



Updates on the global TB Global TB burden Policy response Treatment approaches

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Tuberculosis is the leading infectious killer



KEY TB FACTS



TB was one of the top ten causes of death worldwide

TB was responsible for more deaths than HIV and malaria



MDR-TB crisis with gaps in detection and treatment

Only 1 in 5 needing MDR-TB treatment were enrolled on it

Source: WHO Global TB Report 2016



Funding shortfall for TB implementation

Gap of over US\$1 billion per year for TB research

Current actions and investments are falling far short



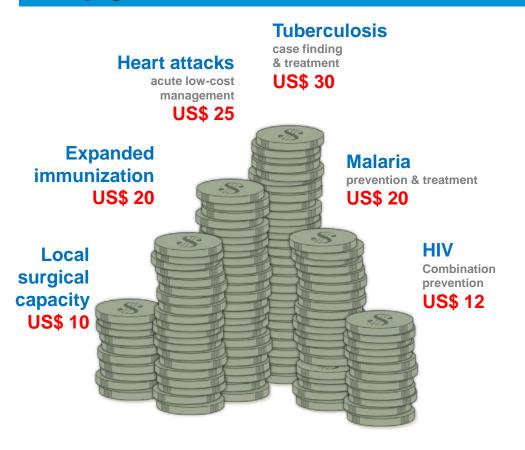


Progress in Global Fund investments in tuberculosis

• The new Global Fund results also show significant progress in the fight against tuberculosis and malaria from the end of 2015 to the end of 2016. The number of new smear-positive TB cases detected and treated increased from 15.1 to 17.4 million, an increase of 15 percent, and the number of people treated for multidrug-resistant TB (MDR-TB) increased by 40 percent, from 267,000 to 373,000.

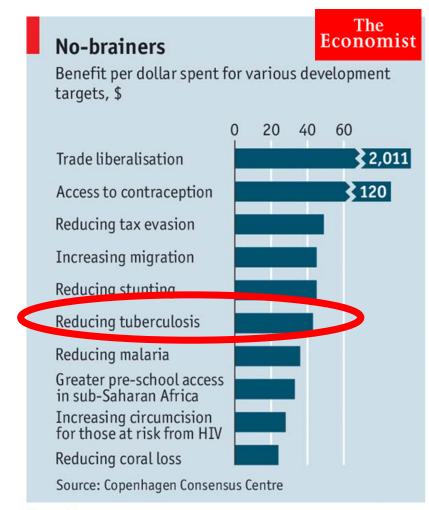
Why investing towards ending TB?

Simply it is the most cost-beneficial health intervention



Return on investment for every one dollar spent on the most cost-effective health interventions





Economist.com

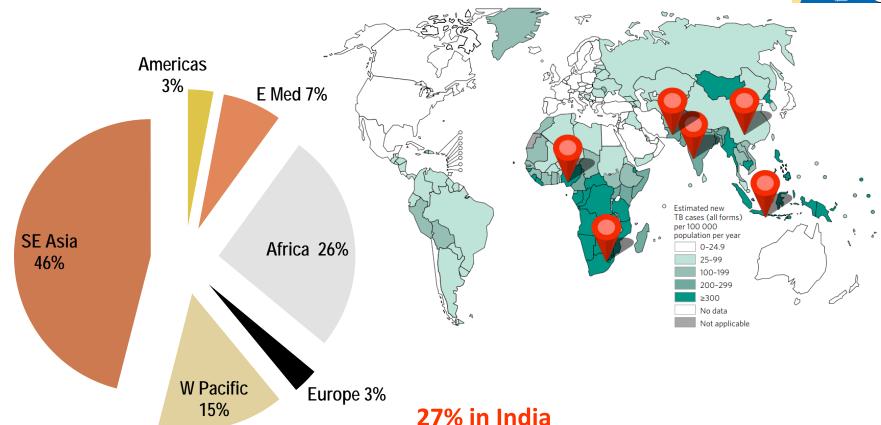
ort of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda,





TB incidence: 10.4 million people/year





27/0 III IIIUIA

9-10% each: Indonesia & China

5 % each: Nigeria, Pakistan & South Africa









The End TB Strategy:

Vision, Targets and Pillars



Vision:

A world free of TB Zero TB deaths, Zero TB disease, and Zero TB suffering

Goal:

End the Global TB epidemic

PILLAR 1		PILLAR 2		PILLAR 3	
Integrated, patient- centered TB care and prevention	XXX	Bold policies and supportive systems	XXX	Intensified research and innovation	
Government ste	wardship and	accountability, w	ith monitoring	and evaluation	
Building a strong coalition with civil society and communities					
Protec	ting and prom	oting human righ	ts, ethics and	equity	
Adaptation of the	strategy and	targets at country	level, with glo	obal collaboration	1

