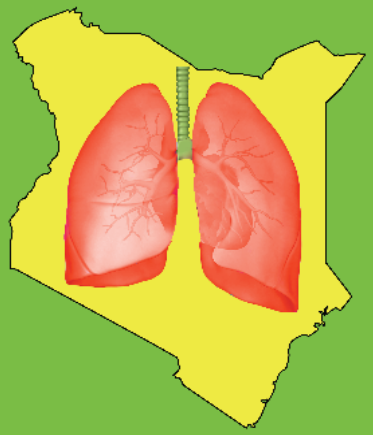


KENYA TUBERCULOSIS PREVALENCE SURVEY 2015-2016

Assessing Kenya's TB Burden

REACH, TREAT, CURE EVERYONE

REPUBLIC OF KENYA

MINISTRY OF HEALTH

SURVEY FINDINGS

March 24, 2017

Jane Rahedi Ong'ang'o

Senior Researcher, KEMRI | Survey Co-ordinator

REPUBLIC OF KENYA

MINISTRY OF HEALTH

Outline

- Background
- Why the survey
- Where and how the survey was done
- Findings
- Conclusions

Ministry of Health
National Tuberculosis, Leprosy and Lung Disease Programme

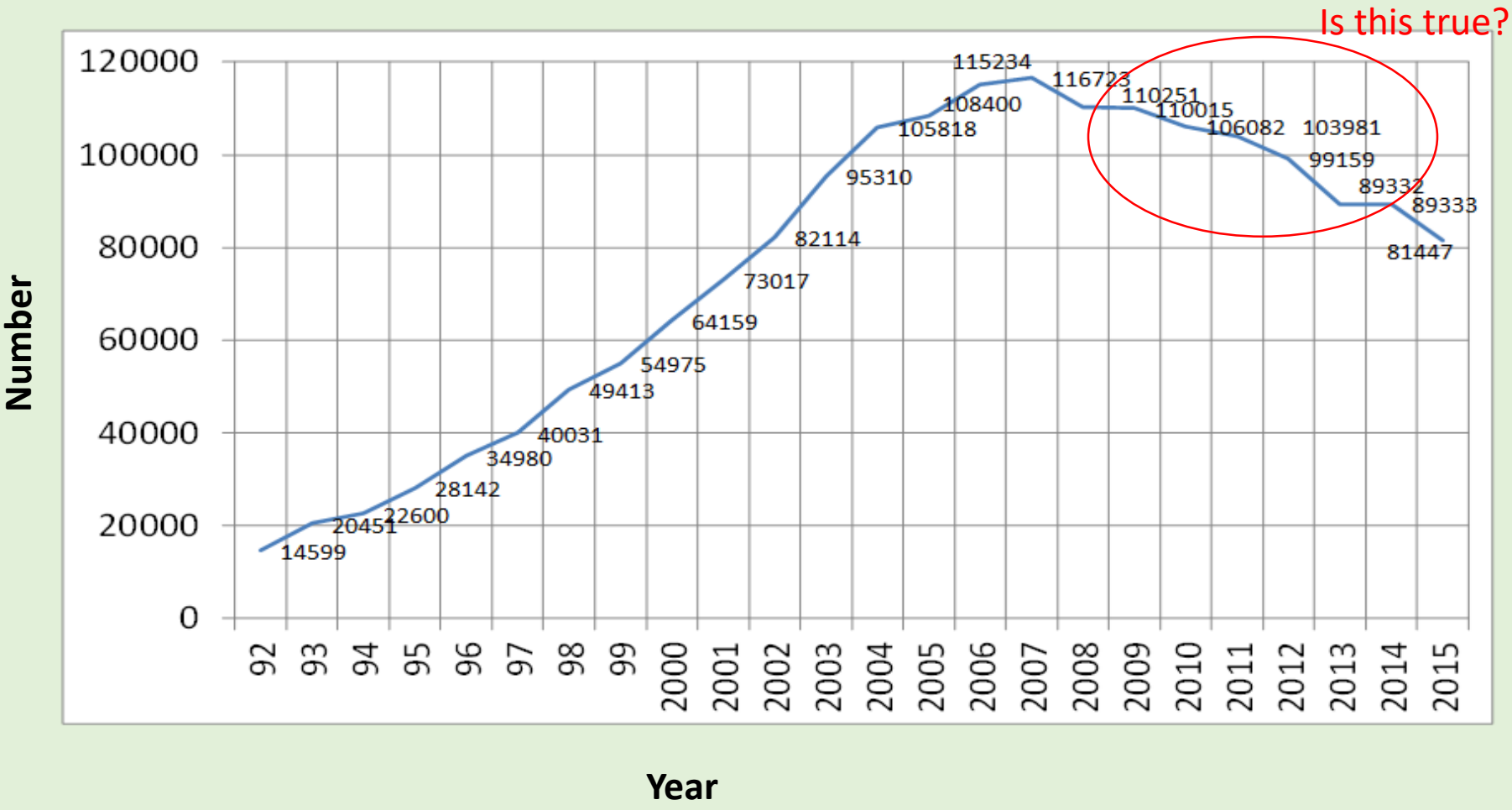
REPUBLIC OF KENYA

MINISTRY OF HEALTH

Tuberculosis in Kenya

- **4th** leading cause of death
- Among the **30** high TB burden countries globally
- TB epidemic affects the young **(15-34yrs)** – the economically productive age groups
