Background

1. Tuberculosis (TB) continues to be a public health problem in the Region of the Americas, with 289,000 new cases and relapses in 2018, 81% of which were reported; 55,000 cases were not diagnosed. The incidence rate was 29 cases per 100,000 population, still far from the target of 5.3 cases per 100,000 population by 2030 (1). The purpose of this document is to report to the Governing Bodies of the Pan American Health Organization (PAHO) on advances in the implementation of the Plan of Action for the Prevention and Control of Tuberculosis (Document CD54/11, Rev. 1), adopted in 2015 by the 54th Directing Council of PAHO, through Resolution CD54.R10 (2, 3).

2. The plan is consistent with the Sustainable Development Goals (SDGs), which include ending the TB epidemic by 2030 (4). The global End Tuberculosis strategy provides the technical framework (5). The plan is also aligned with the Strategy for Universal Access to Health and Universal Health Coverage (6). Furthermore, the Moscow Declaration to End TB (November 2017) (7) and the Political Declaration of the High-level Meeting of the United Nations General Assembly on the fight against tuberculosis in September 2018 (8), renewed the commitment of the Member States of the World Health Organization (WHO) to stepping up national efforts against this disease in accordance with the aforementioned frameworks.

Analysis of Progress Achieved

*Strategic Line of Action 1: Integrated tuberculosis prevention and care, focused on those persons affected by the disease*

3. On the first line of strategic action, significant progress has been made in several areas: a) the technical-programmatic and management capacity of national TB control programs, including national TB laboratories, through technical advice, training, regional
meetings, internships at high-level centers, and monitoring visits; 
b) early molecular
diagnosis, through support from a regional grant from the Global Fund to Fight AIDS,
Tuberculosis and Malaria aimed at strengthening TB laboratories in 20 countries (9); 
c) active case detection and contact tracing, with an emphasis on vulnerable populations
(children, indigenous people, persons deprived of liberty, street dwellers, and populations
with addictions, among other groups), through advocacy during the annual
commemoration of World TB Day, regional events, and country visits; d) timely treatment
of drug-susceptible and drug-resistant tuberculosis with social support, through technical
advice for the updating of management guidelines, monitoring visits by the regional Green
Light Committee, use of the Quan-TB tool, and joint work with the PAHO Regional
Revolving Fund for Strategic Public Health Supplies to improve drug management; e) an
interprogrammatic approach to co-infection by tuberculosis and human immunodeficiency
virus (TB/HIV) through updated regional clinical guidelines and the implementation
of integration projects; f) comprehensive care of comorbidities (diabetes and smoking, among
others); and g) treatment of latent infection through work with other programs and the
advice provided to countries.

<p>| Objective 1.1: Strengthen integrated prevention and care of tuberculosis, focused on those persons affected by the disease, in accordance with international standards for tuberculosis care |</p>
<table>
<thead>
<tr>
<th>Indicator, baseline, and target</th>
<th>Status</th>
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<tbody>
<tr>
<td><strong>1.1.1</strong> Number of countries that diagnose and treat tuberculosis in accordance with international standards for tuberculosis care</td>
<td>35 countries have been updating their national guidelines for diagnosing and treating TB in accordance with international standards of care, despite WHO’s frequent updating of TB care guidelines. This limits progress with this indicator.</td>
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<tr>
<td>Baseline (2013): 20</td>
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<tr>
<td>Target (2019): 35</td>
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<tr>
<td><strong>1.1.2</strong> Number of countries that carry out systematic preventive therapy for contacts (under age 5) of active tuberculosis cases</td>
<td>The 20 target countries provided preventive treatment with isoniazid to children under 5 years of age who are contacts of active TB cases, as recommended by PAHO/WHO, according to notifications and reports on monitoring visits to countries in 2018.</td>
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<tr>
<td>Baseline (2013): 5</td>
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<tr>
<td>Target (2019): 20</td>
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<tr>
<td><strong>1.1.3</strong> Number of countries that carry out systematic preventive therapy of TB/HIV co-infection, in accordance with national guidelines</td>
<td>According to the latest available information, as of 2018, 20 countries reported initiating isoniazid preventive therapy in people with HIV, which means the target has been met. Information on coverage and duration varies due to limitations in the HIV information systems.</td>
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<tr>
<td>Baseline (2013): 5</td>
<td></td>
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<tr>
<td>Target (2019): 10</td>
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</table>
**Objective 1.1:** Strengthen integrated prevention and care of tuberculosis, focused on those persons affected by the disease, in accordance with international standards for tuberculosis care

