



# Tuberculosis situation in the EU/EEA, 2019

Findings from the joint report *Tuberculosis surveillance and monitoring in Europe* by ECDC and WHO Regional Office for Europe

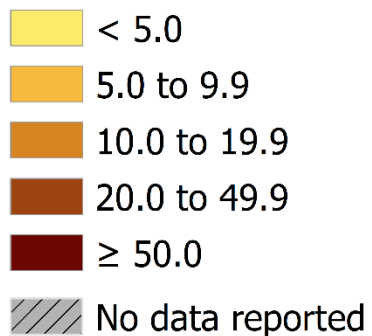
Stockholm, 22 March 2021

# TB notifications, EU/EEA\*, 2019

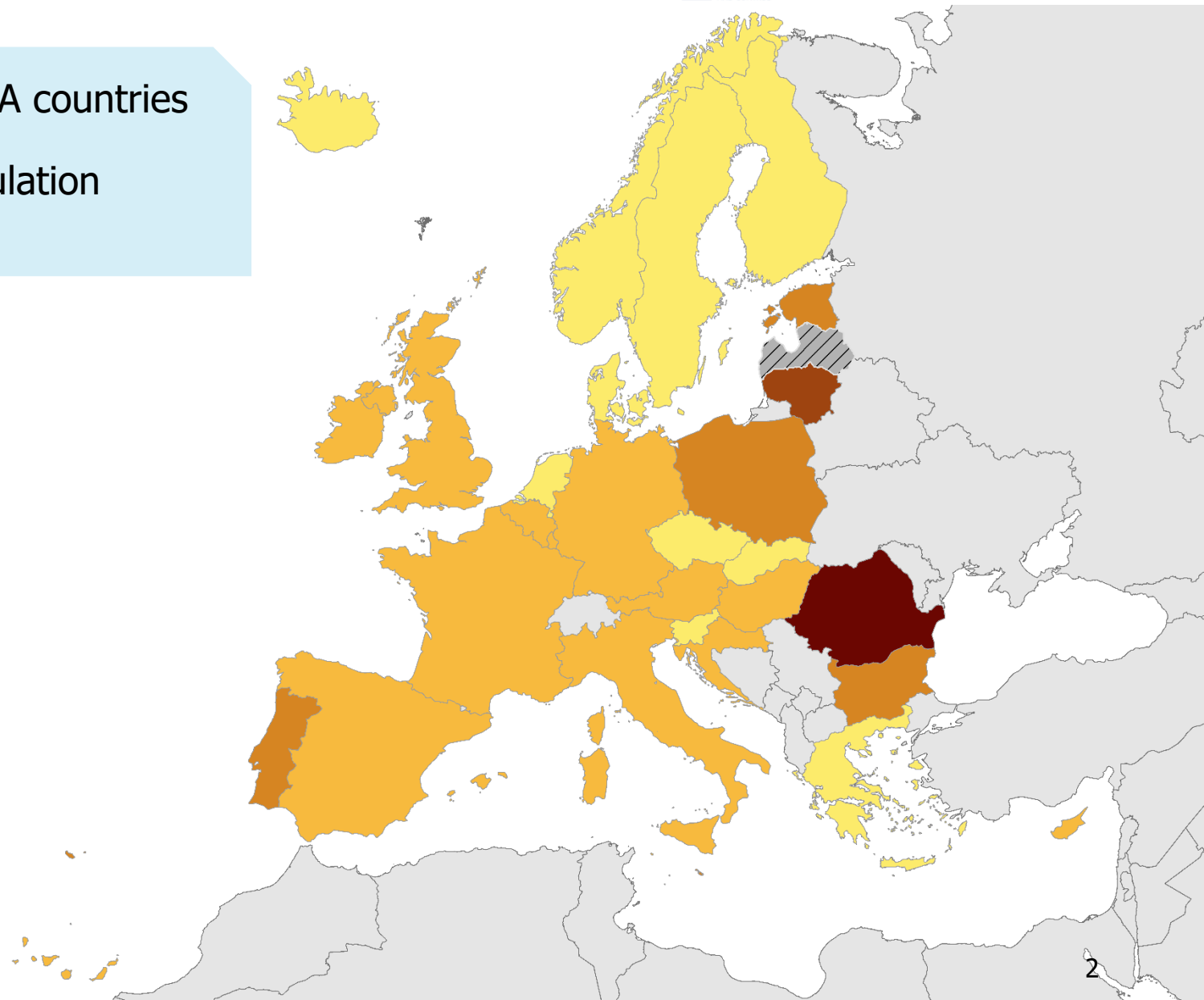
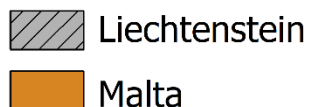
**49 752** TB cases notified in 29 EU/EEA countries

Notification rate **9.6** per 100 000 population  
(range 3.1–59.9)

## Cases per 100 000 population



Countries not visible  
in the main map

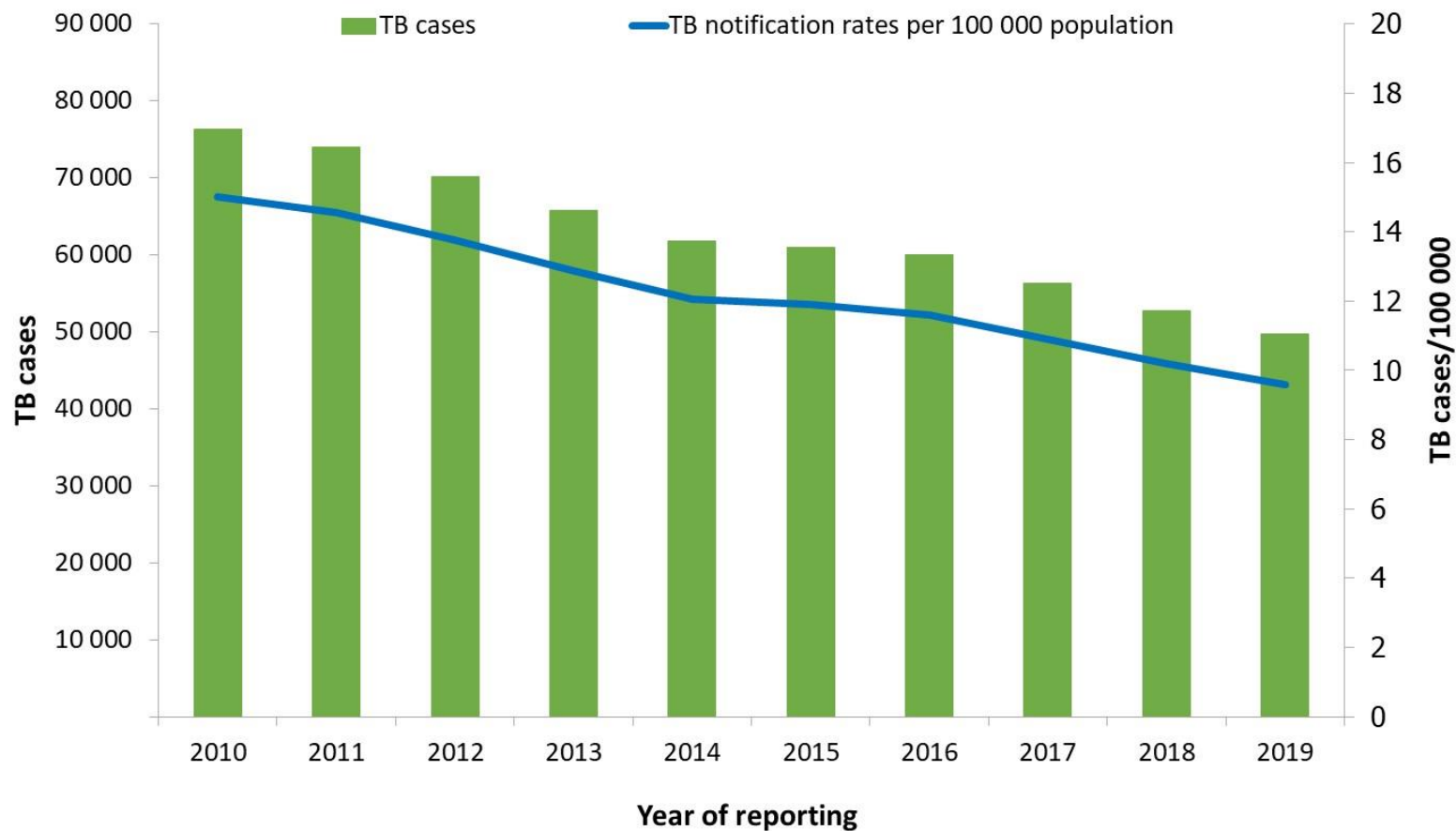


\* Latvia and Liechtenstein did not report data for 2019.

# Notified TB cases, EU/EEA\*, 2010–2019

Continuous decline between 2010 and 2019:

- Number of TB cases decreased by **35%**
- Notification rate decreased by **36%**



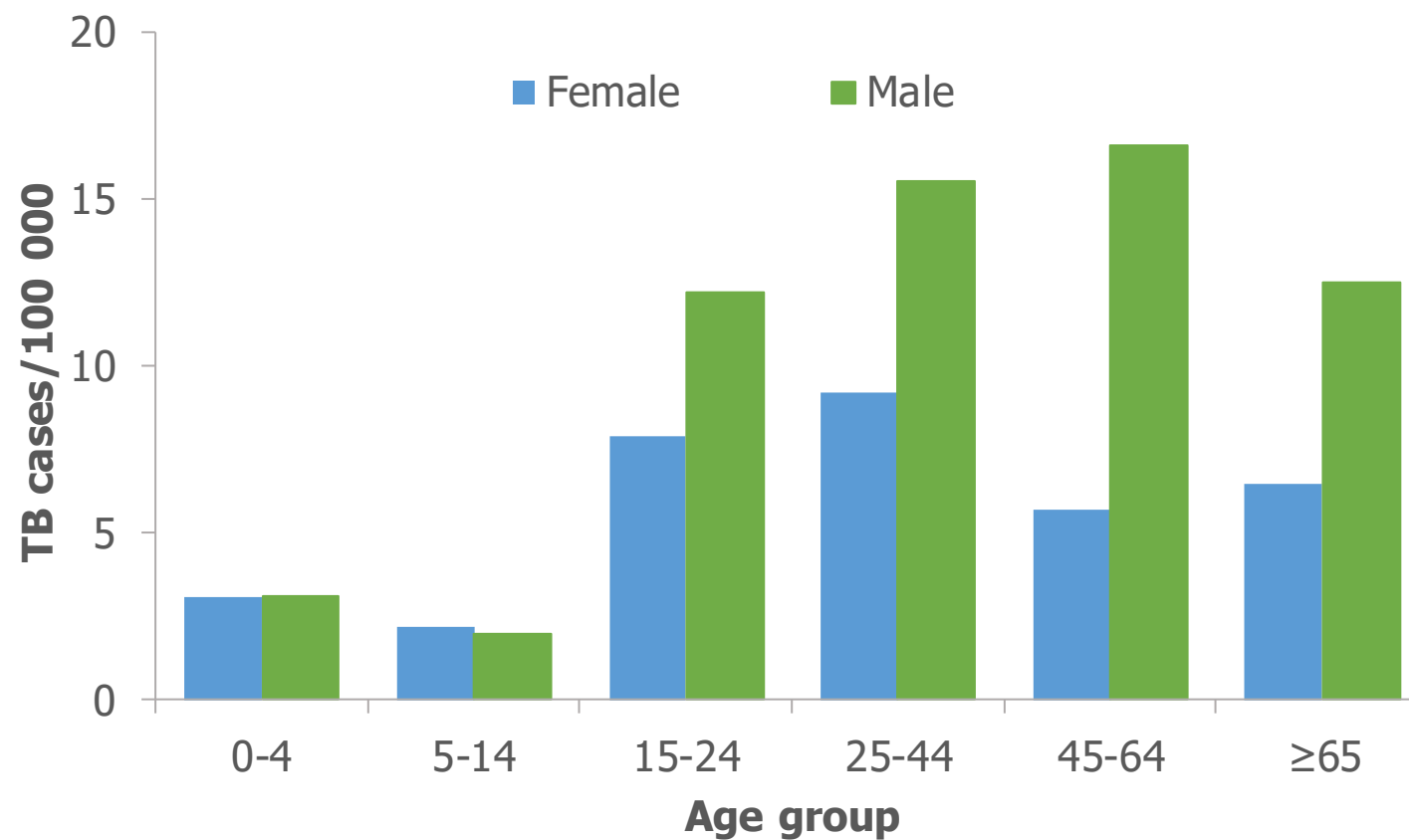
\* Latvia did not report data for 2018 or 2019, Liechtenstein did not report data for 2019.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# TB notification rate by sex and age group, EU/EEA\*, 2019

The highest notification rate was observed in the age group **25–44 years** (12 per 100 000)