- In 2015
  - **81,518** cases were identified and treated
  - Estimated prevalence of TB was **233/100,000**
  - Kenya detected about **80%** of all TB cases

TB Case Notification by Year



REPUBLIC OF KENYA

MINISTRY OF HEALTH

Survey Rationale

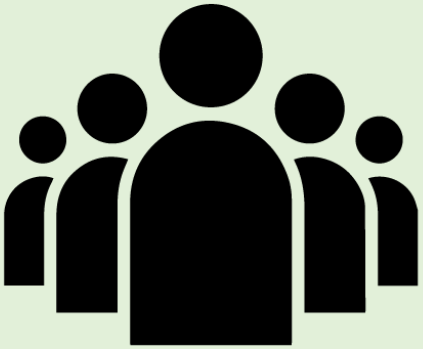
First national TB prevalence survey done in **1958 – 1959 (646 per 100,000)**

- Provide a better estimate of the burden of TB
- Assess the associated health seeking behaviour of TB patients and those reporting TB symptoms
- Inform country planning and policy formulation to end TB

Where And How The Survey Was Conducted

45

counties participated



63,050

people screened at the community level

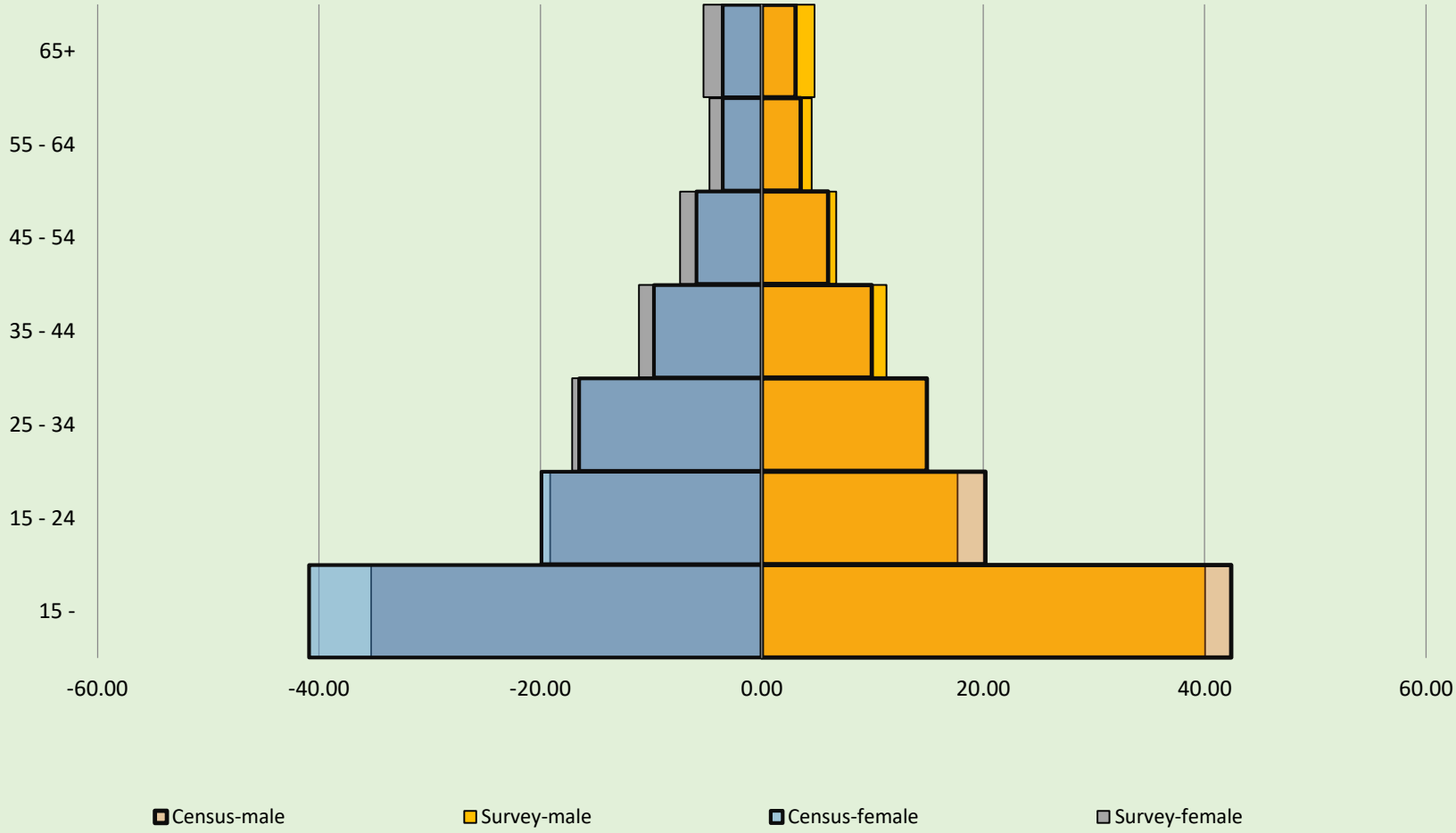
All participants were:

asked a series of questions to assess for TB symptoms

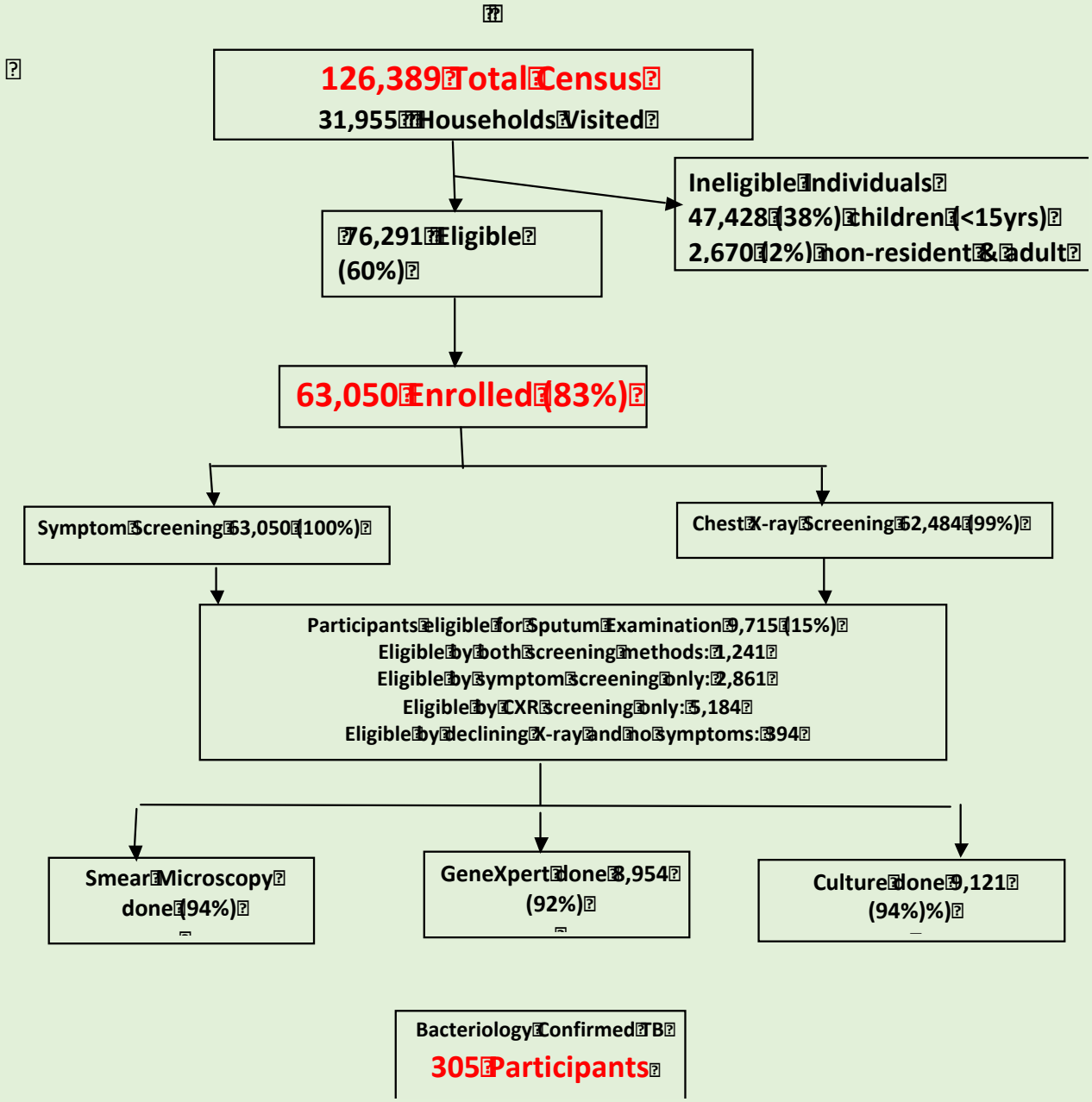
were subjected to a chest x-ray

submitted sputum for laboratory analysis through microscopy, GeneXpert and culture

