




# Modern features of TB diagnosis and treatment in Kazakhstan



**Sputum Smear microscopy**



**Xpert MTB Rif**  
59 machines  
+ 41 machines (in 2019)




**LPA**  
23 machines



**BACTEC**  
21 machines

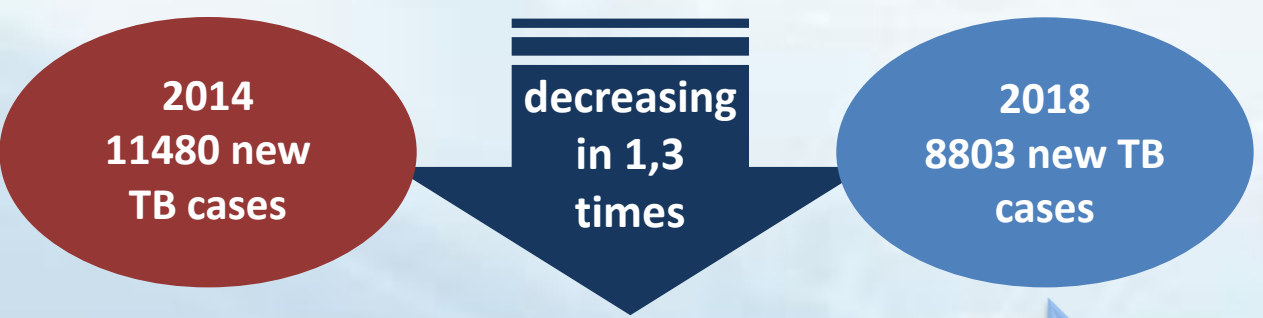


**Tuberculin test**  
**Diaskintest**  
**T-Spot.TB**



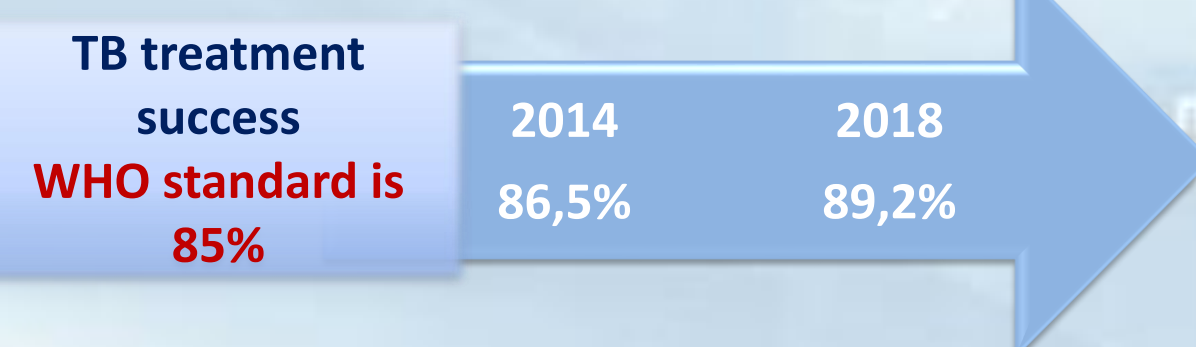
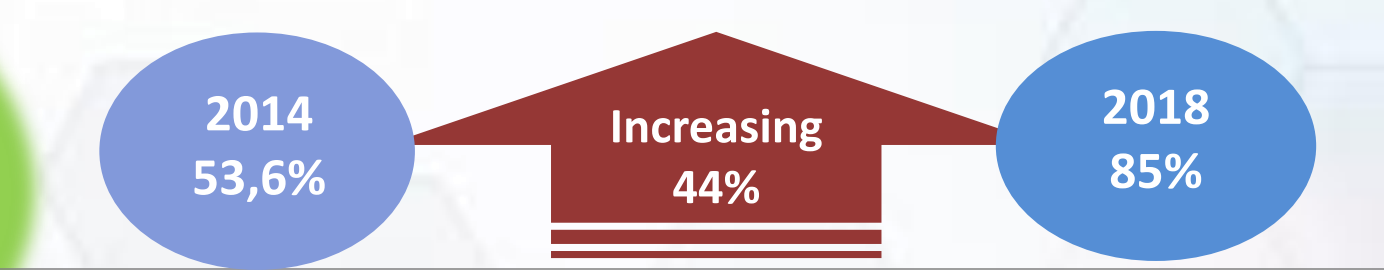
**Fluorography**  
**X-Ray**  
**CT scan, MRI**

## New TB cases



During the period of 2014-2018 we saved 74 000 lives in Kazakhstan

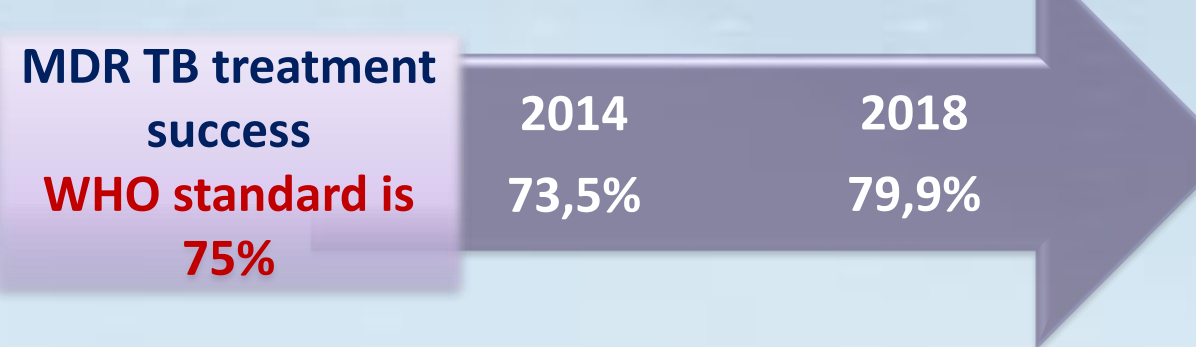
## The coverage of molecular-genetic diagnostic methods of TB (Xpert MTB Rif), %



New TB drugs for M/XDR-TB  
The increasing the range in 3,7 times

**TB treating in Kazakhstan is the most effective in the World (WHO)**

- 2016 End TB is **675 patients**
- 2018 Global foundation **1280 patients**
- 2019 State budget **2554 patients**



## TB Mortality

