

Epidemiology of hepatitis B and C in the European Union/European Economic Area

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Burden of hepatitis B and C in the EU/EEA

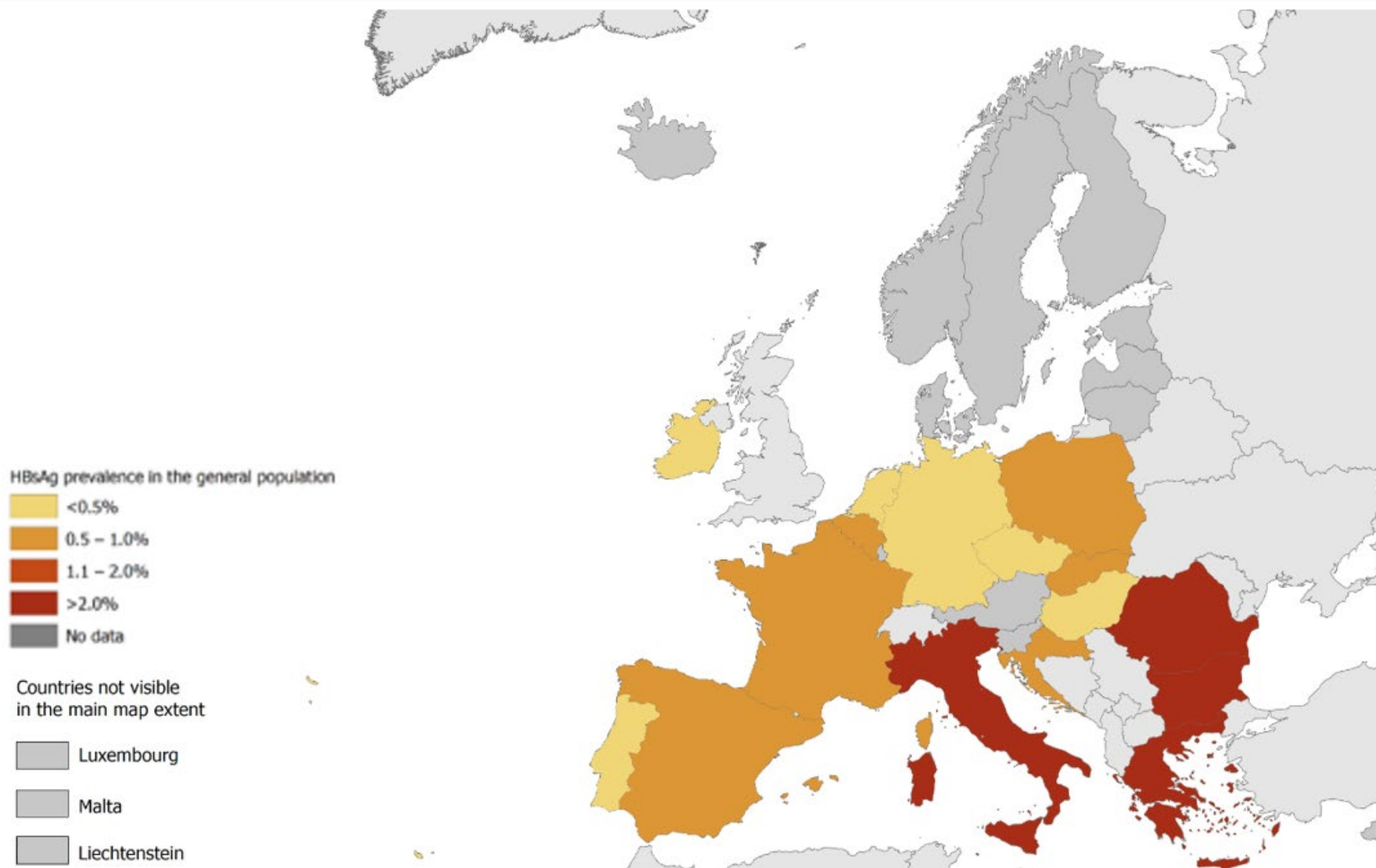
Estimated numbers with chronic infection

3.6 million people living
with chronic HBV
(2016 estimate)

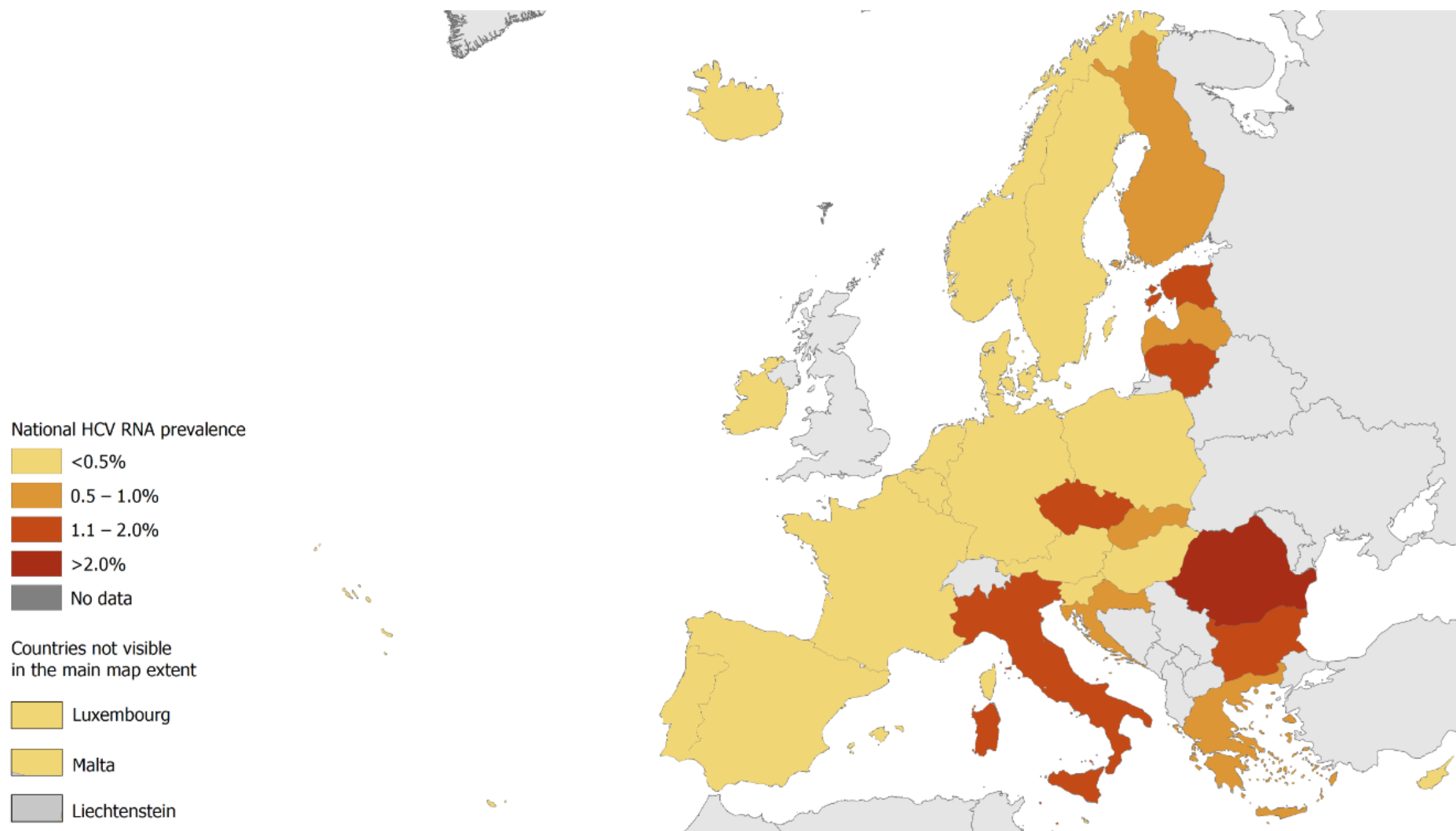
2.4 million people living
with chronic HCV
(2022 estimate)

