STRATEGIC OBJECTIVE 1

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

SCOPE

This Strategic Objective (SO) focuses 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: 39 countries in 2006. Target: 39 countries by 2013.

- Number of countries achieving and maintaining certification for the elimination of measles, rubella, congenital rubella syndrome and neonatal tetanus in the Region. Baseline: 0 countries in 2006. Target: 39 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 13 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 Hib 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 influenza, 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 (NDs) directly or indirectly affect the capacity of many countries in the Region to meet the MDGs. NDs have adverse effects not only on health and well-being but also contribute to low levels of school attendance and poverty, and stem from environmental problems. Lack of routine epidemiological surveillance and data recording for the NDs in the Region makes it difficult to accurately estimate disease burden. However, national surveys and special studies shed light on the burden in some populations. PAHO/WHO estimates that 20%-30% of Latin Americans are infected with one of several intestinal helminths or schistosomiasis, two very important NDs. Lymphatic filariasis affects approximately 750,000 people, while onchocerciasis puts 500,000 people at risk in the Region; both diseases are targeted for elimination. A study of cystic echinococcosis noted an estimated total of 52,693 Disability Adjusted Life Years (DALYs) lost in the Region, while economic losses total more than US$ 120 million per year. Today, there is better knowledge of the extrinsic determinants of neglected diseases; furthermore new safe and inexpensive methods to monitor these diseases in populations and treat infected persons make their prevention, control, and even elimination more feasible than ever before.

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), which 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 for 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.

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
1.1.1	Number of countries achieving more than 95% vaccination coverage at national level (DPT3 as a tracer)	17	20	25
1.1.2	Proportion of municipalities with vaccination coverage level less than 95% in Latin America and the Caribbean (DPT3 as a tracer)	38% (5,729)	35% (5,277)	30% (4,523)
1.1.3	Number of countries supported to make evidence-based decisions for the introduction of new and underutilized vaccines	9	10	20
1.1.4	Number of essential child and family health interventions integrated with immunization, for which guidelines on common program management are available	4	6	8
1.1.5	Number of countries that have established either legislation or a specified national budget line in order to ensure sustainable financing of immunization	30	32	35
1.1.6	Number of countries that have included the new vaccines (RV, NEUMO, INF, YF, HPV) in their national epidemiological surveillance system	0	5	15

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
1.2.1	Number of countries using oral polio vaccine (OPV) according to an internationally agreed timeline and process for cessation of its routine use	35	35	35
1.2.2	Percentage of final country reports or updates on polio containment certified by the Regional Commission for the Americas	100%	100%	100%
1.2.3	Number of countries with sustained surveillance of acute flaccid paralysis	39/39	39/39	39/39
1.2.4	Number of countries that have implemented interventions to achieve rubella and Congenital Rubella Syndrome (CRS) elimination	36/39	39/39	39/39
1.2.5	Number of countries achieving neonatal tetanus (NNT) elimination	38/39	39/39	39/39

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
1.3.1	Number of countries maintaining dracunculiasis eradication certification	40	40	40
1.3.2	Number of countries that are implementing WHO Global Strategy for further Reducing the Leprosy Burden and Sustaining Leprosy Control Activities	0/25	5/25	20/25
1.3.3	Population at risk (in millions) of lymphatic filariasis in four endemic countries receiving mass drug administration (MDA) or preventive chemotherapy	2.4	4.7	6
1.3.4	Coverage of at-risk school-age children in endemic countries with regular treatment against schistosomiasis and soil-transmitted helminthiasis (STH)	38%	50%	75%
1.3.5	Number of countries in Latin America and the Caribbean that have eliminated human rabies transmitted by dogs	11/21	12/21	16/21
1.3.6	Number of countries in Latin America and the Caribbean that maintain surveillance and preparedness for emerging or re-emerging zoonotic diseases (e.g. avian flu and bovine spongiform encephalopathy)	10/33	13/33	22/33
1.3.7	Number of countries with Domiciliary Infestation Index by T. infestans (Southern Cone) and R. prolixus (Central America) under 1%	3/21	11/21	15/21
1.3.8	Number of countries with total Chagas screening of blood banks to prevent transmission by transfusion.	14/21	20/21	20/21
1.3.9	Number of onchocerciasis-endemic countries with foci where transmission has been declared interrupted and which are undergoing a 3-year post-transmission interruption surveillance period	1/13	2/13	3/13

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
1.4.1	Number of countries with enhanced surveillance for communicable diseases of public health importance, according to PAHO/WHO assessment guidelines	13/39	15/39	18/39
1.4.2	Number of countries adapting generic surveillance and communicable disease monitoring tools or protocols to specific country situations	2/35	15/35	30/35

