



World TB Day 2007

# TB anywhere is TB everywhere

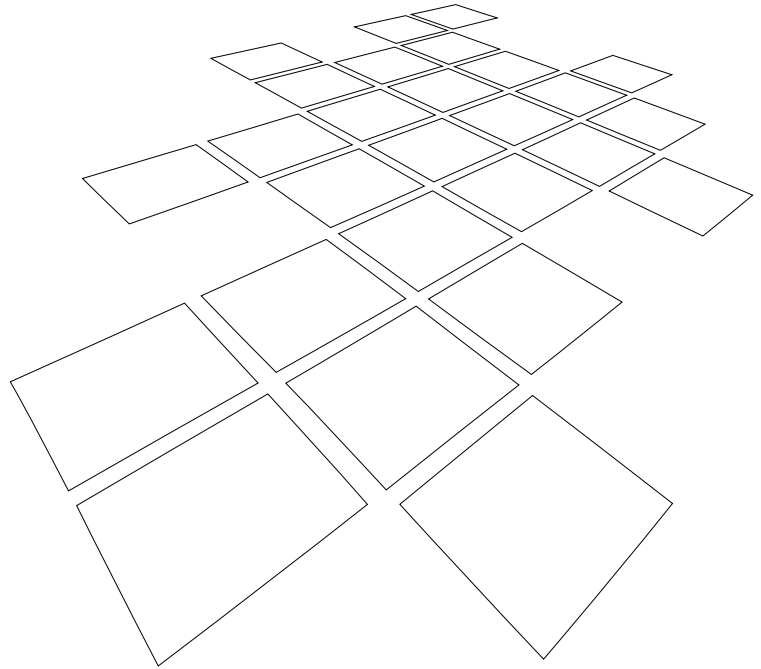
A world free of tuberculosis is everybody's responsibility

 **World Health Organization**  
Regional Office for the Eastern Mediterranean



# Contents

Message from the Regional Director	2
Tuberculosis in the Eastern Mediterranean Region	4
Tuberculosis care in the Region	7
The challenges in tuberculosis care in the Region	12
The future of tuberculosis care in the Region	14



**Message from Dr Hussein A. Gezairy  
Regional Director,  
WHO Eastern Mediterranean Region  
on the occasion of  
World Tuberculosis Day 24 March 2007**

Among all communicable diseases, tuberculosis is still the number one killer of adults in the WHO Eastern Mediterranean Region. A disease that is totally preventable and curable is responsible for not less than 111 000 deaths in the Region and 2 million in the world every year. This is in addition to the absolutely avoidable suffering of tuberculosis patient's families, relatives and communities who are directly and indirectly affected by this disease. This tragic situation cannot be allowed to go on any longer.



Today, the regional situation with regard to the 2005 global targets—70% case detection rate and 85% treatment success rate—is clear. Five countries in the Region, namely Lebanon, Morocco, Oman, Somalia and Tunisia, have met the targets. Bahrain and the Libyan Arab Jamahiriya have met the 70% case detection target. This is good news, and indicates that the current tuberculosis control strategy is effective. However, the fact still remains that at the regional level, we have unfortunately failed to achieve the global targets, particularly for case detection. Our case detection rate is only 44%. In other words, an estimated 284 000 tuberculosis patients in this region were missed in 2005. Those people therefore cannot access good quality tuberculosis care and their families, relatives and communities will continue to suffer unnecessarily unless immediate and ground-breaking measures are taken to save them.

Moreover, we have emerging threats to tuberculosis control. The HIV epidemic is worsening, and multi-drug resistant tuberculosis is becoming ubiquitous, possibly in the form of extensively drug-resistant tuberculosis (XDR-TB) which is incurable. Complex emergencies compound the problem in some countries.

The global theme of World Tuberculosis Day this year is: "TB anywhere is TB everywhere". This is a very pro-active theme and is actually a reflection of the situation in the Region. It is a theme aiming at correcting the common misconception about tuberculosis. Tuberculosis is not a disease of the past. Tuberculosis is not only the "poor people's problem". Finding and treating tuberculosis patients is not solely the responsibility of Ministries of Health. If tuberculosis is anywhere, then tuberculosis can be found everywhere. The national tuberculosis programmes alone cannot possibly detect and provide care for all tuberculosis cases, even if they double or triple their efforts.