Variation in disease burden across countries and between different population groups

Hepatitis B (HBsAg) prevalence (%) in the adult general population in the EU/EEA



Hepatitis C (RNA) prevalence (%) in the overall population in EU/EEA countries, 2022

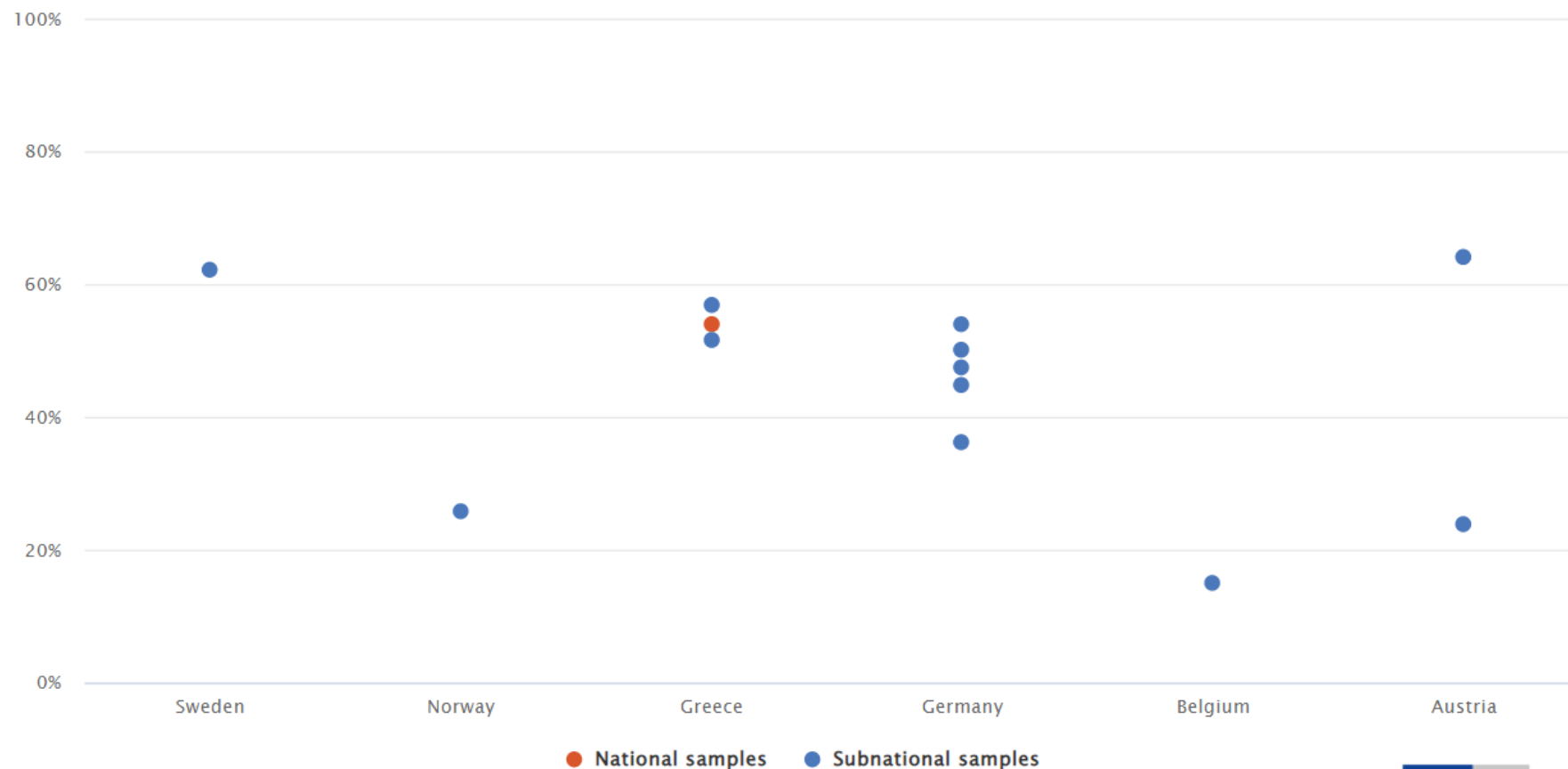


Prevalence of hepatitis B and C in different population groups

Hepatitis B (HBsAg prevalence)	Hepatitis C (anti-HCV)
Migrant populations 0.9 - 31.7%	People who inject drugs 15.4 – 96.8% (RNA prevalence 15.0 – 64.2%)
People who inject drugs 0 - 16.9%	People in prison 2.3 – 82.6%
People in prison 0.3 - 8.3%	Migrant populations 0 – 16.8%
Men who have sex with men 2.3 - 4.3%	Men who have sex with men 0.6 – 4.8%

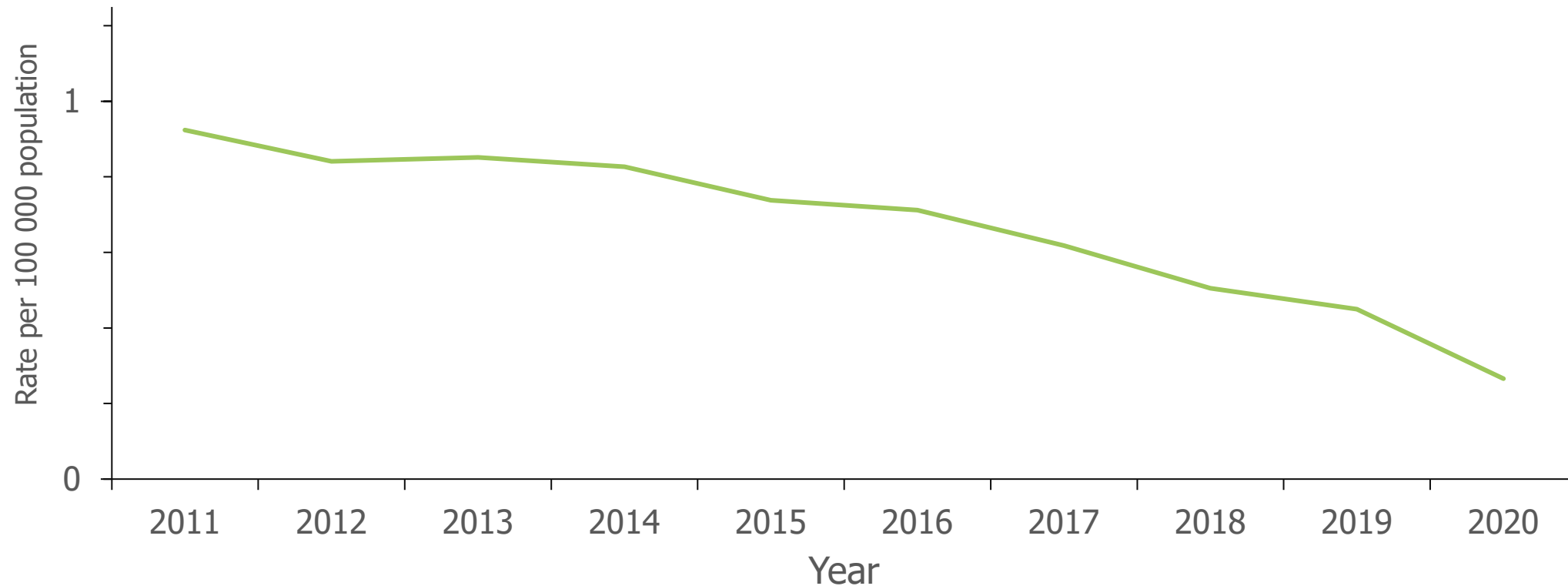
People who inject drugs: HCV-RNA prevalence