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<tr>
<td><strong>1.1.4</strong> Number of countries that diagnose over 85% of estimated cases of MDR-TB among reported tuberculosis cases</td>
<td>Four countries diagnosed over 85% of estimated cases of rifampicin/multidrug-resistant tuberculosis among reported TB cases in 2018. During the period of the regional Plan of Action, and following the introduction of the Xpert® MTB/RIF rapid molecular diagnostic test, there were changes to the WHO definition of multidrug-resistant tuberculosis, which now includes rifampicin-resistant tuberculosis, thus replacing the criteria used in the definition of the baseline values and 2013 targets. Based on this criterion, the target does not correspond to what was initially meant to be measured. The mid-term report proposed updating the target to 10 countries (10).</td>
</tr>
<tr>
<td><strong>1.1.5</strong> Number of countries that initiate treatment of 100% of reported cases of MDR-TB</td>
<td>According to the latest available information, as of 2018, nine countries were initiating treatment of all their reported cases of multidrug-resistant TB; in addition, seven countries exceeded 90%. All this was due to the technical support of the multidrug-resistant TB experts of the Green Light Committee regional mechanism.</td>
</tr>
<tr>
<td><strong>1.1.6</strong> Number of countries where 100% of cases of TB/HIV co-infection receive antiretroviral therapy</td>
<td>According to the latest available information, as of 2018, six countries were providing antiretroviral treatment to all patients with TB/HIV co-infection. In addition, 12 countries provided antiretroviral treatment to more than 80% of co-infected patients. It is important to mention that in several countries there are problems with information on this indicator that make it impossible to know the real situation.</td>
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**Strategic Line of Action 2: Political commitment, social protection, and universal coverage of tuberculosis diagnosis and treatment**

4. On the second strategic line, progress has been made in the following areas: a) increased political commitment from Member States in relation to tuberculosis following the High-level Meeting of the United Nations General Assembly on tuberculosis, maintaining a high percentage of government funding for disease prevention and control
and support from the Regional Parliamentary Front Against Tuberculosis; b) strengthening of civil society participation, including the people affected, through the creation of networks and effective coordination mechanisms between different actors; c) regulation of the quality and rational use of medicines, consistent with international recommendations; d) strengthening TB information systems and the capacity to analyze information for decision-making; and e) promoting the inclusion of TB patients in social protection programs.

<table>
<thead>
<tr>
<th>Objective 2.1: Formulate and implement, in accordance with the Global Strategy, national tuberculosis control plans that strengthen political commitment and an integrated approach to tuberculosis control, within the framework of the Strategy for Universal Access to Health and Universal Health Coverage, and social protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator, baseline, and target</td>
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</table>
| 2.1.1 Number of countries that have implemented updated plans in accordance with the Global Strategy | As of 2019, 30 countries were implementing national strategic plans for TB based on the End TB Strategy. These are in different stages of implementation.  
Baseline (2013): 0  
Target (2019): 30 |
| 2.1.2 Number of countries that have financed their updated strategic plans in accordance with the Global Strategy | As of 2019, 30 countries had funding for their updated TB strategic national plans. The proportion of funding varied in the countries according to the various sources of financing, but national resources were the main source in most countries.  
Baseline (2013): 0  
Target (2019): 30 |
| 2.1.3 Number of countries that have community networks working in tuberculosis control | As of 2019, 16 countries had established community networks supporting TB prevention and control activities. A multi-country project of the Global Fund to Fight AIDS, Tuberculosis and Malaria supports eight of these countries in strengthening civil society participation.  
Baseline (2013): 3  
Target (2019): 10 |
| 2.1.4 Number of countries with established regulations on the registry, importation, and manufacture of medical products | As of 2019, 35 countries have established regulations on aspects related to registry, importation, and manufacture of medical products, including those for TB (drugs, diagnostics, and supplies), exceeding the target (11, 12).  
Baseline (2013): 28  
Target (2019): 30 |
| 2.1.5 Number of countries that include people affected by tuberculosis in social protection programs | As of 2019, TB patients in 15 countries benefited from social protection programs, usually those with multidrug-resistant TB. Coverage is variable depending on the source and level of funding for this support. Sustainability is not always guaranteed.  
Baseline (2013): 5  
Target (2019): 15 |
Strategic Line of Action 3: Operational research and implementation of innovative initiatives and tools for tuberculosis prevention and control

