

# MDR-TB: Challenges to Communities



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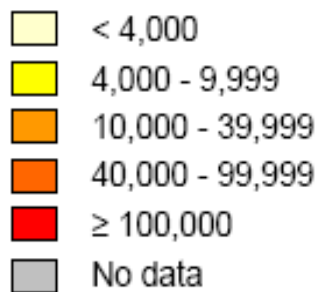
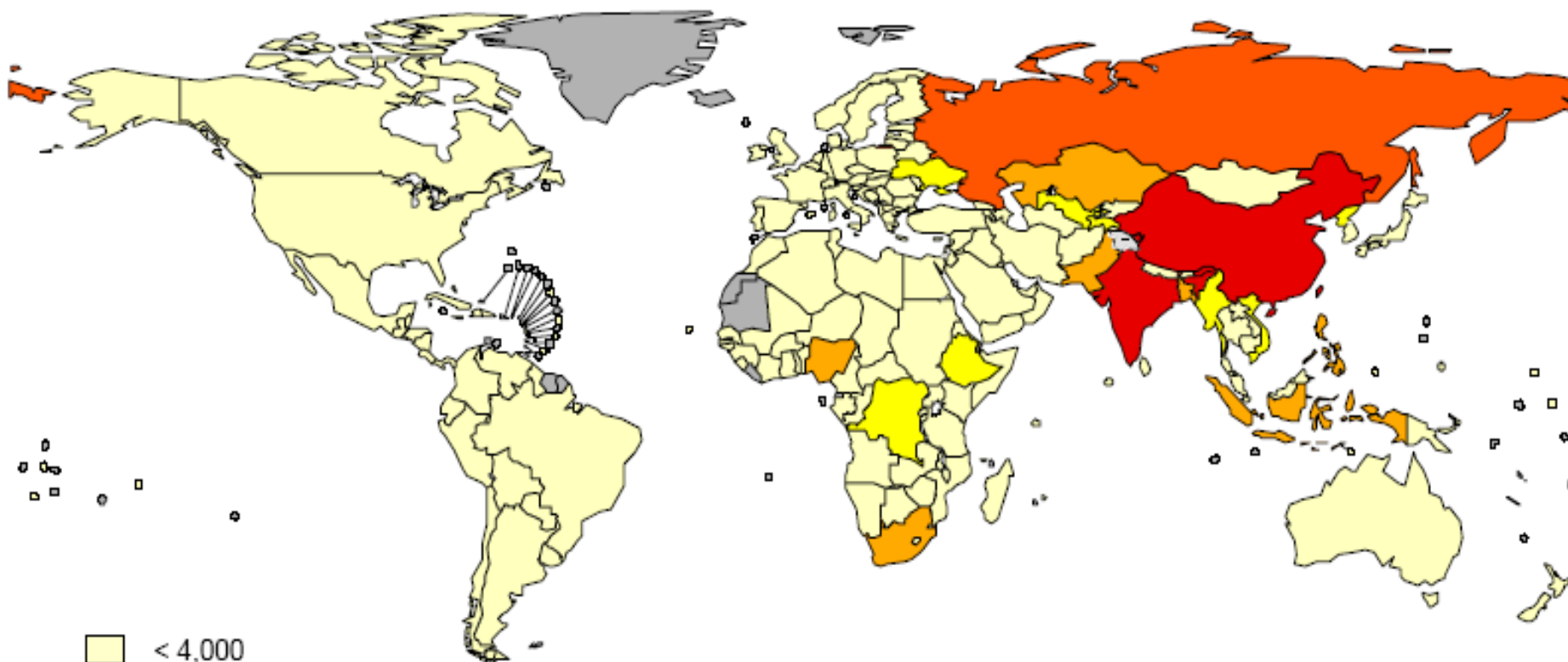
# Background



- 5% of the world's TB cases, or 510,000 people, are estimated to have multiple drug resistant TB (MDR-TB)
- MDR is a exceedingly difficult challenge in TB diagnosis, treatment and management.
- Extensively drug-resistant TB (XDR-TB), which can be incurable, has been reported in more than 50 countries worldwide.



