

The 38th Union World Conference on Lung Health
of the International Union Against Tuberculosis and Lung Disease (The Union)
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**"Experience with routine MDR surveillance
systems in Kazakhstan, a low-income, high-
prevalence country.
What can we learn?"**

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Republic of Kazakhstan



- Population– 15,700,300
- Surface – 2,724,900 km²
- Population density – 5.5 per 1 km²
- Regions: 14 oblasts, 2 capitals

DOTS and DOTS Plus Programs implementation in Kazakhstan

- **Since 1999 has been started DOTS implementation for whole country**
- **Since 2001 DOTS Plus has been implemented region by region**
- **Since 2003 the Ministry of Health has declared that DOTS and DOTS Plus Programs implemented countrywide**

Routine MDR TB surveillance system in Kazakhstan

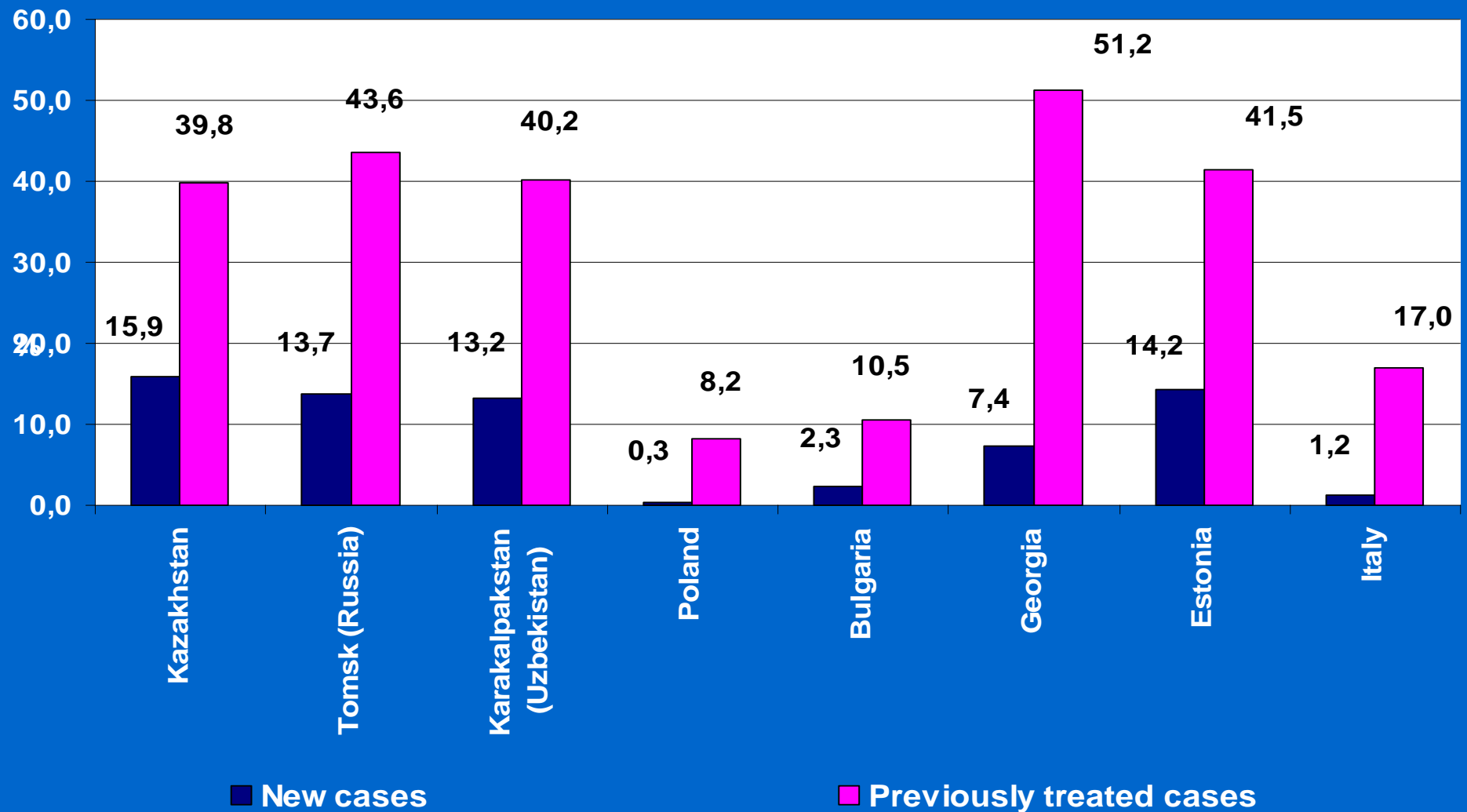
Network:

- NRL has been regularly certified by NRL in Borstel (Germany) – for I line TB drugs (for SLD was not certified yet)
- Countrywide DST lab network – 16 regional labs (for I line)
- Regional labs have been regularly certified by NRL (for I line)

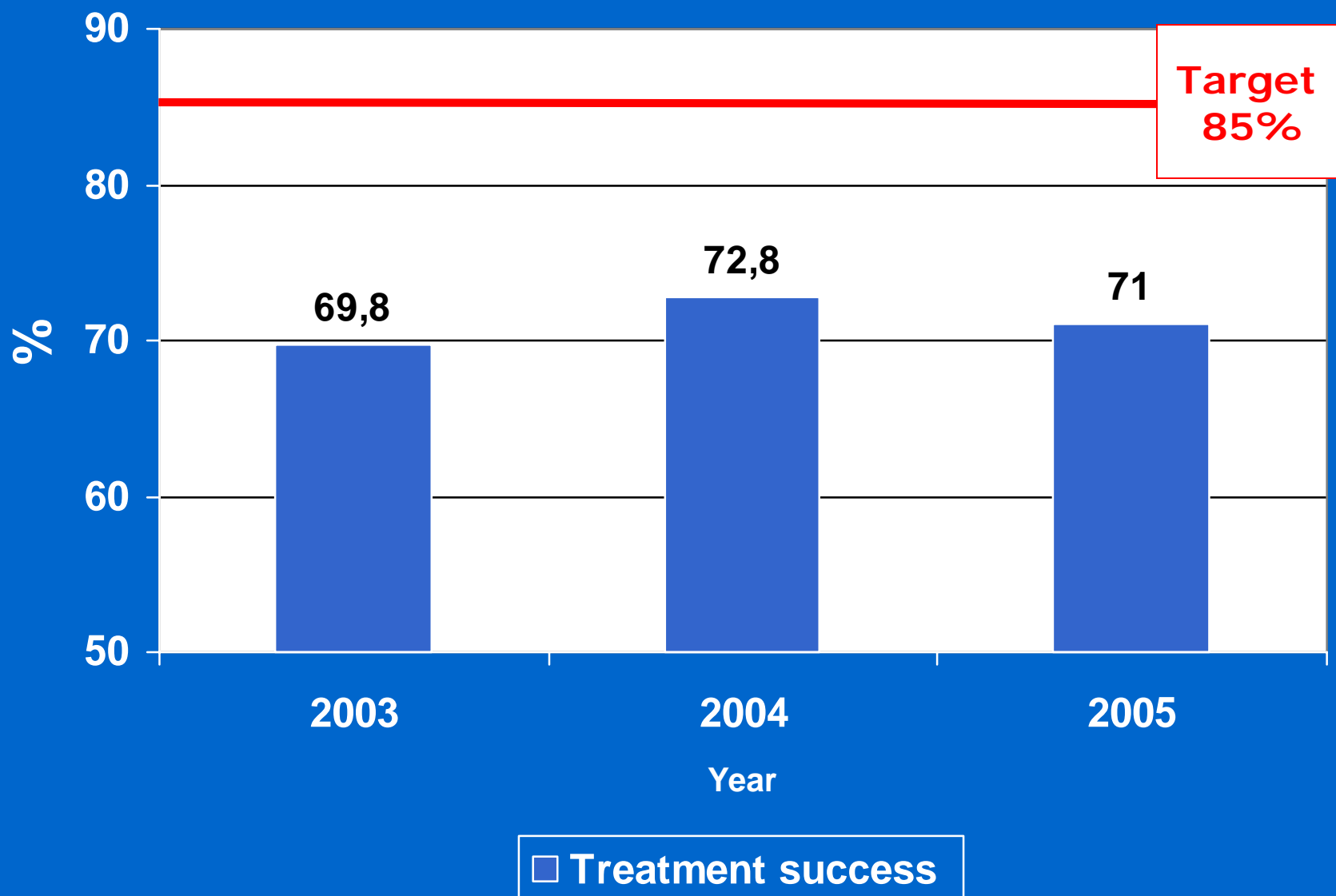
Coverage:

- All new TB cases
- All re-treatment TB cases
- Chronic smear positive TB cases

MDR TB prevalence among WHO European region countries, 2004



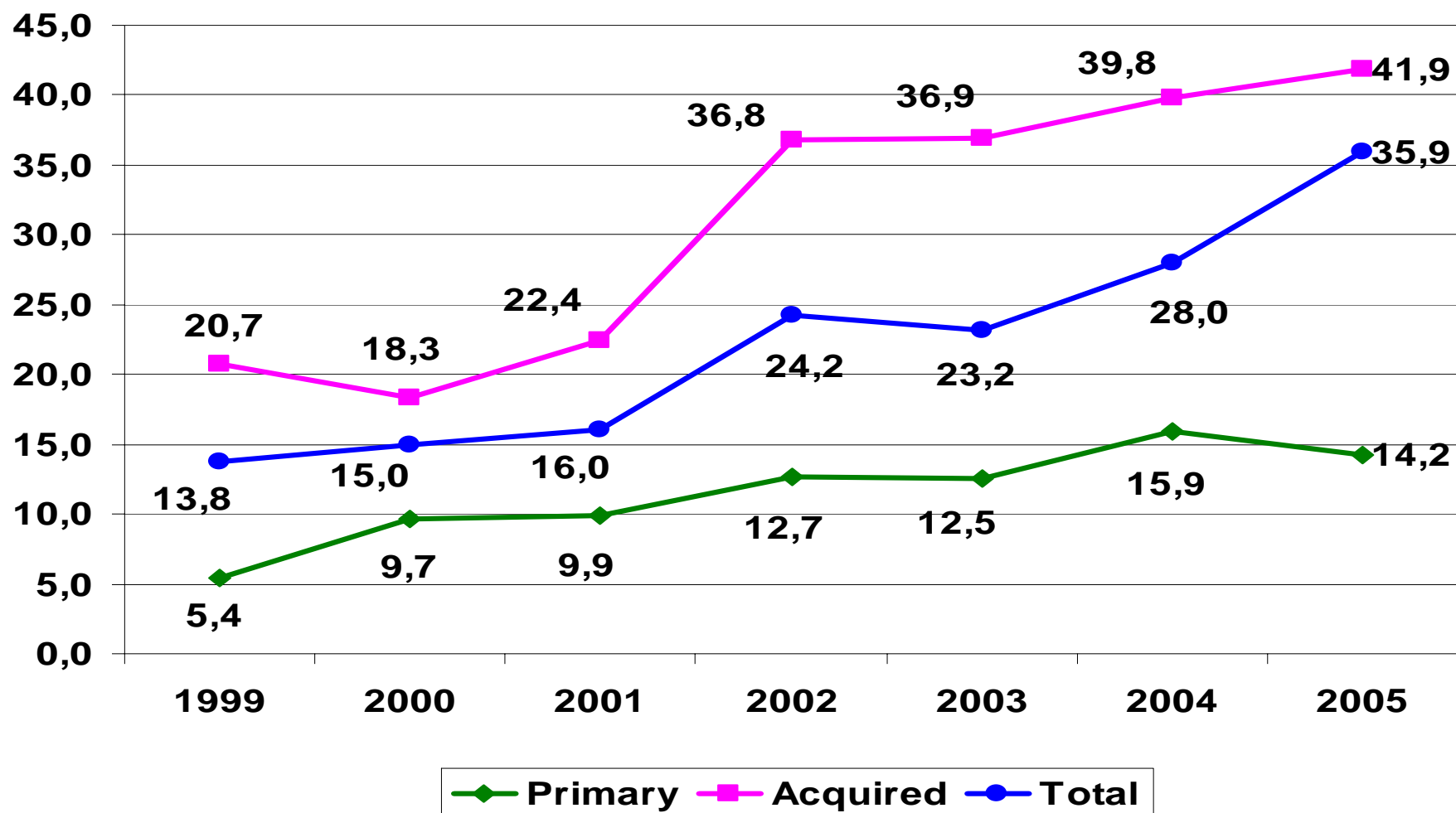
Cure rate among new TB smear positive cases in Kazakhstan, 2003-2005