The only plausible solution for the stagnant situation we have reached in the Region is partnership. This partnership will actively engage all stakeholders including governments, national tuberculosis programmes, independent experts, nongovernmental organizations and faith groups, donors, academia, celebrities, media, communities and patients, social workers, and financial institutions in the regional fight against tuberculosis. Only through a joint, effective and strong collaborative partnership will we have the power to reach a wider audience, to overcome the challenges facing us and eventually put an end to the suffering from tuberculosis in the Region.

In this regard, I am pleased to announce that a decision to establish an Eastern Mediterranean Partnership to Stop TB has been reached. Preparatory steps have been made to draw up this partnership's framework, vision, mission and mode of operation so as to formerly launch it before the end of this year.

The Eastern Mediterranean Partnership to Stop TB will be a key player in ensuring the achievement of the tuberculosis-related global targets. However, the regional-level partnership will become effective only when there is a national partnership to Stop TB in the country. Hand in hand with the national partnership, the Eastern Mediterranean Partnership will provide intensified support to national tuberculosis control efforts in all the countries of the Region because "TB anywhere is TB everywhere" and everyone can play a role in realizing our vision of living in a region free of tuberculosis.



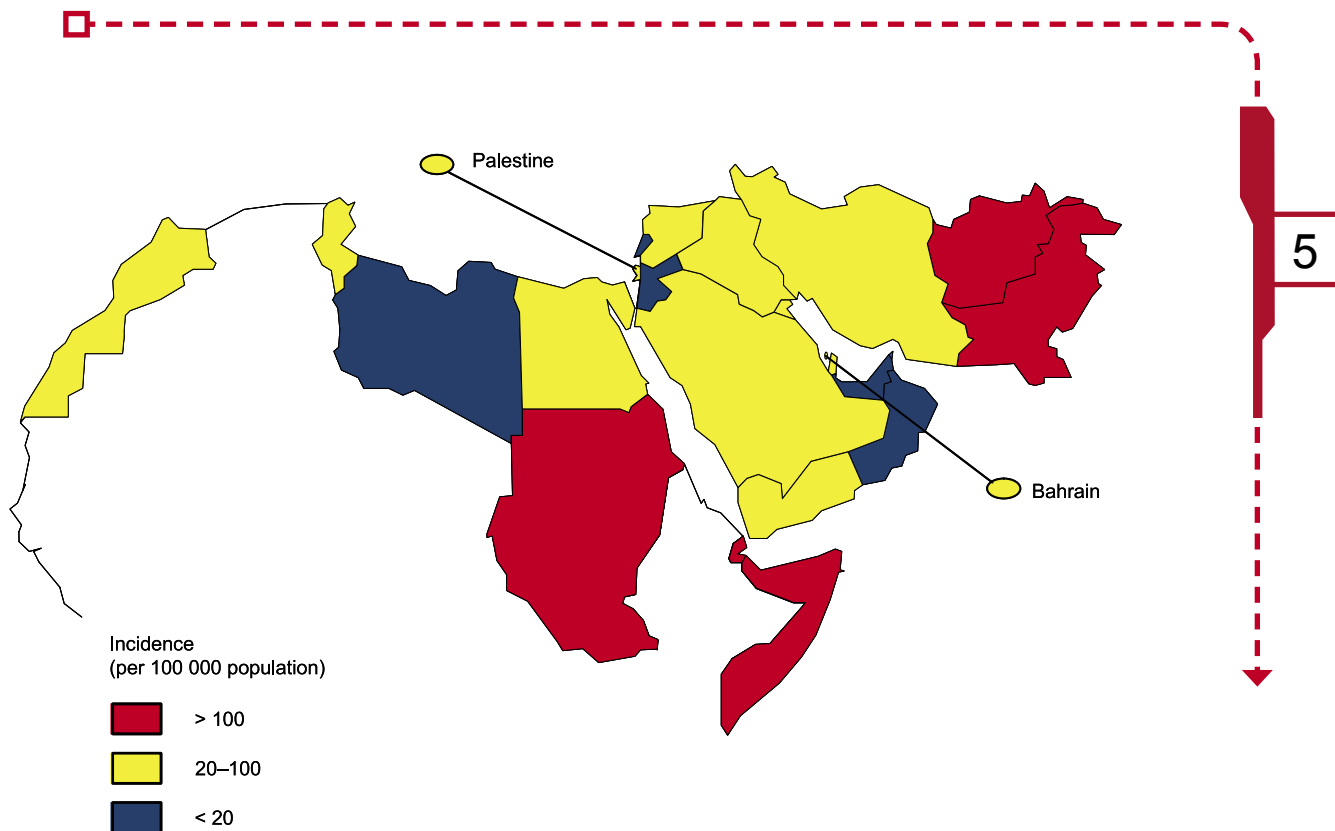


## Tuberculosis in the Eastern Mediterranean Region

Tuberculosis is everywhere in the Eastern Mediterranean Region (Figure 1). It is a very serious public health problem in the Region. The estimated regional incidence (number of cases) of tuberculosis is very high: around 560 000 people develop active tuberculosis every year. The estimated mortality (number of deaths) is also high: around 110 000 people die of tuberculosis every year; in other words 300 people die of tuberculosis every day. Tuberculosis is actually the leading cause of death from communicable disease in adults. Tuberculosis kills more people in the Region than other major communicable diseases such as HIV/AIDS and malaria, which result in estimated annual mortality of 48 000 and 59 000, respectively.