1.4.3	Number of countries that submit the joint reporting forms on immunization surveillance and monitoring to the PASB, in accordance with established timelines	15/35	18/35	20/35
1.4.4	Number of countries routinely implementing antimicrobial resistance (AMR) surveillance and interventions for AMR containment	14/35	17/35	20/35

RER 1.5 **New knowledge, intervention tools and strategies that meet priority needs for the prevention and control of communicable diseases developed, validated, available, and accessible.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
1.5.1	Number of consensus reports published on subregional, regional or global research needs and priorities for a disease or type of intervention	0	3	6
1.5.2	Number of new or improved interventions and implementation strategies whose effectiveness has been evaluated and validated	1	2	5
1.5.3	Number of countries which have developed their operational research capacity in partnership with regional and global scientific institutions	3/33	5/33	8/33

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
1.6.1	Number of countries that have completed the assessment of core capacities for surveillance and response, in line with their obligations under the International Health Regulations (2005)	3/35	35/35	35/35
1.6.2	Number of countries that have developed national plans of action to meet minimum core capacity requirements for early warning and response in line with their obligations under the International Health Regulations	0/35	32/35	35/35
1.6.3	Number of countries whose national laboratory system is engaged in at least one internal or external quality-control program for communicable diseases	20/39	24/39	30/39
1.6.4	Number of countries participating in training programs focusing on the strengthening of early warning systems, public health laboratories or outbreak response capacities	38	38	38

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).**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
1.7.1	Number of countries that have national preparedness plans and standard operating procedures in place for pandemic influenza	22/35	28/35	35/35
1.7.2	Number of international support mechanisms established for surveillance, diagnosis and mass intervention (e.g. international laboratory surveillance networks and vaccine-stockpiling mechanisms for meningitis, hemorrhagic fevers, plague, yellow fever, influenza, smallpox)	5	6	7
1.7.3	Number of countries with basic capacity in place for safe laboratory handling of dangerous pathogens and safe isolation of patients who are contagious.	22	25	40
1.7.4	Number of countries implementing interventions and strategies for dengue control (Communication for Behavior Impact [COMBI]).	15	17	19

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
1.8.1	Number of PASB entities (regional headquarters and country offices) with the global event management system in place to support coordination of risk assessment, communications and field operations	1/30	10/30	28/30
1.8.2	Number of countries with at least one participating partner institution in the Global Outbreak Alert and Response Network, and other relevant regional networks	26	30	38
1.8.3	Proportion of requests for support from Member States during an emergency or epidemic, for which PASB mobilizes a comprehensive and coordinated international response (including disease-control efforts, investigation and characterization of events, and sustained containment of outbreaks)	100%	100%	100%
1.8.4	Median time (in days) for verification of outbreaks of international importance, including laboratory confirmation of etiology	7 days	5 days	3 days

STRATEGIC OBJECTIVE 2

To combat HIV/AIDS, tuberculosis and malaria

SCOPE

This Strategic Objective (SO) focuses on interventions for the prevention, early detection, treatment and control of HIV/AIDS, sexually transmitted diseases (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).[7]
- 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).[8]
- 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).
- Number of countries that have an incidence of congenital syphilis of less than 0.5 cases per 1,000 live births. Baseline: 9 countries in 2006. Target: 26 countries by 2013 (Per Regional HIV/STI Plan for the Health Sector).
- 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.

[7] 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."

[8] 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.

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. 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 re-infections, 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 living 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, blood-borne 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 living 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 living 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 multi-drug 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).

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.
    - 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.
- 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. 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.

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
2.1.1	Number of countries that have achieved the national universal access targets for HIV/AIDS	0	5	15
2.1.2	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, as part of their national programs	20	23	33

2.1.3	Number of countries detecting 70% of estimated cases of pulmonary tuberculosis through a positive TB smear test	13/27	21/27	27/27
2.1.4	Number of countries with a treatment success rate of 85% for tuberculosis cohort patients	10/27	21/27	25/27
2.1.5	Number of countries that have achieved the regional target for elimination of congenital syphilis	1	10	40
2.1.6	Number of countries that have achieved targets for prevention and control of sexually transmitted infections (70% of persons with STIs diagnosed, treated and counseled at primary point-of-care sites)	5	7	12
2.1.7	Number of countries that have developed integrated/ coordinated policies on Tuberculosis	0/27	8/27	15/27

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
2.2.1	Number of countries with gender-sensitive policies and guidelines on HIV/AIDS	15	17	21
2.2.2	Number of countries with national strategic plans for the health workforce, including policies and management practices on incentives, regulation and retention, with attention to the specific issues raised by HIV/AIDS, TB and MALARIA	3	7	20
2.2.3	Number of countries monitoring access to gender-sensitive health services for HIV/AIDS	3	10	25