**Males** were over-represented in all age groups over 14 years

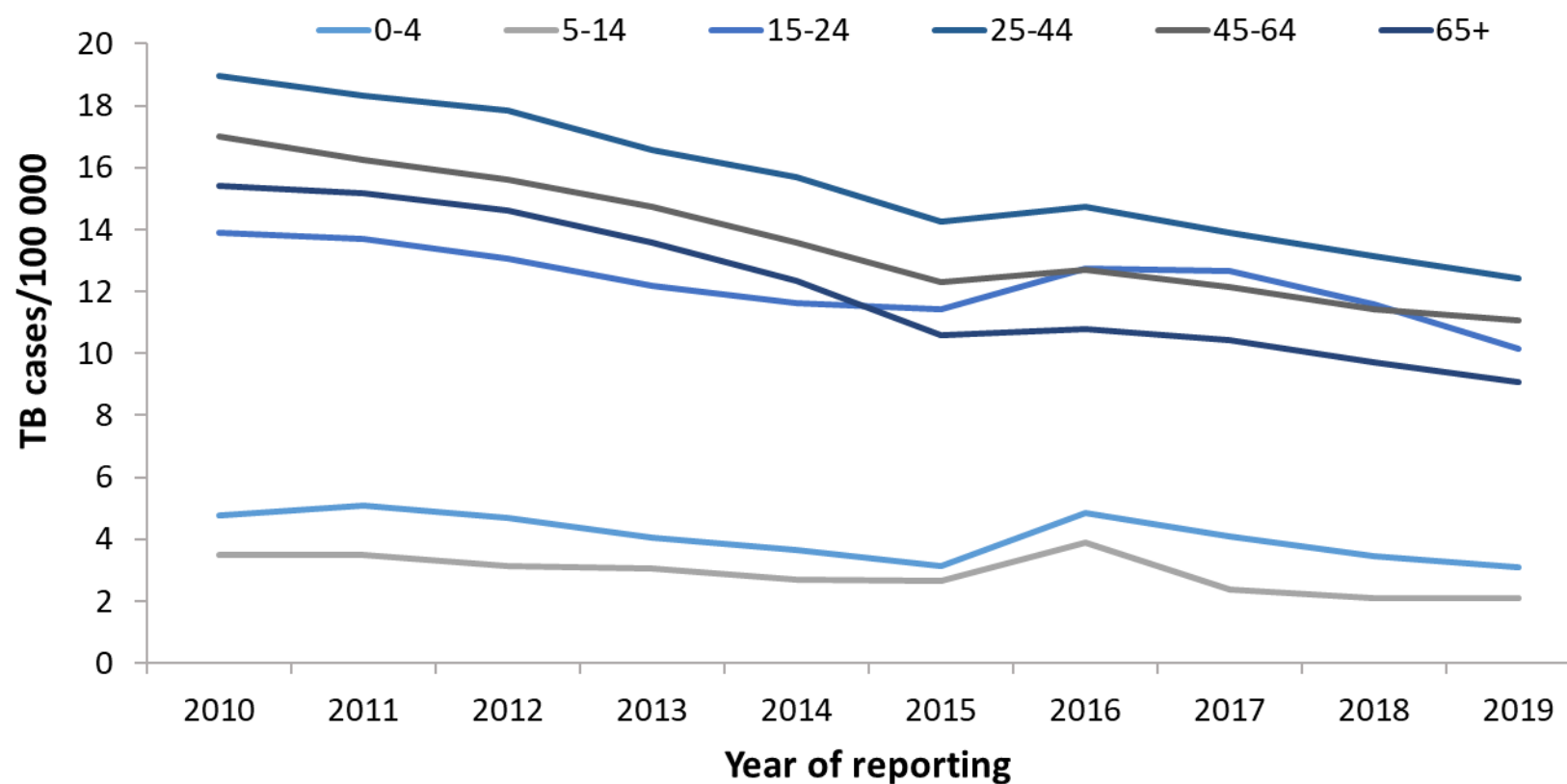


\* Latvia and Liechtenstein did not report data for 2019.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# TB notification rate by age group, EU/EEA\*, 2010–2019

Annual average decrease of **3–6%** in all age groups



\* Latvia did not report data for 2018 or 2019, Liechtenstein did not report data for 2019.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2010–2019 data

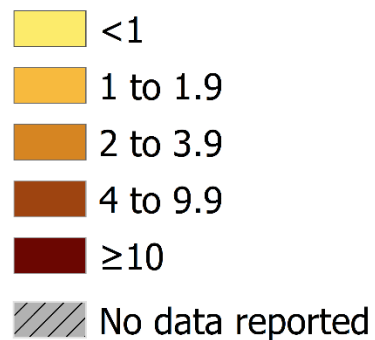
# TB in children under 15 years, EU/EEA\*, 2019

**1 955** TB cases notified in children under 15 years

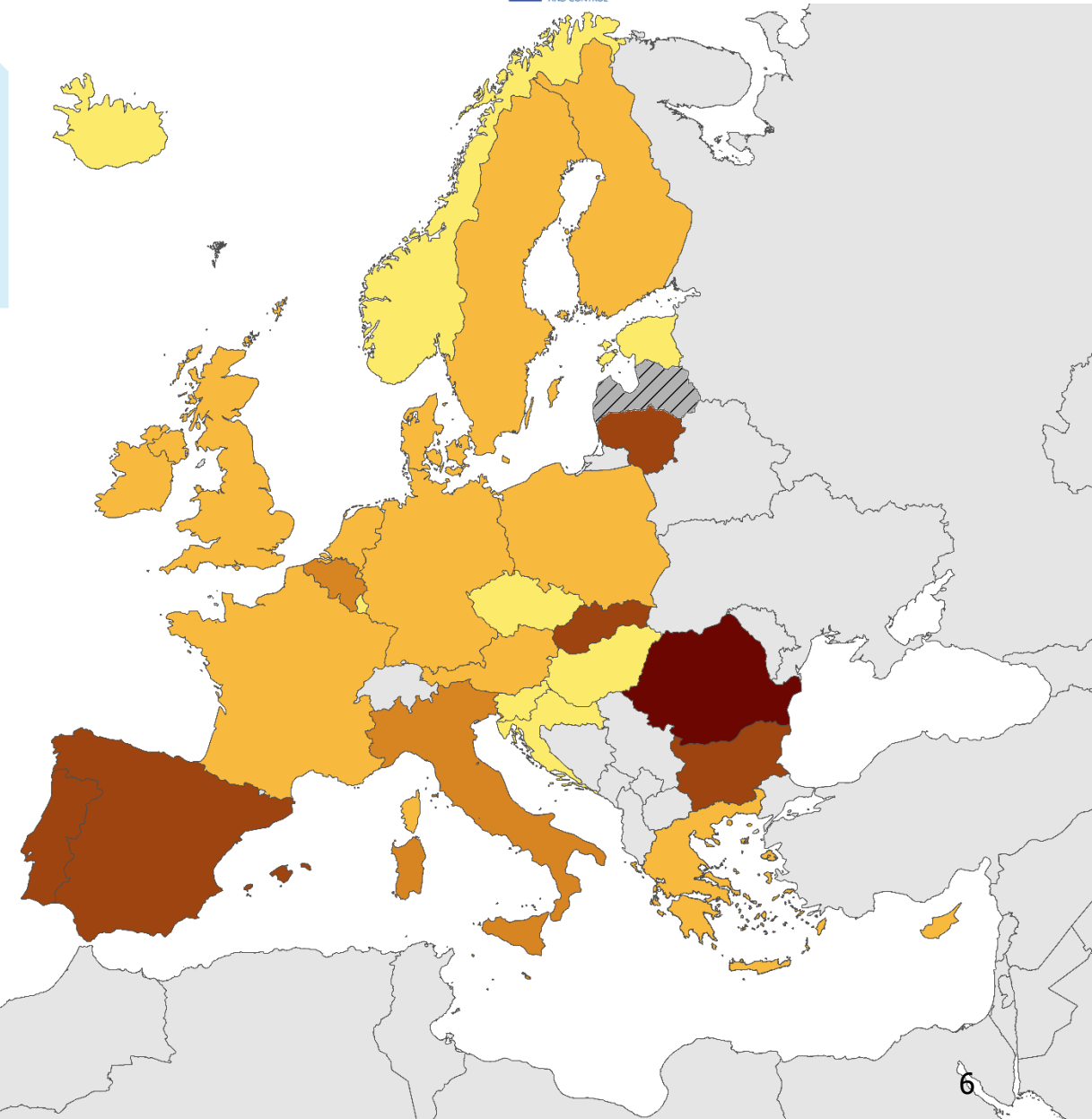
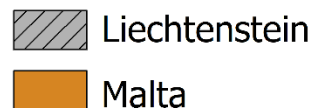
**3.9%** of all TB cases (range 0.0–16.4%)

**2.4** per 100 000 child population (range 0.0–12.9)

## Cases per 100 000 children



Countries not visible  
in the main map



\* Latvia and Liechtenstein did not report data for 2019.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# Confirmed TB cases\*, EU/EEA†, 2019



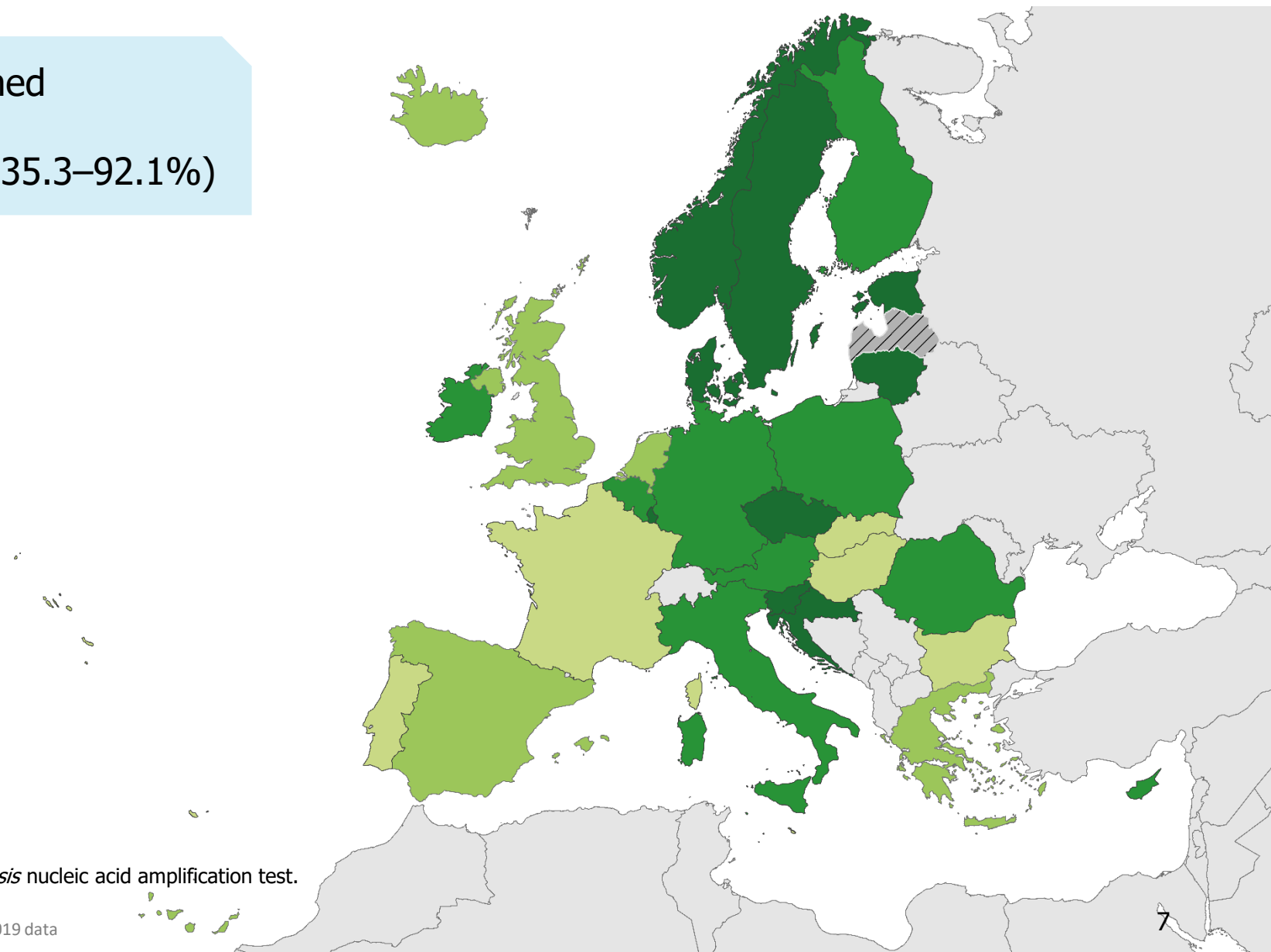
**33 368** TB cases were confirmed  
**67.1%** of all TB cases (range 35.3–92.1%)

## Proportion of confirmed cases

- 25 to 59
- 60 to 69
- 70 to 79
- 80 to 100
- No data reported

Countries not visible in the main map

- Liechtenstein
- Malta



\* Confirmation by culture, or by microscopy and *Mycobacterium tuberculosis* nucleic acid amplification test.

† Latvia and Liechtenstein did not report data for 2019.