Prevalence of current HCV infection (HCV RNA+) among people who inject drugs, by country, 2019 or latest available data



Hepatitis B incidence

Notifications of newly diagnosed cases of acute hepatitis B provide proxy data on incidence



Hepatitis C incidence

Declining overall incidence reported by many countries following control of blood transfusion and iatrogenic transmission in 1990s

- Further declines reported following introduction of harm reduction

Incidence highest among **PWIDs**

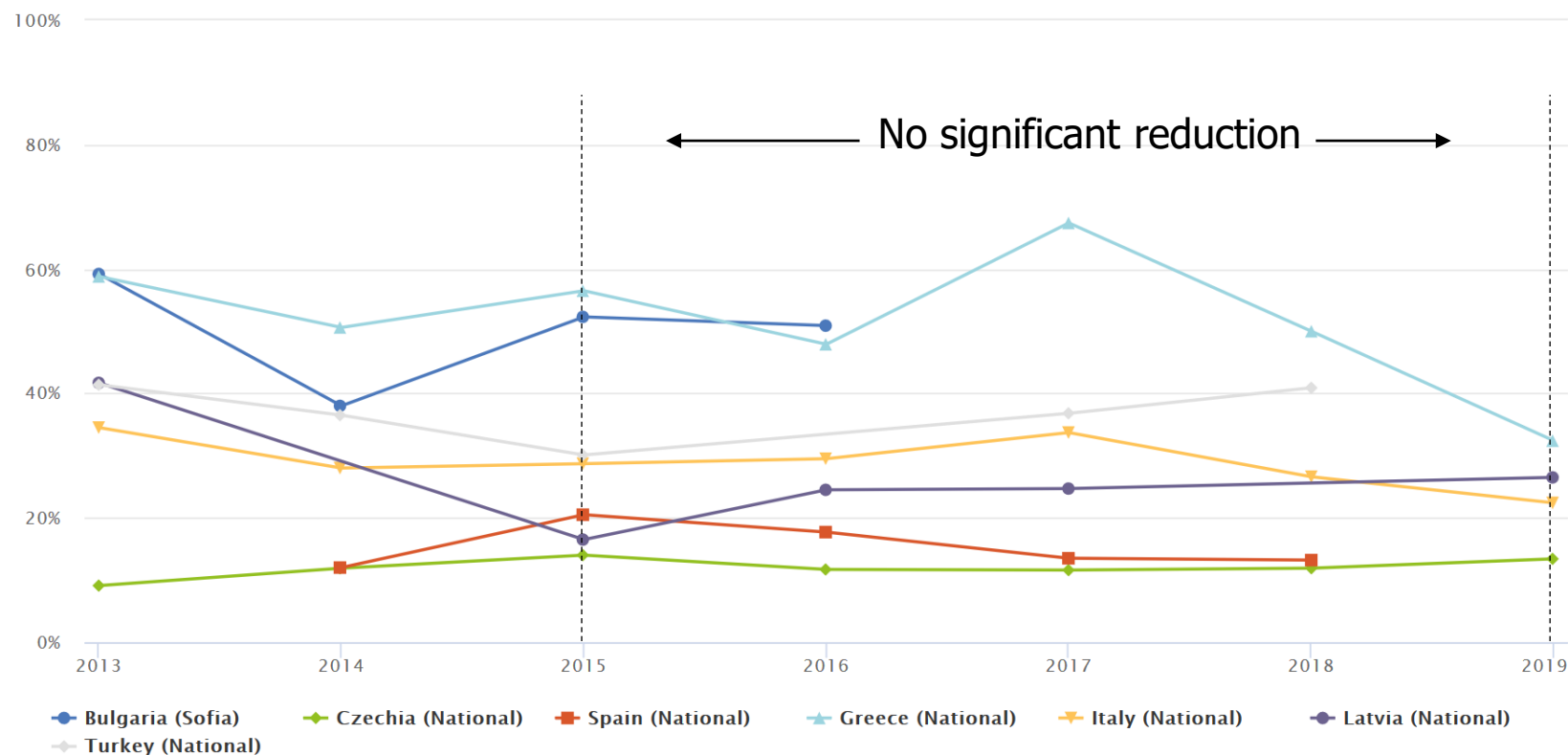
- Declining trends seen in some countries

Incidence also high among **MSM**

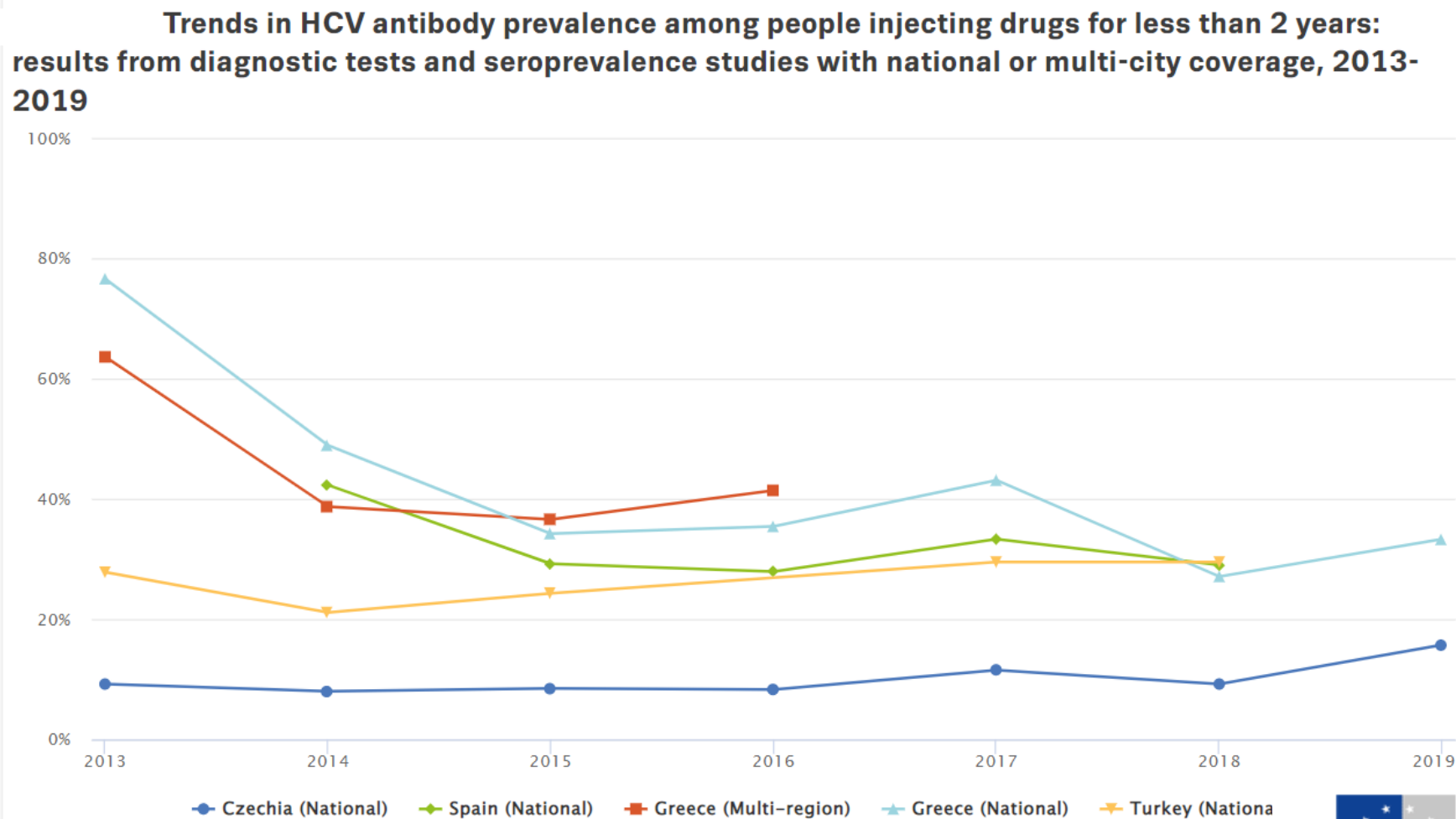
- Highest among HIV positive MSM, then MSM who are HIV-negative on PrEP (HIV pre-exposure prophylaxis), then HIV negative men not on PrEP
- Recent declines among HIV infected MSM related to widespread availability of direct acting antivirals in Netherlands