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
2.3.1	Number of countries implementing revised/updated diagnostic and treatment guidelines on TUBERCULOSIS	0/27	15/27	25/27
2.3.2	Number of countries implementing revised/updated diagnostic and treatment guidelines on MALARIA	16/21	18/21	21/21
2.3.3	Number of countries with high incidence of P. falciparum MALARIA using artemisinin-based combination therapy	6/13	8/13	13/13
2.3.4	Number of countries receiving support to increase access to affordable essential medicines for TUBERCULOSIS	27	29	37
2.3.5	Number of malaria-endemic countries receiving support to increase access to affordable medicines for MALARIA	21/21	21/21	21/21

2.3.6	Number of countries that participate in the Strategic Fund mechanism for affordable essential medicines for HIV/AIDS.	18	19	21
2.3.7	Number of countries implementing quality-assured HIV screening of all donated blood	32	35	40

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
2.4.1	Number of countries that regularly collect, analyze and report surveillance coverage, outcome and impact data on HIV using PAHO/WHO's standardized methodologies, including appropriate age and sex dis-aggregation	27	30	40
2.4.2	Number of countries that regularly collect, analyze and report surveillance coverage, outcome and impact data on TUBERCULOSIS using WHO/PAHO's standardized methodologies, including appropriate age and sex dis-aggregation	28	30	40
2.4.3	Number of countries that regularly collect, analyze and report surveillance coverage, outcome and impact data on MALARIA using PAHO/WHO's standardized methodologies, including appropriate age and sex dis-aggregation	21/21	21/21	21/21
2.4.4	Number of countries providing PAHO/WHO with annual data on surveillance, monitoring and financial allocation data for inclusion in the annual global reports on control of TUBERCULOSIS, and the achievement of targets	27	30	40
2.4.5	Number of countries providing PAHO/WHO with annual data on surveillance, monitoring and financial allocation data for inclusion in the annual global reports on control of, and the achievement of targets for, TB/HIV co-infection	18	25	35
2.4.6	Number of countries providing PAHO/WHO with annual data on surveillance, monitoring and financial allocation data for inclusion in the annual global reports on control of MALARIA and the achievement of targets	21/21	21/21	21/21
2.4.7	Number of countries reporting on surveillance and monitoring of HIV drug resistance, disaggregated by sex and age	0	10	35
2.4.8	Number of countries reporting on surveillance and monitoring of TUBERCULOSIS drug resistance, disaggregated by sex and age	14/27	19/27	25/27
2.4.9	Number of countries reporting on surveillance and monitoring of MALARIA drug resistance, disaggregated by sex and age	9/21	13/21	20/21

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
2.5.1	Number of countries with partnerships for HIV control	40	40	40
2.5.2	Number of countries with partnerships for TUBERCULOSIS control	5/27	8/27	15/27
2.5.3	Number of countries with partnerships for MALARIA control	21/21	21/21	21/21
2.5.4	Number of countries implementing strategies to ensure adequate resources and absorptive capacity for the response to HIV	12	15	20
2.5.5	Number of countries implementing strategies to ensure adequate resources and absorptive capacity for the response to TUBERCULOSIS	14/27	17/27	25/27
2.5.6	Number of countries implementing strategies to ensure adequate resources and absorptive capacity for the response to MALARIA	13/21	17/21	19/21
2.5.7	Number of countries that have involved communities, academia, persons affected by the disease, civil society organizations, and the private sector in planning, design, implementation and evaluation of HIV programs	40	40	40
2.5.8	Number of countries that have involved communities, academia, persons affected by the disease, civil society organizations, and the private sector in planning, design, implementation and evaluation of TUBERCULOSIS programs	3/27	12/27	25/27
2.5.9	Number of countries that have involved communities, academia. persons affected by the disease, civil society organizations, and the private sector in planning, design, implementation and evaluation of MALARIA programs	13/21	17/21	21/21

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	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	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
2.6.3	Number of peer-reviewed publications arising from PAHO/WHO-supported research on HIV/AIDS for which the main author's institution is based in Latin America or the Caribbean	0	3	6
2.6.4	Number of peer-reviewed publications arising from PAHO/WHO-supported research on MALARIA for which the main author's institution is based in Latin America or the Caribbean	0	2	5
2.6.5	Number of peer-reviewed publications arising from PAHO/WHO-supported research on TB for which the main author's institution is based in Latin America or the Caribbean	0	2	5

STRATEGIC OBJECTIVE 3

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

SCOPE

This Strategic Objective (SO) focuses on prevention and reduction of the burden of disease, disabilities, and premature deaths from the major chronic noncommunicable 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.