# Estimated MDR Cases in 2007



**NEPHAK** *say yes to life*

# Challenges of MDR-TB



MDR-TB is challenging to deal with because:

- Not easy to **suspect**
- Not easy to **diagnose**
- Not easy to **treat**
- Not easy to **manage**



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# Diagnostic and Treatment Challenges



## Diagnostic Challenges

- MDR-TB may not present with the usual symptoms of TB
- Presence of HIV makes MDR-TB more difficult to suspect
  - More difficult to suspect among children and PLHIV
- Requires Drug Sensitivity Testing (DST) on top of SSM

## Treatment Challenges

- MDR-TB treatment regimens can cost \$1,500 - \$9,000 for the drugs alone, not including the costs of administering treatment and long term care and monitoring.
- Pill burden and duration of treatment (up to 2 years)
- Stock-outs and supply issues lead to further resistance



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# Unmet Needs in MDR TB Therapy



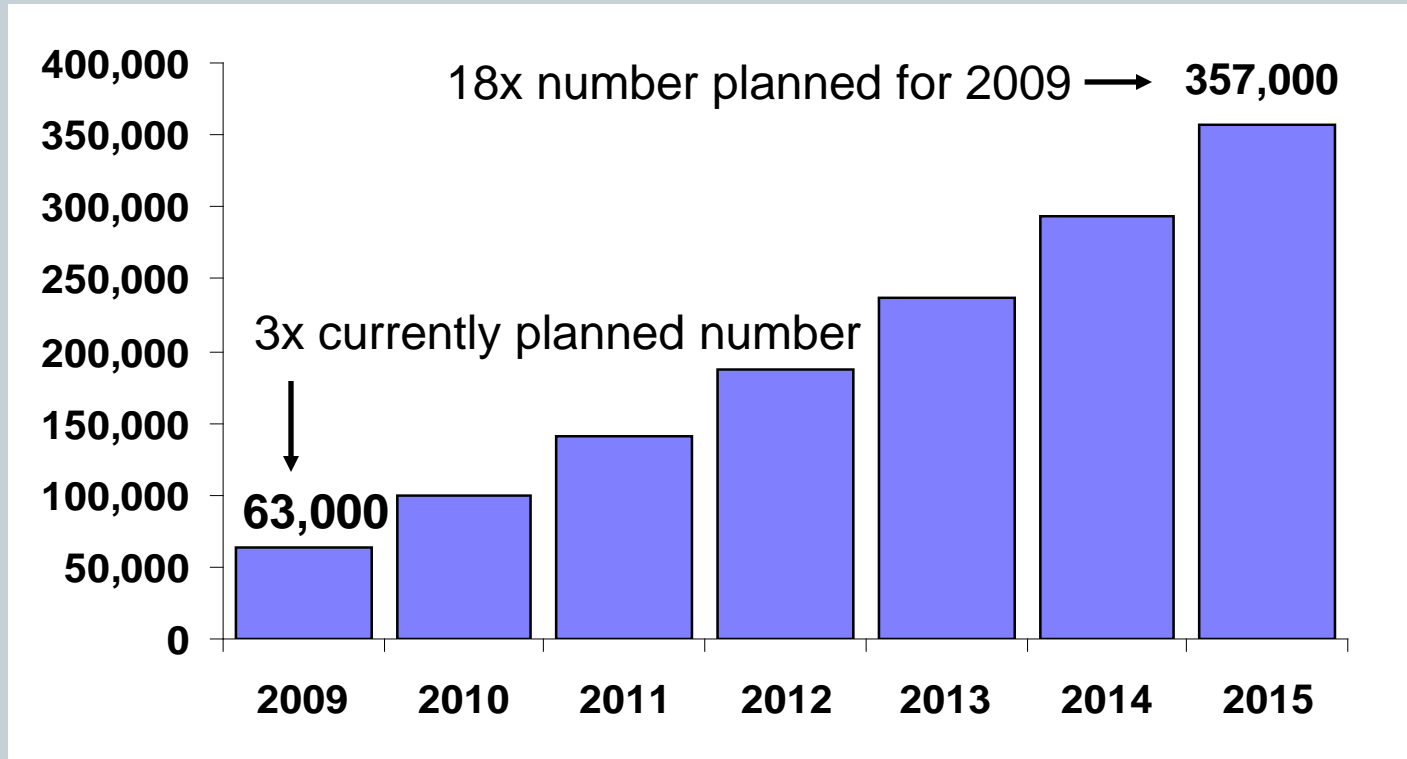
<b>Current MDR Therapy</b>	<b>Unmet Needs</b>
<ul style="list-style-type: none"><li>• Regimen based on a combination of 4-7 drugs</li><li>• Some drugs must be administered via injection</li><li>• Drugs are mostly poorly tolerated</li><li>• Treatment length requires a minimum of 18 to 30 months</li></ul>	<ul style="list-style-type: none"><li>• A simpler regimen with fewer drugs</li><li>• Oral administration</li><li>• Safer drugs with fewer side effects</li><li>• A significantly shorter and more effective regimen</li></ul>