Proxy for hepatitis C incidence: trends in anti-HCV prevalence among young PWID (<25 years)

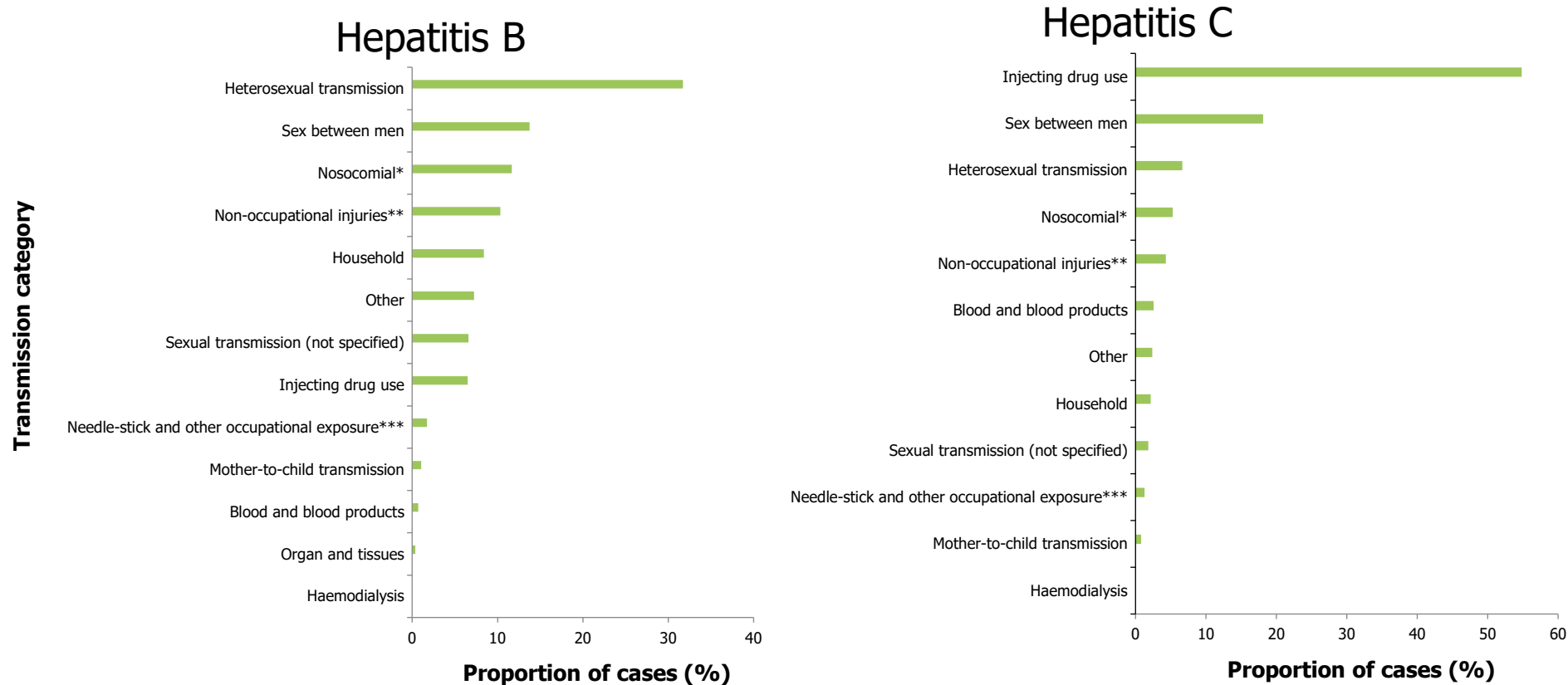
Trends in HCV antibody prevalence among people who inject drugs aged less than 25 years: results from diagnostic tests and seroprevalence studies with national or multi-city coverage, 2013-2019



Proxy for hepatitis C incidence: trends in anti-HCV prevalence among new PWID (injected less than 2 years)



Transmission category of acute hepatitis B and C cases, EU/EEA, 2020



Source: European Centre for Disease Prevention and Control (ECDC). Hepatitis B: Annual Epidemiological Report for 2020; European Centre for Disease Prevention and Control (ECDC). Hepatitis C: Annual Epidemiological Report for 2020.

* Nosocomial refers here to patient infections in healthcare settings

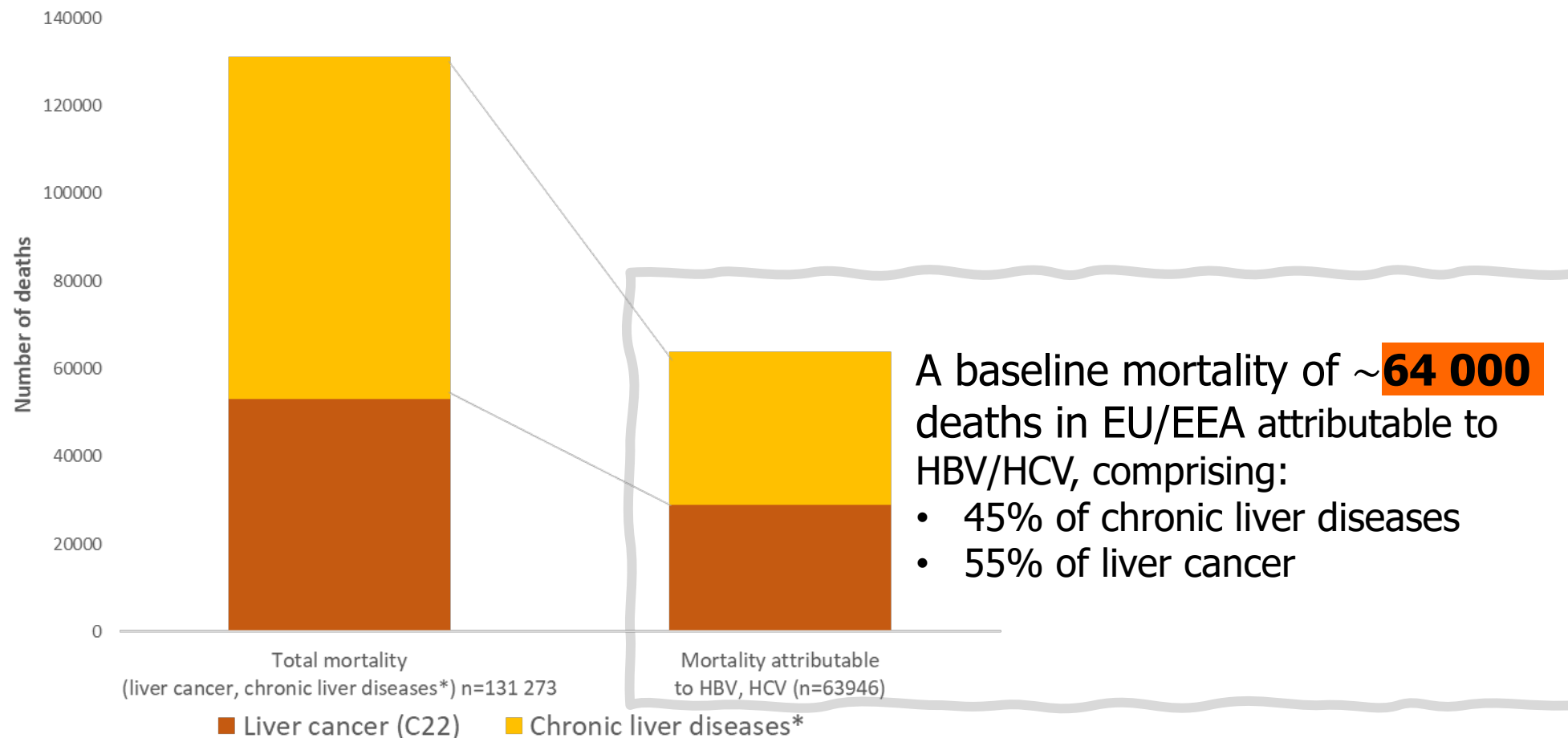
** 'Non-occupational injuries' include needle sticks that occur outside a health care setting, bites, tattoos, piercings

