

*Scaling-up the implementation of collaborative TB/HIV activities in the Region of the Americas,  
7<sup>th</sup>-8<sup>th</sup> July 2011, Panama city, Panama*

# The New WHO guidelines on intensified TB case finding and Isoniazid preventive therapy and operational considerations

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# Outline of presentation

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- The WHO 12 point policy package
- Progress in implementation
- Key barriers of scaling up of TB screening and IPT
- The 12 recommendations with evidence base
- Key operational issues
- Summary

# The updated 12 points policy package

## **A. Establish the mechanisms for integrated TB & HIV services**

1. Set up **or strengthen** a TB/HIV coordinating body effective at all levels
2. Conduct HIV **and TB** surveillance **among TB and HIV patients respectively**
3. Carry out joint TB/HIV planning
4. Conduct monitoring and evaluation

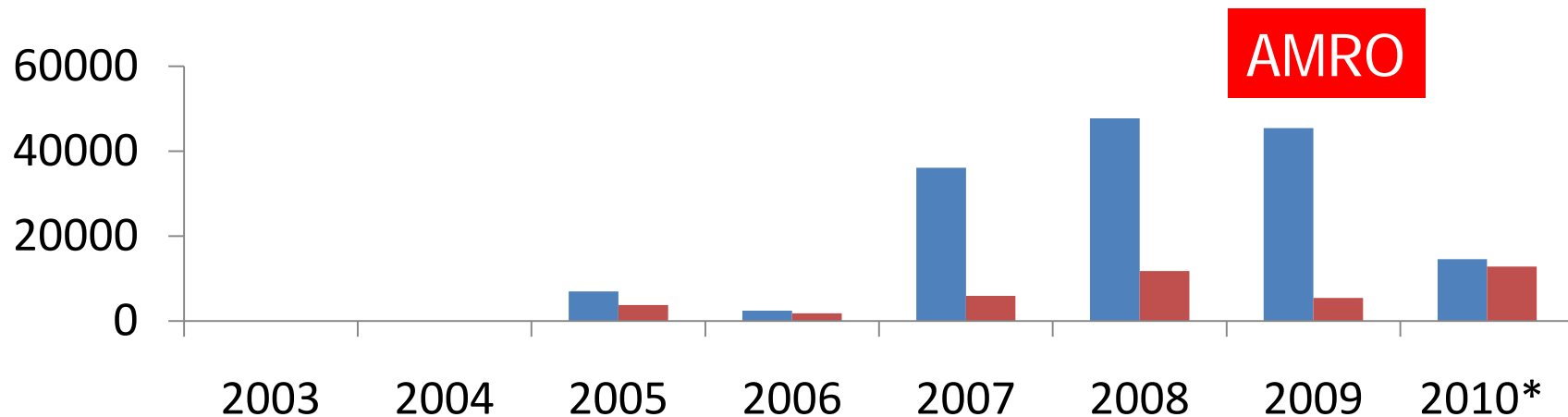
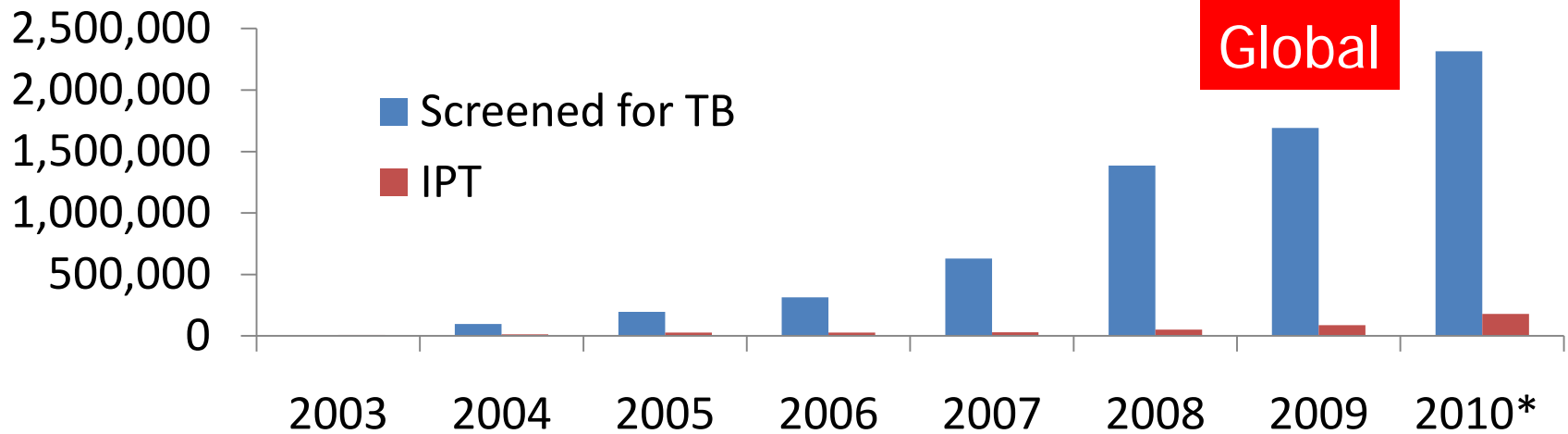
## **B. Decrease the burden of TB in PLHIV (*Three Is for HIV/TB*)**