# Global Plan Targets for Treatment



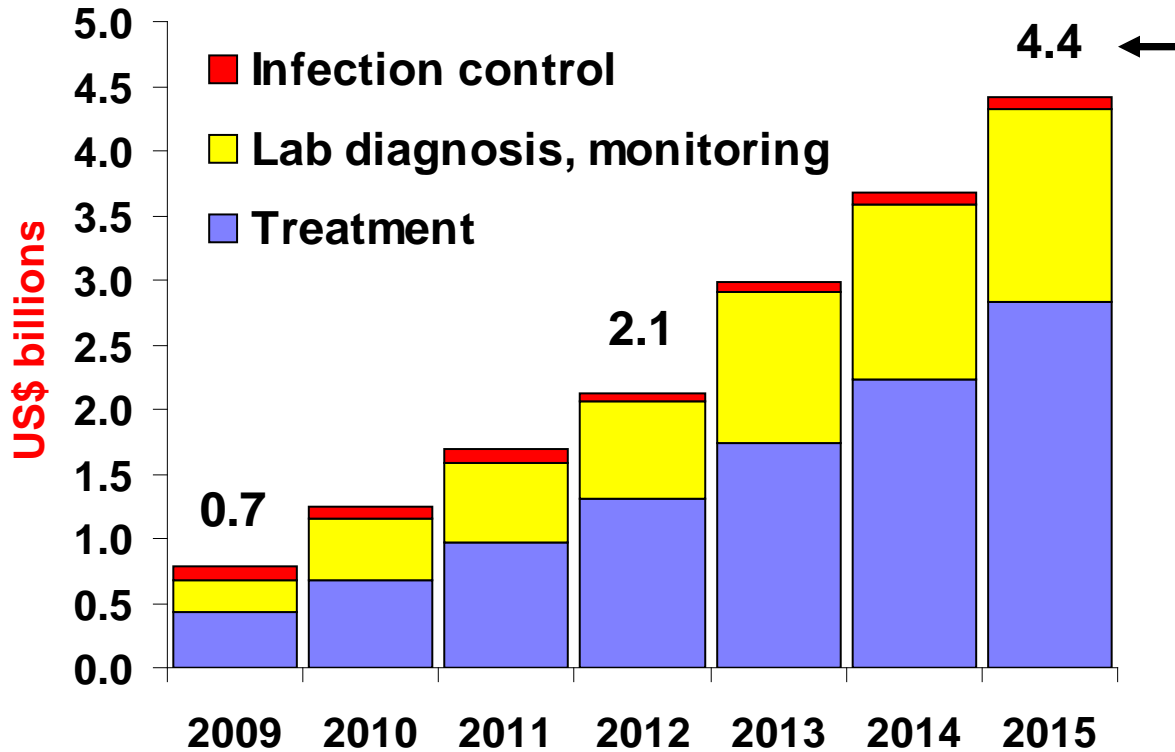
**Target: to treat 80% of smear and/or culture-positive MDR-TB cases by 2015**  
**Total patients treated over 7 years = 1.4 million**



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Source: WHO (Apr 1, 2009)