*** Occupational exposure includes needle-stick and other occupational injuries

Acute HBV reports from Austria, the Czechia, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain and Sweden

Acute HCV reports from Austria, Croatia, Denmark, Estonia, Germany, Ireland, Italy, Latvia, the Netherlands, Portugal, Slovakia, Spain, and Sweden

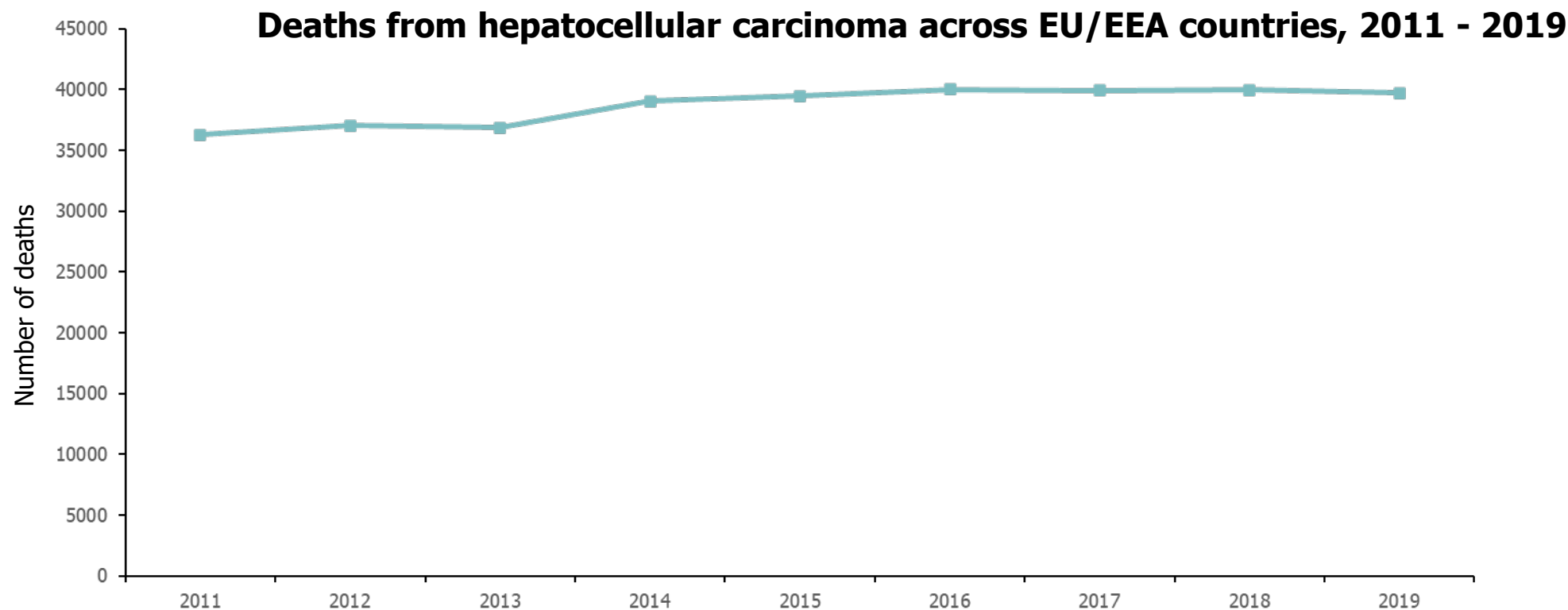
Mortality attributable to HBV and HCV in EU/EEA and UK in 2015



*(B18-B18.9, I85-I85.9, I98.2, K70-K70.3, K71.7, K74-K74.9, K75.2, K75.4-K76.2, K76.4-K76.9, K77.8)

Mortality data extracted from Eurostat, May 2021. The 2015 baseline includes 5275 deaths attributable to HBV/HCV from the UK.

Mortality due to viral hepatitis B and C in the EU/EEA over time



No decrease in total mortality from liver cancer and chronic liver diseases at EU/EEA level 2011 – 2018

Mortality from **liver cancer** continue to **increase**

Hepatitis B and C among migrant populations



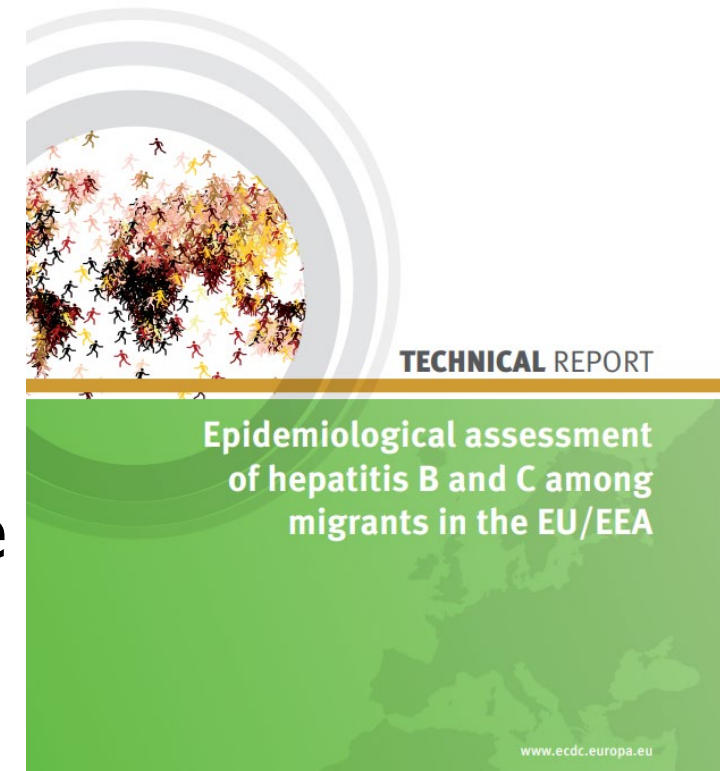
ECDC report in 2016 to estimate burden of hepatitis B and C among migrant populations in Europe

