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# Provision of TB Care In the Context of Large Geographical Distances: the Experience of Kazakhstan.

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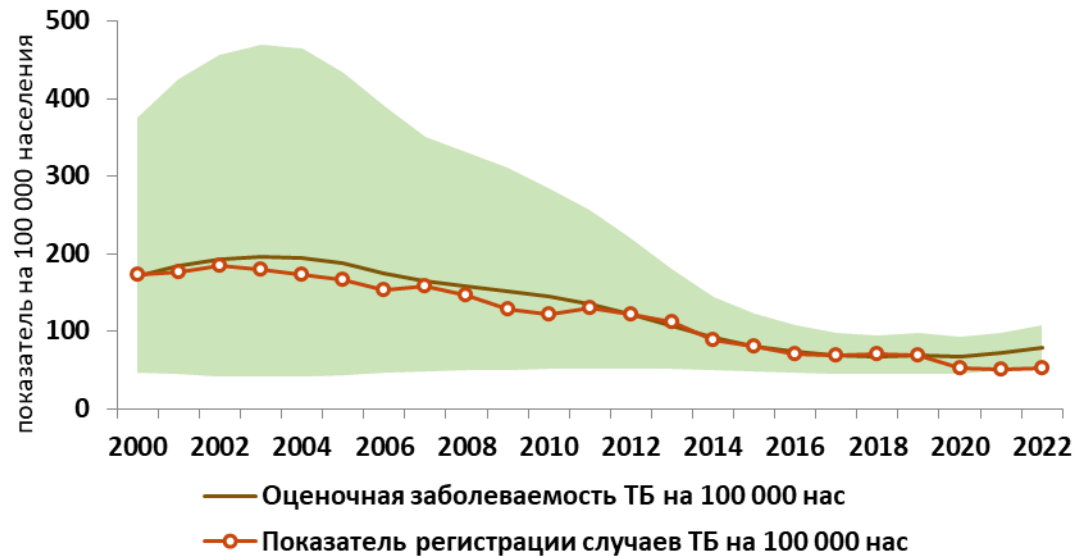
European Region