Tuberculosis is also an important developmental problem. The disease affects young adults: 70% to 80% of cases occur among the age group of 15 to 54 years. This is the most socially and economically productive age group in society, and patients are usually the breadwinners in their families. Suffering from tuberculosis means a long duration of illness, often for a period of several years, and a long period of treatment, at least 6 to 8 months. Illness obviously affects the patients' social and economic productivity, and thus their income. Moreover, tuberculosis often affects the poorer segments of the community. Catastrophic health expenditure is not uncommon among those suffering from tuberculosis.

Among the 22 countries of the Region, low-income countries or countries with complex emergencies are affected most by tuberculosis. Pakistan has by far the highest incidence, around 290 000 tuberculosis patients a year, accounting for 51% of the tuberculosis cases in the Region. Other countries most affected by tuberculosis are Afghanistan, Egypt, Iraq, Islamic Republic of Iran, Morocco, Somalia, Sudan and Yemen. Together these nine countries account for 95% of the regional tuberculosis burden. Djibouti has by far the highest incidence rate, with 762 cases per 100 000 population. This is actually one of the highest tuberculosis incidence rates in the world. Other countries that have high incidence of tuberculosis (greater than 100 cases per 100 000 population) are Afghanistan, Pakistan, Somalia and Sudan.



**Figure 1. Tuberculosis incidence in countries of the Region, 2005**

Drug-resistant tuberculosis was found everywhere at different levels in eight countries that conducted anti-tuberculosis drug resistance surveys<sup>1</sup>. Multidrug-resistant (MDR) tuberculosis was also found among new cases of tuberculosis in 7 out of the 8 countries. The level of MDR ranged from 0.8% in Qatar to 9.1% in Jordan among new cases and from 11.2% in Yemen and 30.3% in Jordan among previously treated. No concrete data are yet available in the Region concerning extreme drug resistance (XDR), which is resistance to second-line drugs; however, a study in the Islamic Republic of Iran indicated the presence of XDR in the country.

<sup>1</sup>Drug resistance surveys were conducted in Egypt, Jordan, Lebanon, Morocco, Oman, Syrian Arab Republic, Tunisia and Yemen



The HIV/AIDS epidemic has started having an impact on tuberculosis in the Region. HIV seroprevalence is increasing in countries that are affected by the HIV/AIDS epidemic. In Djibouti and Sudan, which are in the generalized epidemic stage, HIV seroprevalence is estimated at 16% and 9%, respectively. In Somalia, which is on the edge of a generalized epidemic, it is 5%. The data are still limited in the Region, but around 7500 tuberculosis patients are probably infected with HIV in the Region.

