

## LATE-DIAGNOSED HIV AND TUBERCULOSIS TREATMENT OUTCOMES

The prevention and management of infectious diseases such as the Human Immunodeficiency Virus (HIV) and tuberculosis remain a high priority in many European countries. The EU is committed to play an important role in achieving target 3.3 of the United Nations' Sustainable Development Goals, which is to end the epidemics of Acquired Immunodeficiency Syndrome (AIDS), tuberculosis and other communicable diseases by 2030 (European Commission, 2018).

Although HIV is preventable through effective public health measures, significant HIV transmission continues in Europe with nearly 30 000 newly-diagnosed cases reported in EU countries in 2016. In some countries such as Latvia and Malta, rates of HIV transmission have increased in recent years (see indicator "New reported cases of HIV/AIDS and tuberculosis" in Chapter 3).

HIV weakens the human immune system, leaving those affected vulnerable to infections and other health issues including tuberculosis or hepatitis C. The most advanced stage of HIV infection is AIDS. Early testing for HIV allows infected individuals to be put on treatment quickly leading to earlier viral suppression, thus allowing them to continue to live a normal life and to avoid infecting others.

Figure 6.25 shows the percentage of late diagnosis among newly diagnosed HIV cases in 2016. The Czech Republic, the Slovak Republic and Belgium report the lowest proportion of late diagnosis cases among newly diagnosed HIV infections, with percentages of 18% or less. The proportion in Romania, Greece, Italy, Lithuania and Malta is two-times greater (at 36% or more). The high rates in some countries suggest that screening and testing services need to be substantially improved to identify and treat HIV cases earlier, particularly among at-risk populations.

Tuberculosis also remains an important public health issue in some European countries. Although the number of new cases of tuberculosis has generally declined over the past decade, further efforts are needed to prevent the spread of this disease in some countries (see indicator "New reported cases of HIV/AIDS and tuberculosis" in Chapter 3).

Figure 6.26 shows the percentage of new tuberculosis cases and relapses with successful treatment outcome after 12 months. Sweden, the Netherlands, the Slovak Republic, Romania and Bulgaria have rates of 85% or more of successful treatment outcomes, while Croatia has the lowest success rate. Success rates are driven by the availability of treatment programmes, patient adherence, and the proportion of multi-drug resistant tuberculosis infections.

Drug-resistant tuberculosis can occur when the drugs used to treat the condition are misused or mismanaged, including where people do not complete a full course of treatment, providers prescribe the wrong treatment or where proper treatments are not

available. Multi-drug resistant tuberculosis requires longer and more intensive treatment and is associated with lower success rates.

Figure 6.27 shows the percentage of newly diagnosis tuberculosis cases classified as being Rifampicin-resistant or multi-drug resistant. While a number of countries did not report any case, the Baltic countries (Estonia, Lithuania and Latvia) reported the highest proportions of multi-drug resistant cases in 2016.

### Definition and comparability

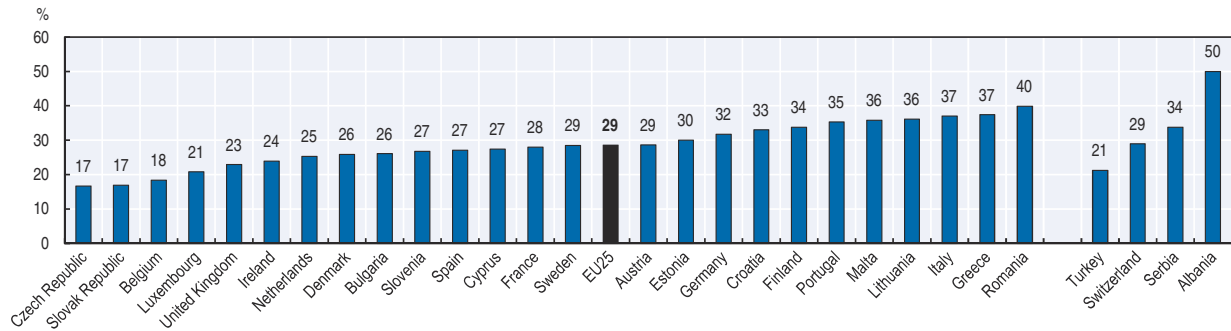
Late diagnosis of HIV cases is defined as patients with a CD4 cell count under 200 per mm<sup>3</sup> of blood at diagnosis (ECDC and WHO Regional Office for Europe, 2017). Surveillance systems for HIV are not identical across Europe and differences in data collection methods and testing policies can affect data comparability. Official reports of newly diagnosed cases of HIV do not represent true incidence. Newly reported HIV diagnoses include recently infected individuals as well as those who were infected several years ago but only recently tested for HIV. These reports are also influenced by several factors such as the uptake of HIV testing, patterns of reporting, the long incubation period and a slow progression of the disease.