	MILES 2020	TONES 2025	SDG* 2030	END TB 2035
Reduction in number of TB deaths compared with 2015 (%)	35%	75%	90%	95%
Reduction in TB incidence rate compared with 2015 (%)	20%	50%	80%	90%
TB-affected families facing catastrophic costs due to TB (%)	0%	0%	0%	0%

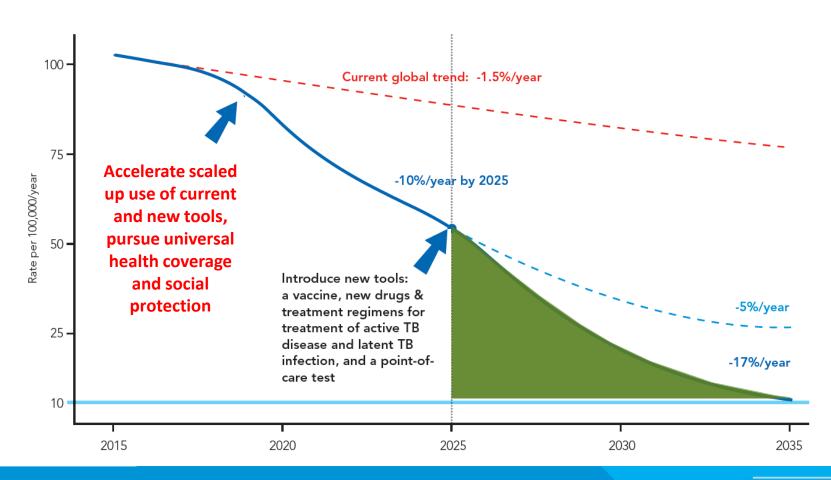
TARGETS





Accelerating to reach the WHO & SDG End TB targets

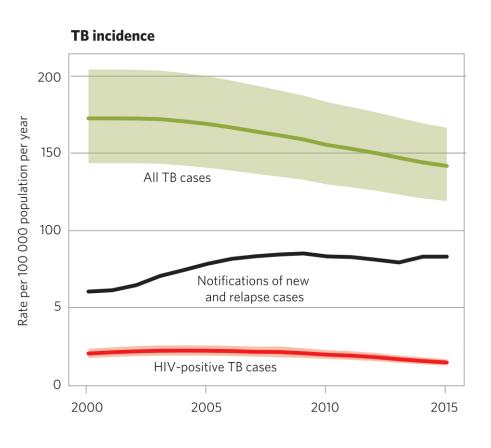


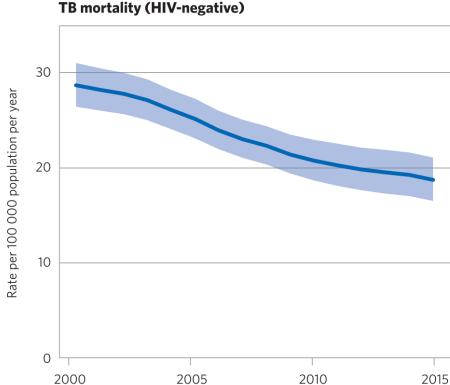




The global TB situation (2)