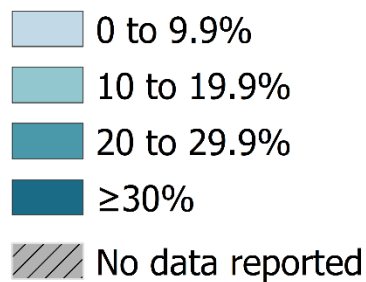
Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# Extrapulmonary TB, EU/EEA\*, 2019

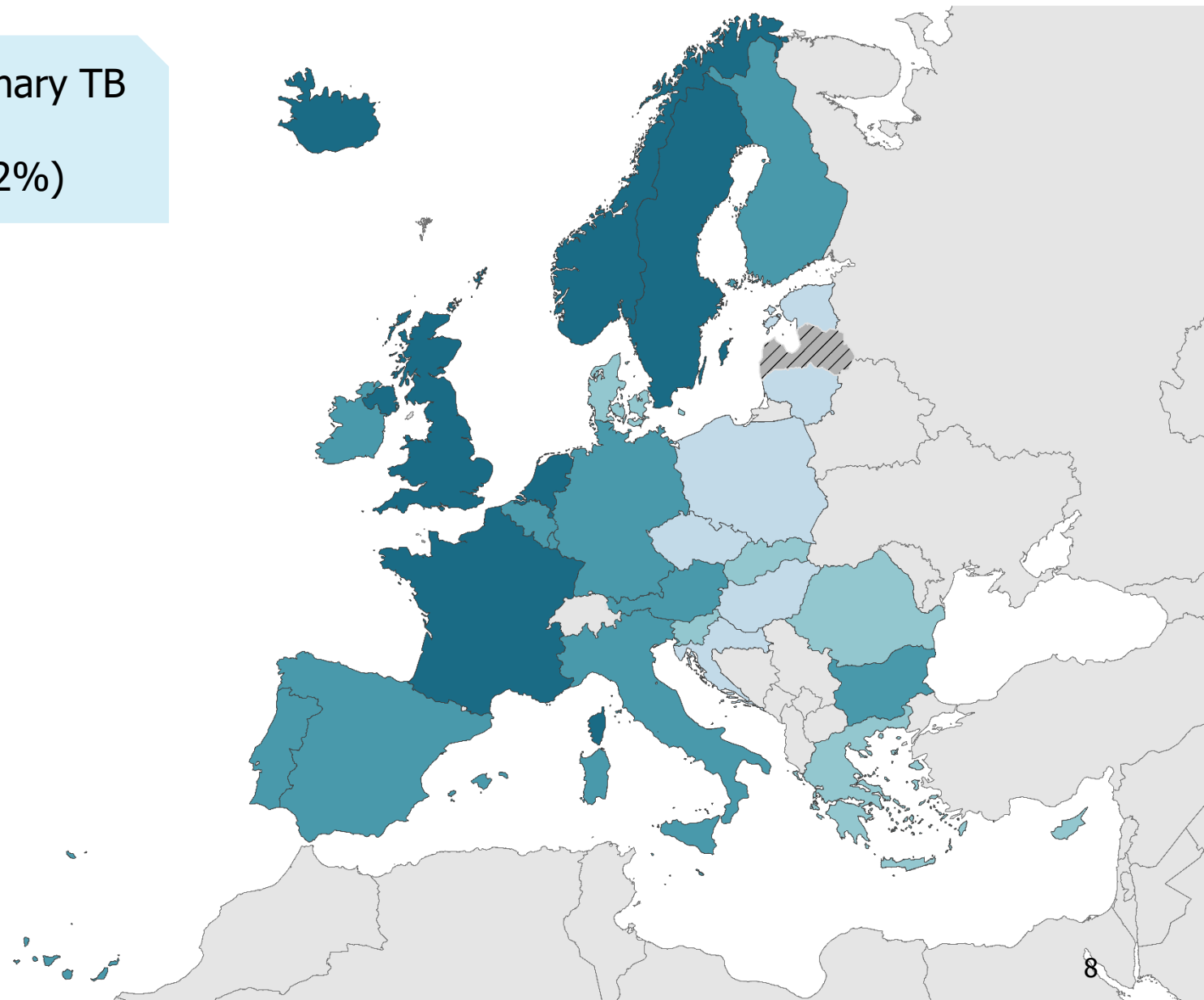
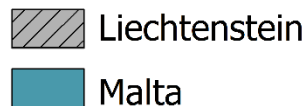
**10 988** notified cases had extrapulmonary TB

**22.1%** of all TB cases (range 3.1–46.2%)

## Proportion of extrapulmonary TB cases



Countries not visible  
in the main map



\* Latvia and Liechtenstein did not report data for 2019.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

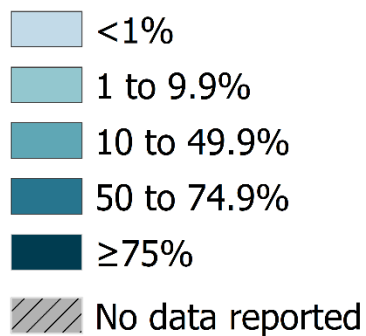


# TB in persons of foreign origin\*, EU/EEA†, 2019

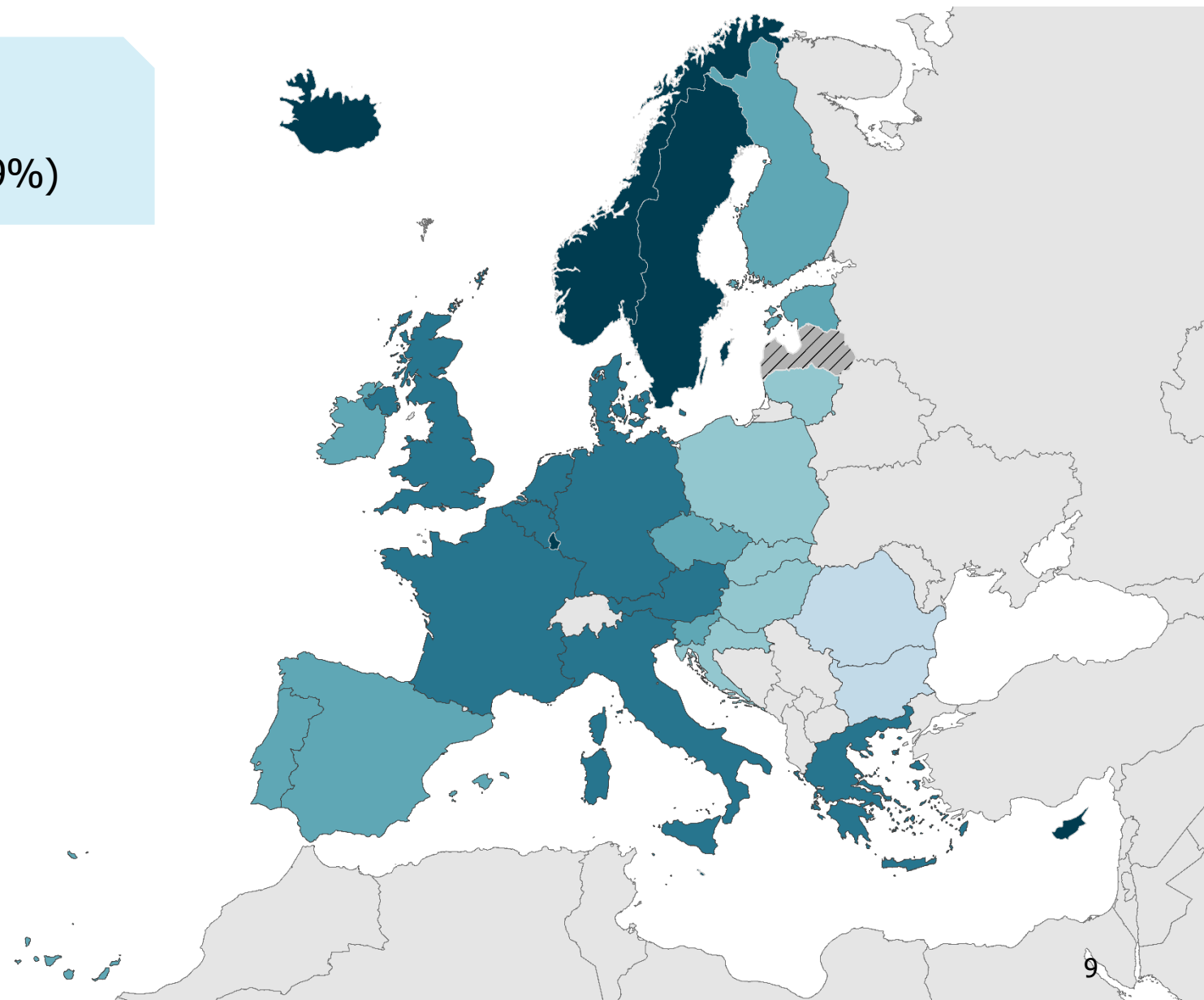
**17 181** TB cases of foreign\* origin

**34.5%** of all TB cases (range 0.0–95.9%)

## Proportion of TB cases of foreign origin



Countries not visible  
in the main map



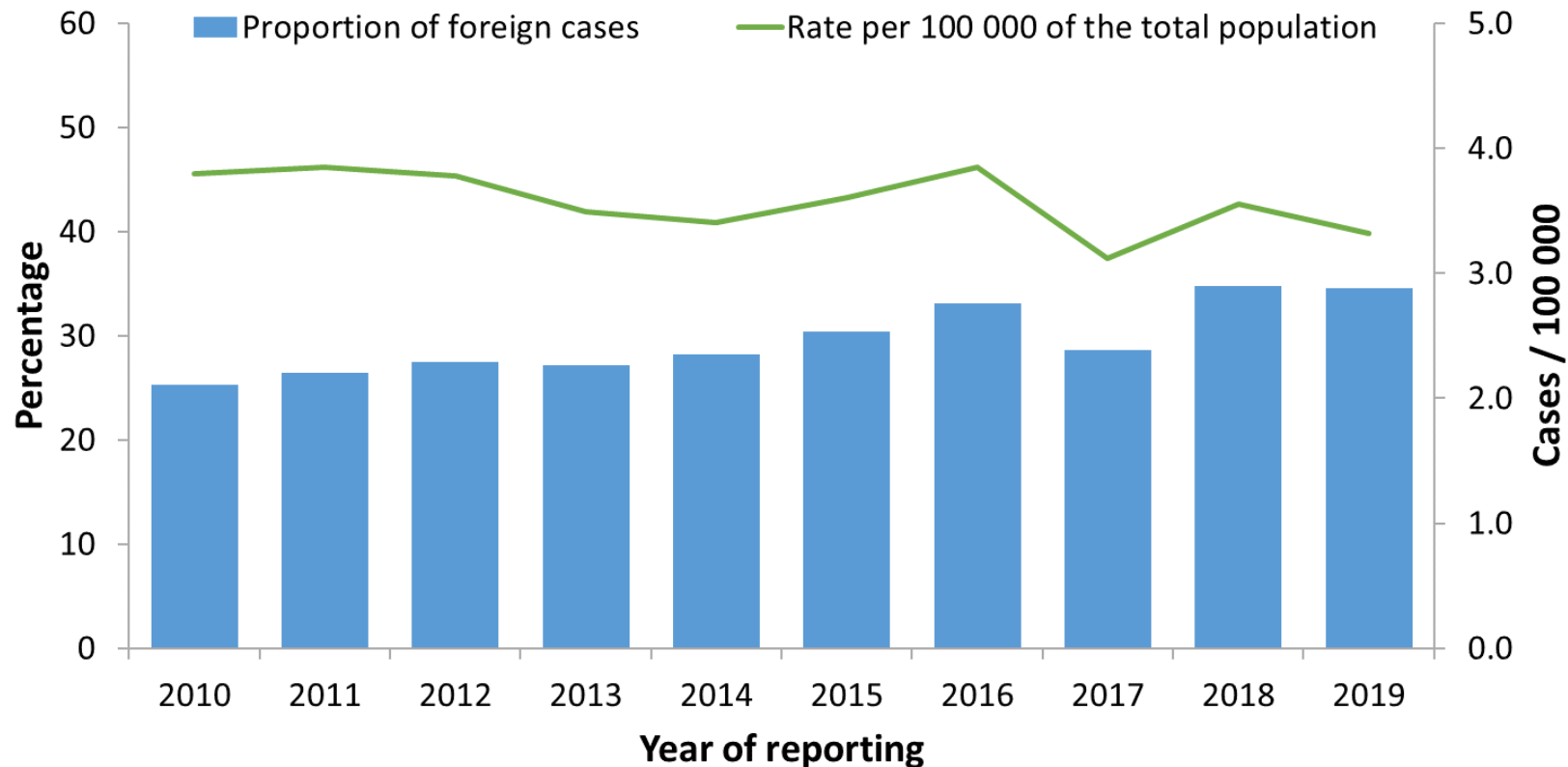
\* Notified in persons originating from other countries than the reporting country.

† Latvia and Liechtenstein did not report data for 2019.

# TB cases in persons of foreign origin\*, EU/EEA†, 2010–2019

The proportion of cases in persons of foreign origin increased from **25.3%** in 2010 to **34.5%** in 2019

The rate of TB cases of foreign origin per 100 000 of the total population varied between **3.1** and **3.9**



\* Notified in persons originating from other countries than the reporting country.

† Croatia is not included for 2012. Latvia did not report data for 2018 or 2019. Liechtenstein did not report data for 2019.