Based on:

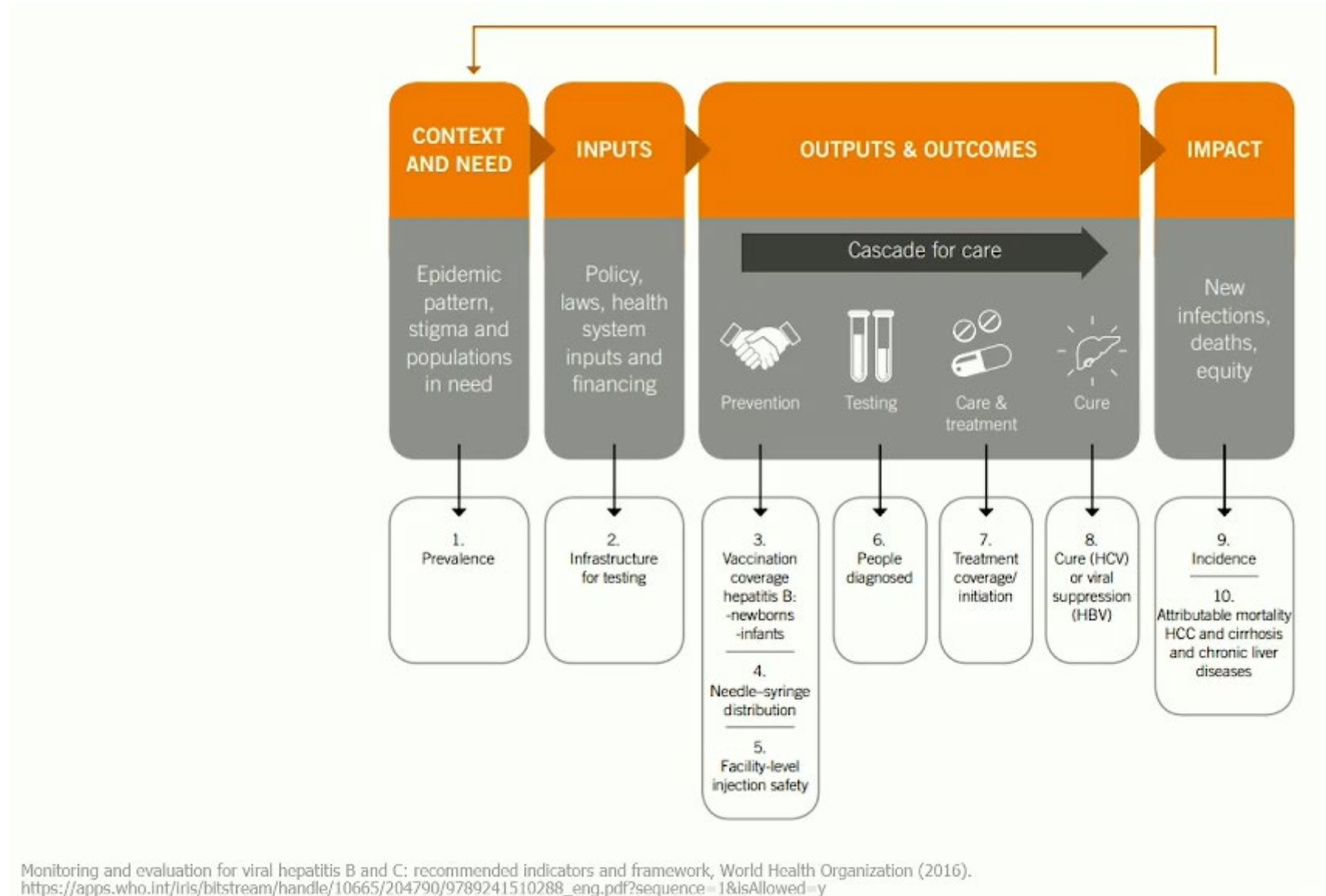
- Number of migrants in EU countries
- Prevalence in country of origin

Estimated 25% of the chronic hepatitis B burden in the EU/EEA was among migrant populations and for hepatitis C this was 14%

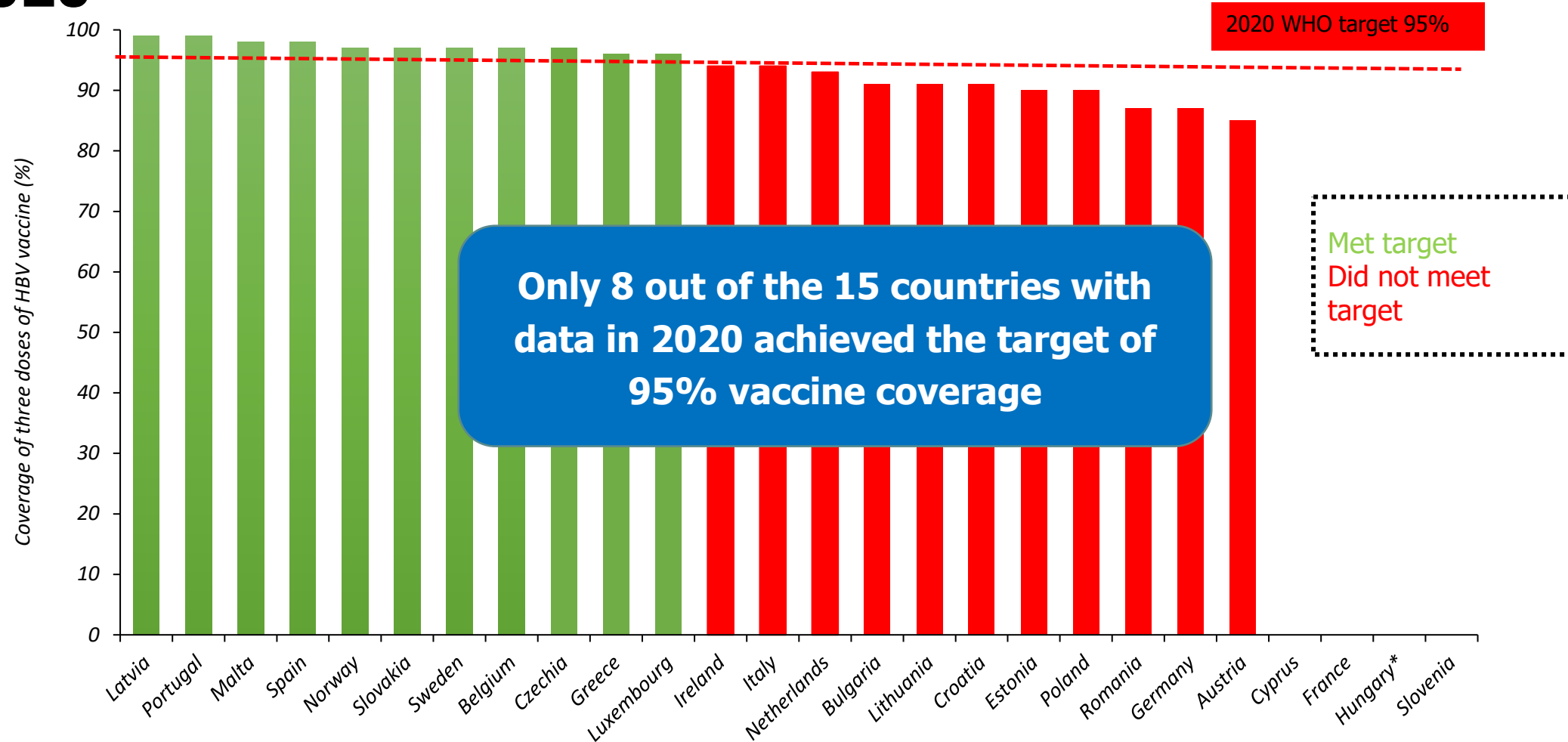
The proportion of migrants in the total population at that time was considerably lower (5%)