TB incidence and mortality, 2000-2015



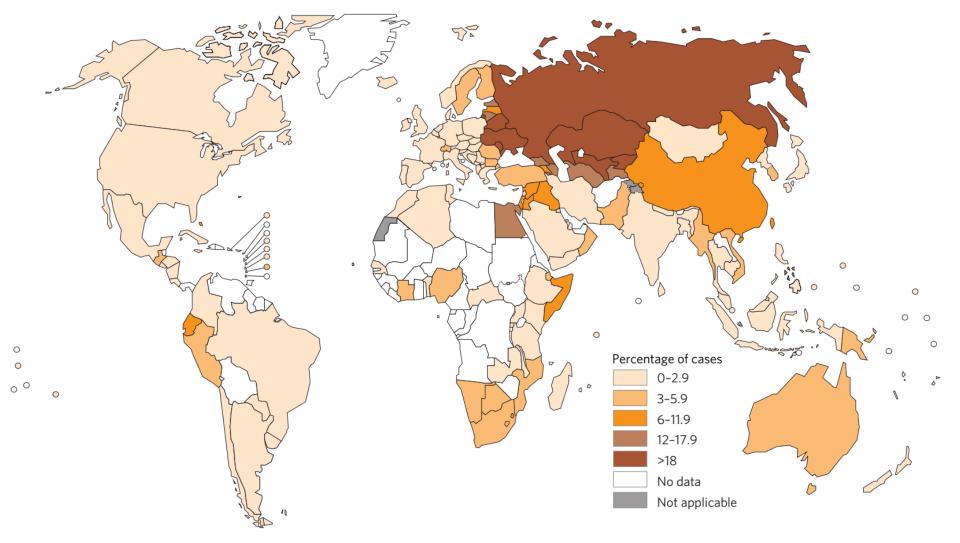








Percentage of new TB cases with MDR/RR-TB^a

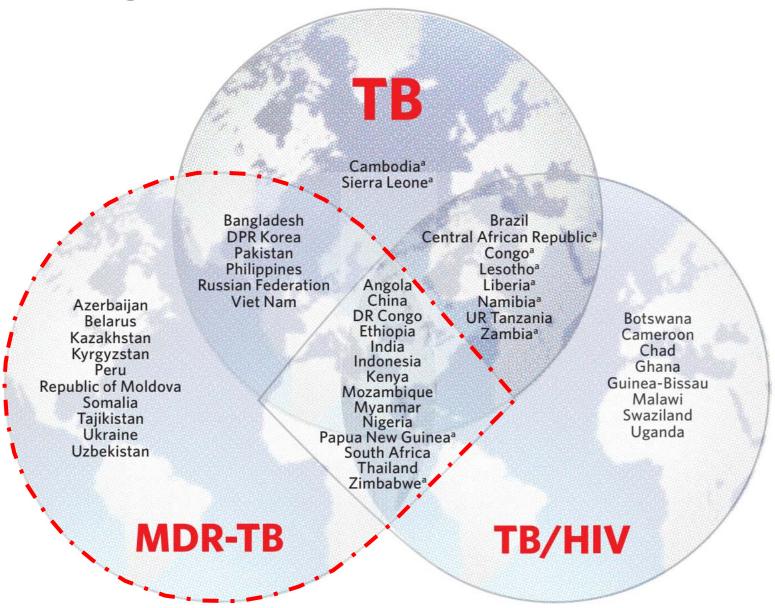








30 High MDR-TB burden countries

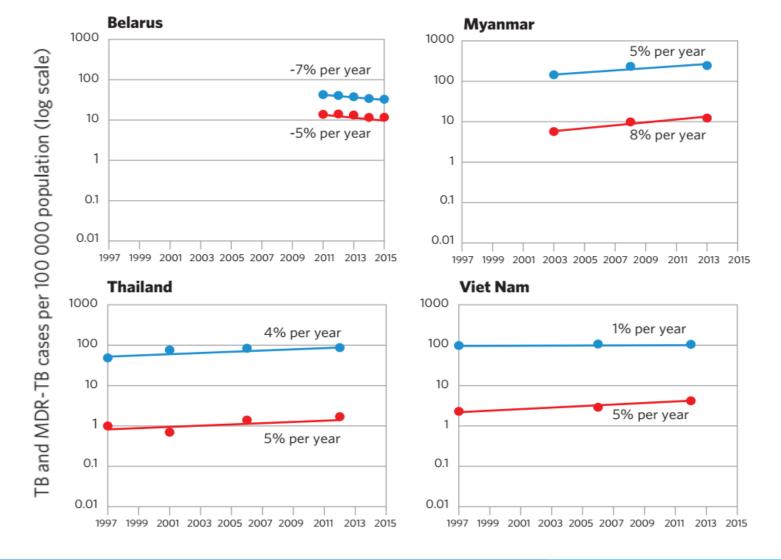








Trends in new TB (blue) and new MDR-TB (red) case rates. selected high MDR-TB burden countries