New tuberculosis cases include patients who have never been treated for tuberculosis or have taken anti-tuberculosis drugs for less than one month. All pulmonary cases of tuberculosis have been bacteriologically confirmed. Successful treatment outcomes are defined as the sum of: 1) cured: a TB patient with bacteriologically-confirmed TB at the beginning of treatment who was smear or culture-negative in the last month of treatment and on at least one previous occasion; and 2) treatment completed, but does not meet the criteria to be classified as cure or treatment failure (a TB patient whose smear or culture is positive at month five or later during treatment) (ECDC, 2018).

### References

- European Commission (2018), *Commission Staff Working Document on Combatting HIV/AIDS, viral hepatitis and tuberculosis in the European Union and neighbouring countries – State of play, policy instruments and good practices*, EC, Brussels.
- ECDC and WHO Regional Office for Europe (2017), *HIV/AIDS surveillance in Europe 2017 – 2016 data*, ECDC, Stockholm.
- ECDC (2018), *Tuberculosis Surveillance and Monitoring in Europe 2018 – 2016 data*, ECDC, Stockholm.

### 6.25. Percentage of late diagnosis among newly diagnosed HIV cases, 2016

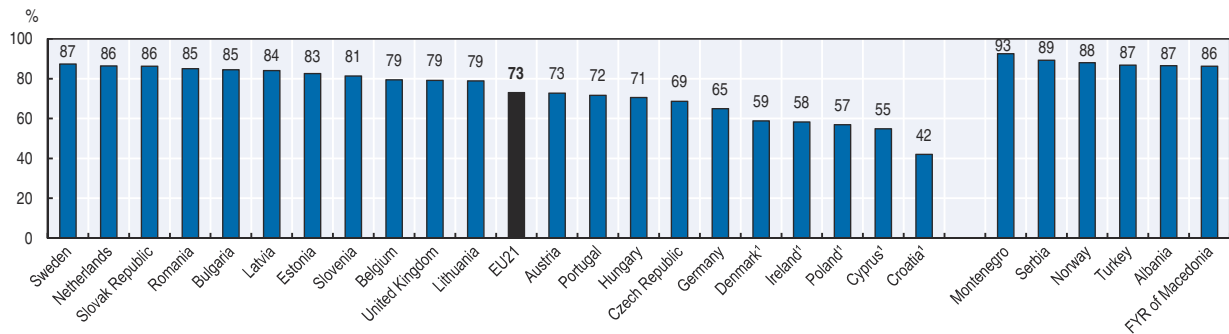


Note: Minimum of 30 HIV cases needed for inclusion. EU average unweighted.

Source: ECDC (2017).

StatLink <http://dx.doi.org/10.1787/888933836086>

### 6.26. Percentage of treatment success after 12 months of new TB cases and relapses, 2015



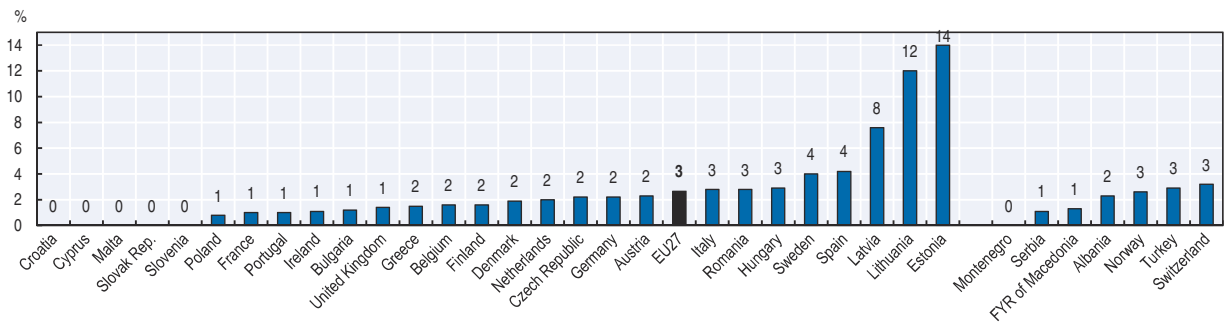
1. Three-year average.

Note: Minimum of 30 TB cases needed for inclusion. EU average unweighted.

Source: ECDC (2018).

StatLink <http://dx.doi.org/10.1787/888933836105>

### 6.27. Estimated percentage of notified new tuberculosis cases with multi-drug resistance, 2016



Note: Minimum of 30 TB cases needed for inclusion. EU average unweighted.

Source: ECDC (2018).

StatLink <http://dx.doi.org/10.1787/888933836124>



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