Monitoring and evaluation framework for hepatitis B and C



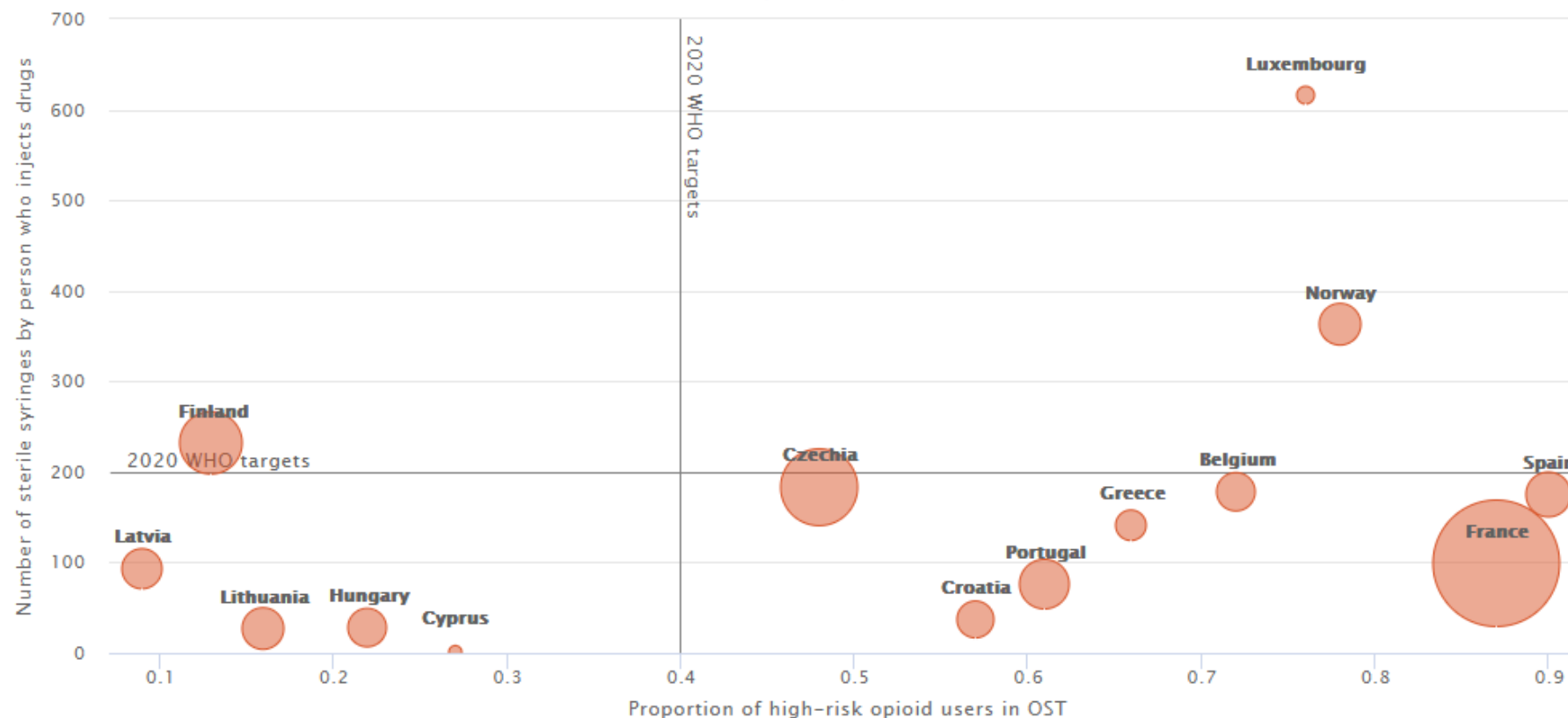
Coverage (%) of three doses of HBV vaccine in EU/EEa countries that implement universal HBV vaccination in 2020



Source: WHO. Hepatitis B (HepB3) immunization coverage among 1-year olds (%). [https://www.who.int/data/maternal-newborn-child-adolescent-ageing/indicator-explorer-new/mca/hepatitis-b-\(hepb3\)-immunization-coverage-among-1-year-olds-\(-\)](https://www.who.int/data/maternal-newborn-child-adolescent-ageing/indicator-explorer-new/mca/hepatitis-b-(hepb3)-immunization-coverage-among-1-year-olds-(-))

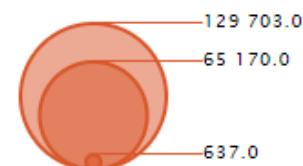
*No data available from Hungary as the programme is a two-dose regime provided from the age of 13 years. No available data for 2020 from Austria, Cyprus or Slovenia.

Number of sterile syringes distributed per person who injects drugs and proportion of high risk opioid users in opioid substitution treatment (OST), by country, 2019*



Only two of the 14 countries with data have reached the combined prevention targets

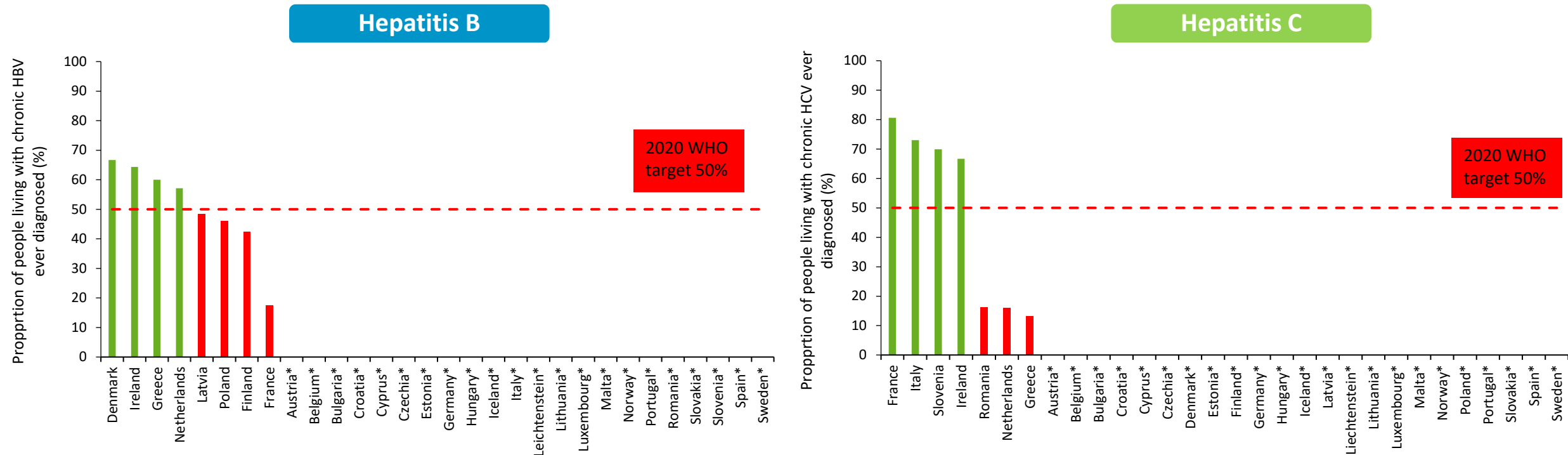
Number of people who inject drugs



* Or most recent year.