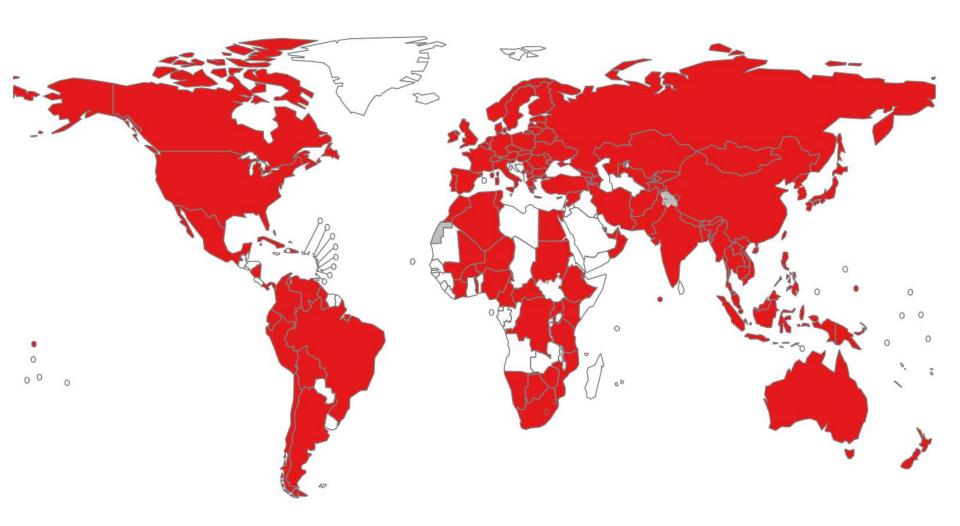








Countries ever notifying an XDR-TB case



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

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DR-TB RESPONSE

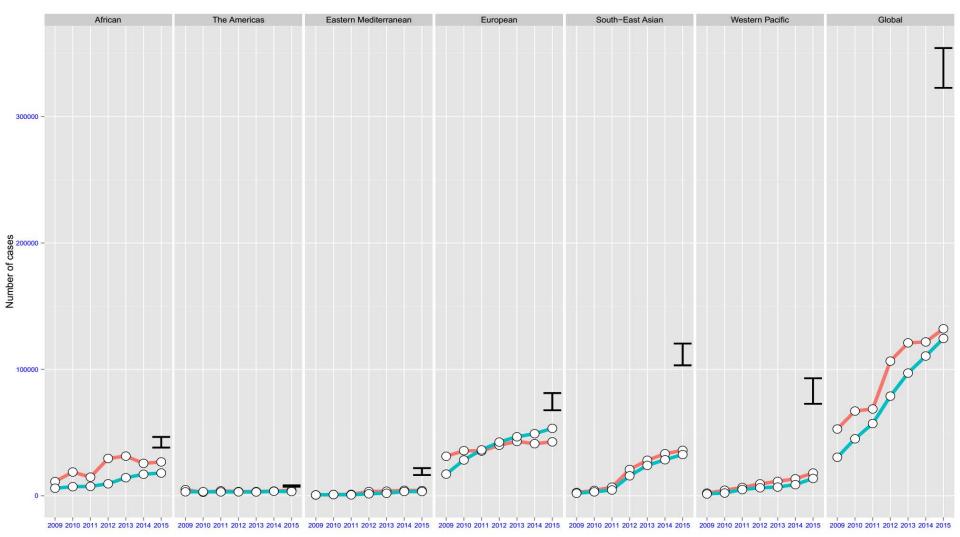






MDR/RR-TB detection and treatment

MDR/RR-TB cases detected (orange), TB cases enrolled on MDR-TB treatment (green), and estimated MDR/RR-TB cases among notified (black bar), by Region, 2009–2015



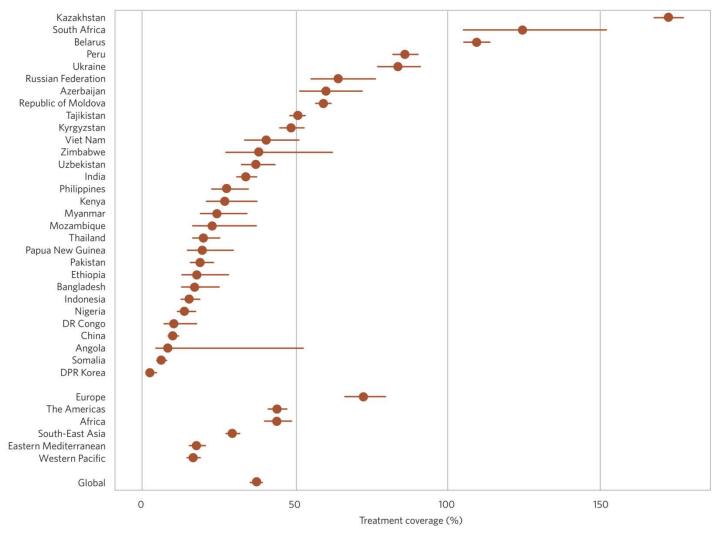






MDR/RR-TB treatment coverage

Enrolments on MDR-TB treatment as a % of the estimated MDR/RR-TB cases among notified pulmonary TB cases in 2015, 30 high MDR-TB burden countries, regions and globally



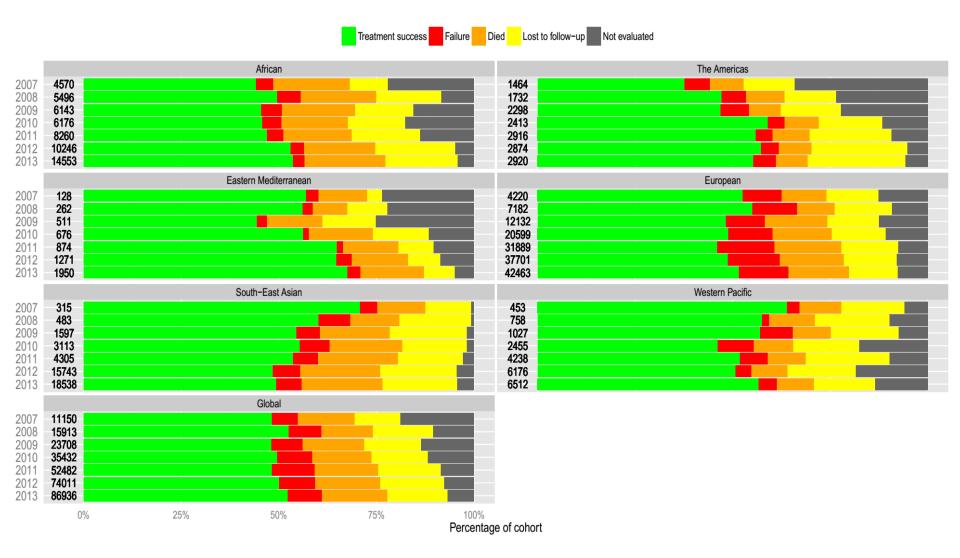






Outcomes of MDR/RR-TB treatment

Annual cohorts, by WHO region and global, 2007-2013



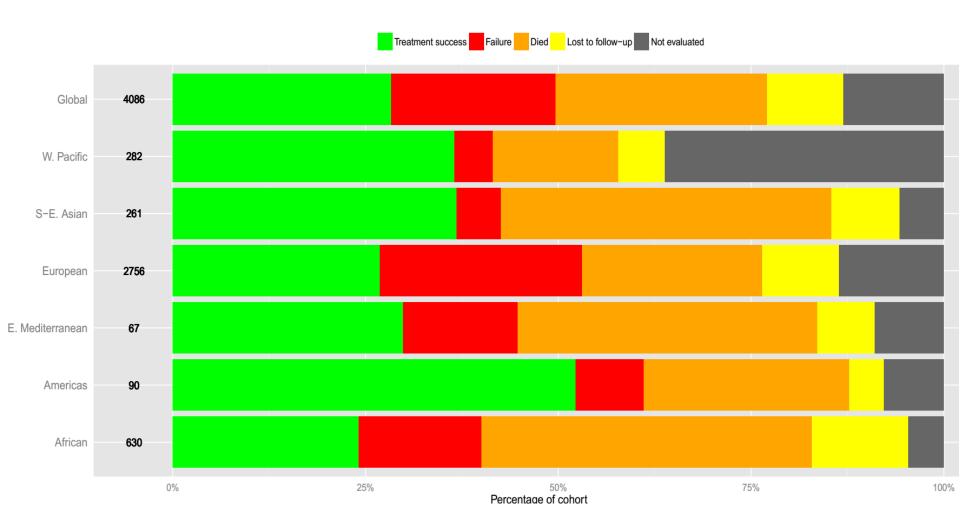






Outcomes of XDR-TB treatment

2013 cohort, by WHO region and global



*number of cases observed shown next to the bars







In summary



incident cases of MDR-TB in 2015 (with another 100 000 rifampicin-resistant TB cases eligible for second-line treatment)

132 000

125 000

patients started on MDR-TB treatment in 2015

52%



treatment success in MDR/RR-TB patients starting treatment in 2013

5 priority actions



Prevent the development of drug resistance through high quality treatment of drug-susceptible TB



Expand rapid testing and detection of drug-resistant TB cases



Provide immediate access to effective treatment and proper care



Prevent transmission through infection control



Increase political commitment with financing







WHO policies related with management of drug-resistant tuberculosis

Global TB Programme, WHO/HQ/LDR unit - Geneva















WHO guidelines for the treatment of drugresistant tuberculosis. 2016 update Key changes

- A shorter MDR-TB treatment regimen is recommended for RR-/MDR-TB patients, under several conditions
- The design of conventional MDR-TB regimens uses a different regrouping of second-line medicines
- Treatment of children with RR-/MDR-TB based on a first-ever meta-analysis of individual-level paediatric patient data for treatment outcomes
- Recommendation on partial lung resection surgery





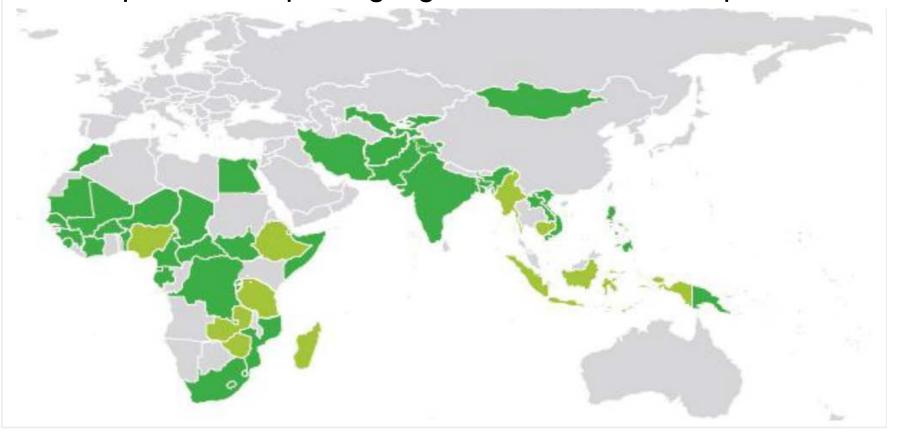


Shorter MDR-TB treatment

June 2017: 39 countries implementing STR

End 2017: 48 countries implementing STR

Report of the Global DR-TB initiative Triage Task Force http://www.stoptb.org/wg/mdrtb/taskforces.asp?tf=2









