

NEPAL NATIONAL TB PREVALENCE SURVEY BRIEF

# TB BURDEN IN NEPAL

Around, one hundred and seventeen thousand, **117,000 (88,000 – 145,000)** people with TB disease are living in Nepal today.

**Urgent action is required to accelerate TB response in Nepal #to END TB#**

Around sixty-nine thousand, **69,000 (41,000 – 103,000)** people developed TB in 2018. TB burden is much higher, almost 1.6 times higher than previously estimated.

National TB prevalence survey (2018–2019) suggested significant impact of efforts on TB epidemiology in Nepal, that had led to an estimated annual reduction of TB incidence by **3%** in the last decade.

This decline is better than the global annual decline rate of **1.5%–2%**. However, this decline needs to be further accelerated to meet the End TB targets.

## NATIONAL TB PREVALENCE SURVEY, 2018-19

Nepal's first-ever high quality and innovative TB prevalence survey was carried out using WHO recommended methods, with systematic use of digital X-ray and bacteriological examination using molecular technology (Xpert MTB/RIF). Locally developed software was used for overall data-management in the survey. This survey was labelled as one of the high-quality TB prevalence surveys by international experts and members of the WHO Task Force on TB Impact Measurement. The country now has a better understanding of the TB disease burden based on evidence from this survey.

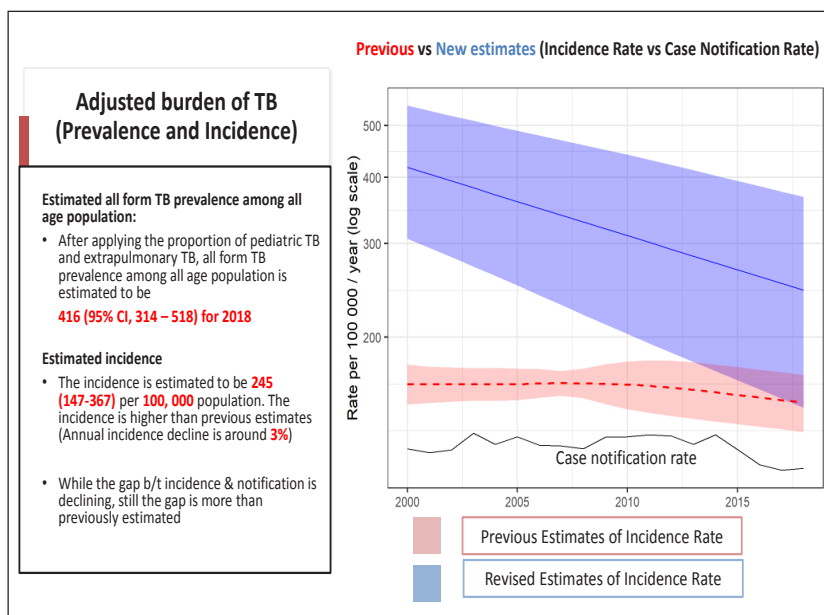
## TB SITUATION IN NEPAL

From the study findings, the revised estimates of TB burden in Nepal for 2018 are:

- **Prevalence: 416 (314 - 518)/ 100,000**, around **117,000 (88,000 – 145,000)** people with TB disease are living in Nepal
- **Incidence: 245 (147 - 367)/ 100,000**, around **69,000 (41,000 – 103,000)** people developed TB disease in 2018

In addition to higher annual incidence decline by 3%, TB prevalence increased with increasing age group (highest in >65 years). This is a good sign of TB epidemiology in Nepal and might suggest a significant improvement in the TB programme's long-term efforts to control TB.

Majority of TB patients are in the productive age group (25–64 years), as the country's



population is still young and TB prevalence among men is twice or more than in women.

## GLOBAL POSITION

The upward revision of the TB prevalence in Nepal is similar to other countries in the region which have completed a similar survey such as Bangladesh (2015–2016), Indonesia (2013–2014), the Philippines (2016), and Myanmar (2018).

Nepal's first prevalence survey was carried out efficiently with the multi-partners' involvement under the strong leadership of the Government of Nepal. The findings have enabled the country to accurately estimate the true burden of TB disease. The country needs to accelerate TB response through appropriate strategic interventions and increased investments to reach the End TB targets.

## SCREENING

Out of 99 clusters, there were 79 clusters (80%) identified at least one TB case and few clusters had as many as 9-12 cases. This might indicate that TB cases may be widely distributed in Nepal with some hot spot areas.