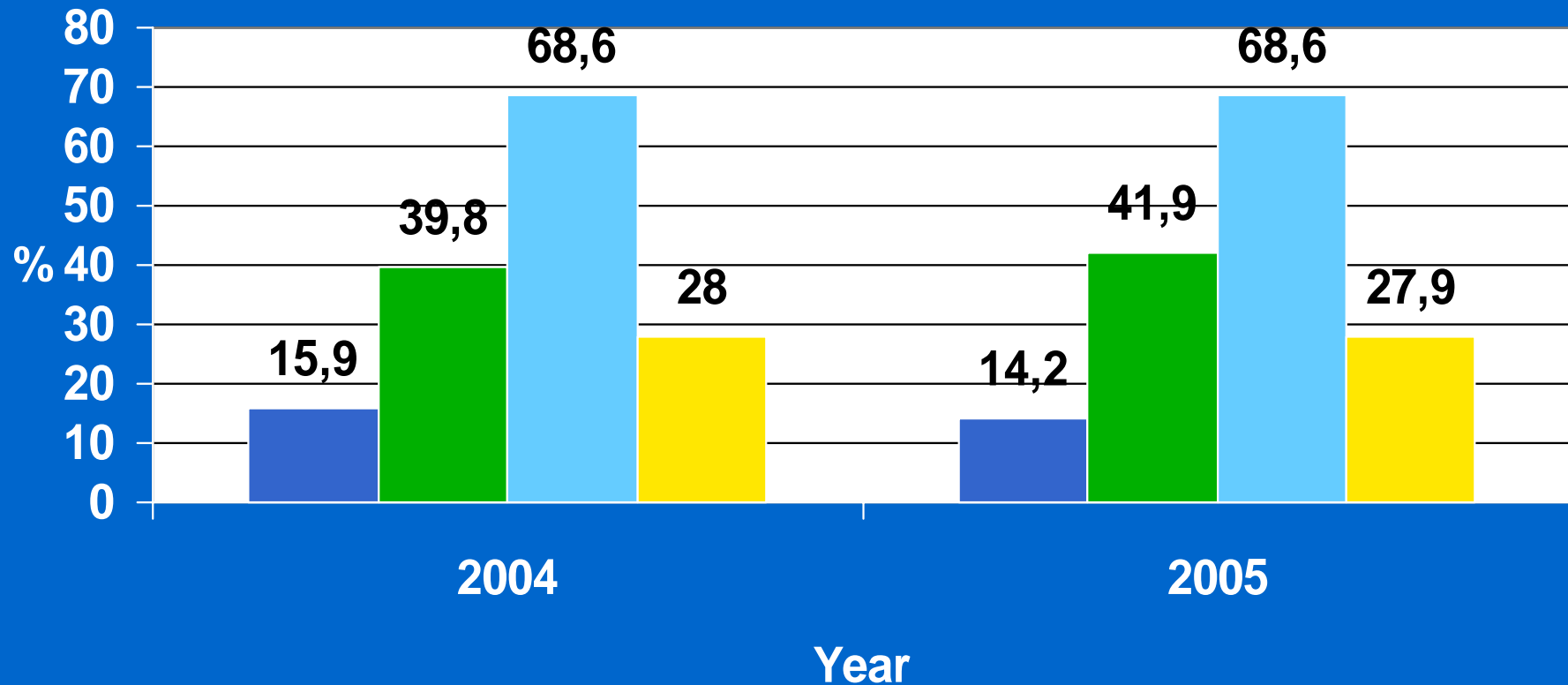
Main causes contributed to the MDR TB creation in Kazakhstan

- **Poor DOT performance particularly at PHC level**
- **Wrong forecast of estimated MDR TB patients enrolled to treatment and insufficient quantity of procured SLD**
- **Interruption of SLD supply and lack of buffer stock**
- **Lack of unified strategy on TB chronics case management**
- **Intrahospital contacts of susceptible TB patients with MDR TB (nosocomial MBT transmission) due to insufficient infection control (ventilation) measures**