National Population Against Survey Population Proportions



TB Prevalence Survey Summary



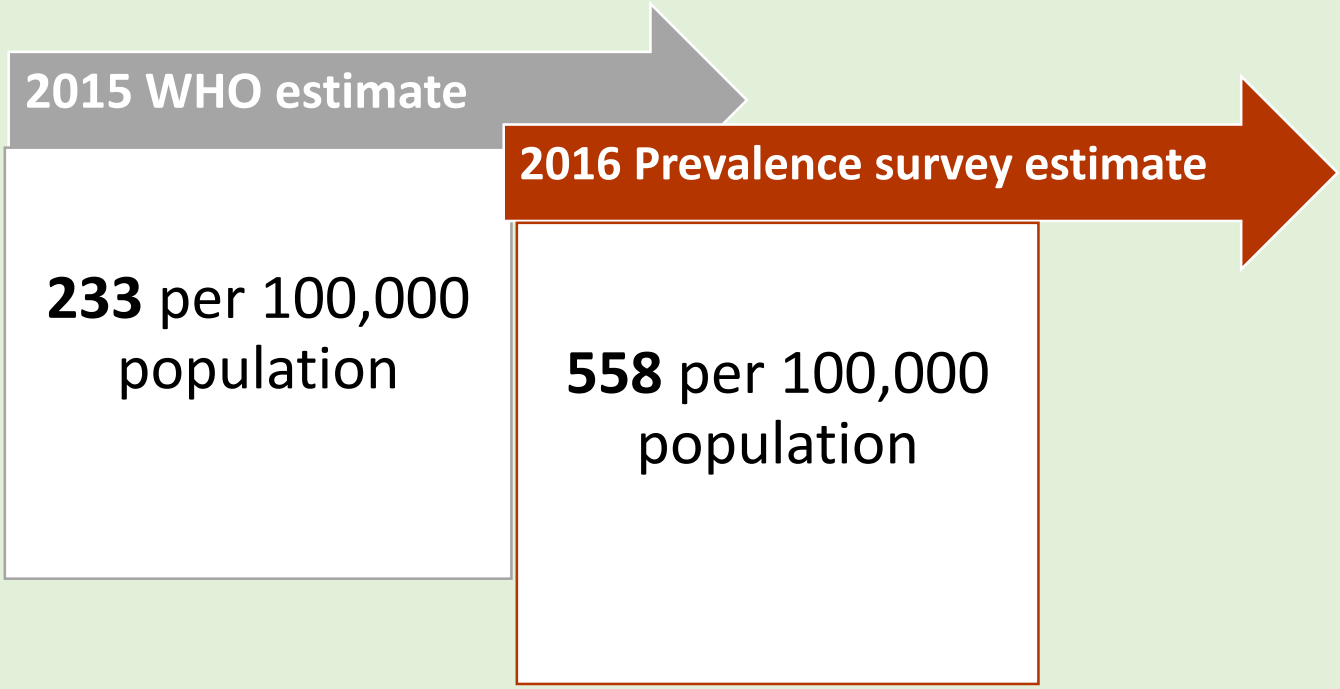
KEY FINDINGS

Of The TB Prevalence Survey 2016

There's More TB In Kenya Than We Thought