5. Intensify TB case finding **and ensure quality TB treatment**
6. Introduce TB prevention with **IPT and ART**
7. Infection control for TB in health care and congregate settings ensured

## **C. Decrease the burden of HIV in patients with **presumptive** and diagnosed TB**

8. Provide HIV testing & counselling to patients with **presumptive** and diagnosed TB
9. Introduce HIV preventive methods patients with **presumptive** and diagnosed TB
10. Provide CPT for TB patients living with HIV
11. Ensure **HIV prevention, treatment & care for TB patients living with HIV**
12. Provide Antiretroviral therapy to TB patients living with HIV

# Implementation of TB screening and IPT



# Vague global policy guidance and perceptions (1993-2009)

- IPT should be given to TST positives
- Mandatory CXR to "exclude active TB"
- How to exclude active TB before IPT?
- INH exclusive "property" of NTP
- Fear of INH drug resistance
- Weak monitoring and evaluation system
- Weak pre-ART care and neglect to TB

*What are the operational barriers?*

# IPT policy in country X, 2006

## Eligibility criteria for an institution to offer IPT

The following are the minimum requirements for an organization/institution to offer IPT

### **Human resource:**

- Medical Officer
- Laboratory assistant
- Trained counselor
- Pharmacy technician
- Adherence supporters

### **Infrastructure:**

- Functional Laboratory
- X-ray or access to x-ray services
- Counseling room/space
- Consultation room

### **Equipment and logistics:**

- Facilities for TB microscopy
- Facilities for skin testing (mantoux)
- Cold chain system
- Facilities for HIV testing
- Sustainable supply of anti-TB drugs including Isoniazid
- Sustainable supply of HIV test kits

### **Other key issues:**

- If an organization has a TB default rate of greater than 5% it will not be eligible to provide IPT