Dynamics of MDR TB prevalence in Kazakhstan, 1999-2005

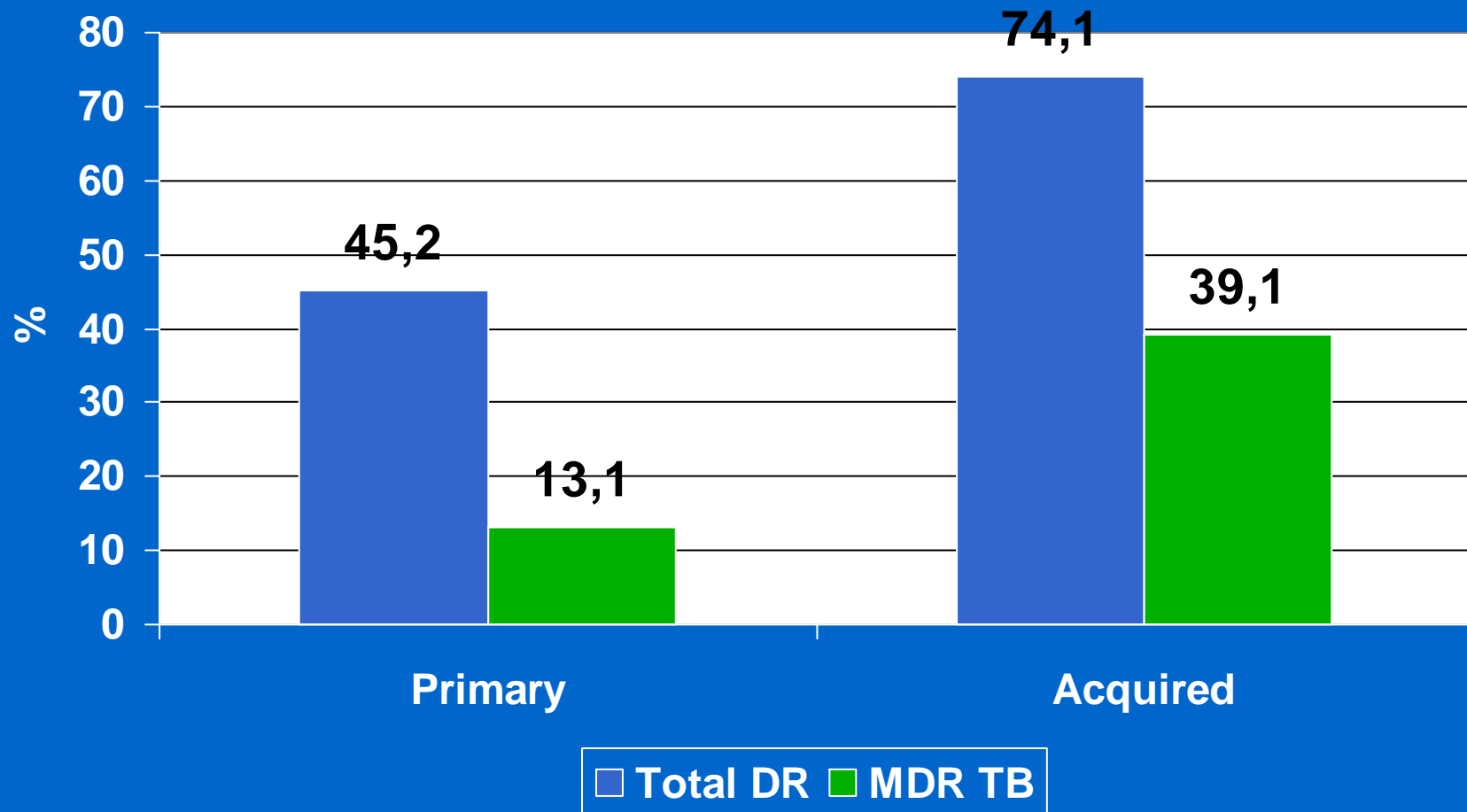


Number of MDR TB patients in Kazakhstan, 2004 - 2005



■ New cases ■ Re-treatment cases ■ Chronics ■ Total

Prevalence of DR TB in Kazakhstan, 2006



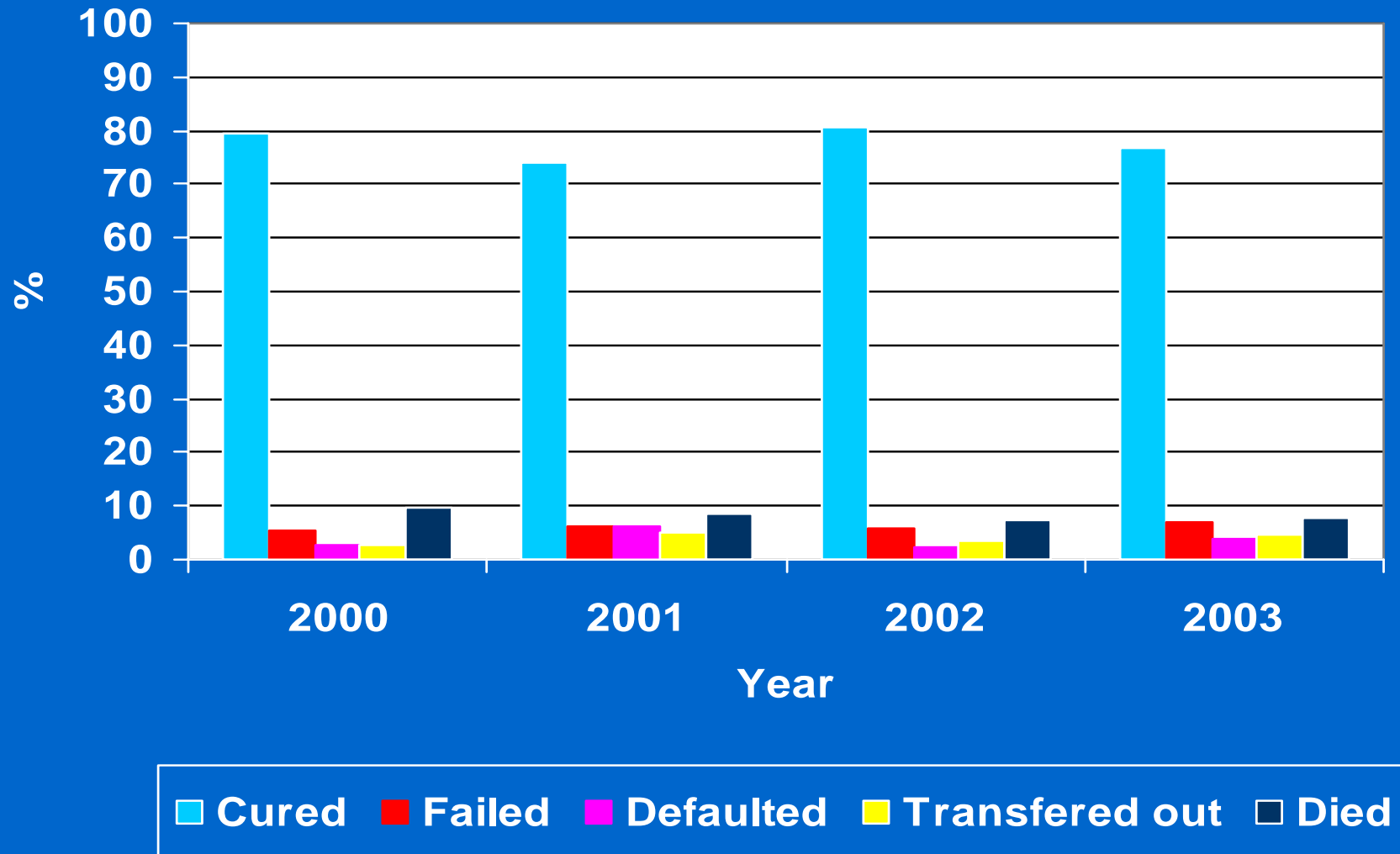
Number of MDR TB patients registered in Kazakhstan, 2006

Patients	Number	%
Total	6470	100
New cases	1362	21,1
Re-treatment cases	2612	40,4
Chronics	2496	38,5

Number of MDR TB patient enrolled to treatment in Kazakhstan, 2006

Patients	Number	%
Total	1406	21,7
New cases	326	23,2
Re-treatment cases	727	51,7
Chronics	353	25,1

DOTS Plus program treatment outcomes in Kazakhstan, 2000 – 2003



Conclusions - I

- **Development and implementation of integrated, interagency long-term state program on TB control and development of new revised orders on TB and MDR TB Control in compliance with international standards**
- **Performance of DOT protocol and providing social support for TB patients**
- **Improvement of SLD management in order to ensuring the uninterrupted drug supply and quality control**
- **Timely MDR TB diagnosis (ubiquitous coverage of quality DST testing for all TB patients)**

Conclusions - II

- **Timely treatment of MDR TB patients (uninterrupted SLD supply, buffer stocks and to give priority for patients with primary MDR TB)**
- **Improvement of infection control and installation of modern ventilation systems in order to prevent intrahospital (nosocomial) MBT transmission**
- **Utilization of international partners experiences on SLD procurement through the GLC mechanism in order to admit for treatment more number of MDR TB patients by drugs of guaranteed quality**

Thank you!