5. On the third strategic line, progress has been made in the following areas: a) increasing introduction of new rapid molecular diagnostic technologies (GeneXpert® and line probe assay), medicines (bedaquiline, delamanid and rifapentin), presentations (dispersible tablets for children), and regimens (for drug-resistant tuberculosis); b) strengthened capacity to conduct operational research through training and the creation of national TB research networks in high-burden countries; c) stepped-up implementation of the tuberculosis elimination framework in low-incidence countries; d) continuity in the TB control initiative in large cities; and e) development and implementation of a tool for active pharmacovigilance.

<table>
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<tr>
<th>Objective 3.1: Implement innovative initiatives and tools for tuberculosis control, using operational research in each Member State to measure and evaluate their contribution in terms of diagnosis and treatment outcomes</th>
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<tbody>
<tr>
<td><strong>Indicator, baseline, and target</strong></td>
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<tr>
<td><strong>3.1.1 Number of countries with established and functional national tuberculosis research networks that include national TB control programs</strong></td>
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<tr>
<td>Baseline (2013): 1</td>
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<tr>
<td>Target (2019): 10</td>
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<tr>
<td><strong>3.1.2 Number of countries that have operational research plans for tuberculosis</strong></td>
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<tr>
<td>Baseline (2013): 1</td>
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<tr>
<td>Target (2019): 10</td>
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<tr>
<td><strong>3.1.3 Number of countries that use the new tools for tuberculosis control</strong></td>
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<tr>
<td>Baseline (2013): 11</td>
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<td>Target (2019): 20</td>
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</table>

6. Lessons learned include the importance of dialogue and coordination prior to implementation of the activities of the plan of action with all stakeholders, especially national authorities. It is also necessary to bring together human, technical, and financial resources from various entities in order to achieve the established targets. This constructive process usually requires more time than is initially planned.

7. Implementation of this plan has helped reduce mortality from tuberculosis by 11% (from 2.6 to 2.3 per 100,000 population between 2014 and 2018). With regard to the incidence, there has been a slight increase (1%) in the same period. Among other reasons,
this is due to increased case-finding, the introduction of new diagnostic methods, and a
deterioration in socioeconomic conditions in some countries.

**Action Needed to Improve the Situation**

8. The following recommendations are made with a view to accelerating progress
toward achieving the SDGs, the targets of the End TB Strategy, and the commitments of
the high-level meeting of the United Nations General Assembly on tuberculosis:

a) Improve case-finding and contact tracing.
b) Expand implementation of new molecular technology for rapid diagnosis and the
introduction of new medicines.
c) Improve patient-centered integrated care, including for comorbidities of
tuberculosis and HIV, diabetes, and addictions, through interprogrammatic work
with the corresponding programs.
d) Ensure that all vulnerable populations are addressed (indigenous populations,
persons deprived of liberty, street dwellers, children, migrants, people of African
descent) through case-finding, contact tracing, timely diagnosis and treatment, and
case monitoring.
e) Strengthen intersectoral work (justice, labor, social development, housing,
defense), patient support through government social protection programs, and civil
society participation (non-governmental organizations, parliamentarians,
academia, scientific societies, community organizations, and patient groups).
f) Improve TB-related information systems and data analysis within the framework
of national systems with nominal information that are electronically based and
connected to laboratory information systems, supply systems, and vital record
systems.
g) Promote greater operational research through existing national TB research
networks and support the creation of new national networks.

**Action by the Directing Council**

9. Considering the extraordinary and unprecedented circumstances presented by the
COVID-19 pandemic, and in accordance with Resolution CE166.R7, this report will be
published for information purposes only, and will not be discussed by the Directing
Council.

**References**

WHO; 2019 [consulted 28 January 2019]. Available from:


