

# MULTIDRUG-RESISTANT TUBERCULOSIS (RR/MDR-TB) IN THE AMERICAS

### Estimated and notification of MDR/XDR-TB:

#### In the World 1:

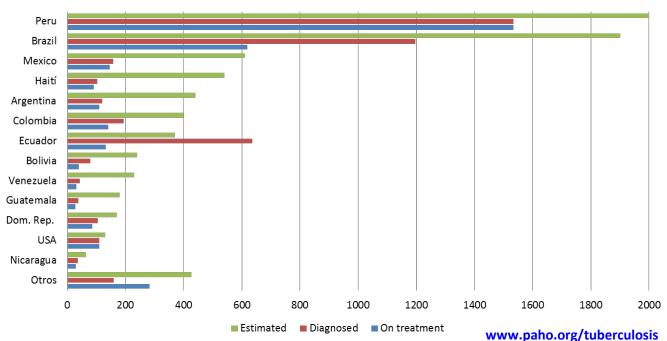
- In 2015, there were an estimated 480 000 new cases of multidrug-resistant TB (MDR-TB) and an additional 100 000 people with rifampicin-resistant TB (RR-TB) who were also newly eligible for MDR-TB treatment
- The crisis of MDR-TB detection and treatment continues. In 2015, of the estimated 580 000 people newly eligible for MDR-TB treatment, only 125 000 (20%) were enrolled. Five countries accounted for more than 60% of the gap: India, China, the Russian Federation, Indonesia and Nigeria. Globally, the MDR-TB treatment success rate was 52% in 2013
- The latest treatment outcome data show a treatment success rate of 83% for TB (2014), 52% for MDR-TB (2013) and 28% for XDR-TB (2013)
- As part of efforts to improve outcomes for MDR/XDRTB, at least 70 countries had started using bedaquiline and 39 countries had introduced delamanid by the end of 2015.

<sup>1</sup>WHO. Global Tuberculosis Report 2016

#### In the Américas:

- In 2015, WHO estimated a total of 7 700 (7 200-8 200) cases of RR/MDR-TB. According to the data reported by the countries, there were 4 508 diagnosed cases of RR/MDR-TB, 3 374 begin a MDR-TB treatment
- 51% of the estimated cases were concentrated in two countries and 94% in the 13 countries with the highest TB burden
- 4,508 cases of RR-TB / MDR-TB were diagnosed (58.5% of the estimated). 96% of these in the 13 countries with the highest load
- 122 cases of XDR-TB were diagnosed, equivalent to 2.7% of the total TB-RR / MDR cases. 2 countries report 72% of XDR-TB cases
- The PSD coverage was 29.2% among the new cases and 45.5% among those previously treated for TB, making a total of 72 248 people to whom a PSD was performed, 84% more than what was done in the year 2014.

#### RR/MDR-TB Estimated, diagnosed and on treatment. Americas Region 2016.



## Diagnosis RR/MDR-TB

In 2015 the number of laboratories have increased the access to LPA \*\* y Gene Xpert- MTB/Rif\*\*\*

- 21 countries have implemented DST for 1st line and 11 countries for 2<sup>nd</sup> line
- 11 countries perform DST with the use of liquid media with automated reading equipment
- 19 countries have implemented Gene Xpert
- 11 countries have implemented LPA.

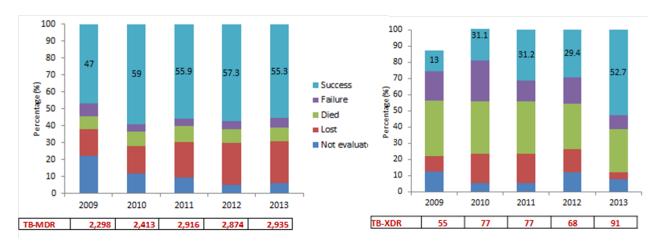
### Validation of BACTEC MGIT-960 to 2nd line, Peru



# MDR-TB/XDR-TB

- 3 374 cases with TB-RR/MDR started treatment with second-line drugs (75% of those reported.)
- 2 935 people with MDR-TB started a treatment in 2013; the result of treatment were: 55.3% were successful, 8% died, 6% failures, 6% not evaluated, and 1 of 4 patients died
- 91 cases of XDR-TB were diagnosed in 2013, treatment success reached 52.7%, 8.8% failures, 26.4% died and 7.7% not evaluated. An important achievement in this cohort is the decrease in the number of people lost during treatment to 4.4% as a result of the supervised treatment strategy in the patient's home.

# Treatment outcomes, MDR-TB & XDR-TB. Region of The Americas. 2009-2013



### What are RR-TB, MDR-TB and XDR-TB?

\*\*\*Molecular biology test in real time and completely automated

Rifampicina resistant tuberculosis (RR-TB) resistance to rifampicin detected using phenotypic or genotypic methods, with or without resistance to other anti-TB drugs.

Multidrug resistant tuberculosis (MDR-TB) resistance to at least both isoniazid and rifampicin.

Extensive drug-resistant tuberculosis (XDR-TB), resistance to any fluoroquinolone, and at least one of three second-line injectable drugs (capreomycin, kanamycin and amikacin), in addition to multidrug resistance.

\*DST: drug susceptibility testing

\*\* Line Probe Assay (LPA)

www.paho.org/tuberculosis