Tuberculosis affects hundreds of thousands of people, causing considerable suffering in each individual affected. As noted previously, tuberculosis hits the poorer segments of society hardest. Stories of catastrophic health expenditure and suffering due to tuberculosis abound in the Region. One family lost all its income and went bankrupt because the mother suffered from tuberculosis for several years before she was able to get proper treatment and was cured. Another tragic story concerns a 13-year-old patient who lost both his parents due to tuberculosis. The child himself was a relapse case who was brought to the health facility by his only remaining relative, his grandfather. All these real-life tragedies were preventable.



## Tuberculosis care in the Region

7

Tuberculosis care is expanding everywhere in the Region. All countries have been using the WHO-recommended tuberculosis control strategy, DOTS (Directly Observed Treatment Short-course), for several years. Tuberculosis care according to the DOTS strategy is available widely: the population covered by DOTS is actually 97% in the Region. Seventeen (17) countries in the Region have 100% DOTS population coverage. The other countries also implement DOTS widely (81% in Afghanistan, 87% in Iraq, 91% in Sudan and 93% in Yemen) except for the United Arab Emirates (20%).

Good tuberculosis care is available in areas implementing the DOTS strategy. Patients suffering from tuberculosis can receive diagnostic services at microscopy laboratories. In 2005, 276 144 tuberculosis patients were diagnosed in the Region (Table 1), including 110 030 patients with infectious, smear positive tuberculosis. Once diagnosed, patients can receive standardized treatment of 6 to 8 months with the help of treatment supporters. The quality of treatment is good because the majority of tuberculosis patients under treatment are cured. Of the detected cases in 2004, 83% of those who received treatment were cured.

In the past 10 years (1996–2005), 2 million tuberculosis patients were detected and cured in the Region. This was a tremendous support to overall health and economic development in countries of the Region.





Table 1. Notified tuberculosis cases, case detection rate and treatment success rate in countries of the Region, 2005

Country	Number of notified cases	Case detection rate (%)	Treatment success rate (%)
Afghanistan	21 844	44	89
Bahrain	280	77	82
Djibouti	3 109	42	80
Egypt	11 446	63	70
Iran, Islamic Republic of	9 422	64	84
Iraq	9 454	43	85
Jordan	367	63	85
Kuwait	517	66	63
Lebanon	391	74	90
Libyan Arab Jamahiriya	2 098	178	64
Morocco	26 269	101	87
Oman	261	108	90
Pakistan	137 574	37	82
Palestine	28	2	50
Qatar	325	47	78
Saudi Arabia	3 539	38	82
Somalia	12 904	86	91
Sudan	27 562	35	77
Syrian Arab Republic	4 310	42	86
Tunisia	2 079	82	90
United Arab Emirates	103	19	70
Yemen	5 825	41	82
<b>Region</b>	<b>279 707</b>	<b>44</b>	<b>83</b>

Tuberculosis care is also expanding to meet the different, emerging needs in the community in the countries of the Region. This has been done through adaptation of the new Stop TB Strategy developed in 2006 (Figure 2). The Stop TB Strategy is a comprehensive set of tuberculosis care activities based on DOTS. The Strategy consists of six components: pursuing expansion of high-quality DOTS activities; addressing MDR-TB, HIV/TB and other challenges; contributing to health system strengthening; engaging all care providers; empowering people with tuberculosis, and communities; and enabling and promoting research. Countries have been pursuing expansion of high-quality DOTS activities in several ways.

Laboratory quality has been improved via establishment of a laboratory network with quality assurance. The national reference laboratory of Egypt was designated as the regional reference laboratory for tuberculosis in order to support countries. A regular supply of high-quality tuberculosis drugs is ensured through the support of the Global TB Drug Facility (GDF). The GDF provides tuberculosis drugs to 10 countries in the Region. Monitoring and evaluation of tuberculosis control has been improved through introduction of an innovative computerized system (e-nominal registration system, or ENRS). ENRS has been introduced in Egypt, Jordan and the Syrian Arab Republic.