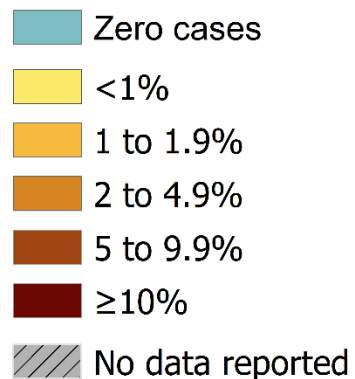
Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# Multidrug-resistant TB (MDR TB), EU/EEA\*, 2019

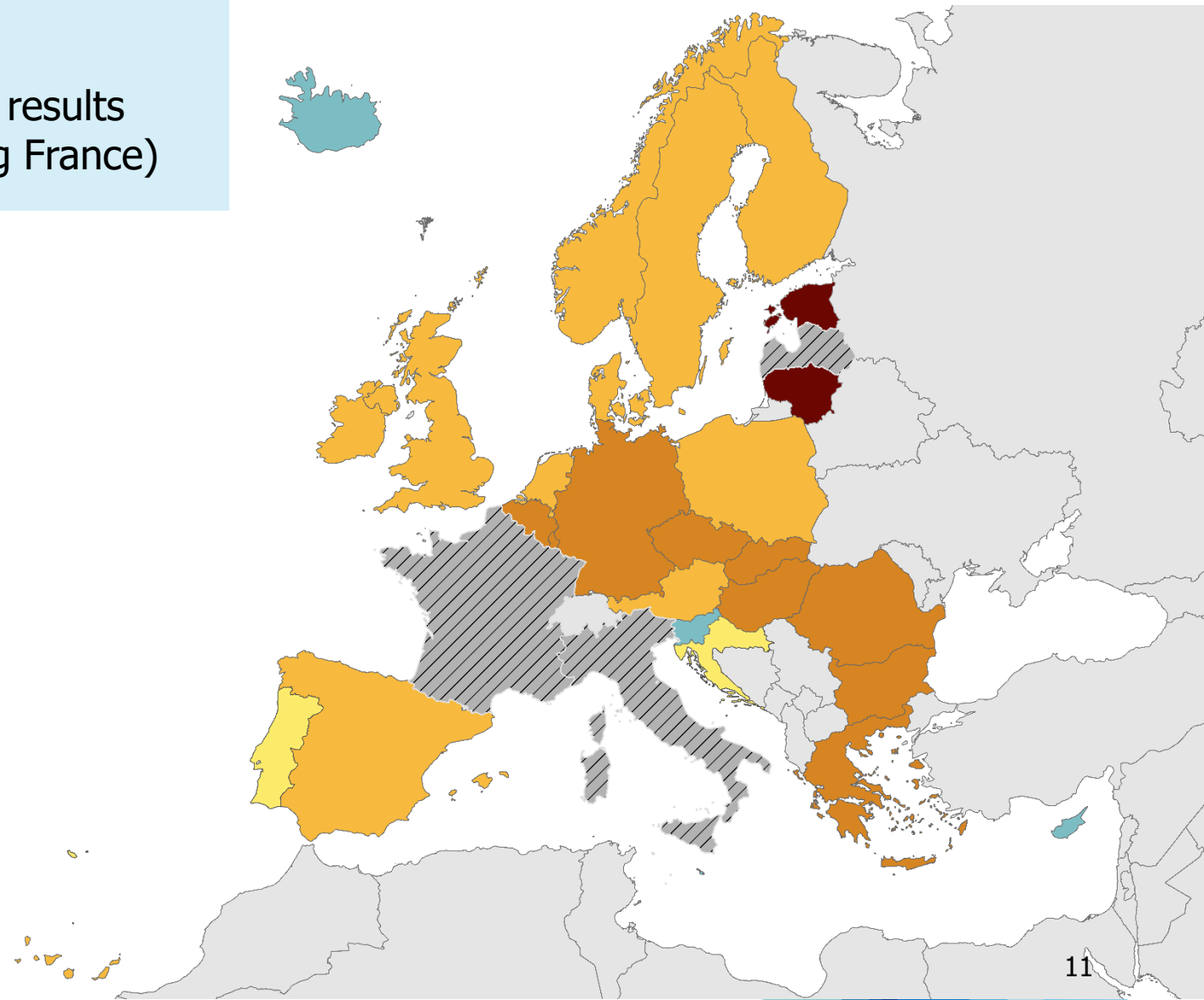
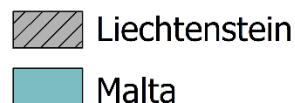
**834** MDR TB cases notified by 28 EU/EEA countries\*

**3.4%** of all TB cases with available DST<sup>†</sup> results had MDR TB (range 0.9–21.3%, excluding France)

## Proportion of MDR TB cases among TB cases with available DST results



Countries not visible in the main map



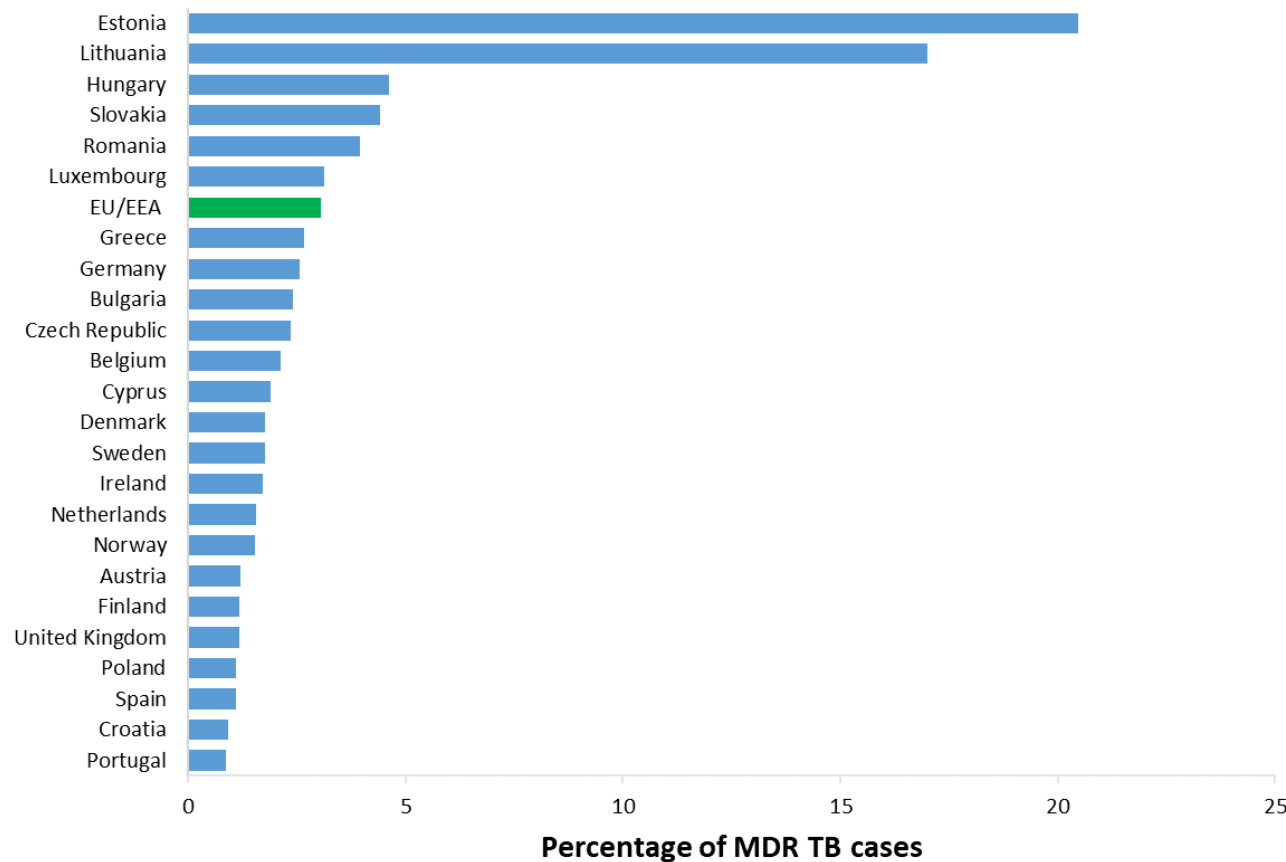
\* Data from France included in the total cases notified and percentage, but not included in the range or the map, as DST results are only available for MDR cases.

DST data are not available for all TB cases in Italy.  
Latvia and Liechtenstein did not report data for 2019.

<sup>†</sup> DST – drug susceptibility test.

# Proportion of multidrug-resistant TB (MDR TB), EU/EEA\*, 2019

**878** MDR TB cases notified by 29 EU/EEA countries  
**3.1%** of all bacteriologically-confirmed TB cases with available DST<sup>†</sup> results had MDR TB (range 0–20.5%)



\* MDR TB data from France and Italy are not included in the graph. Iceland, Malta and Slovenia reported zero MDR TB cases for 2019.

Latvia and Liechtenstein did not report data for 2019.

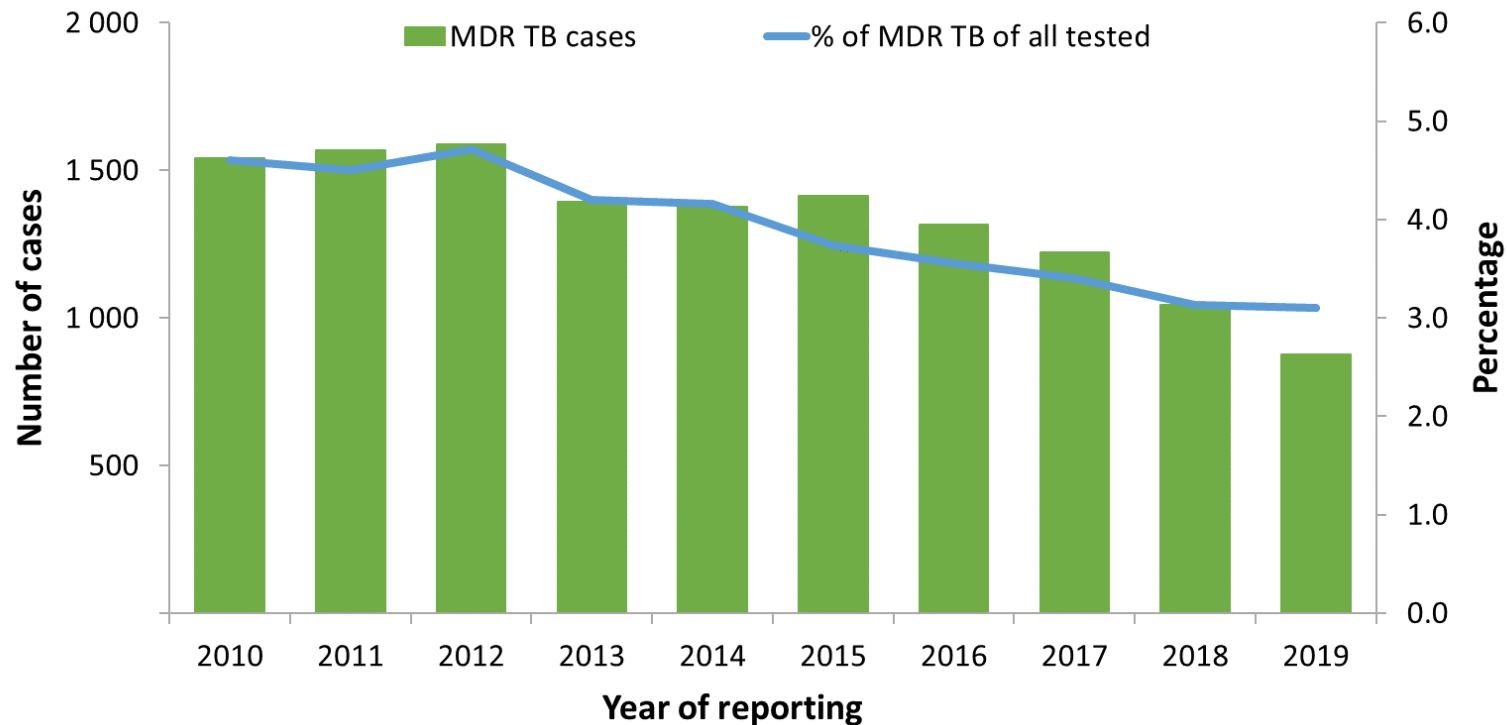
<sup>†</sup> DST – drug susceptibility test.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# MDR TB cases and proportions of all TB cases tested for drug resistance, EU/EEA\*, 2010–2019

The total number of notified MDR TB cases decreased from **1 541** in 2010 to **878** in 2019

Proportion of MDR TB cases among all TB cases with available DST<sup>†</sup> results decreased from **4.6%** in 2010 to **3.1%** in 2019



\* Countries and the years they are not included due to reporting discrepancies or no data: Croatia (2010), France (2012), Italy (2013, 2014, 2019) Latvia (2018, 2019), Liechtenstein (2019), Spain (2013, 2014).

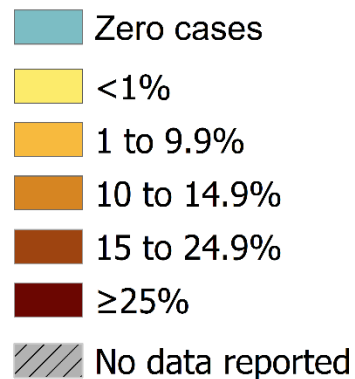
<sup>†</sup> DST – drug susceptibility test.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

