual inclusion is effectively advanced.

With respect to **violence and injuries**, in the last decade nearly 120,000 homicides were reported annually in the Region, with an estimated underreporting of 10%. More than 12 countries of the Region have homicide rates higher than 100 per 100,000 inhabitants. Males aged 15-34 are the most significant victims. Surveys and studies have found that some 20% to 60% of households in the Region are the scene of physical and psychological violence against women, girls, and boys. Between 3% and 28% of children are subjected to corporal punishment in the Region, and the increase of violent youth gangs is of great concern in many countries.

Although laws to protect women and children from intra-family violence have been enacted in every country, they are not being fully enforced. Some progress has been made in the development of reliable information systems on violence; however, data and collection criteria need standardization. Governments at national and municipal level should define plans and allocate resources for violence prevention based on successful experiences in reducing homicides and increasing safe environments. The health sector must improve its capacity to care for victims of violence.

In developing countries, the design of traffic environments can be dangerous, from a road safety point of view, for pedestrians, cyclists and motorcyclists. Transport and traffic planners often neglect wider social approaches. This deeply influences the nature and quantity of crashes. Solutions better linked to road safety problems and population needs should be identified.

Another challenge for improving road safety is the lack of reliable data from different sectors, such as transport, police and health. Enforcement strategies mainly focus on traffic fluidity, rather than the prevention of road traffic injuries.

#### STRATEGIC APPROACHES

- Advocating with governments to prioritize chronic disease prevention and control through education, policies and a communication plan, emphasizing intersectoral action and publicprivate partnerships.
- Enhancing capacity to advance the *Regional Strategy on Non-communicable Diseases* in the Caribbean, Central America, the Andean subregion, and the Southern Cone.
- Providing evidence-based public health policies, guidelines and tools to strengthen health services for prevention, screening and early detection, diagnosis, treatment, rehabilitation, and palliative care.
- Building capacity of the public health workforce through training and continuing education opportunities to reinforce competencies in public health interventions and high quality health care.
- Strengthening the surveillance, research and information base for policy, planning and evaluation, especially pertaining to risk factors, by using the PAHO/WHO STEPwise approach to Surveillance (STEPS) methodology (a simple, standardized method for collecting, analyzing and disseminating data in WHO member countries).

- Prioritizing evidence-based, cost-effective policies, programs and interventions.
- Applying an inter-programmatic approach to address violence, unintentional injuries and road safety.
- Implementing comprehensive policies to strengthen road safety and allow safer traffic and circulation space.
- Fostering exchange of lessons learned among Member States.

#### **ASSUMPTIONS AND RISKS**

#### Assumptions:

- Data and information are available for effective policy, planning, monitoring and independent evaluation.
- Ability exists to secure high-level multisectoral collaboration in countries, individually and collectively.

#### Risks:

- Partners in and out of the Organization do not respond to and embrace the Regional Strategy for Non-communicable Diseases.
- Insufficient resources are allocated to address this topic.

#### **REGION-WIDE EXPECTED RESULTS**

RER 3.1 Member States supported through technical cooperation to increase political, financial and technical commitment to address chronic non-communicable conditions, mental and behavioral disorders, violence, road safety, and disabilities.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
3.1.1	Number of countries implementing institutional development mechanisms (human/budget resources, training, inter-sectoral partnerships) related to violence	9	<u>15</u>	<u>20</u>	<u>24</u>
3.1.2	Number of countries implementing institutional development mechanisms (human/financial resources, training, inter-sectoral partnerships) related to mental health	24	27	<u>27</u>	<u>29</u>
3.1.3	Number of countries implementing institutional development mechanisms (human/financial resources, training, inter-sectoral partnerships) related to chronic diseases	21	24	<u>31</u>	38
3.1.4	Number of countries implementing institutional development mechanisms (human/financial resources, training, inter-sectoral partnerships) related to disabilities	10	<u>14</u>	<u>19</u>	24
3.1.5	Number of countries implementing institutional development mechanisms (human/financial resources, training, inter-sectoral partnerships) related to road safety	9	<u>15</u>	<u>18</u>	<u>21</u>

RER 3.2 Member States supported through technical cooperation for the development and implementation of policies, strategies and regulations regarding chronic non-communicable conditions, mental and behavioral disorders, violence, road safety, disabilities, and oral diseases.