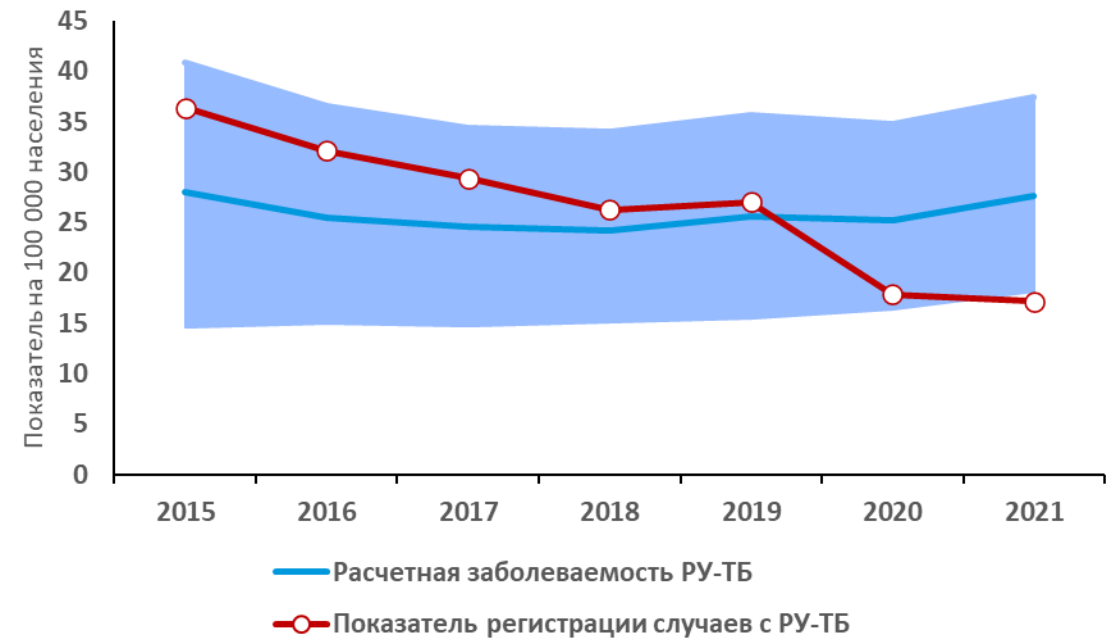


# Case Notification and Estimated TB Incidence Rates in Kazakhstan

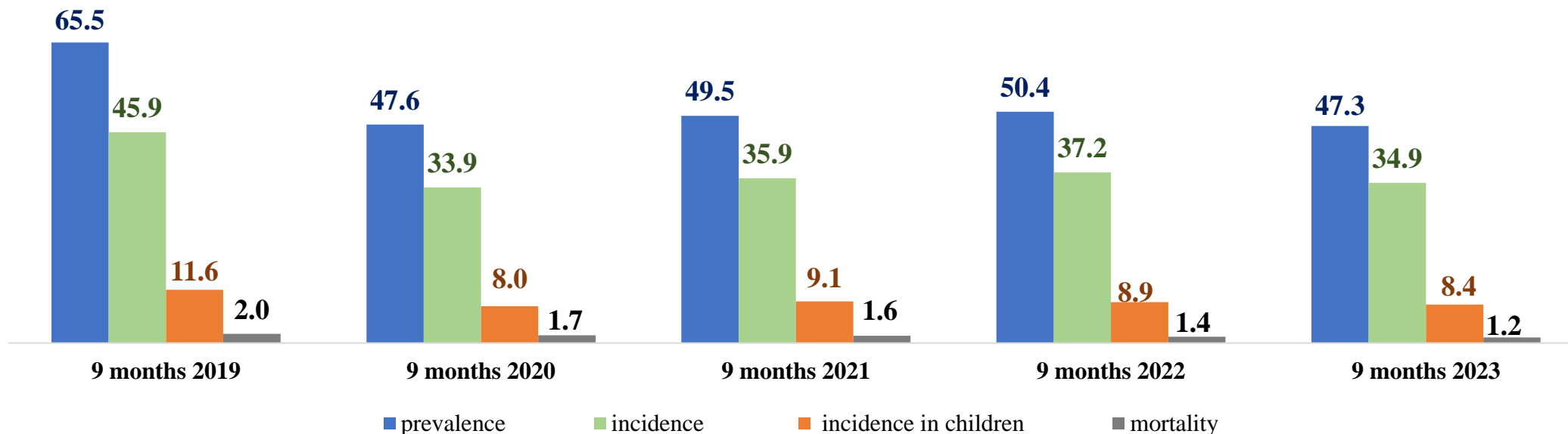
## All TB cases



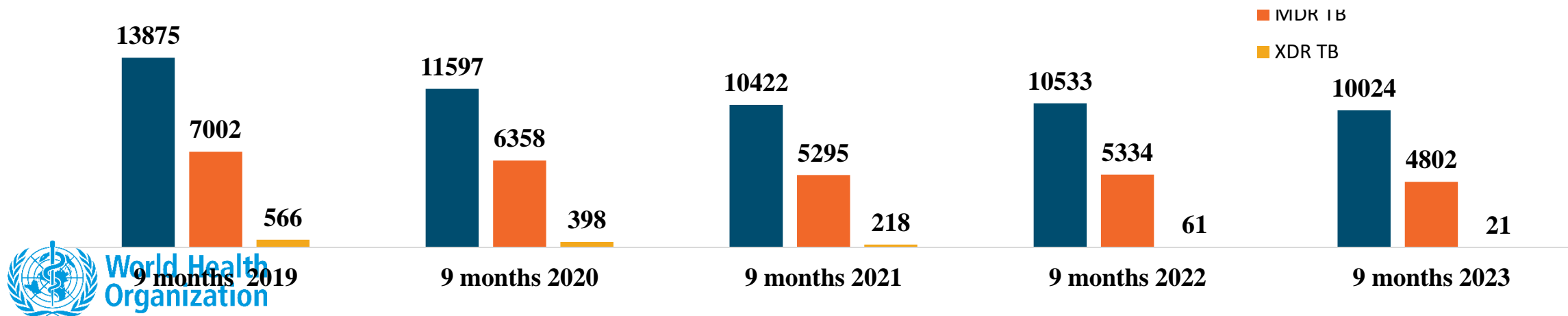
## RR-TB cases



## Incidence, incidence and mortality in children (per 100,000 population)

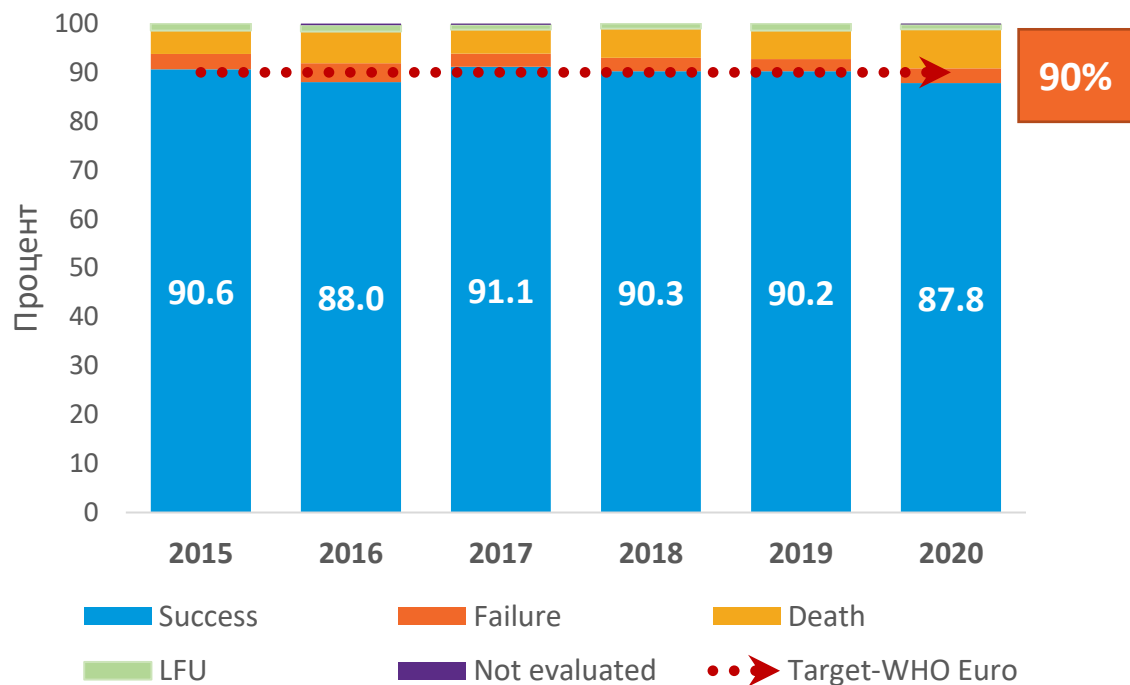


## Prevalent TB cases in the RK by the end of the reporting period

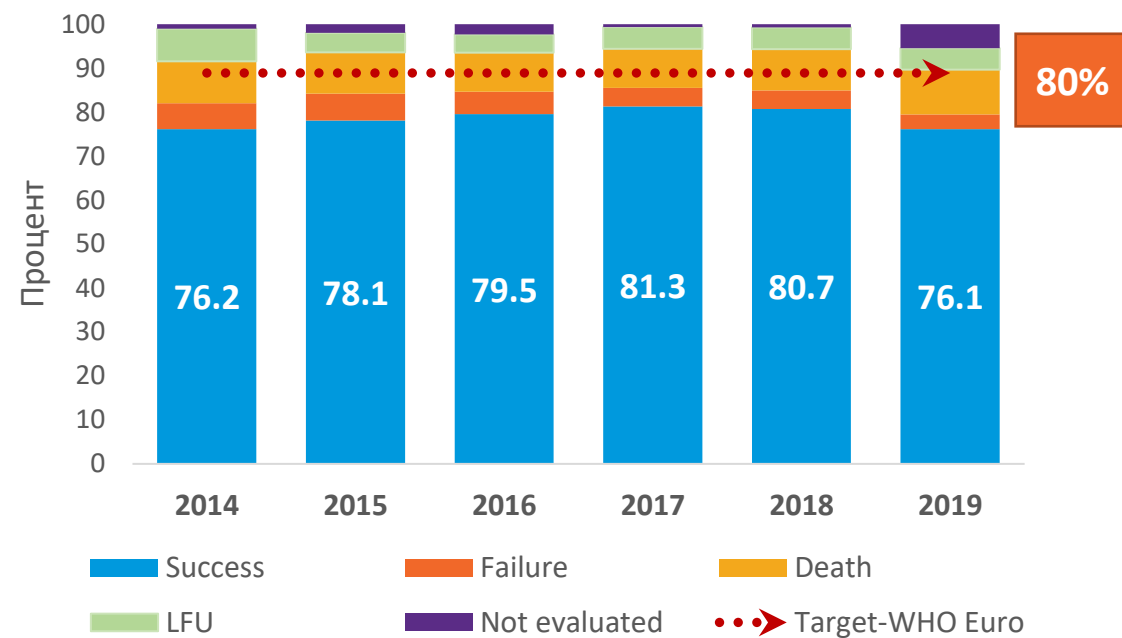


# TB Treatment Outcomes in Kazakhstan

## New cases and relapses, 2015-2020 cohorts



## RR/MDR-TB cohorts, 2014-2019

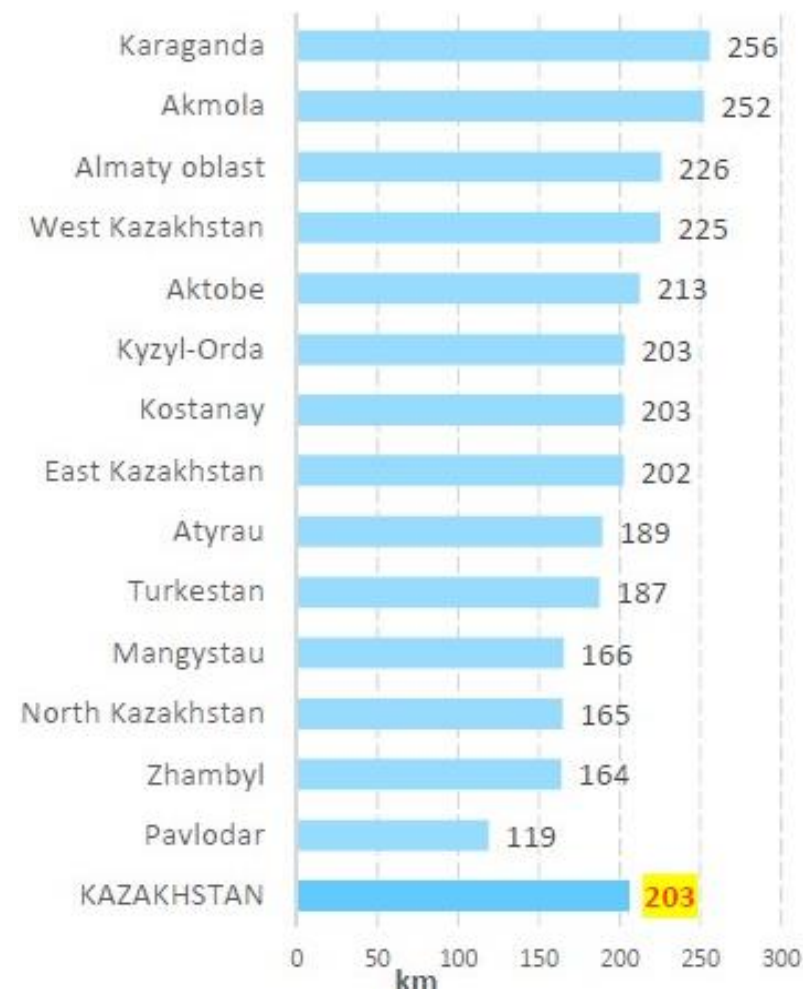


## Average Distance From the District Center to the Center of the Region, km

In Kazakhstan, the average distance from district centers and small towns to regional (oblast) centers is  $203.3 \pm 140.4$  km. Only 11.5% of basic TB treatment facilities are located within 50 km of regional centers, while three quarters of the BTFs (135 out of 182, or 74.2%) are located more than 100 km from regional centers, and for 79 districts (43.4%) the distance exceeds 200 km.

Each regional center has a Center for Phthisiopulmonology, city polyclinics, central district polyclinics and hospitals. In each village, there is a rural outpatient clinic and in remote areas a feldsher-obstetric unit.

### Казахстан (2017)





# TB Detection and Diagnosis in Kazakhstan

Early TB case detection is performed by healthcare workers of all specialties in health care organizations, regardless of their form of ownership, when people seek care in primary health care and inpatient facilities, as well as during mandatory and preventive medical check-ups. Outpatient TB care is provided by primary health care facilities and clinical diagnostic departments of the centers of phthisiopulmonology. Inpatient care is provided by regional centers of phthisiopulmonology and NSCP.