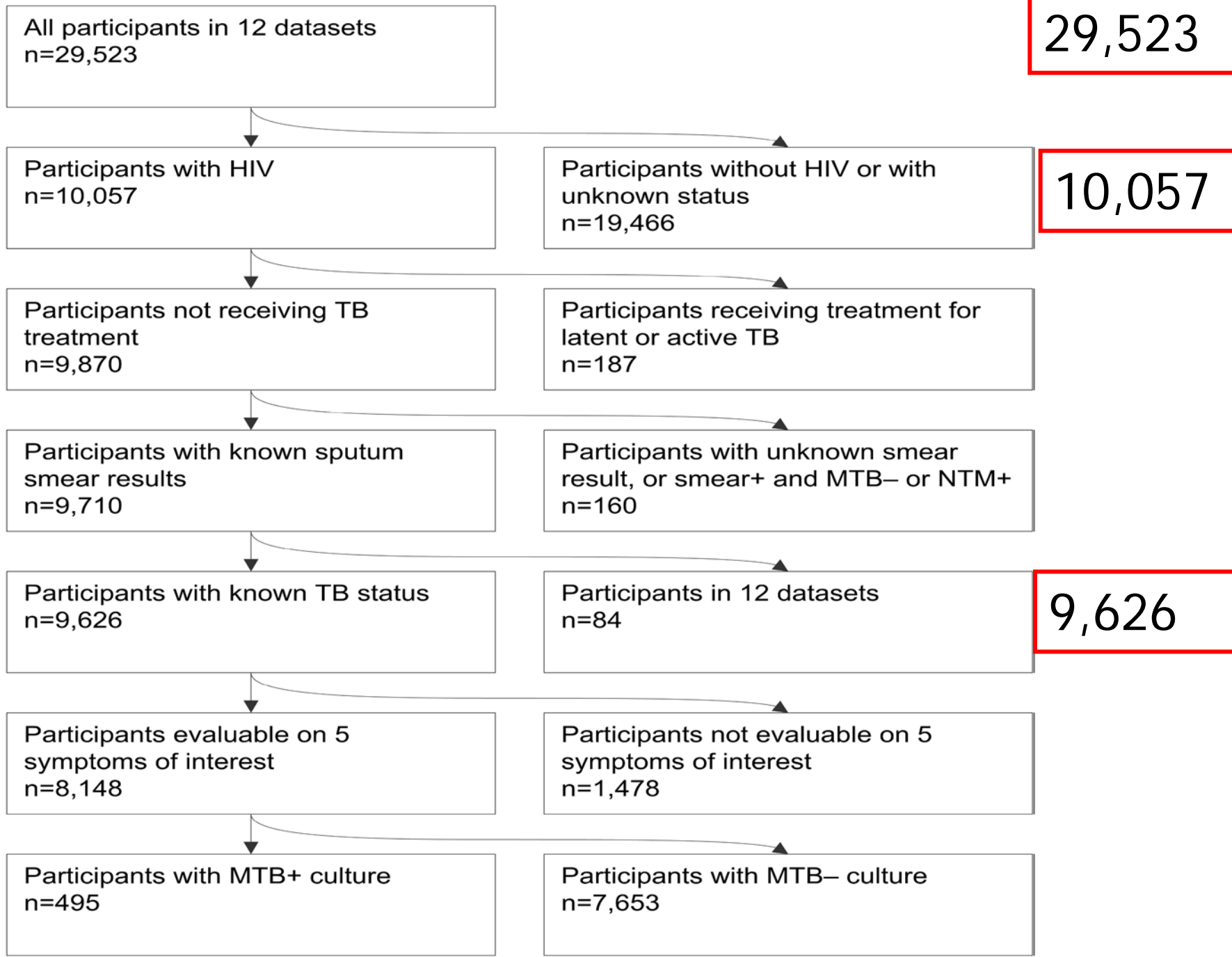
*What are the operational barriers?*

# Development of a Standardized Screening Rule for Tuberculosis in People Living with HIV in Resource-Constrained Settings: Individual Participant Data Meta-analysis of Observational Studies

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## Inclusion criteria for studies

- Collected sputum specimens from PLHIV regardless of signs or symptoms;
- Used mycobacterial culture of at least one specimen to diagnose TB and;
- Collected data about signs and symptoms.





# Top five best performing rules (1 of m) in all subjects (n = 8173)

Combination rule	Sen (%)	Spe (%)	LR-	NPV (95% CI) 5% TB prevalence
CC, F, NS, WL	79	49	0.42	97.7 (97.4-98.0)
H, F, NS, WL	76	53	0.46	97.6 (97.2-98.0)
CC, F, WL	74	54	0.48	97.5 (97.1-97.9)
CC, NS, WL	73	59	0.49	97.5 (97.1-97.8)
CC, F, NS	73	61	0.44	97.7 (97.4-98.0)

CC: cough in the last 24 hours; F: Fever; H: Haemoptysis; NS: Night sweats; WL: Weight loss