At the same time, care for those suffering from multidrug resistance is expanding. Egypt, Jordan, Lebanon, Morocco and Tunisia are implementing the global strategy on multidrug resistance set by the Green Light Committee. Countries of the Gulf Cooperation Council also provide care for drug-resistant patients. Care for tuberculosis suspects (i.e. patients who have tuberculosis-like symptoms) has been improved through introduction of the Practical Approach to Lung Health (PAL) in five countries. Collaboration with health care providers is being promoted. Six countries carried out an extensive national situation analysis to develop national collaboration strategies.

To help scale up tuberculosis care in countries, the regional plan to Stop TB was developed as part of the Global Plan to Stop TB 2006–2015. The plan aims at achieving Target 8 of the Millennium Development Goals by 2015<sup>2</sup>. The plan is based on the new Stop TB Strategy, and outlines priority activities. As indicated in the plan, in the next ten years an estimated US\$ 3.1 billion will be needed to expand, scale up and accelerate efforts to Stop TB in the Region.

<sup>2</sup> MDG Target 8 is to halt and begin to reverse the incidence of tuberculosis by 2015

This scale-up cannot be achieved through the work of the national tuberculosis programmes alone. National tuberculosis programmes need to be further strengthened and supported. Additional partners, resources, expertise and active community involvement are urgently needed to help address the challenges facing tuberculosis control in the Region in an effective and sustainable manner.

To address these needs, an initiative to establish an Eastern Mediterranean Partnership to Stop TB (EM Partnership) is under way. A preparatory committee was formulated by the WHO Regional Office for the Eastern Mediterranean and met for the first time in January 2007 to plan the establishment of the partnership. The EM Partnership will be a key player in providing support to national partnerships and in ensuring the achievement of the global targets for tuberculosis control and the tuberculosis-related target of the Millennium Development Goals.





World Health  
Organization

# THE STOP TB STRATEGY

11

## VISION

## A WORLD FREE OF TB

### GOAL

To dramatically reduce the global burden of TB by 2015 in line with the Millennium Development Goals and the Stop TB Partnership targets

### OBJECTIVES

- Achieve universal access to high-quality diagnosis and patient-centred treatment
- Reduce the human suffering and socioeconomic burden associated with TB
- Protect poor and vulnerable populations from TB, TB/HIV and multidrug-resistant TB
- Support development of new tools and enable their timely and effective use

### TARGETS

- MDG 6, Target 8: ...halted by 2015 and begun to reverse the incidence...
- Targets linked to the MDGs and endorsed by Stop TB Partnership:
  - By 2005: detect at least 70% of new sputum smear-positive TB cases and cure at least 85% of these cases
  - By 2015: reduce prevalence of and deaths due to TB by 50% relative to 1990
  - By 2050: eliminate TB as a public health problem (<1 case per million population)

## COMPONENTS OF THE STOP TB STRATEGY

### 1 PURSUE HIGH-QUALITY DOTS EXPANSION AND ENHANCEMENT

- Political commitment with increased and sustained financing
- Case detection through quality-assured bacteriology
- Standardized treatment with supervision and patient support
- An effective drug supply and management system
- Monitoring and evaluation system, and impact measurement

### 2 ADDRESS TB/HIV, MDR-TB AND OTHER CHALLENGES

- Implement collaborative TB/HIV activities
- Prevent and control multidrug-resistant TB
- Address prisoners, refugees and other high-risk groups and special situations

### 3 CONTRIBUTE TO HEALTH SYSTEM STRENGTHENING

- Actively participate in efforts to improve system-wide policy, human resources, financing, management, service delivery, and information systems
- Share innovations that strengthen systems, including the Practical Approach to Lung Health (PAL)
- Adapt innovations from other fields

### 4 ENGAGE ALL CARE PROVIDERS

- Public-Public, and Public-Private Mix (PPM) approaches
- International Standards for TB Care (ISTC)

### 5 EMPOWER PEOPLE WITH TB, AND COMMUNITIES

- Advocacy, communication and social mobilization
- Community participation in TB care
- Patients' Charter for Tuberculosis Care

### 6 ENABLE AND PROMOTE RESEARCH

- Programme-based operational research
- Research to develop new diagnostics, drugs and vaccines

Figure 2. The Stop TB Strategy



## Challenges in tuberculosis care in the Region

Despite the expansion of tuberculosis care in the Region, many tuberculosis patients still cannot access appropriate tuberculosis care. The case detection rate, which is the percentage of existing tuberculosis patients in the community that have access to and have been detected by the tuberculosis care services, is only 44% in the Region (see Table 1). Out of 565 000 cases in the Region, 280 000 cases were detected in 2005. This means that approximately 284 000 tuberculosis patients had no access to appropriate care in 2005. The global target is to detect 70% of the existing cases. The 44% regional detection rate is actually the second lowest among the six regions of WHO<sup>3</sup>. Only seven countries, Bahrain, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Somalia and Tunisia, have reportedly achieved a 70% case detection rate.

