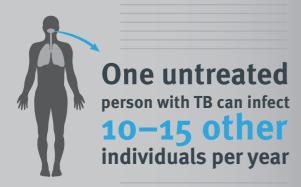
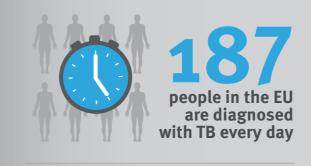
The burden of MDR TB

Tuberculosis (TB)

is a serious and sometimes lethal infectious bacterial disease which most commonly affects the lungs. It is usually caused by Mycobacterium tuberculosis





TB cases decreased 5% over the last 5 years

Notifi 16.6	15.8	15.0	14.3	tion
2008	2000	2010	2011	2012

MDR TB

Multidrug-resistant tuberculosis

Patients with MDR TB do not respond to standard treatment (isoniazid and rifampicin)



Around cases are reported in the EU every year



Drug resistance is a man-made phenomenon caused by:

- Poor quality drugs - Unfinished treatment - Inadequate use of drugs



MDR TB treatment causes substantial side effects like vomiting, deafness, blindness, depression and fatigue



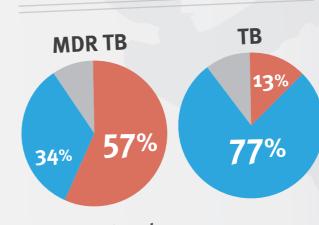
To treat TB it takes at least

months and 4 different drugs

To treat MDR TB it takes at least

months with on average 8 drugs

Europe fails to treat MDR TB



Treatment

successful not successful unknown



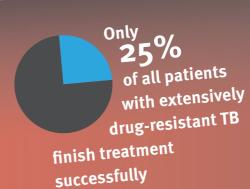
Costs for treatment of multidrug-resistant TB are higher than for TB

Average cost per MDR TB case in the EU, 2012:

33 000 €

Diel R et al., Costs of tuberculosis disease in the European Union: a systematic analysis and cost calculation. Eur Respir J. 2014;43(2):554-65.







Extensive drug resistance

XDR TB is resistant to even more drugs than MDR TB and therefore extremely difficult to treat