Issues and Challenges

Chronic noncommunicable 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 capacity to collect, analyze, report, and use noncommunicable disease data in developing programs and policy varies widely.

There is a lack of awareness of the magnitude of the problem of these diseases, and of opportunities to improve health promotion and disease prevention. 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. 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 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, 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 public-private partnerships.
- Enhancing capacity to advance the *Regional Strategy on Noncommunicable 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 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 Noncommunicable 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 noncommunicable conditions, mental and behavioral disorders, violence, road safety, and disabilities.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
3.1.1	Number of countries whose health ministries have a focal point or a unit for road safety and violence prevention with its own budget	9	14	24
3.1.2	Number of countries whose health ministries have a unit for mental health and substance abuse with its own budget	24	28	30
3.1.3	Number of countries whose health ministries have a unit or department for chronic noncommunicable conditions with its own budget	21	26	38
3.1.4	Number of countries where an integrated chronic disease and health promotion advocacy campaign has been undertaken	3	10	20
3.1.5	Number of countries that have a unit or focal point in the health ministry (or equivalent) on disabilities prevention and rehabilitation	10	13	24
3.1.6	Partners Forum for prevention and control of chronic diseases established, including public, private sector and civil society	0	1	1

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

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
3.2.1	Number of countries that are implementing national plans to prevent violence and road traffic injuries	15	17	23

3.2.2	Number of countries that are implementing national plans for disability, including prevention, management and rehabilitation according to PAHO/WHO guidelines and Directing Council resolutions	5	8	24
3.2.3	Number of countries that are implementing a national mental health plan according to PAHO/WHO guidelines and Directing Council Resolutions	26	29	30
3.2.4	Number of countries that are implementing a national policy and plan for the prevention and control of chronic noncommunicable conditions	15	32	36
3.2.5	Number of countries in the CARMEN network (an initiative for Integrated Prevention and Control of Noncommunicable Diseases in the Americas)	22	27	36
3.2.6	Number of countries that are implementing comprehensive national plans for the prevention of blindness and visual impairment	7	11	20
3.2.7	Number of countries that are implementing comprehensive national plans for the prevention of oral diseases	27	29	35

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.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
3.3.1	Number of countries that have a published document containing a national compilation of data on mortality and morbidity from violence and road traffic injuries	12	16	22
3.3.2	Number of countries with information systems and official published reports on the incidence, prevalence and other disabilities indicators, per International Classification of Functioning, Disability and Health (ICF) criteria	8	10	19
3.3.3	Number of countries with national information systems and annual reports that include mental, neurological and substance abuse disorders	20	24	28
3.3.4	Number of countries with a national health reporting system and annual reports that include indicators of chronic, noncommunicable conditions and their risk factors	15	28	32
3.3.5	Number of countries documenting the burden of hearing and visual impairment including blindness	8	10	21

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

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
3.4.1	Number of cost-effective interventions for the management of selected mental and neurological disorders (depression, psychosis, and epilepsy) prepared and made available	1	2	3
3.4.2	Number of countries with cost analysis studies on violence and road safety conducted and disseminated	8	10	17
3.4.3	Number of cost-effective oral health interventions with an estimate of their regional cost of implementation	4	6	9

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 noncommunicable conditions, mental and behavioral disorders, violence, and injuries, as well as hearing and visual impairment, including blindness.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
3.5.1	Number of countries implementing strategies recommended by PAHO/WHO for population wide prevention of disabilities, including hearing and visual impairment, and blindness	6	8	15
3.5.2	Number of countries implementing multisectoral population-wide programs to prevent violence and injuries and to promote road safety	13	15	21
3.5.3	Number of countries implementing a national mental health plan that integrates mental health promotion, and the prevention of behavioral disorders and substance abuse	0	5	17
3.5.4	Number of countries implementing the Regional Strategy on an Integrated approach to prevention and control of Chronic Diseases, including Diet and Physical Activity	2	10	30

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

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
3.6.1	Number of countries that apply the WHO Violence and Injury Prevention Guidelines in their health care services	12	15	22
3.6.2	Number of countries that use the recommendations in The World Report on Disability and Rehabilitation and related PAHO/WHO resolutions, and have developed and implemented national guidelines, protocols and norms for disability prevention and care of those with disabilities.	5	9	20
3.6.3	Number of countries with a systematic assessment of their mental health systems using WHO-AIMS (Assessment Instrument for Mental Health Systems)	8	12	20
3.6.4	Number of countries implementing integrated primary health-care strategies recommended by WHO in the management of chronic noncommunicable conditions	10	17	30
3.6.5	Number of countries with strengthened health-system services for the treatment of tobacco dependence as a result of using WHO's policy recommendations	6	12	24