# Detection and Diagnosis

Centers of phthisiopulmonology in each of the regional centers have LPA, Bioner, Xpert XDR, and Bactec for molecular drug susceptibility testing and rapid bacteriological examination.

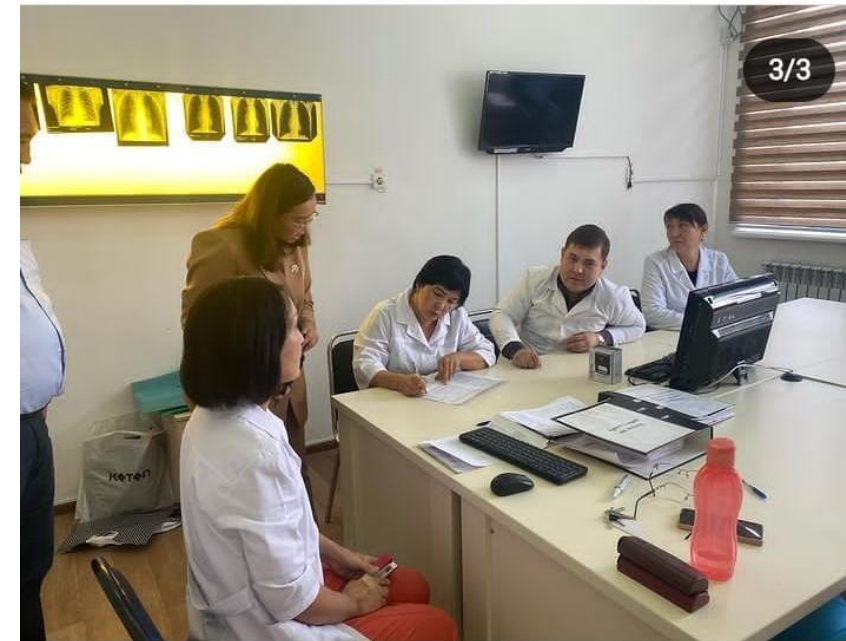




# Centralized Medical Advisory Commission

TB diagnosis is made by CMACs of the regional centers of phthisiopulmonology.