# Top five best performing rules (1 of m) in all subjects with abnormal CXR (n = 2805)

Combination rule	Sen (%)	Spe (%)	LR-	NPV (95% CI) 5% TB prevalence
CC, F, NS, WL, X	91	39	0.24	98.7 (97.1-99.5)
CC, F, NS, X	89	52	0.21	98.9 (97.6-99.5)
CC, F, WL, X	88	42	0.28	98.5 (96.9-99.3)
H, F, NS, WL, X	87	43	0.29	98.1 (97.3-98.6)
CC, NS, W,L X	87	45	0.29	98.6 (97.5-99.3)

CC: cough in the last 24 hours; F: Fever; H: Haemoptysis; NS: Night sweats; WL: Weight loss

# Performance of the best rule (one of current cough, fever, night sweats or weight loss)

Setting	Sen (%)	Spe (%)	LR- (%)	NPV (95% CI)
				5% TB prevalence
Community	76	61	0.39	97.3 (96.9-97.7)
Clinical	89	30	0.38	98.3 (97.5-98.8)
CD4 < 200	94	22	0.29	98.9 (95.8-99.5)
CD4 <sub>≥</sub> 200	83	34	0.49	96.9 (95.1-98.0)

**Guidelines for intensified  
tuberculosis case-finding  
and isoniazid preventive  
therapy for people  
living with HIV  
in resource-  
constrained  
settings**



**HMTB**

# Recommendation 1 : TB screening

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Adults and adolescents living with HIV should be screened with a clinical algorithm and those who do not report any one of;

- current cough,
- fever,
- weight loss or
- night sweats

are **unlikely to have active TB** and should be offered IPT.

*(Strong recommendation, moderate quality evidence)*

# Recommendation 2 : TB screening

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Adults and adolescents living with HIV screened with a clinical algorithm and reported one of the following;

- current cough,
- fever,
- weight loss or
- night sweats

may have active TB and should be evaluated to TB and other diseases.

*(Strong recommendation, moderate quality evidence)*

# Recommendation 3

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Adults and adolescents who are living with HIV and:

- have unknown or positive TST status and;
- unlikely to have active TB

should receive IPT for **at least 6** months

(Strong recommendation, high quality evidence)

# Recommendation 4

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Adults and adolescents who are living with HIV in **settings with higher TB transmission** and:

- have unknown or positive TST status and;
- unlikely to have active TB

should receive IPT for **at least 36 months**

(Conditional recommendation, moderate quality evidence)



## Recommendation 5

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- Tuberculin skin test is not a requirement for initiating IPT for people living with HIV  
(Strong recommendation)

## Recommendation 6

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- Where feasible, TST can be used as people with a positive test benefit more from IPT than those with a negative test  
(Strong recommendation)