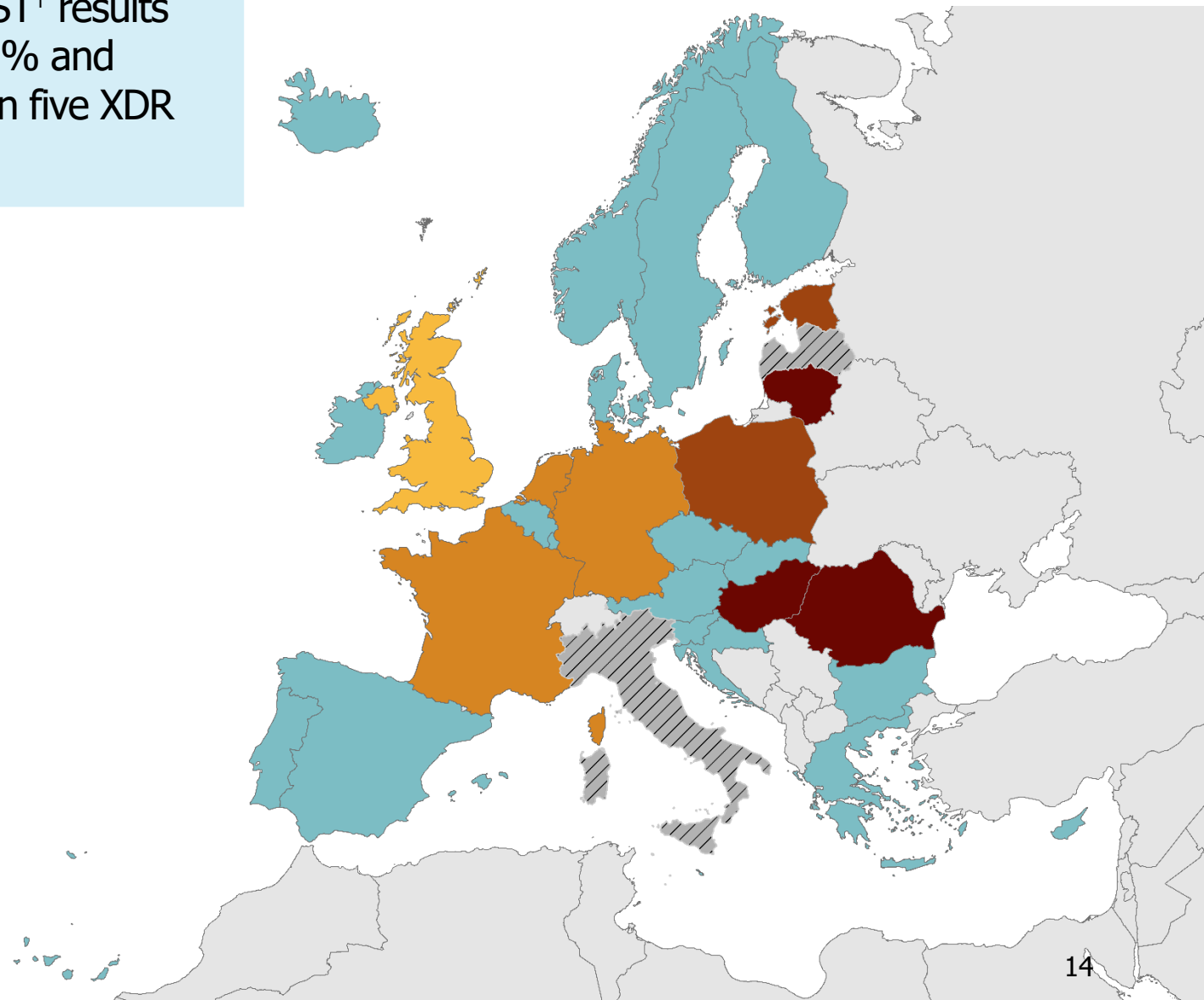
# Extensively drug-resistant TB (XDR TB), EU/EEA\*, 2019

**21.9%** of MDR TB cases with second-line DST<sup>†</sup> results were extensively drug-resistant (range 0–100% and 12.2–36.5% for countries reporting more than five XDR TB cases)

## Proportion of XDR TB cases among MDR TB cases with second-line DST results



Countries not visible in the main map



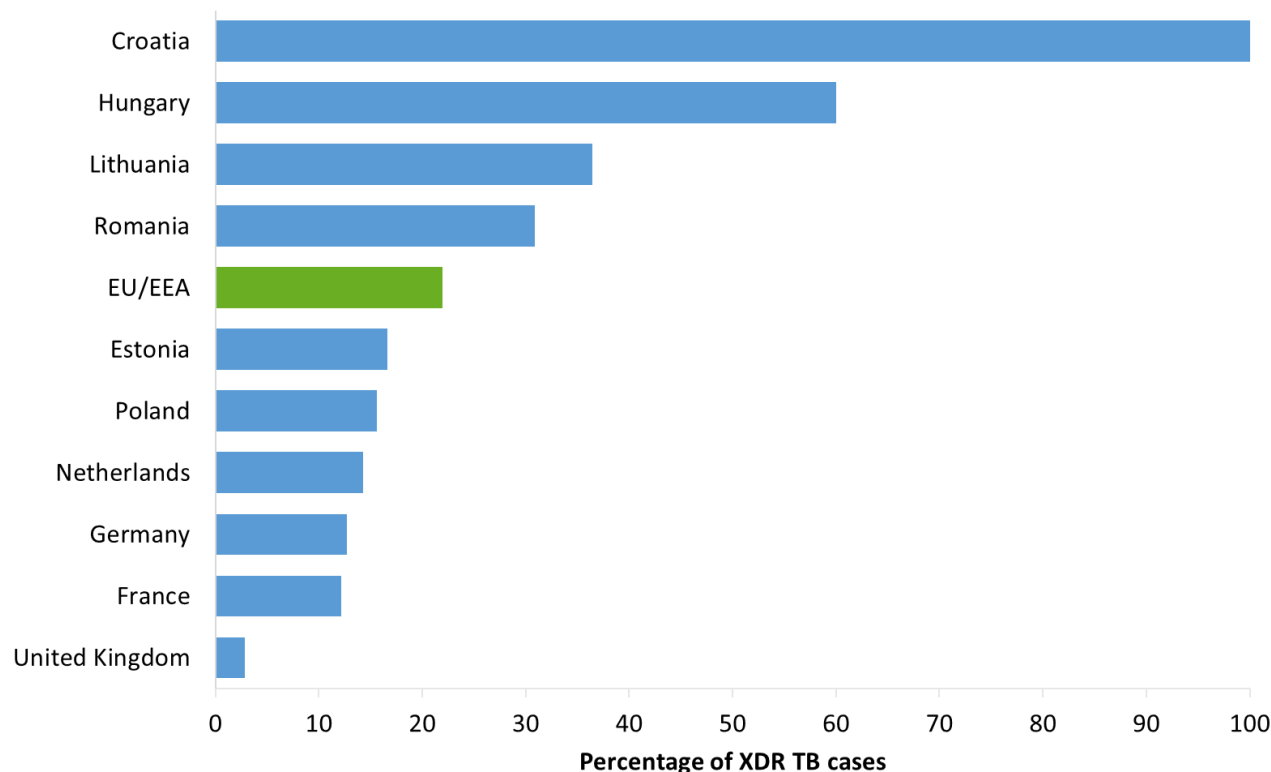
\* Latvia and Liechtenstein did not report data for 2019.  
Italy not included in the map as DST data not available for all TB cases.

<sup>†</sup> DST – drug susceptibility test.

# Proportion of extensively drug-resistant TB (XDR TB), EU/EEA\*, 2019

**128** XDR TB cases notified in 10 EU/EEA countries\*

**21.9%** of all MDR TB cases with second-line DST<sup>†</sup> results (range 2.9%–100.0%)



\* The graph shows countries that reported XDR TB cases. No XDR TB cases were reported by Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, Malta, Norway, Portugal, Slovakia, Slovenia, Spain, and Sweden.

No data on XDR TB were reported by Italy. Latvia and Liechtenstein did not report data for 2019.

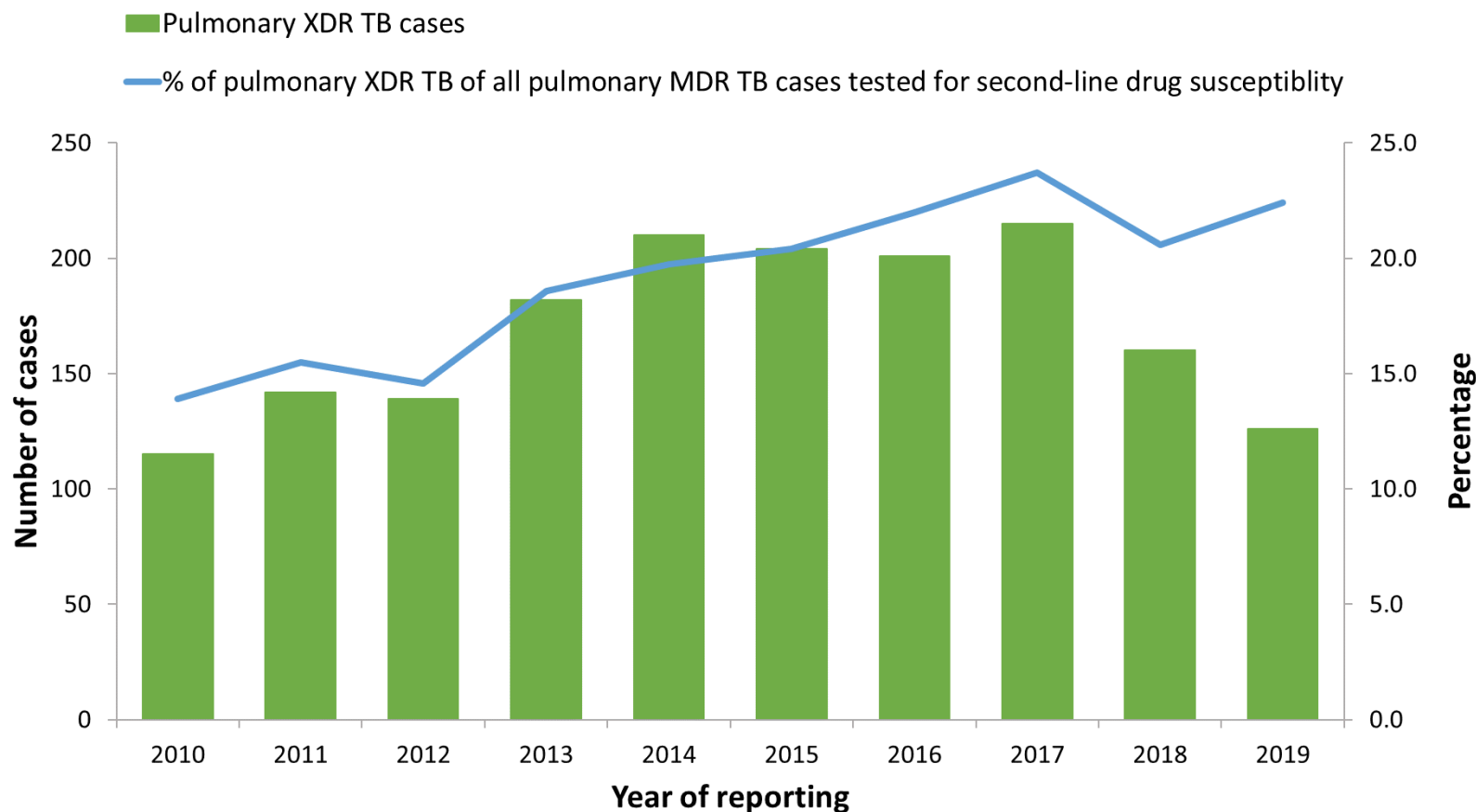
<sup>†</sup> DST – drug susceptibility test.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# Pulmonary XDR TB cases and proportions of pulmonary XDR TB cases among all pulmonary MDR TB cases tested for second-line drug resistance, EU/EEA\*, 2010–2019

The total number of pulmonary XDR TB cases increased from **115** in 2010 to **126** in 2019

The proportion of XDR TB cases among pulmonary MDR TB cases increased from **13.9%** in 2010 to **22.4%** in 2019



\* Countries and the years for which they are not included due to reporting discrepancies or no data: Croatia (2010-2011), France (2010-2012), Italy (2010-2012), Latvia (2018-2019), Liechtenstein (2019), Spain (2010-2012).

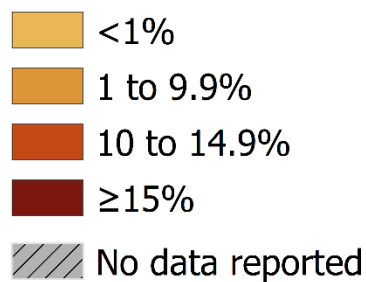


# TB/HIV co-infection, EU/EEA\*, 2019

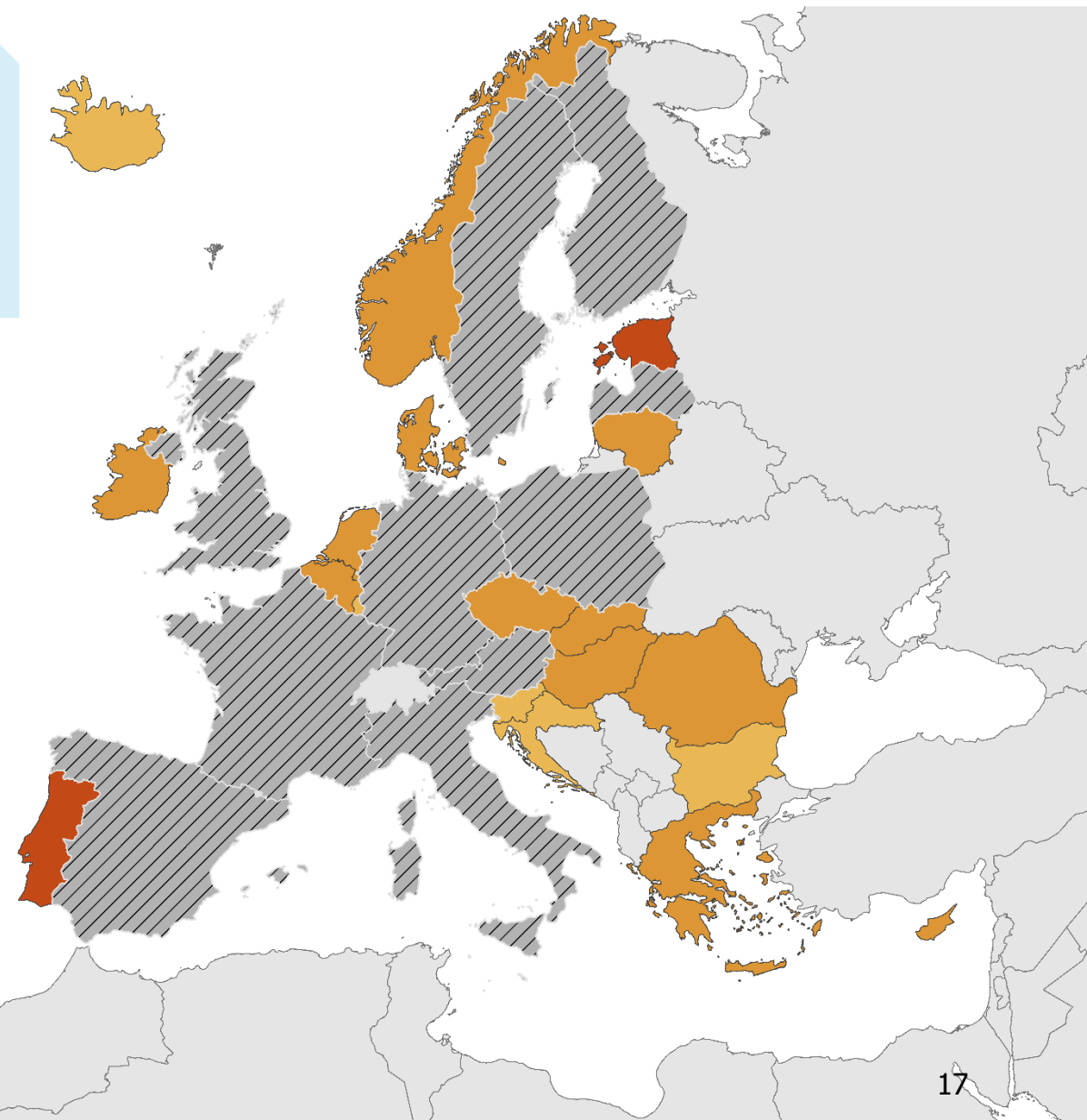
**502** HIV-positive TB cases were notified by 19 EU/EEA countries in 2019