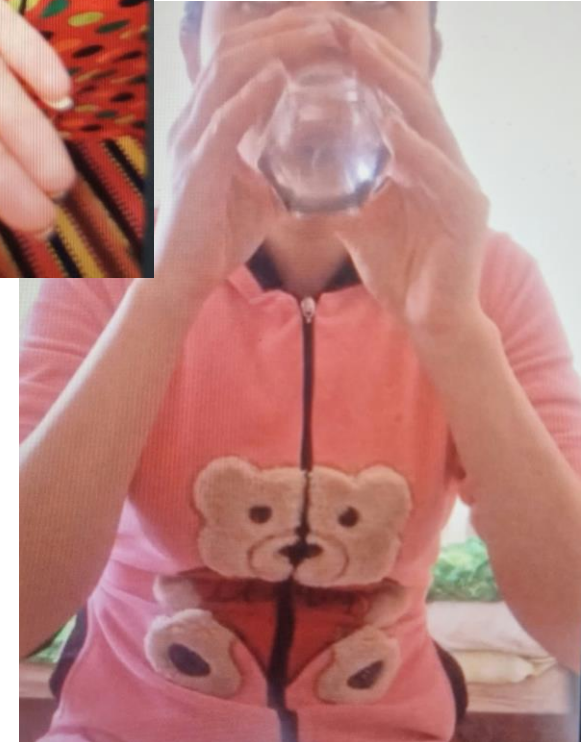
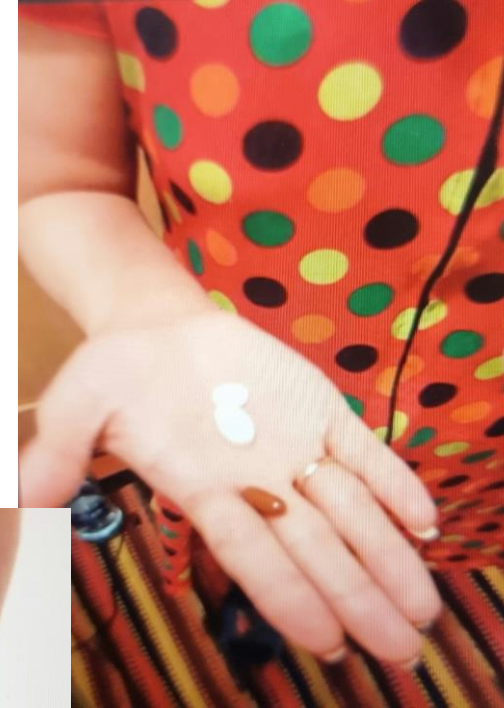
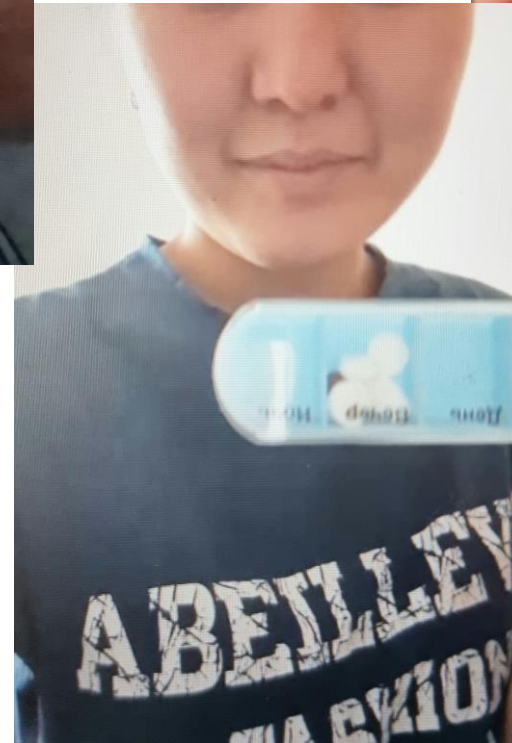
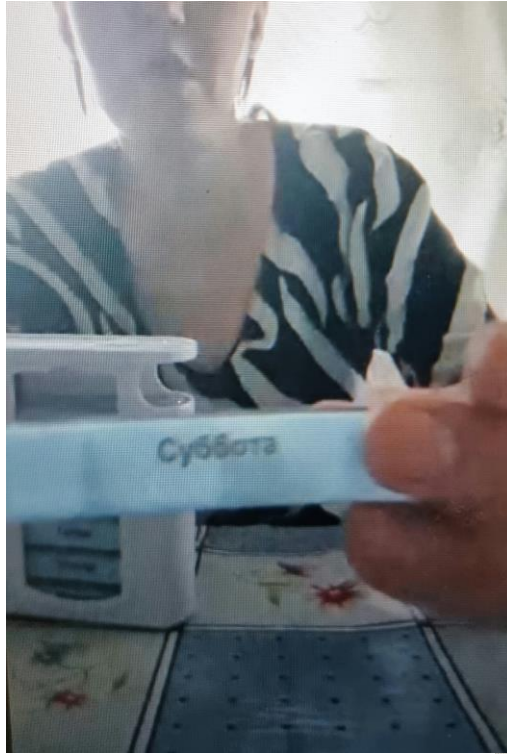
All remote regions present cases to the CMAC online. In the cities, the procedure is performed offline.



# TB Treatment in the Republic of Kazakhstan

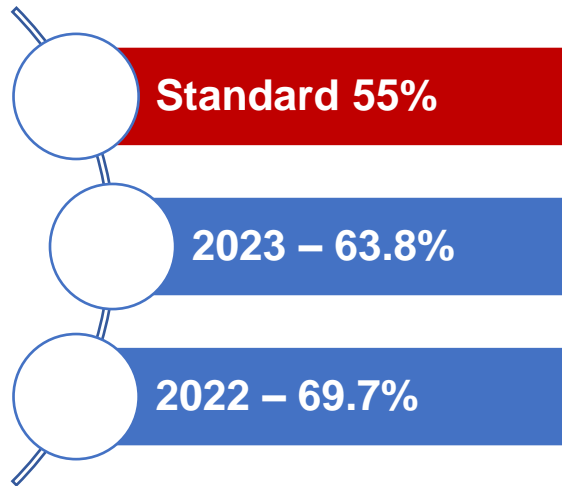
TB treatment: All infectious TB patients, patients with adverse anti-TB drug reactions and disadvantaged patients with social indications are hospitalized. Non-infectious patients start treatment as outpatients at the PHC level.