Of the TB cases, more than 70% had no reported symptoms but showed abnormal chest X-ray. This highlights the importance of use of digital X-rays as a screening tool and not to only rely on symptom screening alone to increase TB case detection.

## ACCESS TO CARE

Among participants who had cough for 2 weeks or more, around 31% sought medical treatment in government facilities, around 14% in private facilities and around 39% did not seek any care or treatment. The proportion was higher among women, working-age group, rural, mountains, and poor groups. This is of great concern and access to care in such areas among vulnerable groups needs to be improved.

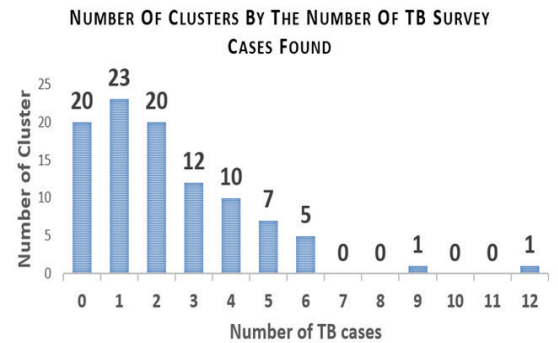
Majority (66%) of the participants with current and past TB history, chose government health facilities as the first choice for diagnosis. Around 23% chose private health facilities, and around 11% were diagnosed from outside countries (cross border). Those who were diagnosed outside were mostly men in the productive age group.

This shows good trust in government health services but may also indicate a lack of alternative services that people can access. This is an opportunity to improve access to quality TB diagnosis, care, and treatment in the public facility, and also, an opportunity to complement government health services with regulated private sectors.

More than 80% of the participants with TB treatment history admitted that the treatment was taken either under the supervision of health workers at the health facilities or taken at home under supervision with frequent visits to the health facilities. Only less than 10% took treatment without observation. This indicates that, for those who were diagnosed and started on treatment, the quality of care is acceptable. However, high prevalence of TB in older age groups (>65 yrs.) also suggests poor access to TB service by elderly population and long delay. As they are often care givers to the grandchildren, TB in elderly should be addressed adequately.

## Clusters with TB Cases

- 79 clusters with at least one TB case.
- 38 clusters – terai
- 28 clusters – hills
- 7 clusters – mountains
- 6 clusters- Kathmandu
- 1 Cluster → 12 TB cases (highest)



## FIVE PRIORITY ACTIONS TO ADDRESS THE TB BURDEN IN NEPAL TO MEET THE END TB TARGETS

### 1. Ensure high-level political commitment to END TB.

- TB burden is much higher than previously estimated. While productive age groups are most affected, there is also high TB prevalence among older age groups of > 65 years of age. It is essential to mobilize other sectors beyond health such as industries, education, finance, private sectors, communities, etc. for coordinated and joint efforts to End TB.
- Underpin and sustain the TB and MDR-TB response through high-level political commitment, strong leadership across multiple government sectors, partnerships and adequate investments in TB.

### 2. Improve access to high-quality TB service in public sectors and expand services at all levels.

- Ensure early detection and quality treatment of TB to prevent further infection to others and development of drug resistance TB.
- Ensure better access to more sensitive screening and diagnostic tools such as chest X-ray and (Xpert ® MTB/RIF). Roll out of (Xpert ® MTB/RIF) tests will also facilitate early detection of MDR-TB.

### 3. Engage the private sector in provision of high-quality TB services

- Improve roles of the private sector and hospitals in TB control to deliver high quality TB care and services.
- Implement mandatory case notification which is essential to provide patients and their families with appropriate supports including social support and contact tracing.

### 4. Increase awareness and create demand for quality TB services

- Empower communities with proper knowledge of TB and generate demand for quality TB services.
- Address TB problem among migrants by conducting appropriate screening and care where necessary

### 5. Ensure increased investment in TB, both financial and human resources, to meet the Global commitment to END TB

- Commit to increase domestic investment for TB.
- Advocate for increased donor investment for TB.
- Ensure adequate human resources at all levels for high quality TB service delivery
- Ensure NO out of pocket expenditure by TB affected families and
- Repeat TB- prevalence survey to compare trends to see actual impact of programme interventions in next 8-10 years' time.



Government of Nepal  
Ministry of Health and Population  
**National TB Control Centre**

#### PARTNERS

World Health Organization (WHO)  
Save The Children/TGF  
Research Institute of Tuberculosis (RIT) Japan  
LHL International

Damien Foundation  
INTREPID Nepal  
JANTRA  
NTCC, GENETUP/NATA, IOM Laboratories