**3.1%** of TB cases with known HIV status were HIV-positive (range 0.0–11.3%)

## Proportion of co-infected TB cases among TB cases with known HIV status



Countries not visible in the main map

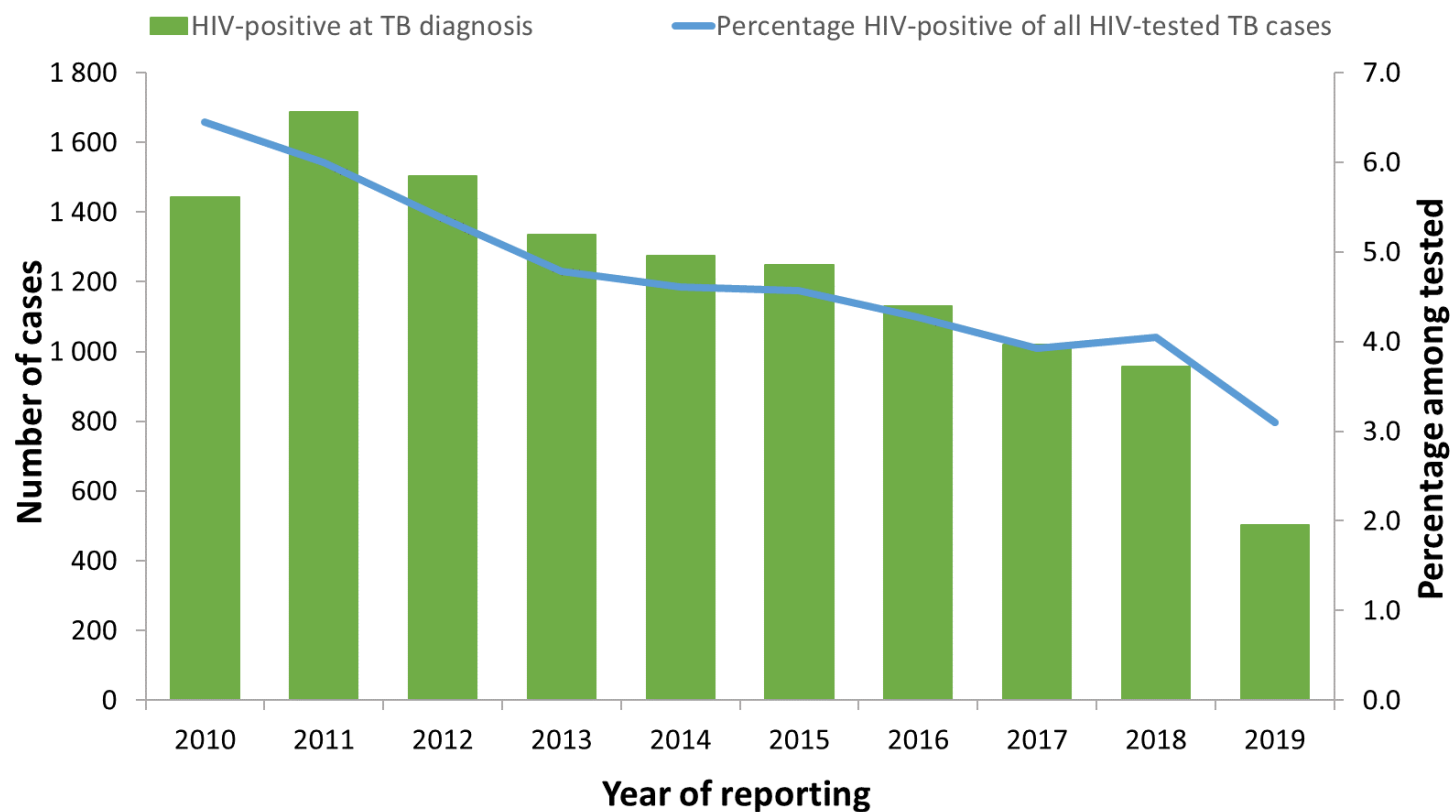


\* Ten countries did not report HIV status data: Austria, Finland, France, Germany, Italy, Malta, Poland, Spain, Sweden, United Kingdom. Latvia and Liechtenstein did not report data for 2019.

# HIV-positive TB cases and proportions among all those tested, EU/EEA, 2010–2019\*

The total number of HIV-positive TB cases decreased from **1 442** in 2010 to **502** in 2019

The proportion of HIV-positive TB cases among those tested decreased from **6.4%** in 2010 to **3.1%** in 2019



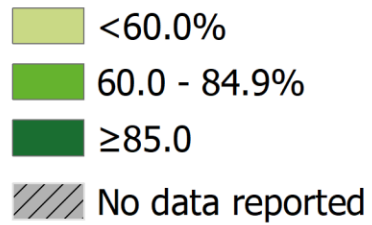
\* Countries and the years for which they are not included due to reporting discrepancies or no data: Austria (all years), Croatia (2010-2015), Cyprus (2010-2013), Denmark (2010, 2012-2013), Finland (all years), France (all years), Germany (all years), Greece (2010-2012), Hungary (2012-2013), Italy (all years), Latvia (2018-2019), Liechtenstein (all years), Luxembourg (2015), Malta (2018-2019), Norway (2010-2012), Poland (2012-2019), Spain (2019), Sweden (all years), United Kingdom (2010, 2019).

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

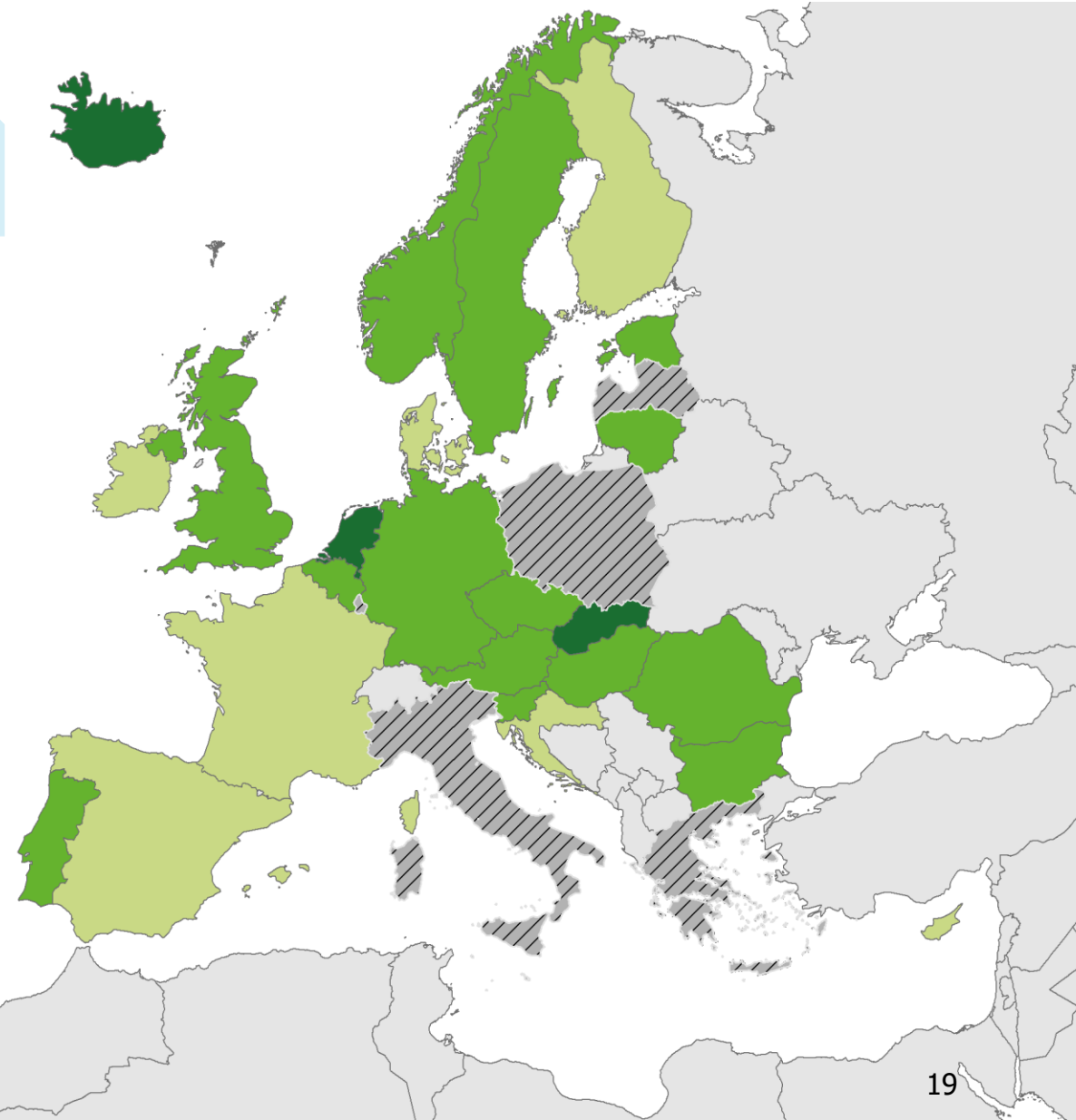
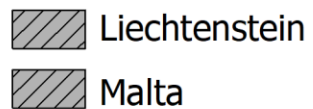
# Treatment success as of 2019 in all TB cases notified in 2018, EU/EEA\*

**63.7%** of all TB cases had a successful treatment outcome after 12 months (range 10.5–100.0%)

## Percentage of treatment success



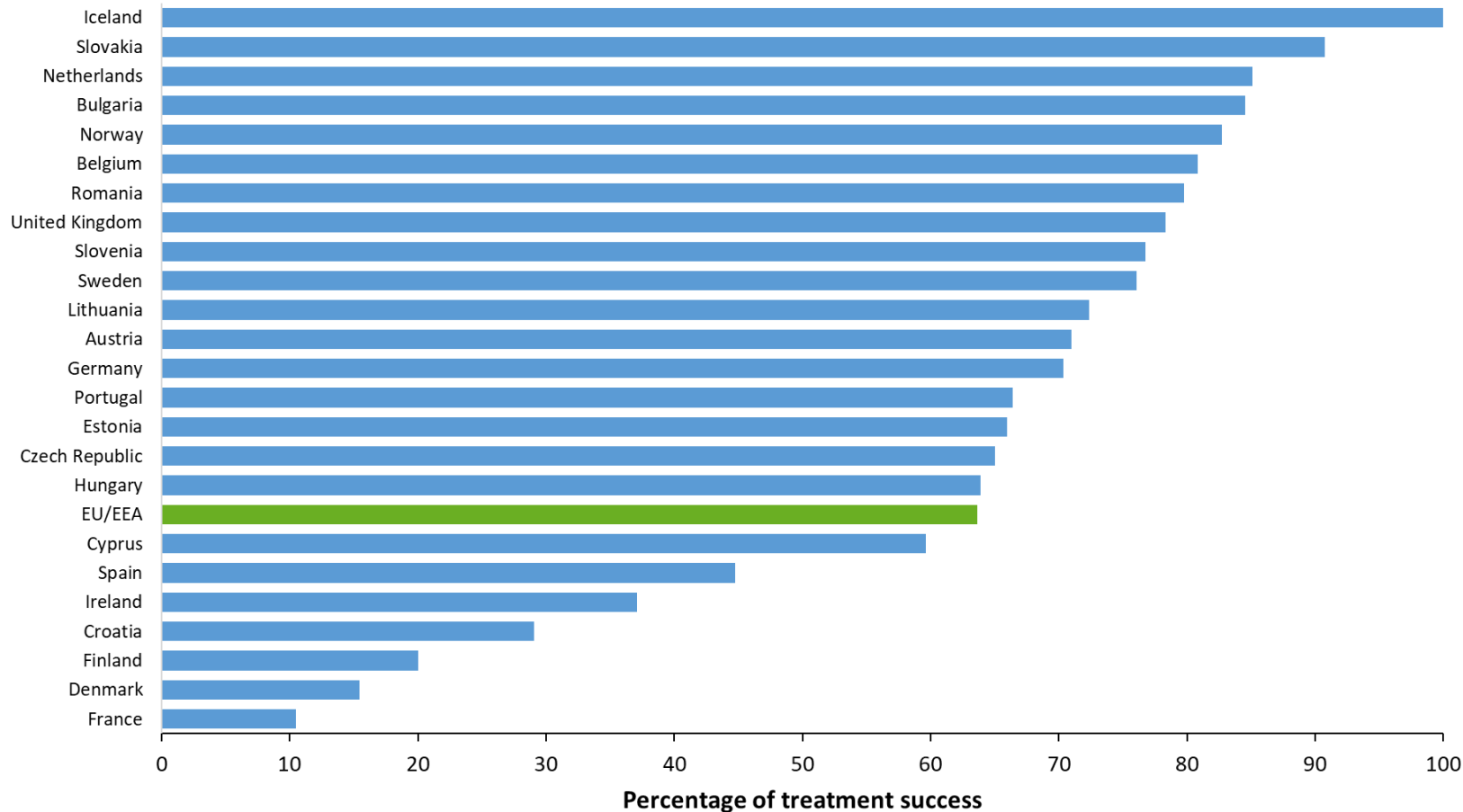
Countries not visible in the main map



\* Five countries did not report treatment outcome data: Greece, Italy, Luxembourg, Malta, Poland. Latvia and Liechtenstein did not report any data for 2019.