# Funding Required 2009 - 2015



**10x 2009 budget**  
**61x 2009 funding**

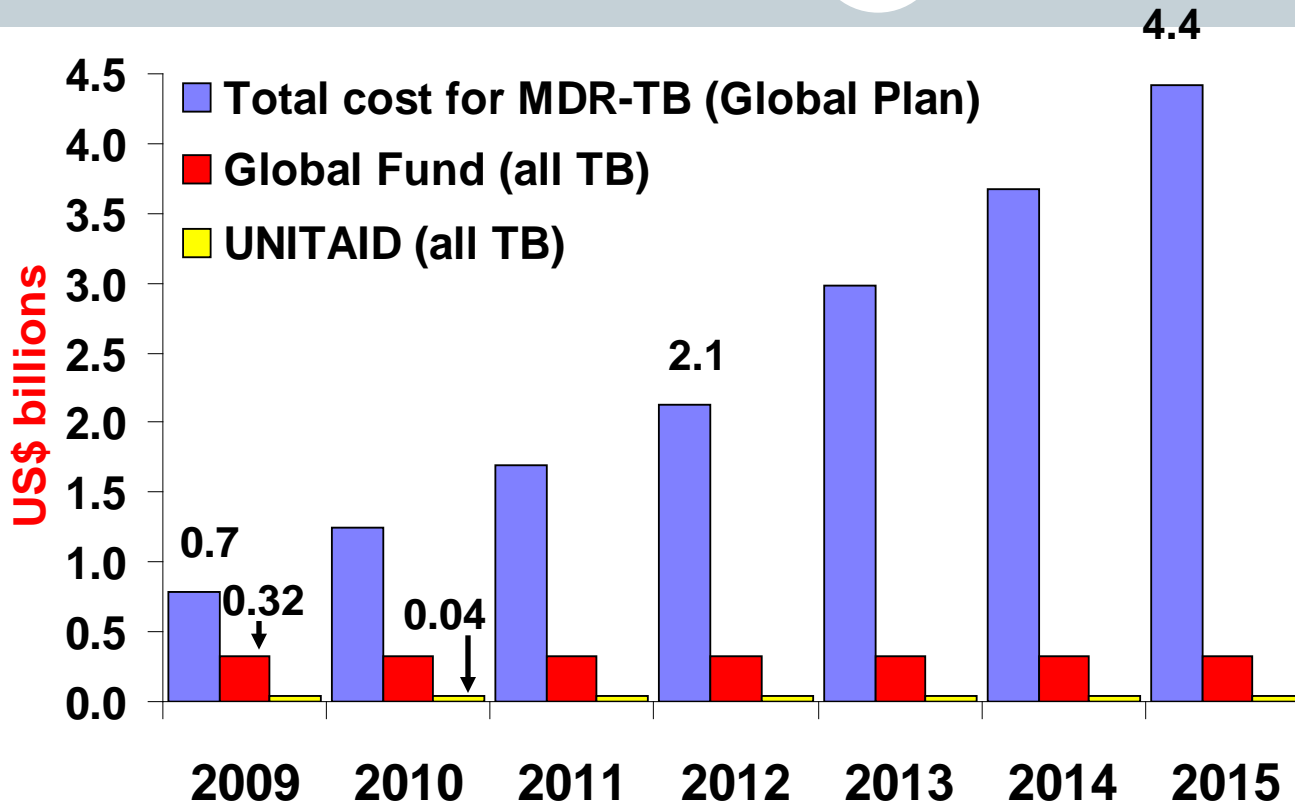
Total US\$16.9 billion over 7 years, average US\$2.4 billion per year  
Much higher than existing budgets and funding



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Source: WHO (Apr 1, 2009)

# The Global Fund and Unitaid



Unlikely to finance more than a relatively small share of the costs of MDR-TB diagnosis and treatment, unless either:

a) both agencies mobilize substantially more funding *and/or*

b) the cost of MDR-TB diagnosis and treatment can be reduced

NB. assumption Global Fund and UNITAID financing sustained at 2009 levels



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Source: WHO (Apr 1, 2009)

# Management Challenges



## Second line drugs

- Treatment depends on patient reactions

## Laboratory

- Tests are expensive
- Frequency of testing is difficult
- Access to laboratories and testing is limited

## Health Care Workers

- Fear of infection
- Knowledge gap
- Staffing inadequacies (numbers/cadre)

## Infection control

- Infrastructure: Isolation facilities, existing facilities
- Cost of personal protection (single use)



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# What needs to be done



## What the community needs:

- Proper sputum collection and disposal procedures
- Availability of HIV testing and counseling - including for contacts
- Availability of TB screening for contacts
- Availability of Drug Sensitivity Testing
- Drug procurement, supply, and access to drugs
- Develop shorter, safer, simpler, more effective drug regimens

## How community can help:

- Education about disease, treatment, cough etiquette, etc.
- Training of health workers
- Reduction of stigma and isolation
- Resource mobilization
- Advocacy to support the adoption of new MDR regimens by national TB authorities



**NEPHAK** *say yes to life*