1. DOT in the nurse's office
2. Home-based treatment
3. Video-supported treatment





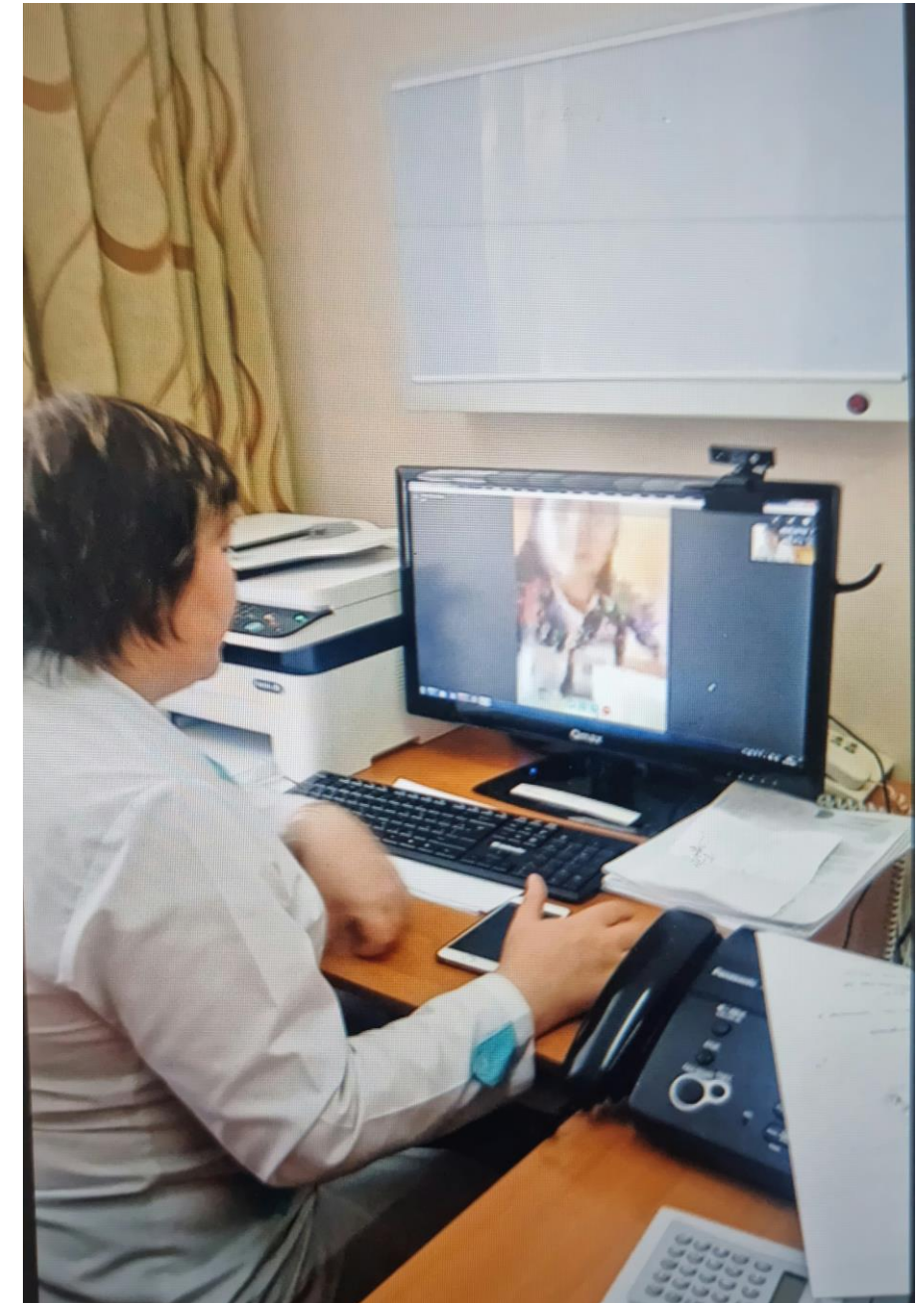
## The proportion of TB patients on outpatient treatment, 9 months 2022-2023.