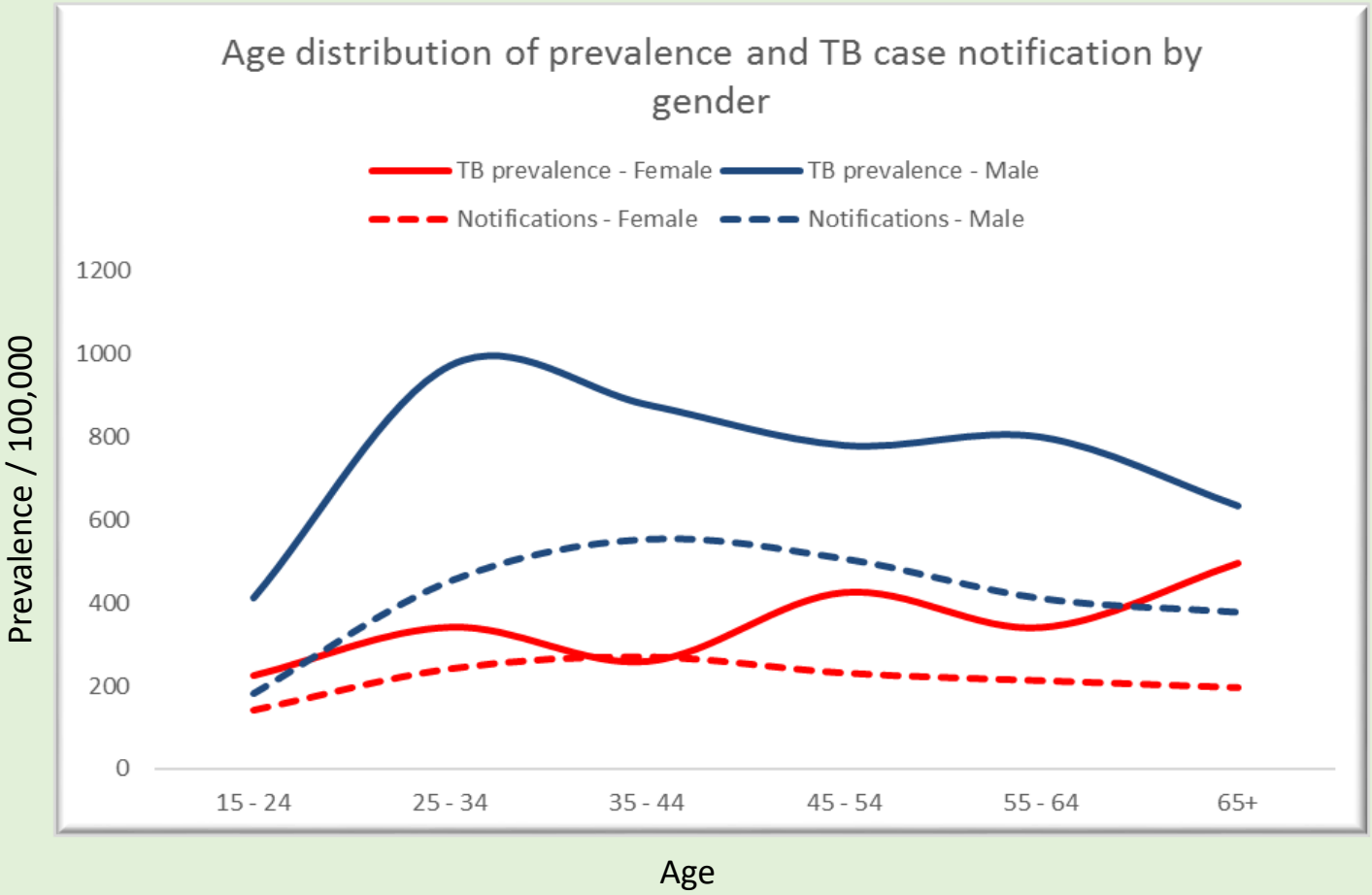
REPUBLIC OF KENYA

MINISTRY OF HEALTH



Translates to approximately 138,105 TB incident cases per year

Prevalence Among Men Is Twice As High As Women

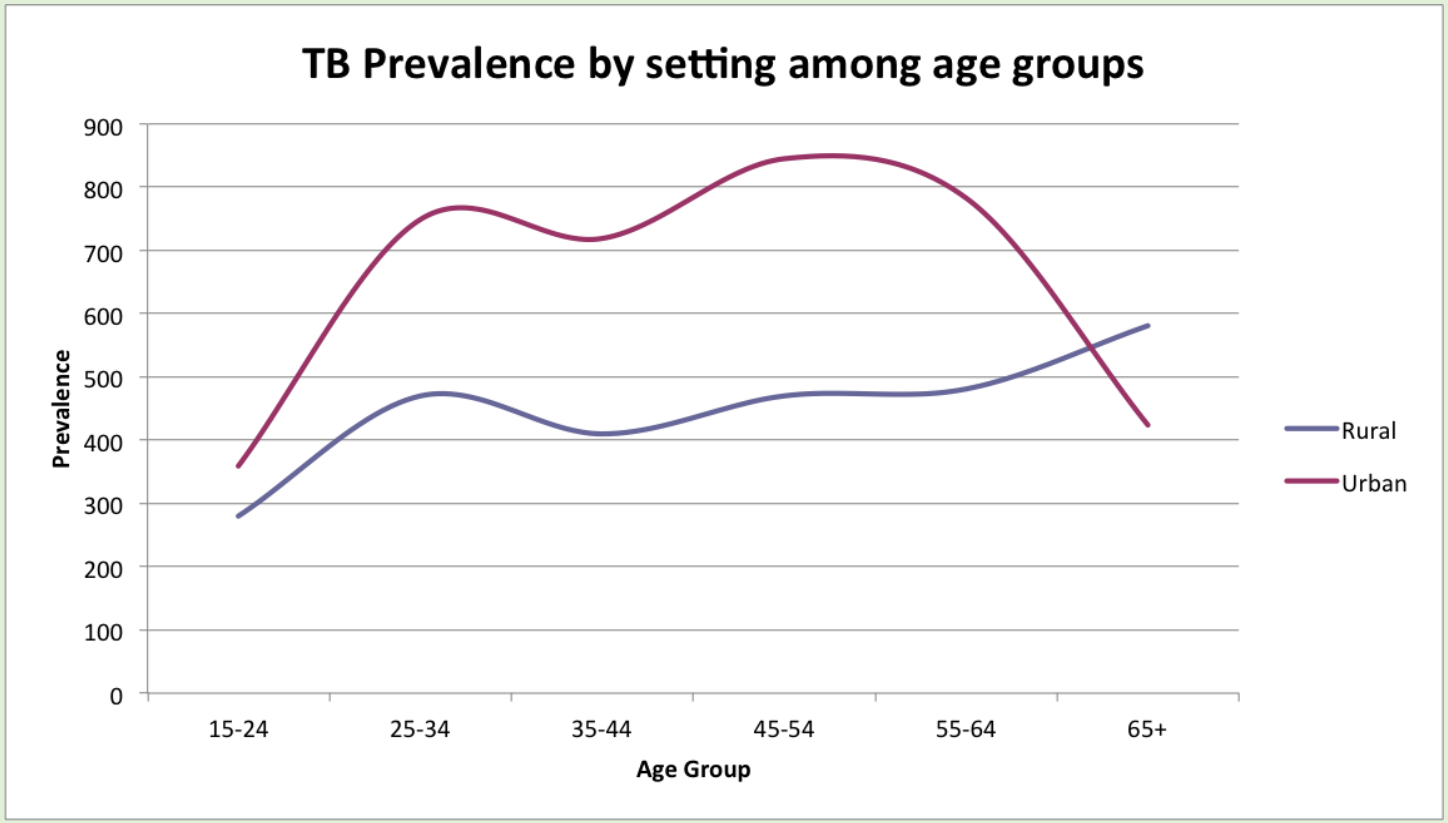


- Males have a higher disease burden (809 vs 359 per 100,000) and are more likely to be missed
- Prevalence among women age group 65 years and above was high