Recommendation on longer MDR-TB regimen

- Evidence relies mostly on observational studies; RCTs rare
- All RR-TB cases to be treated with a recommended MDR-TB regimen, regardless if isoniazid resistance is confirmed or not (caution on InhA mutation)
- The detection of resistance to fluoroquinolones and to 2nd line injectable agents is important for regimen design.
- Access to reliable DST for pyrazinamide would be helpful as well.
- Recommendations apply to adults and children;







Regrouping of the medicines used for RR-/MDR-TB







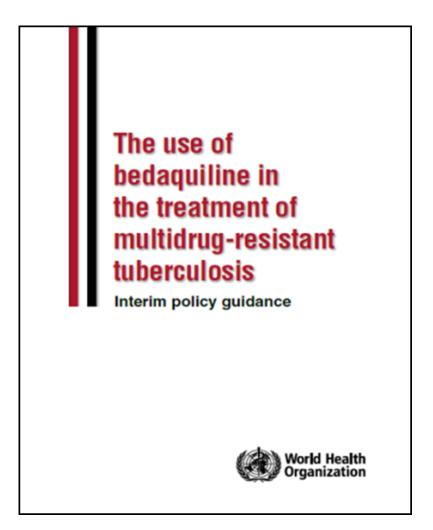
GROUP A		Levofloxacin	
		Moxifloxacin	
Fluoroquinolones	Gatifl	oxacin	
GROUP B	Amika	acin	
	Capreomycin		
Second-line injectable agents		Kanamycin	
	(Streptomycin)		
GROUP C	Ethio	namide / Prothionamide	
	Cycloserine / Terizidone		
Other Second-line Agents	Linez	Linezolid	
	Clofa	zimine	
GROUP D	D1	Pyrazinamide	
GROOT D		Ethambutol	
Add-on agents		High-dose isoniazid	
	D2	Bedaquiline	
		Delamanid	
		<i>p</i> -aminosalicylic acid	
	D3	Imipenem-Cilastatin	
		Meropenem	
		Amoxicillin-Clavulanate	
		(Thioacetazone)	







WHO interim policy guidance on new drugs



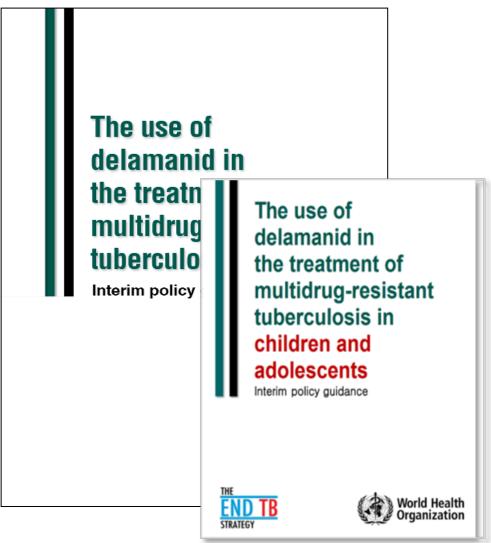








Table 1. Registration status of Bdq and Dlm worldwide [a]

	Countries in which the medicines are registered [b]	Countries in which regulatory dossiers have been filed [b]
Bdq	India, New Zeeland, Moldova, Peru, Philippines, Russia, South Africa,	Bangladesh, Burundi, [d] Colombia, Ghana, [d] Indonesia, Kenya, [d] Mexico, Nigeria, [d] Rwanda, [d] Tanzania, [d] Thailand, Uganda, [d] Vietnam, Turkey.
Dlm	EU, ^[c] Hong Kong, Japan, South Korea, Turkey	<u>China</u> , <u>India</u> , <u>Indonesia</u> , <u>Peru</u> , <u>Philippine</u> s, ^[e] <u>South Africa</u> .

Notes: [a] Data are updated to July 2017; [b] The countries underlined are MDR-TB high burden countries. [c] Countries belonging to the European Union are 28; [d] Countries are part of the WHO Collaborative Registration Procedure for Stringent Regulatory Authority-approved products; [e] December 2016 -Philippines rejected one component of the technical dossier, probably regarding compound manufacturing. Since rejection, the dossier was submitted again and Otsuka is now awaiting to receive the approval.