### VST coverage:

9 months 2023 – 36.9%

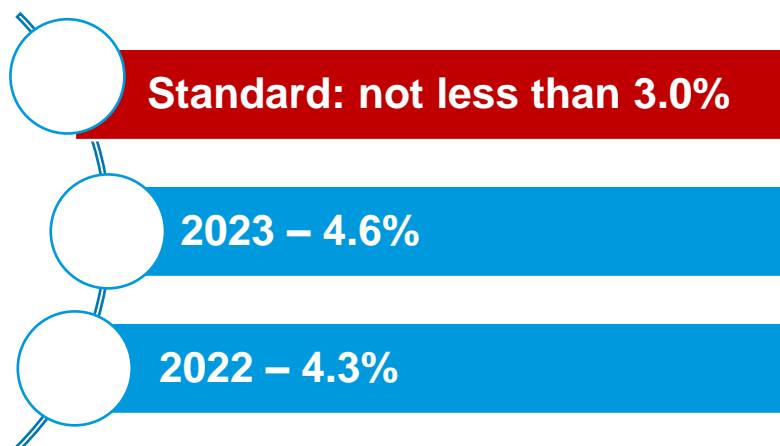
9 months 2022 – 42.3%



# Social Support For Patients

The percentage of financial resources allocated for social support for TB patients, %

Total funding in Kazakhstan (local budget): **9 months 2023 - 1 692 439 tenge** **9 months 2022r. - 1 394 383 tenge**



- In the first 9 months of 2023, NGOs have:
- ✓ informed **37,920 people** from the target groups
  - ✓ detected **310** active TB cases
  - ✓ examined **400** contacts
  - ✓ returned back to treatment **170** defaulters with active TB

TB state social contracting tenders were held in 9 regions:

- ✓ Astana - 26,700,000 tenge
- ✓ WKR - 18,202,000 tenge
- ✓ Mangistau region - 15,000,000 tenge
- ✓ Pavlodar region - 16,000,000 tenge
- ✓ Kostanay region - 18,000,000 tenge
- ✓ Atyrau region - 3,989,000 tenge
- ✓ Zhetisu region - 3,150,000 tenge
- ✓ SKR - 10,000,000 tenge
- ✓ Aktoobe region - 17,000,000 tenge

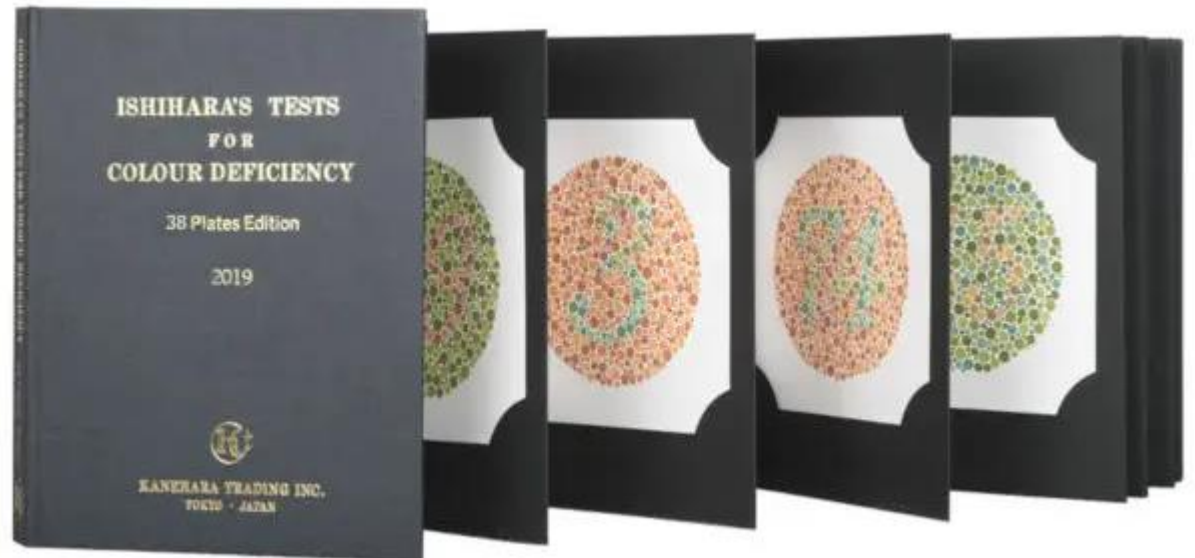
As of 01.10.2023, a total of **128,127,000 tenge** have been allocated from the local budget for NGO state social contracting in TB.

# Patient Clinical Monitoring

Monthly examinations of patients are conducted by district TB physicians, and all samples are taken and tested locally at PHC facilities; in remote areas, if there is no laboratory, samples are sent to district centers.



European Region





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Спасибо!  
Thank you!