Causes of low case detection, namely limited access to tuberculosis care, are complex. The quality of tuberculosis care is not always high in many countries. For example, laboratory diagnosis is not always extensive or accurate. This is because of incomplete development of the laboratory network and incomplete introduction of quality assurance systems. Health care providers in the public and private sectors are



<sup>3</sup>The 6 WHO regions are: Africa, Americas, Eastern Mediterranean, Europe, South-East Asia, and the Western Pacific.



not fully involved in tuberculosis care. The Stop TB Strategy is not fully adopted by these care providers. Care for tuberculosis suspects is not well established yet. Many patients who have tuberculosis-like symptoms do not receive appropriate diagnostic care, and thus are not diagnosed as tuberculosis and do not receive tuberculosis treatment.

Complex emergencies are also an important challenge in the Region. Countries that suffer from a high burden of tuberculosis more are often those under conflict. Afghanistan, Iraq and Sudan have low case detection because in many areas of their countries, tuberculosis care is not accessible due to security issues. Access to tuberculosis care was also disrupted during the recent crisis in Lebanon.

More importantly, tuberculosis is not always regarded as a high priority in relation to other issues in the health sector, and is not recognized at present as a priority among many stakeholder groups including communities, nongovernmental organizations, donors, professional associations and societies of specialists, academia, mass media and policy-makers. National plans are therefore often limited to the national health programme, and are not inclusive of other key stakeholders.

Weakness in the health system does not allow the national tuberculosis programme to implement the Stop TB Strategy fully. This health system weakness extends to health care providers outside the national programme. Resource constraints, including human and financial, are limiting the capacity of countries to implement the Stop TB Strategy.





## The future of tuberculosis care in the Region

High-quality tuberculosis care will be everywhere: every single patient suffering from tuberculosis in the Region will receive high-quality tuberculosis care and will be cured; the number of tuberculosis patients in the Region will decrease; and eventually the Region will become free from tuberculosis. This is the future direction of tuberculosis care in the Region. This means:

- **By 2010**

70% of people with infectious tuberculosis will be diagnosed and 85% of them cured.

- **By 2015**

The regional burden of tuberculosis disease (deaths and prevalence) will be reduced by 50% relative to 1990 levels.

- **By 2050**

The regional incidence of tuberculosis disease will be less than 1 per million population (elimination of tuberculosis as a regional public health problem).

The Global Plan to Stop TB 2006–2015 has a clear vision for the world and for the Region on how to move towards this future. It details the strategy (Stop TB Strategy), activities (six components of Stop TB Strategy) and the resources needed (US\$ 56 billion for the world and US\$ 3.1 billion for the Region).

The regional scenario, which is in line with the Global Plan, is to scale up and establish high-quality tuberculosis care by realizing the six components of the Stop TB Strategy throughout the Region by 2010. In this scale-up of tuberculosis care, priority is being given to resolving the main problem in tuberculosis care in the Region, namely low case detection. Activities aim to address different layers of the tuberculosis case-finding process (Figure 3). Each layer represents potential tuberculosis cases at different points in the health care seeking process, which should result in diagnosis and successful treatment of a tuberculosis patient at a tuberculosis basic management unit.