STRATEGIC OBJECTIVE 4

To reduce morbidity and mortality and improve health during key stages of life, including pregnancy, childbirth, the neonatal period, childhood and adolescence, and improve sexual and reproductive health and promote active and healthy aging for all individuals

SCOPE

This Strategic Objective (SO) focuses on reduction of mortality and morbidity to improve health during key stages of life, ensuring universal access to coverage with effective interventions for newborn, child, adolescent, reproductive age, and older adults, using a life-course approach and addressing equity gaps. Strengthening policies, health systems and primary health care is fundamental to achieving this SO, which contributes to the achievement of Millennium Development Goals 4 (reducing infant mortality), and 5 (reducing maternal mortality).

INDICATORS AND TARGETS

- Proportion of births attended by skilled birth attendants in Latin America and the Caribbean (LAC). Baseline: 85% in 2006. Target: 90% by 2013.

- Reduction in the number of countries in the Region reporting a maternal mortality ratio above 100 per 100,000 live births. Baseline: 10 countries in 2006. Target: 6 countries by 2013.

- Number of countries in LAC with an under-5 mortality rate of 32.1 per 1,000 live births or less. Baseline: 21 countries in 2006. Target: 26 countries by 2013.

- Number of countries in LAC with a contraceptive prevalence rate above 60% (as a proxy measure for access to sexual and reproductive health services). Baseline: 13 countries in 2006. Target: 21 countries by 2013.

- Number of countries in LAC with an adolescent fertility rate (defined as the annual number of live births per 1,000 females aged 15-19) of 75.6/1,000 or less. Baseline: 8 countries in 2006. Target: 13 countries by 2013.

- Number of countries in the Region where 50% or more of the older adult population (60 years or older in LAC, 65 or older in the US and Canada) receive services adapted to their health needs. Baseline: 9 countries in 2006. Target: 15 countries by 2013.

ISSUES AND CHALLENGES

While there have been improvements in infant and child mortality rates in the Region, the situation is worsening for some conditions (e.g. the incidence of sexually transmitted infections and high fertility among adolescents in some countries), and stagnating for others (e.g., maternal and neonatal mortality). Most countries are not on track to meet the internationally agreed goals and targets for family and child health.

Child and Infant Mortality - The region of the Americas has made great strides in reducing child (under five years old) and infant mortality. During 1990-2005 the child mortality rate in children under five years old decreased by 44%. Despite this, large disparities continue among and within countries; e.g. in many Latin American and Caribbean countries the high newborn death rate has not improved to the degree expected. Several countries have experienced a marked reduction in infant mortality, but without an equivalent reduction in neonatal mortality. For example, Bolivia's infant mortality rate fell by 29% between 1989 and 1998, while the decrease in neonatal mortality was only 7% in the same period.

Each year nearly 12,000,000 babies are born in LAC. Of these, 400,000 die annually before the age of 5 years; within this group 270,000 die before 1 year, and of these 180,000 die during the first month of life. Neonatal mortality, defined as death in the first 28 days of life, is estimated at 15 per 1,000 live births. Newborn mortality accounts for 60% of infant deaths and 36% of under-5 mortality; the majority of these deaths are avoidable. Contributing factors to high neonatal mortality include: low visibility of newborn deaths and of newborn health in national priority-setting; inequalities in access to skilled birth attendants and primary health care; and poor maternal health, which adds significantly to the risk of neonatal death. In addition, interventions that directly target babies to further improve outcomes are either deficient or absent.

The leading causes of neonatal death in LAC include infections (32%), asphyxia (29%), prematurity (24%), congenital malformations (10%), and others (7%). While some are direct causes, others, as in most cases of prematurity/low birth weight, may constitute predisposing factors. PAHO estimates that approximately 8.7% of newborns suffer from low birth weight (less than 2,500 grams at birth). Low birth weight is closely associated with increased neonatal morbidity, and it is estimated that between 40% and 80% of infants who die during the neonatal period suffer from this condition. Other indirect causes include socioeconomic factors such as poverty, poor education (especially maternal education), lack of empowerment, poor access and some traditional practices that are harmful. The rural and urban poor, other marginalized communities, indigenous and afro-descendent populations experience disproportionately high neonatal mortality.

Evidence suggests that the first week of life is the most vulnerable in terms of neonatal mortality risk, and that appropriate care in the first 24 hours of life is an important determinant for the future of the child. In countries where the infant mortality rate is not extremely high, about two-thirds of infant deaths take place in the first month of life.[9]

Collective actions are lacking, not only through the health systems and services, but also at the household level, to promote interventions that can be effectively delivered at low cost. Examples of these interventions include the promotion of breastfeeding, oral rehydration therapy, and the consumption of micronutrients, as well as education on complementary feeding. One major challenge is to reorient health services towards a model of care that encourages health promotion and disease prevention, with a family and community approach, and the development of managerial capacity at local levels.

Many national and international agencies (UNICEF, UNF, CIDA, and the Spanish bilateral agency AECI), prominent NGOs, and civil society are working in Latin America in the child health arena. This presents a challenge in terms of coordination to avoid duplication and build on synergies.

[9] Neonatal Health in the Context of Maternal, Newborn and Child Health for the Attainment of the Millennium Development Goals of the United Nations Millennium Declaration. 47th Directing Council of the Pan American Health Organization. 58th Session of the Regional Committee. *Washington, D.C., USA, 25-29 September 2006.* OPS/FCH/CA/07.08.

Adolescent Health - In LAC, females under 20 years of age are estimated to account for 18% of births, 30% to 40% of which are unwanted pregnancies. It is estimated that there is a 40% unmet need for contraception. Adolescent mothers (aged 10 to 19) are two times more likely than older mothers to die from pregnancy-related causes, and account for 30% to 50% of maternal mortality in the countries with higher maternal mortality ratios. The risk of dying is 4 times higher among adolescents under 15 years old. Fifty percent of unsafe abortions occur among women 20-29. More than five countries in the Region have fertility rates in adolescents aged 15-19 of more than 100 per 1,000; 12 countries have fertility rates greater than the regional average (76 per 1,000).

There is also a lack of national adolescent health plans and programs that integrate approaches to address related health issues (adolescent pregnancy, STI/HIV, drug abuse, and violence) that affect a rapidly expanding youth population in the Region. Most of these programs remain as pilot interventions and there is a great need to scale them up using lessons learned from successful experiences. This situation is complicated by the fact that youth health, and in particular adolescent sexual and reproductive health, is not a priority in the political agenda of most countries in the Region. In many countries policy and legislation promoting access to adolescent health services are not enforced and national programs remain fragmented. There is a deficiency of trained human resources, adequate information systems and monitoring and evaluation. Violence disproportionately impacts youth with an estimated 101.7 per 100,000 men and 60.4 per 100,000 women age 15 to 29 in middle and low income countries in LAC dying from intentional injuries. The dominant conceptual framework used to respond to youth violence centers on punitive and not preventive approaches, and focuses on youth as perpetrators of violence, without addressing the underlying causes.[10] Alcohol and drug abuse, and tobacco use are increasing among adolescents in the Region, and are highly associated with early pregnancy, sexual transmitted diseases, HIV, and violence. Several actors are working in the field of adolescent health, such as UNICEF, UNFPA, UNIFEM, USAID, many major NGOs (PLAN, Pathfinder, Red Cross, Alan Guttmacher) and bilateral organizations (CIDA, SIDA, GTZ, NORAD, CIDE), posing a challenge in the coordination of efforts and the harmonization of programs.

Maternal Mortality - Some countries have made strides in reducing maternal mortality (MM), while in others the situation has worsened. Great disparities remain among countries (MM of 630 per 100,000 live births in Haiti vs. 17.3 in Chile) and within countries (in Argentina, MM of 20 per 100,000 live births in Buenos Aires district vs. 136 in La Rioja province). The population that has access to skilled birth attendants is particularly low in the poorest countries and in rural settings. In some countries a large proportion of women (69% of women in Bolivia and 89% of women in Haiti) do not have access to skilled birth care. In Central America, skilled attendance at birth is available to no more than 55% of pregnant women, and in Haiti such skilled care is only available to 26% of urban women. The majority of MM results from preventable causes such as hemorrhage (21%), pregnancy-induced hypertension (26%), sepsis (8%), obstructed and prolonged labor (12%), and abortion-related complications (13%). In some countries, essential obstetric and neonatal services are either not in place or of poor quality, or under-utilized because of cultural or physical barriers and lack of skilled personnel, especially in remote areas.

The coverage of prenatal control attention (normally referred to as one contact) is 89.1%; delivery coverage by trained staff is 88.2%. Five countries with figures above 90% of prenatal control or delivery attention by qualified staff have a MM ratio above 91.1 per 100,000 live births, which shows quality problems in maternal and perinatal health services.

[10] "Políticas públicas y marcos legales para la prevención de la violencia relacionada con adolescentes y jóvenes. Estado del arte en América Latina 1995-2004." (Spanish only) Pan American Health Organization, and German Technical Cooperation (GTZ).