# Treatment success as of 2019 in all TB cases notified in 2018, EU/EEA\*

**63.7%** of all TB cases had a successful treatment outcome after 12 months (range 10.5–100%)

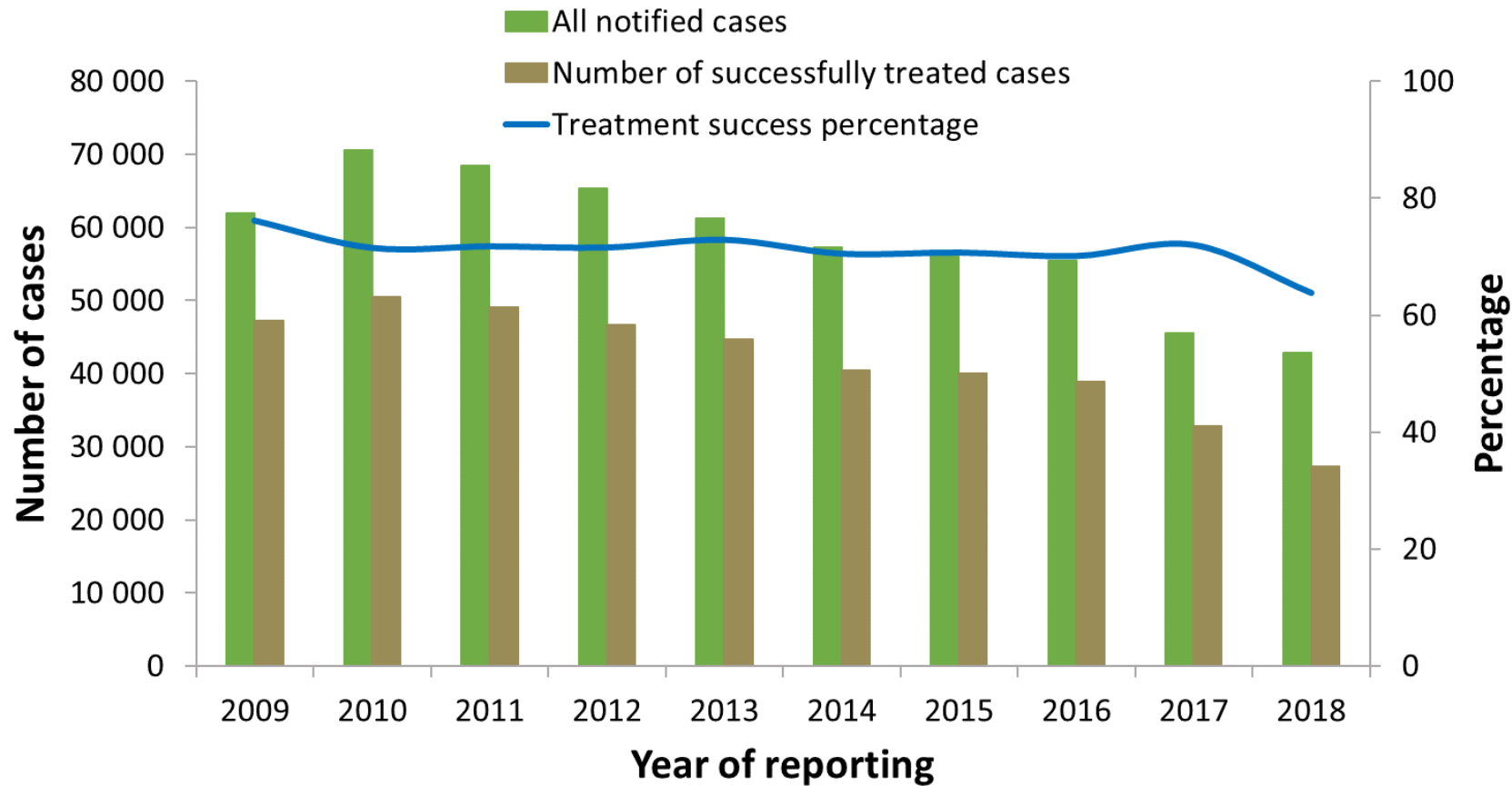


\* Five EU/EEA countries did not report treatment outcome data: Greece, Italy, Luxembourg, Malta and Poland. Latvia and Liechtenstein did not report data for 2019.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# Treatment success of all notified TB cases after 12 months, EU/EEA, 2009–2018

Proportion of successfully treated cases decreased from **76.2%** in 2009 to **63.7%** in 2018\*

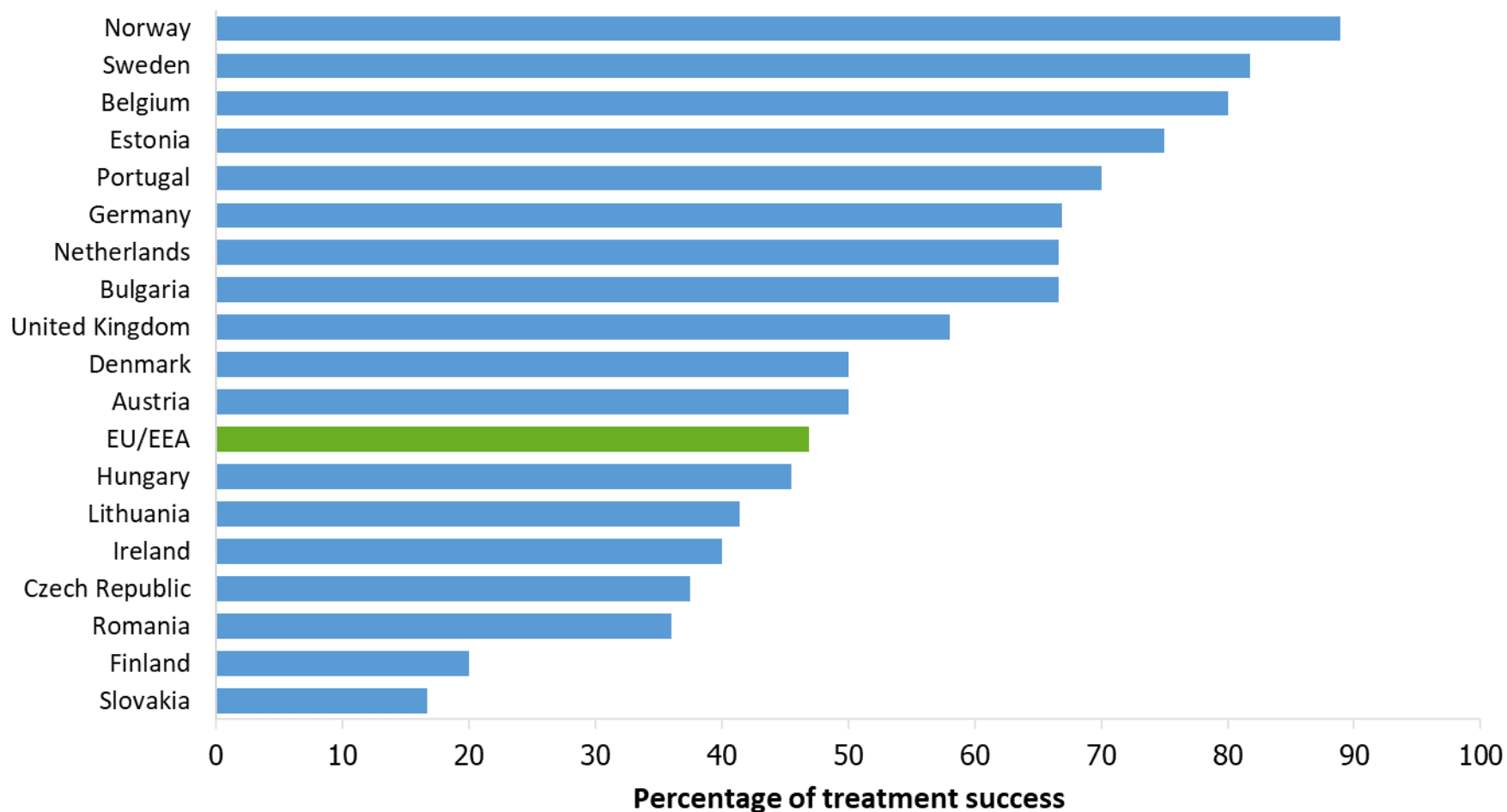


\* Countries and the years for which they are not included due to reporting discrepancies or no data: Croatia (2010-2011), Greece (all years), Italy (all years), Latvia (2017-2018), Liechtenstein (2010-2014, 2018), Luxembourg (all years), Malta (2014-2018), Poland (2017-2018), Spain (2018).

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# Treatment success after 24 months in MDR TB cases, EU/EEA\*, 2019

**46.8%** of all MDR TB cases notified in 2017 were successfully treated (range 16.7–88.9%)



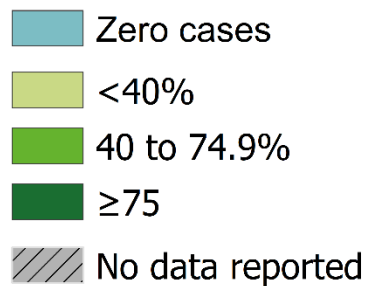
\* Croatia, Iceland, Malta and Slovenia reported zero MDR TB cases in 2017.  
Seven countries did not report treatment outcome data: Cyprus, France, Greece, Italy, Luxembourg, Poland, Spain.  
Latvia and Liechtenstein did not report data for 2019.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

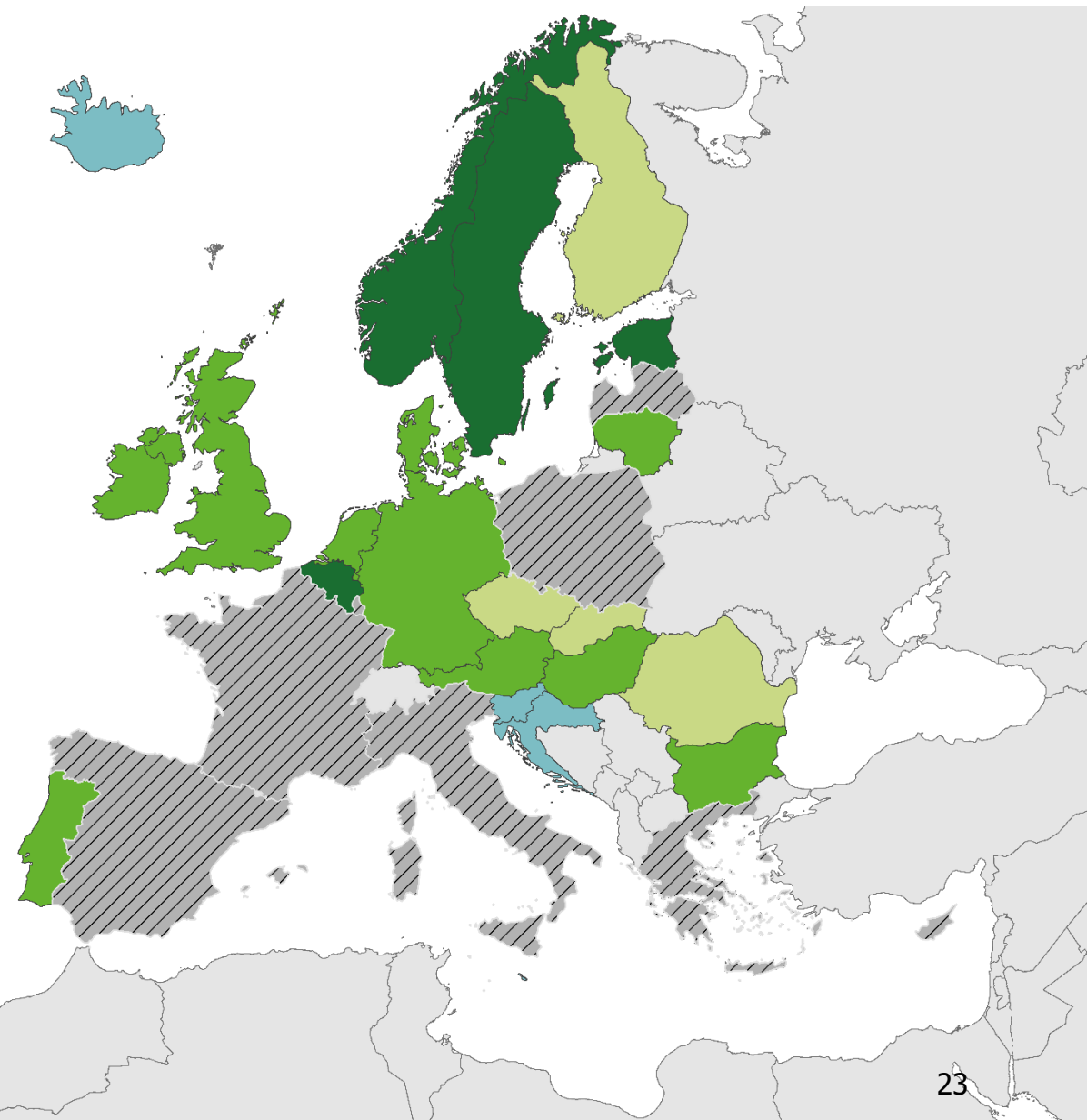
# Treatment success as of 2019 in MDR TB cases notified in 2017, EU/EEA\*

**46.8%** of all MDR TB cases notified in 2017 were successfully treated (range 0.0–88.9%)

## Proportion of treatment success among MDR TB cases



## Countries not visible in the main map



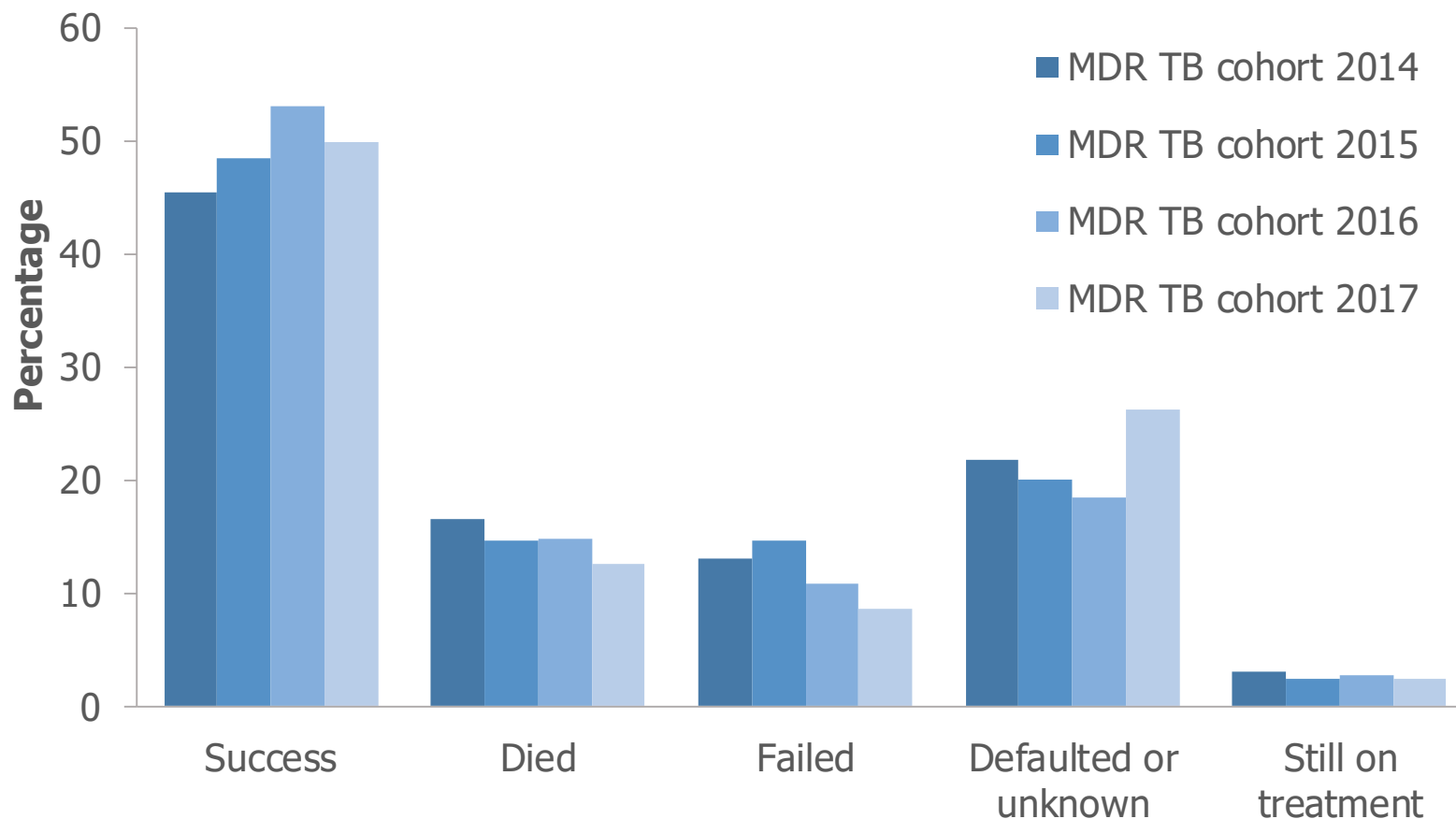
\* Seven countries did not report treatment outcome data: Cyprus, France, Greece, Italy, Luxembourg, Poland, Spain.

Latvia and Liechtenstein did not report any data for 2019.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

# Treatment outcomes of MDR TB cases\* notified in 2014–2017, EU/EEA<sup>†</sup>, 2019

The treatment success rate increased from **45.5%** in 2014 to **49.9%** in 2017



\* XDR TB cases are not included.

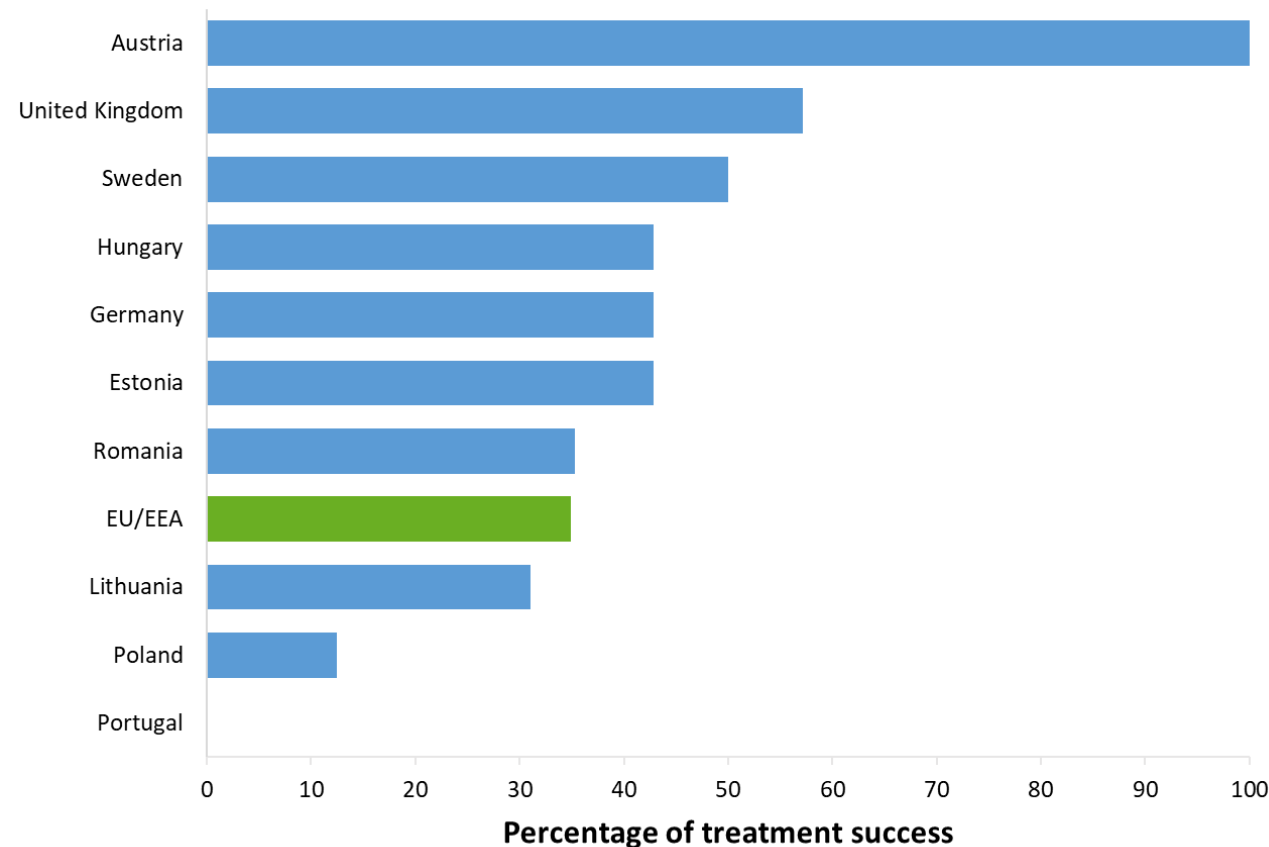
<sup>†</sup> Countries and the cohorts for which they are not included due to reporting discrepancies or no data: Croatia (2016-2017), Cyprus (all cohorts), France (all cohorts), Greece (all cohorts), Iceland (all cohorts), Italy (all cohorts), Latvia (2016-2017), Liechtenstein (all cohorts), Luxembourg (all cohorts), Malta (all cohorts), Poland (2016-2017), Slovenia (all years), Spain (all years).

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data



# Treatment success after 36 months in XDR TB cases, EU/EEA\*, 2019

**34.9%** of the XDR TB cases notified in 2016 were treated successfully (range 0.0–100.0%)\*



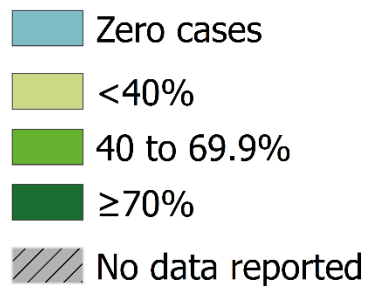
\* Three countries did not report treatment outcome data: Finland, France, Italy. Latvia and Liechtenstein did not report data for 2019. The following countries reported zero XDR TB cases in 2016: Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Greece, Iceland, Ireland, Luxembourg, Malta, Netherlands, Norway, Slovakia, Slovenia and Spain.

Source: ECDC/WHO (2021). Tuberculosis surveillance and monitoring in Europe 2021–2019 data

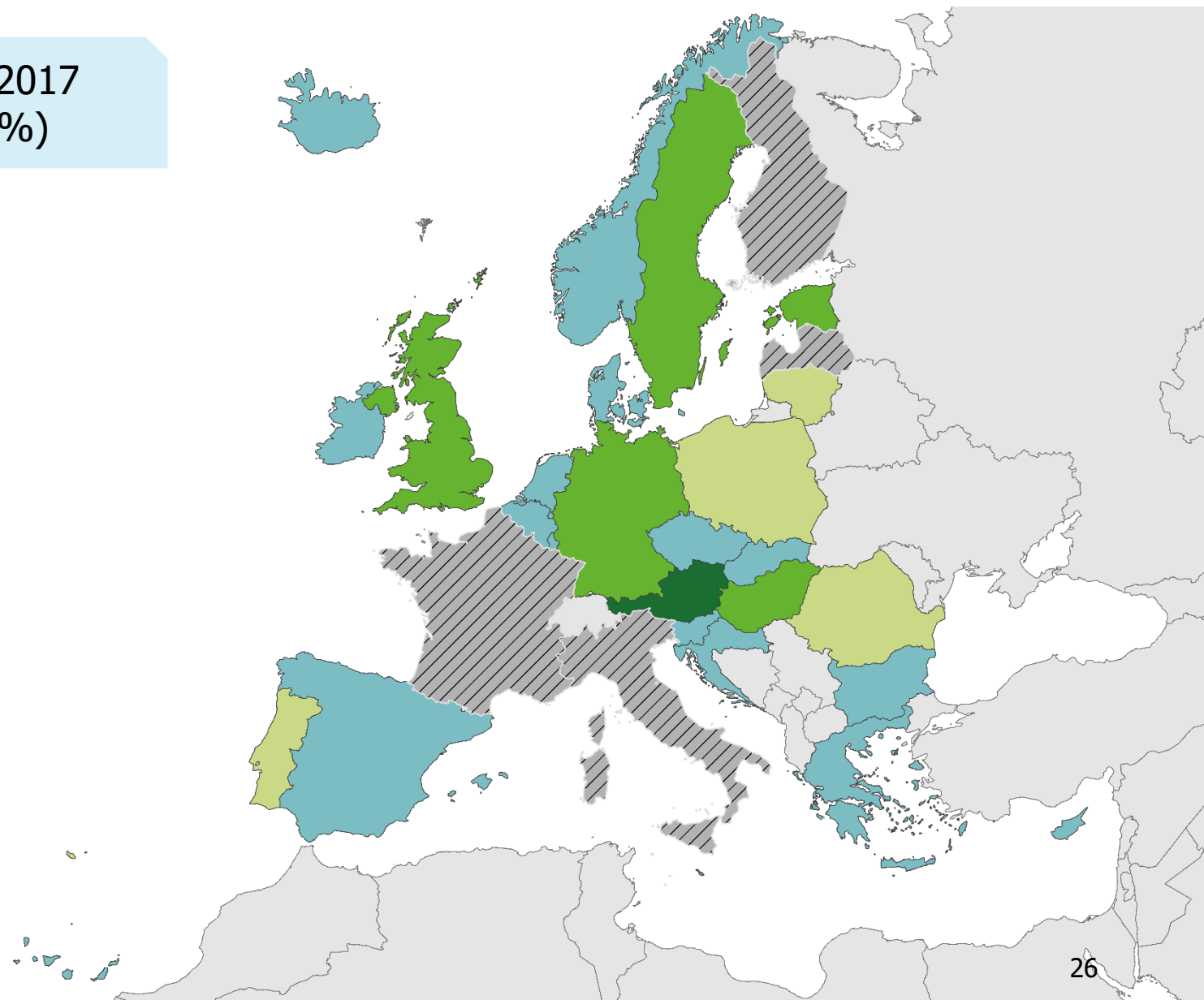
# Treatment success as of 2019 in XDR TB cases notified in 2016, EU/EEA\*

**34.9%** of all XDR TB cases notified in 2017 were successfully treated (range 0–100%)

## Proportion of treatment success among XDR TB cases



Countries not visible in the main map



\* Three countries did not report treatment outcome data: Finland, France, Italy. Latvia and Liechtenstein did not report any data for 2019.