			<b>-</b> .	<b>-</b> .	
Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
3.2.1	Number of countries implementing a multisectoral national plan to prevent interpersonal and gender based violence aligned with PAHO/WHO Guidelines	15	17	<u>20</u>	23
3.2.2	Number of countries implementing a national plan on disability management and rehabilitation, according to PAHO/WHO guidelines	5	7	<u>16</u>	<u>25</u>
3.2.3	Number of countries implementing a national mental health plan, according to PAHO/WHO guidelines	26	29	<u>29</u>	30
3.2.4	Number of countries implementing a national plan for the prevention and control of chronic non-communicable diseases, according to the PAHO Integrated Chronic Disease Prevention and Control Approach, including Diet and Physical Activity	15	30	32	36
3.2.5	Number of countries implementing a national plan for the prevention of blindness and visual impairment, according to PAHO/WHO guidelines	<u>8</u>	<u>14</u>	<u>21</u>	<u>26</u>
3.2.6	Number of countries implementing a national plan for the prevention of oral diseases, according to PAHO/WHO guidelines	<u>26</u>	<u>28</u>	<u>31</u>	35
3.2.7	Number of countries implementing a multisectoral national plan to prevent road traffic injuries, aligned with PAHO/WHO Guidelines	<u>15</u>	<u>17</u>	<u>20</u>	<u>23</u>

RER 3.3 Member States supported through technical cooperation to improve capacity to collect, analyze, disseminate and use data on the magnitude, causes and consequences of chronic noncommunicable conditions, mental and behavioral disorders, violence, road traffic injuries and disabilities.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
3.3.1	Number of countries that have a national health information system that includes indicators of interpersonal and gender based violence	12	16	<u>18</u>	22
3.3.2	Number of countries that have a national health information system that includes indicators of mental health	8	<u>10</u>	<u>14</u>	<u>20</u>
3.3.3	Number of countries that have a national health information system that includes indicators of disabilities	<u>18</u>	<u>22</u>	<u>23</u>	<u>26</u>
3.3.4	Number of countries that have a national health information system that includes indicators of chronic, non-communicable conditions and their risk factors	<u>14</u>	27	<u>31</u>	<u>33</u>
3.3.5	Number of countries that have a national health information system that includes indicators of road traffic injuries	<u>12</u>	16	<u>18</u>	<u>22</u>

RER 3.4 Improved evidence compiled by the Bureau on the cost-effectiveness of interventions to address chronic non-communicable conditions, mental and behavioral disorders, violence, road traffic injuries, disabilities, and oral health.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
3.4.1	Number of cost analysis studies on interventions related to mental and neurological disorders	1	2	<u>2</u>	3
3.4.2	Number of countries with cost analysis studies on violence conducted and disseminated	8	10	<u>12</u>	<u>15</u>
3.4.3	Number of countries with cost analysis studies on oral health conducted and disseminated	4	6	<u>8</u>	9
3.4.4	Number of countries with cost analysis studies on chronic non-communicable conditions conducted and disseminated	9	<u>11</u>	<u>14</u>	<u>18</u>
3.4.5	Number of countries with cost analysis studies on road safety conducted and disseminated	<u>6</u>	<u>8</u>	<u>10</u>	<u>12</u>

RER 3.5 Member States supported through technical cooperation for the preparation and implementation of multisectoral, population-wide programs to promote mental health and road safety and prevent chronic non-communicable conditions, mental and behavioral disorders, violence, and injuries, as well as hearing and visual impairment, including blindness.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
3.5.1	Number of countries implementing multisectoral, population-wide programs to prevent of disabilities	<u>5</u>	<u>6</u>	<u>11</u>	15
3.5.2	Number of countries implementing interventions to promote mental health and the prevention of mental disorders and substance abuse	0	5	<u>11</u>	<u>15</u>
3.5.3	Number of countries implementing multisectoral, population-wide programs to promote the prevention of chronic diseases	2	10	<u>21</u>	<u>31</u>

RER 3.6 Member States supported through technical cooperation to strengthen their health and social systems for the integrated prevention and management of chronic non-communicable conditions, mental and behavioral disorders, violence, road traffic injuries, and disabilities.

Ind.	RER Indicator text	Baseline 2007	Target 2009	Target 2011	Target 2013
3.6.1	Number of countries implementing integrated primary health-care strategies to improve quality of care for chronic non-communicable diseases according to WHO's innovative Care for Chronic Conditions	<u>12</u>	<u>19</u>	<u>24</u>	<u>32</u>
3.6.2	Number of countries with tobacco cessation support incorporated into primary health care services according to the WHO Global Report of the Tobacco Epidemic	<u>4</u>	<u>6</u>	8	9