Health and well-being among older persons - In 2006, 9% of Latin America's population was 60 or older (over 50 million people) and 7 million were 80 years old or older. While the population in general is growing by 1.5% annually, the population over 60 is growing at an annual rate of 3.5%. This demographic shift means that by around 2025, the Region will have 100 million people over 60 years old. This fact underscores that active and healthy aging will be one of the biggest challenges that Latin American and Caribbean societies face during the 21st century. Expansion of primary health care coverage to the older adult population and greater participation of this group in their health care are important issues to be addressed by health systems.

Overall Challenges - Political will to make a difference in this Strategic Objective area is flagging and resources are insufficient. Those most affected (e.g. poor women and children in developing countries) have limited influence on decision-makers and are often excluded from care. Communities need to be empowered to improve local decision-making and action. In addition, some issues are politically and culturally sensitive and complicate the consensus needed to improve public health. Furthermore, efforts to improve the quality of health care and to increase coverage rates are insufficient. Competing health priorities among organizations, vertical program approaches, and lack of coordination among governments and development partners result in program fragmentation, missed opportunities, and an inefficient use of limited financial resources. Better coordination among various partners and harmonization with UN agencies is an important factor for the achievement of this strategic objective. Additionally, interventions must be implemented within a primary health care setting, in a culturally sensitive context.

In the Region, technical knowledge and program experience indicate that effective and affordable interventions exist for most of the problems covered by this Strategic Objective. Consensus exists on the need to reach universal access using key interventions. The PAHO Directing Council set out agreed actions in Resolution CE124.R4 (IMCI) and Resolution CD47/12 (Neonatal health in the context of maternal, newborn and child health) to achieve universal access. To this end, adopting a life-course approach that recognizes the influence of early life events and inter-generational factors on future health outcomes will serve to bridge gaps and build synergies among program areas, while providing effective support to ensure active and healthy aging.

In summary, the crucial challenge of this strategic objective is to ensure the conditions that allow all pregnant women, infants, children, adolescents and adults to develop their human potential, and to achieve their maximum physical and cognitive development and the highest quality of life.

STRATEGIC APPROACHES

- Implementing the *Integrated Management of Childhood Illness* (IMCI) strategy, formulated to focus on the care of children under five, not only in terms of their overall health status but also on the diseases that may occasionally affect them; scaling-up efforts to expand the coverage of clinical, household, and community interventions to the most vulnerable populations, including the indigenous groups, and linking community actions with health services and systems.

- Promoting integral child development, emphasizing psychosocial development of the child, affective development, early stimulation, physical activity and healthy feeding practices, prevention of child abuse, mental health disorders, among others, through the Community IMCI Strategy.

- Implementing the *Integrated Management of Adolescent and their Needs* (IMAN) strategy, which offers an integrated package of interventions based on evidence in adolescent and youth development and health promotion.
- Implementing the *Integrated Management of Adolescent and Adult Illness* (IMAI) strategy, which addresses the overall health of the patient, focusing on the management of chronic disease and prevention, rather than just the treatment of acute illness.
- Implementing the *Regional Strategy for Maternal Mortality and Morbidity Reduction* to reduce the burden of disease, unnecessary disability, and death that are associated with pregnancy, puerperium and childbirth; and expanding the coverage of clinical, household, and community interventions to the most vulnerable populations, including indigenous groups, and linking community actions with health services and systems.
- Implementing the *Regional Initiative for Maternal Mortality Reduction* to strengthen the regional technical and national capability and political environment in favor of the reduction of maternal mortality.
- Implementing the *WHO Global Strategy for Reproductive Health* directed to governments, normative agencies of international organizations, professional associations, nongovernmental organizations, and other institutions.
- Promoting the country planning and implementation process for achieving universal access and coverage of maternal, newborn, child, adolescent, and older adults, while addressing sexual and reproductive health, gender inequality, and growing health inequities that fuel the high levels of mortality and morbidity.
- Integrating and harmonizing programs and interventions throughout a continuum of care that runs through the life course and spans the home, the community, and different levels of the health system and services.
- Promoting community-based interventions with the active participation of the community to increase the demand for services and to support appropriate care in the home across the life course.
- Improving surveillance, and monitoring and evaluation systems; these will include audits of all the deaths of children under the age of 1, medical certification of deaths, appropriate registries by services and geographical units and the availability of statistics and epidemiology services to facilitate better decision making.
- Promoting partnerships with bilateral and UN agencies to harmonize actions that scale–up interventions and maximize the use of resources.
- Developing policies and programs that expand human resources in gerontology and geriatrics education for family as well as community caregivers in order to promote active and healthy aging and to prevent early deterioration (both physical and mental).