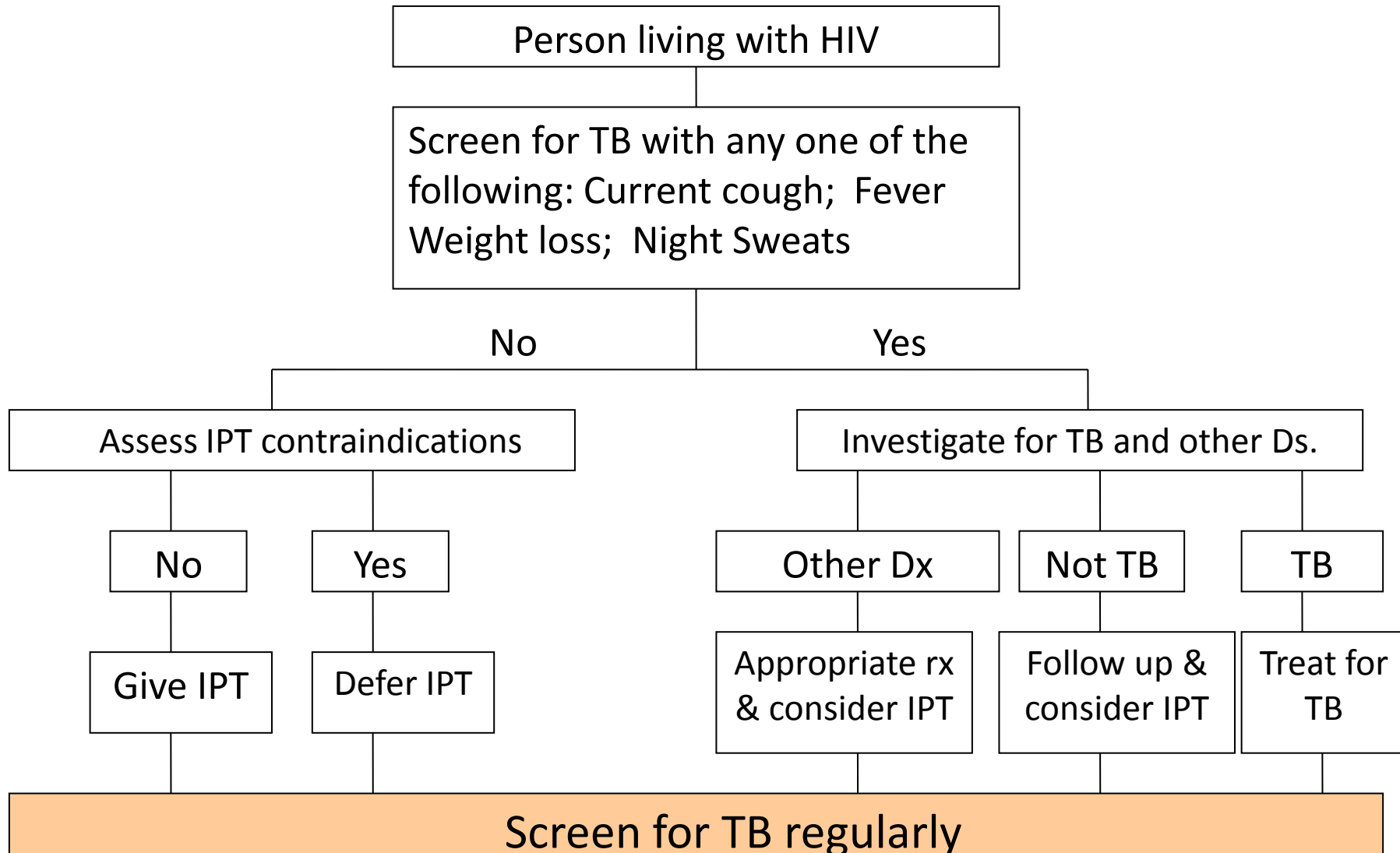
# Recommendation 7

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Providing IPT to people living with HIV does not increase the risk of developing **INH resistant TB**. Therefore concerns regarding the development of INH resistance should not be a barrier to providing IPT.

(Strong recommendation, moderate quality evidence)

# TB screening and IPT algorithm



# Recommendation 8: TB screening in children

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- Children living with HIV who **do not have poor weight gain\***, **fever** or **current cough** are unlikely to have active tuberculosis TB.  
(Strong recommendation, low quality evidence)

**\*Poor weight gain** is defined as reported weight loss, **or** very low weight (weight-for-age less than -3 z-score), **or** underweight (weight-for-age less than -2 z-score), **or** confirmed weight loss (>5%) since the last visit, **or** growth curve flattening

# Recommendation 9: IPT in children

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- Children living with HIV **who have any one of poor weight gain\*, fever, current cough or contact history with a TB case** may have TB and should be evaluated for TB and other conditions. If the evaluation shows no TB, children should be offered IPT regardless of their age.

(Strong recommendation, low quality evidence)

**\*Poor weight gain** is defined as reported weight loss, **or** very low weight (weight-for-age less than -3 z-score), **or** underweight (weight-for-age less than -2 z-score), **or** confirmed weight loss (>5%) since the last visit, **or** growth curve flattening

# Recommendation 10: IPT in children

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- Children over 12 months of age who are living with HIV and who are unlikely to have active TB on symptom based screening and have no contact with a TB case should receive 6 months of INH preventive therapy (10mg/kg)

(Strong recommendation, moderate quality evidence)

# Recommendation 11: IPT for infants

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- Children less than 12 months of age, only those children who have contact with a TB case and who are evaluated for TB (using investigations) should receive 6 months IPT if the evaluation shows no TB disease  
(Strong recommendation, low quality evidence)