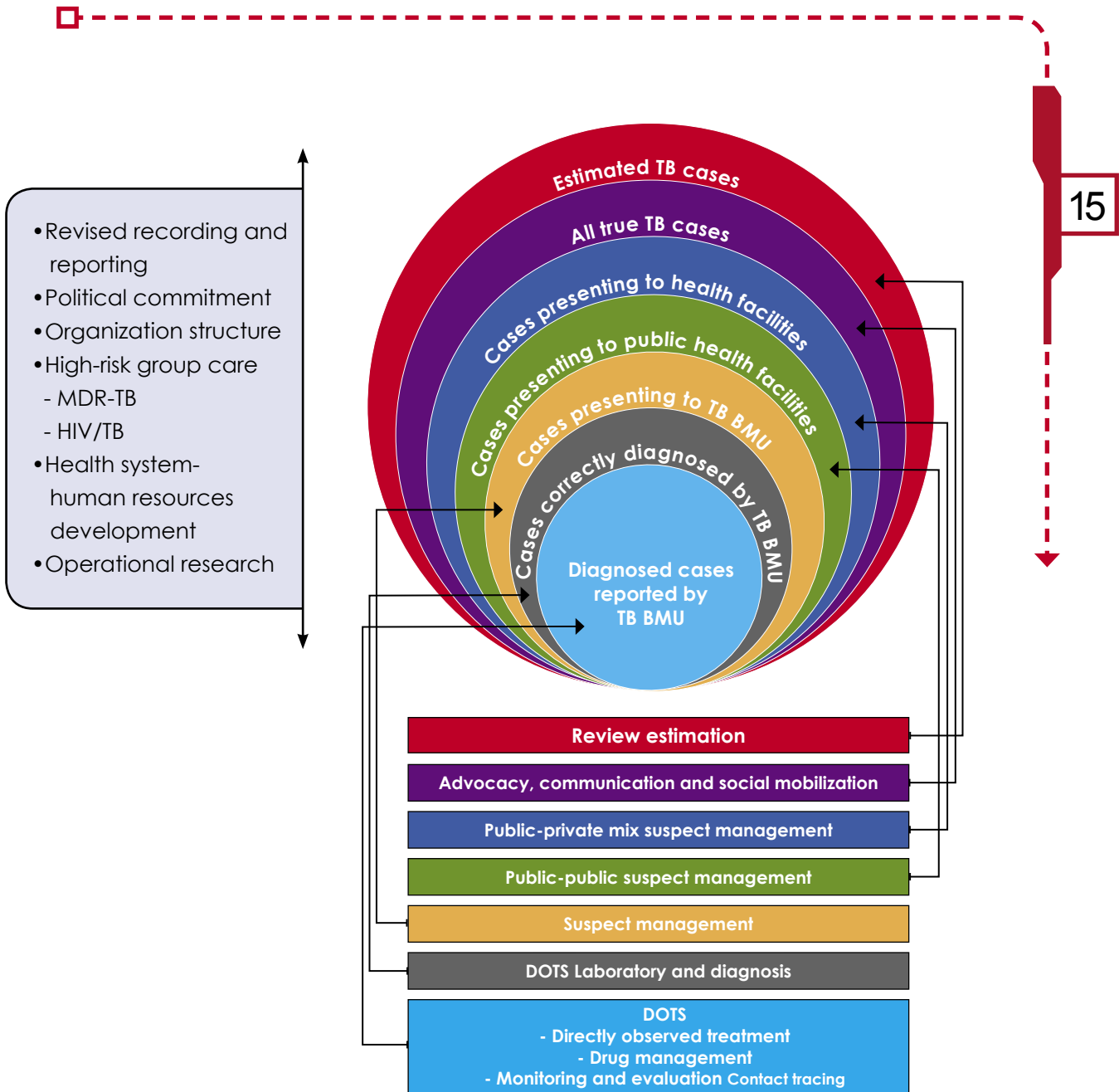


Figure 3. Layers of tuberculosis case-finding

The overarching work and support of the EM Partnership will strengthen all these activities and ensure the full funding and implementation of the Global Plan to Stop TB 2006–2015 in the countries of the Eastern Mediterranean Region.

We have a vision to achieve: to allow the children born in this millennium to witness the elimination of tuberculosis in their lifetime.

We have a target to reach: to reduce the tuberculosis burden by half by 2015.

We have a plan of activities with clearly identified steps.

We need everybody's action and commitment. Tuberculosis is still everywhere, and the future of tuberculosis care is everybody's responsibility.



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