ASSUMPTIONS AND RISKS

Assumptions:

- Overall strengthening of health systems and services will occur, including the development and maintenance of a suitable infrastructure, a reliable supply of essential drugs and commodities, functional referral systems, and a competent and well-motivated workforce.
- Key processes will be pursued, such as the improved harmonization of the work performed by UN agencies at the country level and the integration of health issues in national planning and implementation instruments.

- Political will for these activities will be reflected in additional technical and financial resources for making progress towards the Millennium Development Goals.

Risks:

- Threats posed by the possibility of a flu pandemic in the Region, diverting financial and human resources.
- Political instability, economic crisis, and natural disasters may lead to the reversal of direction in some indicators.
- Lack of political commitment by donor agencies and governments to properly address family and community health needs.
- A healthcare workforce weakened by strikes, frequent changes in political appointments, and high turnover of trained personnel.

REGION-WIDE EXPECTED RESULTS

RER 4.1 **Member States supported through technical cooperation to develop comprehensive policies, plans, and strategies that promote universal access to a continuum of care throughout the life course; to integrate service delivery; and to strengthen coordination with civil society, the private sector and partnerships with UN and Inter-American system agencies and others (e.g. NGOs).**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
4.1.1	Number of countries that have integrated national programs in maternal, neonatal, and child health	2	6	15
4.1.2	Number of countries that have a policy of universal access to sexual and reproductive health	7	11	16
4.1.3	Number of countries that have a policy on the promotion of active and healthy aging	11	15	18

RER 4.2 **Member States supported through technical cooperation to strengthen national/local capacity to produce new evidence and interventions; and to improve the surveillance and information systems in sexual and reproductive heath, and in maternal, neonatal, child, adolescent and older adult health.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
4.2.1	Number of countries that implement information systems and surveillance systems to track sexual and reproductive health, maternal, neonatal and adolescent health, with information disaggregated by age, sex and ethnicity	11	15	20
4.2.2	Number of PASB systematic reviews on best practices, operational research, and standards of care	0	5	10

4.2.3	Number of centers of excellence responsible for operational research, service delivery, and training courses that strengthen national capacity	12	15	20

RER 4.3 **Member States supported through technical cooperation to reinforce actions that ensure skilled care for every pregnant woman and every newborn, through childbirth and the postpartum and postnatal periods.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
4.3.1	Numbers of countries that have implemented national strategies to ensure skilled care at birth, including prenatal, post-natal, and newborn care	10	12	22
4.3.2	Number of countries adapting and utilizing PAHO/WHO-endorsed technical and managerial norms and guidelines on integrated management of pregnancy and childbirth	5	9	16

RER 4.4 **Member States supported through technical cooperation to improve neonatal health.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
4.4.1	Number of countries with neonatal strategies using the continuum of care approach, including the neonatal component of the Integrated Management of Childhood Illnesses (IMCI)	4	8	18
4.4.2	Number of guidelines and tools developed and disseminated to improve neonatal care and survival	4	6	9

RER 4.5 **Member States supported through technical cooperation to improve child health and development, taking into consideration international agreements.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
4.5.1	Number of countries that have expanded geographical coverage of Integrated Management of Childhood Illness (IMCI) to more than 75% of targeted subnational entities in their health services	8	10	15
4.5.2	Number of countries implementing the WHO/PAHO Key Family Practices approach at the community level to strengthen primary health care	9	10	15

RER 4.6 **Member States supported through technical cooperation for the implementation of policies and strategies on adolescent health and development.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
4.6.1	Number of countries with national programs in adolescent health and development	10	12	17
4.6.2	Number of countries implementing a comprehensive package of services in adolescent health and youth development (Integrated Management of Adolescent Needs [IMAN]).	3	10	15

RER 4.7 **Member States supported through technical cooperation to implement the Global Reproductive Health Strategy, with particular emphasis on ensuring equitable access to reproductive health services.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
4.7.1	Number of countries that have reviewed public health policies related to reproductive health	7	10	12
4.7.2	Number of countries that have adopted the WHO Global Strategy for Reproductive Health	5	8	15

RER 4.8 **Member States supported through technical cooperation to increase advocacy for aging as a public health issue, and to maintain maximum functional capacity throughout the life course.**

Indicator #	RER Indicator text	Baseline 2007	Target 2009	Target 2013
4.8.1	Number of countries that have implemented community-based policies with a focus on strengthening primary health-care capacity to address healthy aging	5	7	12
4.8.2	Number of countries that have multisectoral programs for strengthening primary heath care capacity to address healthy aging	9	10	14