Table 1. Registration status of Bdq and Dlm in the 30 MDR-TB high burden countries^[a]

	MDR-TB HBCs in which the medicines are registered	MDR-TB HBCs in which regulatory dossiers have been		
		filed		
Bdq	China, India, Moldova, Peru,	Bangladesh, Indonesia, Kenya, ^[b]		
	Philippines, Russia, South Africa,	Nigeria, ^[b] Thailand, Vietnam.		
	Uzbekistan.			
Dlm	None	China, India, Indonesia, Peru, Philippines, [c] South Africa.		

Notes: [a] Data are updated to July 2017; [b] Countries are part of the WHO Collaborative Registration Procedure for Stringent Regulatory Authority-approved products; [c] December 2016 -Philippines rejected one component of the technical dossier, probably regarding compound manufacturing. Since rejection, the dossier was submitted again and Otsuka is now awaiting to receive the approval.

WHO Essential Medicines List-21st Expert Committee



Executive Summary

The Selection and Use of Essential Medicines

2017

Report of the 21st WHO Expert Committee on the

Selection and Use of Essential Medicines

WHO headquarters, Geneva

27-31 March 2017

Update on anti –TB medicines Clofazimine Linezolid Dolamanid (indication for

Delamanid (indication for children)
Ofloxacin (deletion)









Effects on the QT Interval of a Gatifloxacin-Containing Regimen versus Standard Treatment of Pulmonary Tuberculosis

Piero L. Olliaro,^a Corinne Merle,^{a,b} Thuli Mthiyane,^c Boubacar Bah,^d Ferdinand Kassa,^e Evans Amukoye,^f Alimatou N'Diaye,^g Christian Perronne,^h Christian Lienhardt,^{I,J} Helen McIlleron,^k Katherine Fielding^b

ence, 0.8%; 95% CI, -1.4% to 3.1%; P=0.47). No evidence was found of an association between $C_{\rm max}$ of the antituberculosis drugs 1 month into treatment and the length of QTcF. Neither a standard 6-month nor a 4-month gatifloxacin-based regimen appears to carry a sizable risk of QT prolongation in patients with







Ongoing work

- Policy updates envisaged for the coming months
 - Update of the IPD MDR-TB longer regimen
 - Guideline developing group meeting on INH-resistant TB
 - Update of use of delamanid in childhood TB
- Pharmacokinetics/pharmacodynamics task force
 - Revision of the dosage of rifampicin
- TB Digital health agenda
 - Video observed therapy
- Update of the WHO Expresion of Interests
- Update of the Companion Handbook to WHO policies for DR-TB management

The opportunity of the SDG era to reach the end TB targets





SDG TARGET 3.3 – BY 2030

END THE TB EPIDEMIC













FIRST INTERGOVERNMENTAL CONSULTATION

WHO GLOBAL MINISTERIAL CONFERENCE

ENDING TB IN THE
SUSTAINABLE
DEVELOPMENT ERA:
A MULTISECTORAL
RESPONSE

16 - 17 November 2017, Moscow, Russian Federa







FIRST WHO GLOBAL MINISTERIAL CONFERENCE ENDING TB IN THE SUSTAINABLE DEVELOPMENT ERA:

Conference Vision

The WHO Global Ministerial Conference "Ending TB in the Sustainable **Development Era: A Multisectoral Response" aims to accelerate** implementation of the WHO End TB Strategy - with immediate action addressing gaps in access to care and the MDR-TB crisis - in order to reach the End TB targets set by the World Health Assembly and the United Nations (UN) Sustainable Development Goals (SDGs) through national and global commitments, deliverables and accountability. The Ministerial Conference will inform the UN General Assembly High-Level





FIRST WHO GLOBAL MINISTERIAL CONFERENCE



ENDING TB IN THE SUSTAINABLE DEVELOPMENT ERA: A MULTISECTORAL RESPONSE

All 194 Member States invited (Ministers of Health and other Ministers) List of Member States for which travel support is available

- > 40 TB and MDR-TB highest burden countries, according to the WHO Global Tuberculosis Report 2016, will be supported by WHO headquarters with financing provided by the Russian Federation
- > 18 additional priority countries identified by the WHO regional offices will be supported with financing of regional offices