TB Prevalence Is Highest In Urban Areas

REPUBLIC OF KENYA

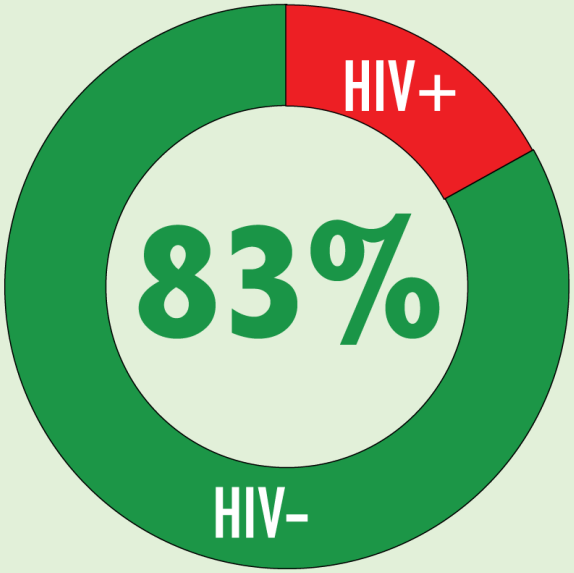
MINISTRY OF HEALTH



Majority Of TB Cases Were HIV Negative

REPUBLIC OF KENYA

MINISTRY OF HEALTH



83% of TB cases were HIV negative. This suggests that interventions to control TB among People Living with HIV have been successful and a large burden of TB now exists among people not infected with HIV

Symptom Profile of Prevalent Cases

Symptom	Cases	Proportion
Cough ≥ two weeks only	147	48%
Night sweats only	85	28%
Fever only	62	20%
Weight loss only	41	13%
Weight loss or fever or night sweats or cough more than two weeks	181	59%
Any coughing or fever or weight loss or night sweats or fatigue or other symptoms or breathe shortness or chest pains (At least one symptom)	225	74%
Total	**305**	

- If other TB related symptoms are included in the sputum eligibility criteria, the prevalent cases missed by symptom screening would be reduced

Chest X-ray Is A Good Screening Test

REPUBLIC OF KENYA

MINISTRY OF HEALTH

52% of the prevalent cases did not have the usual cough of two weeks or more.

These cases were only identified because of an abnormal chest x-ray

Overview Of Prevalence By Diagnostic Method

Type of Test	Number of Cases (n)	Prevalence per 100,000 population (N=63,050)
All bacteriologically confirmed cases (culture and Xpert)	305	558
Smear Microscopy	123 (40%)	230
Gene Xpert Positive	237 (78%)	431
Culture positive	215 (71%)	341