# Recommendation 12: 2<sup>o</sup> IPT for children

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- All children living with HIV who have successfully completed treatment for TB disease should receive INH for additional 6 months

(Conditional recommendation, low quality evidence)



# Key operational considerations

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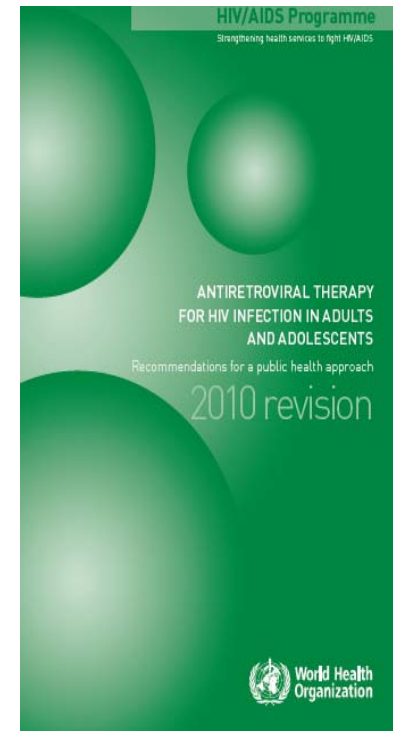
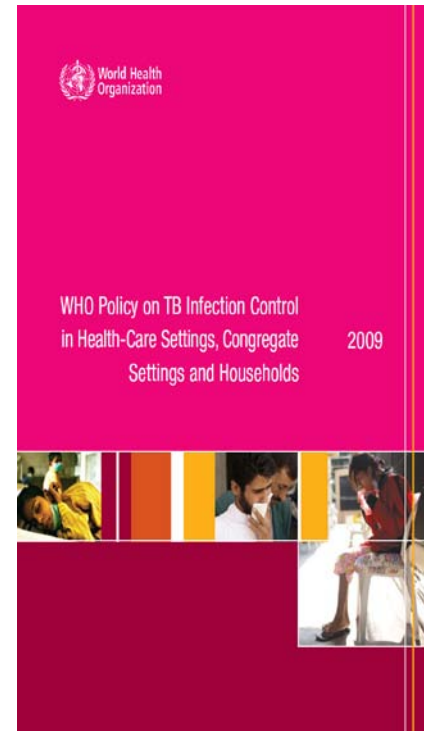
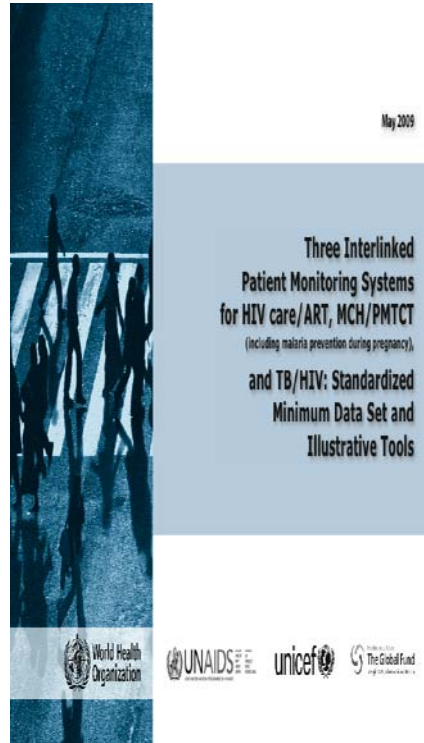
- National plan with national targets
- Primary ownership by HIV stakeholders
- Effective INH access and supply system
- Standardised indicators and M and E system
- Adherence and clinical monitoring
- Engagement of affected communities

# Summary: what is new?

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- Screening for TB only by using symptom based algorithm is sufficient to start IPT for PLHIV
- No mandatory CXR and TST requirement for IPT
- Regular screening of those on IPT at every visit
- Pregnant women, children, those on ART and those who completed TB treatment should receive IPT
- Conditional recommendation of 36 months IPT for settings with high TB transmission among PLHIV

# Other important companion documents



*Scale up, document and monitor!*