WHO WILL COVER TRAVEL EXPENSES OF TWO HIGH-LEVEL REPRESENTATIVES FROM EACH MEMBER STATE LISTED BELOW

AFR

Angola **Central African Republic**

Congo **DR** Congo **Ethiopia**

Kenya

Lesotho

Liberia

Mozambique Namibia

Nigeria

Sierra Leone

South Africa

UR Tanzania

Zambia

Zimbabwe

Guinea*

Swaziland*

Uganda*

EUR

Azerbaijan **Belarus** Kazakhstan Kyrgyzstan

Republic of Moldova **Russian Federation**

Tajikistan Ukraine

Uzbekistan

Armenia*

Georgia*

SFAR

Bangladesh **DPR Korea**

India Indonesia

Myanmar

Thailand Bhutan*

Maldives*

Nepal*

Sri Lanka*

Timor-Leste*

WPR

Cambodia China

Philippines

Viet Nam

Papua New Guinea

Mongolia* Lao PDR*

AMR Brazil

Peru Bolivia*

Colombia*

Mexico*

Haiti*

FMR

Pakistan Somalia

Afghanistan *

Egypt *

* Supported by WHO regional office



FIRST WHO GLOBAL MINISTERIAL CONFERENCE

ENDING TB IN THE SUSTAINABLE DEVELOPMENT ERA: A MULTISECTORAL RESPONSE

All partners invited

- UN organizations
- Multilateral agencies
- Bilateral agencies
- International development agencies
- Regional bodies
- Partnerships
- Nongovernmental organizations; faith-based organizations
- Civil society representatives; affected people and communities
- Professional societies
- Academic and research institutions
- Philanthropic foundations
- Private sector



FIRST WHO GLOBAL MINISTERIAL CONFERENCE





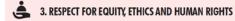
ENDING TB IN THE SUSTAINABLE DEVELOPMENT ERA: A MULTISECTORAL RESPONSE

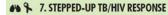








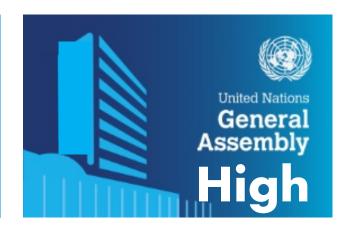






6. ACTION ON AMR, HEALTH SECURITY AND MDR-TB

Decision by the UN General Assembly for a High-Level Meeting on TB in 2018



UNITED NATIONS GENERAL ASSEMBLY RESOLUTION A/RES/71/159 - 15 DECEMBER 2016

Global health and foreign policy: Health Employment and Economic Growth

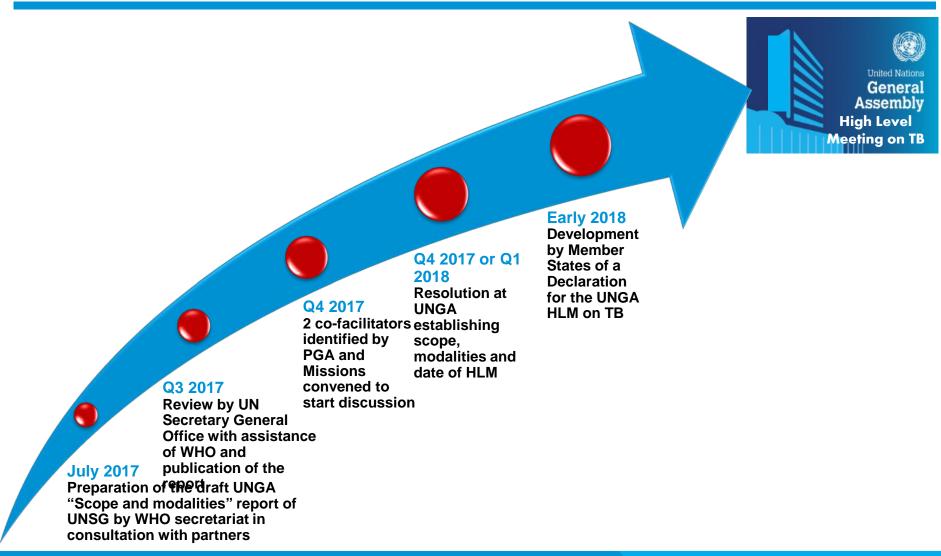
The General Assembly, (...)

- 21. Takes note of the initiative to hold, in Moscow in November 2017, a global ministerial conference on the fight against tuberculosis in the context of public health and the Sustainable Development Goals;
- 22. Decides to hold a high-level meeting in 2018 on the fight against tuberculosis, and requests the Secretary-General, in close collaboration with the Director-General of the World Health Organization and in consultation with Member States, as appropriate, to propose options and modalities for the conduct of such a meeting, including potential deliverables, building on existing efforts in this regard;

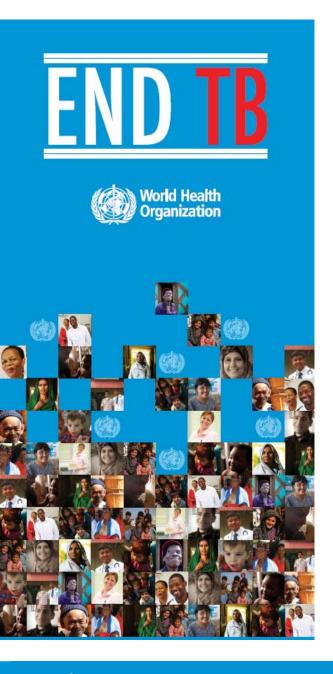
(...)

UN General Assembly High Level Meeting on TB - 2018

Proposed process and roadmap







Together we will END TB