Testing For Tuberculosis

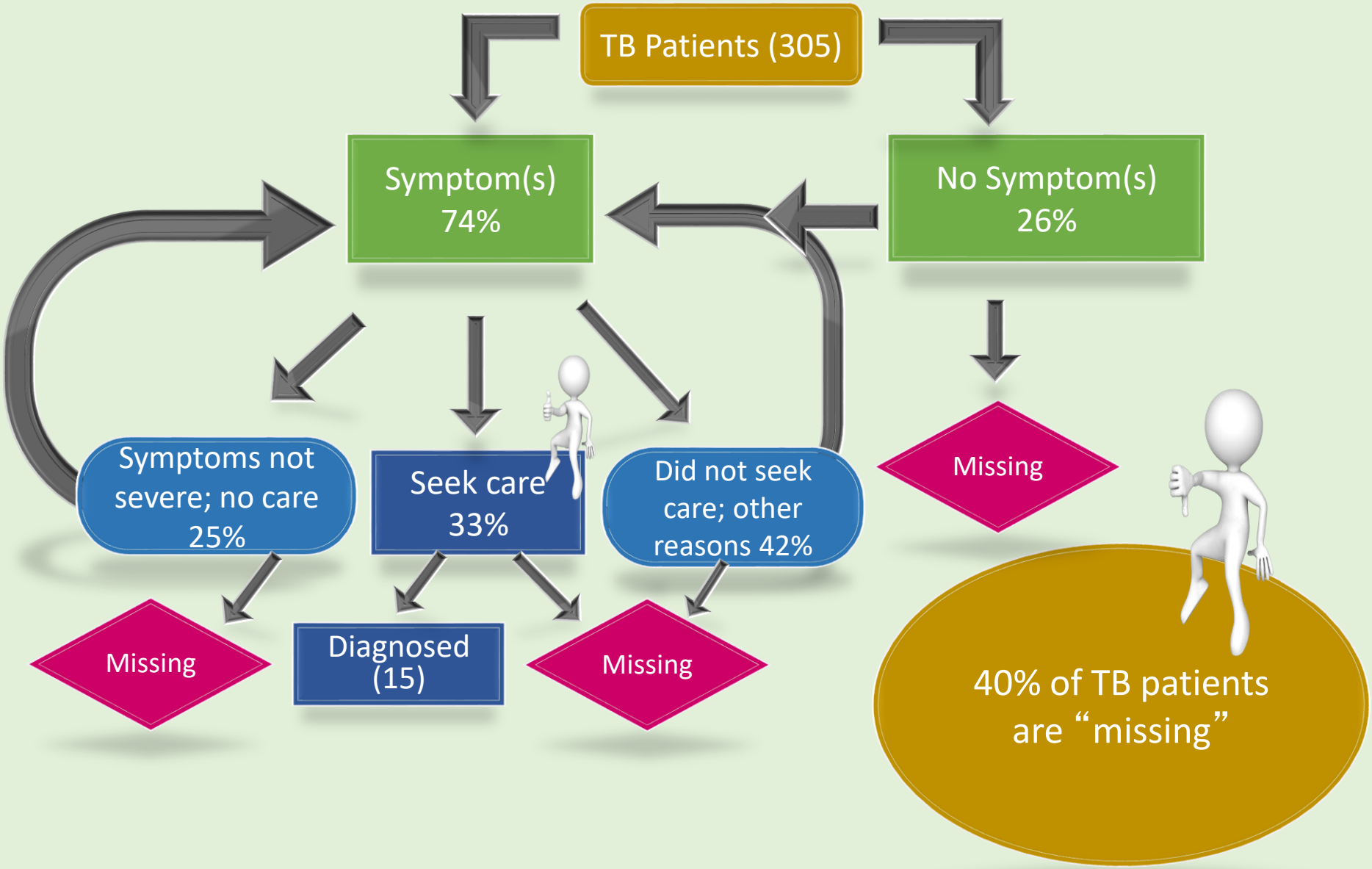
REPUBLIC OF KENYA

MINISTRY OF HEALTH

- **Use of microscopy for diagnosis misses cases**
  - As a solo test, the commonly used microscopy test would have missed more than 50% of the TB cases

- **GeneXpert** (innovative technology for the diagnosis of TB) detected 78% of the TB cases making it a more reliable and efficient test

Health Seeking Behaviour and Missing Cases



Where Are The "Missing" Cases?

People are in the community with non-severe symptoms, and are therefore **not seeking care**

People at work, school, home or clinics are presumed not to have TB and hence **not screened**

People are seeking care for TB symptoms, but **do not get diagnosed**

CONCLUSION

Of The TB Survey Findings

Key TB Survey Findings

1 The Burden of TB in Kenya is Higher Than Previously Thought

TB prevalence

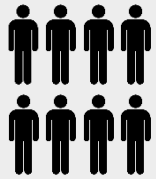
558

per 100,000 people

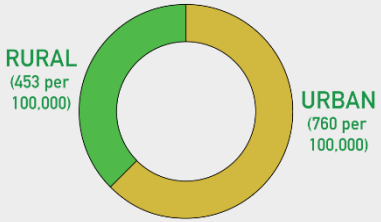
40%

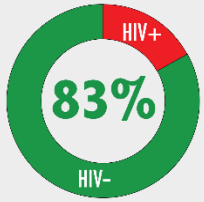
of TB cases remain undetected and untreated

2 People Most Affected by TB



809 males per 100,000 people





65+

3 Testing for Tuberculosis

- Current practice of TB symptom screening misses cases
- Chest x-ray emerged to be a good screening test for TB
- Use of microscopy for diagnosis misses cases
- GeneXpert is a more reliable and efficient test

4 Health Seeking Behaviour

- Individuals with symptoms of TB in the community are not seeking care
- People with TB symptoms first seek health care at either public or private health facilities
- Three quarters of the people with TB symptoms who seek care do not get diagnosed/are missed
- A quarter of those found to have TB did not report any TB symptoms

TB Prevalence Survey Partners

The Global Fund
To Fight AIDS, Tuberculosis and Malaria

World Health Organization

USAID
FROM THE AMERICAN PEOPLE

TB ARC
Accelerated Response and Care

EXPAND-TB

World Health Organization | FIND Because diagnosis matters | gli | Stop TB Partnership GLOBAL DRUG FACILITY | UNITAID

KNBS
KENYA NATIONAL BUREAU OF STATISTICS
Keeping you informed

CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

KENYA MEDICAL RESEARCH INSTITUTE
KEMRI