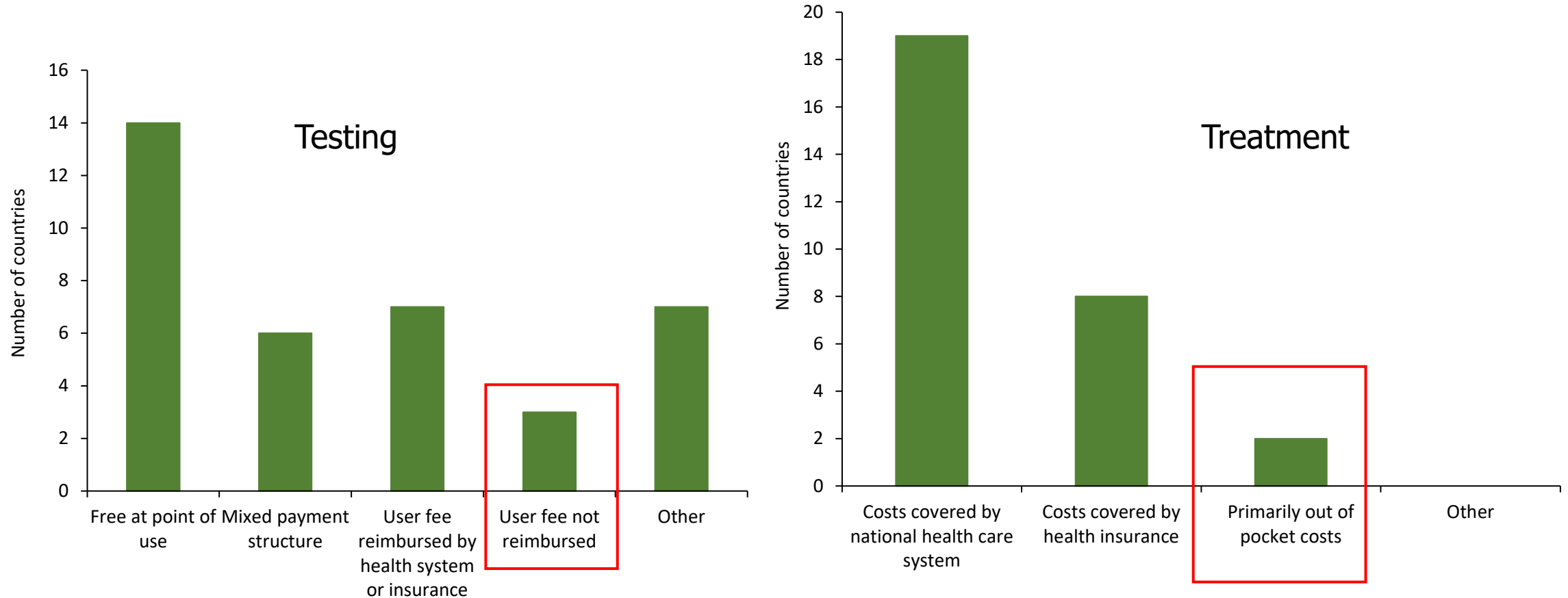
EMCDDA, Elimination barometer on viral hepatitis among people who inject drugs in Europe. *Elimination barometer on viral hepatitis among people who inject drugs in Europe* / www.emcdda.europa.eu

Proportion people living with chronic HBV and HCV in EU/EEA countries, diagnosed by the end of 2020**

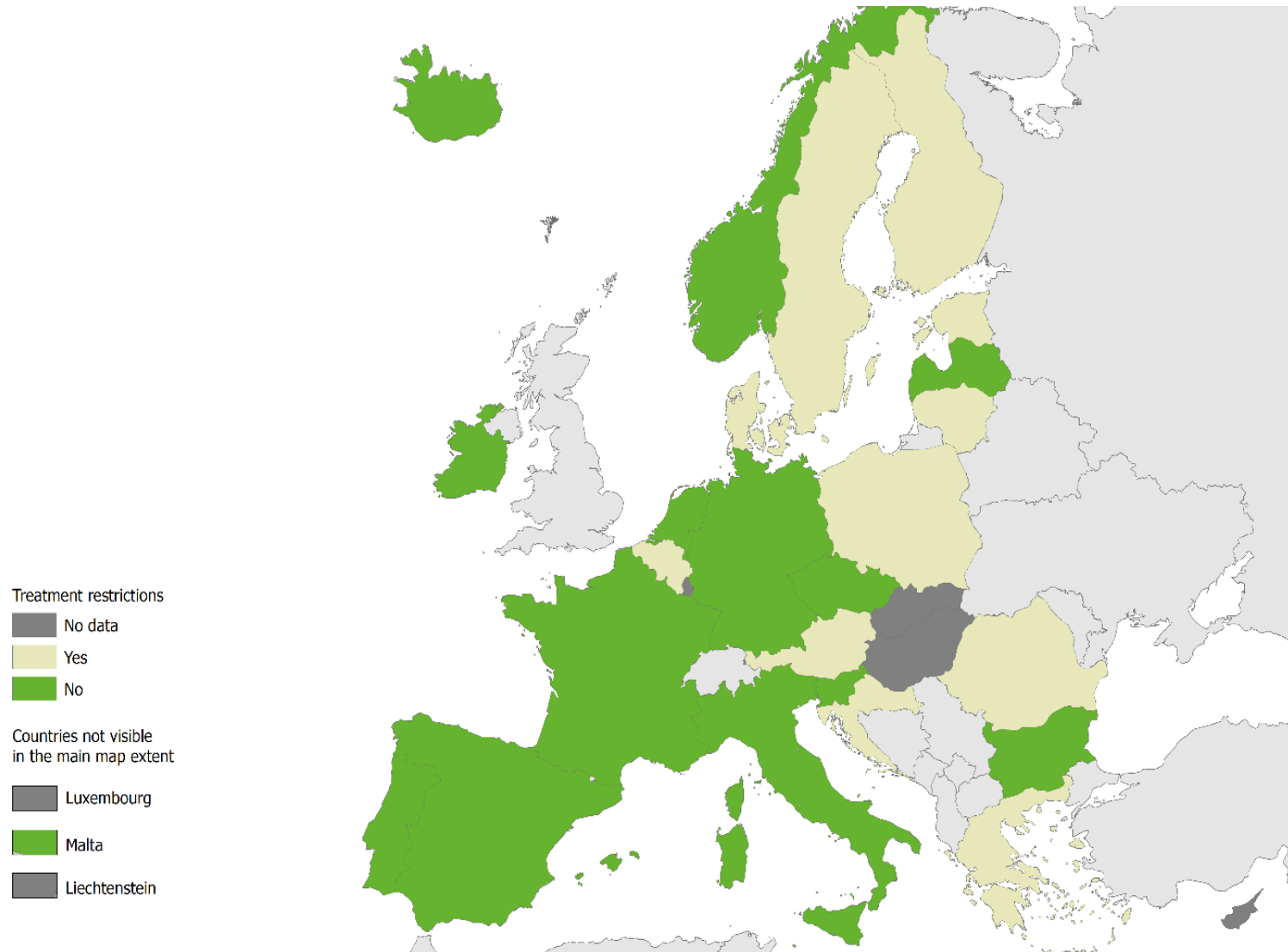


- Considerable variation across the region
- Variation in quality of the data with many countries unable to adjust HCV data for cases as they are treated and cured

Coverage of financial costs relating to HBV and HCV testing and treatment in EU/EEA countries, 2021



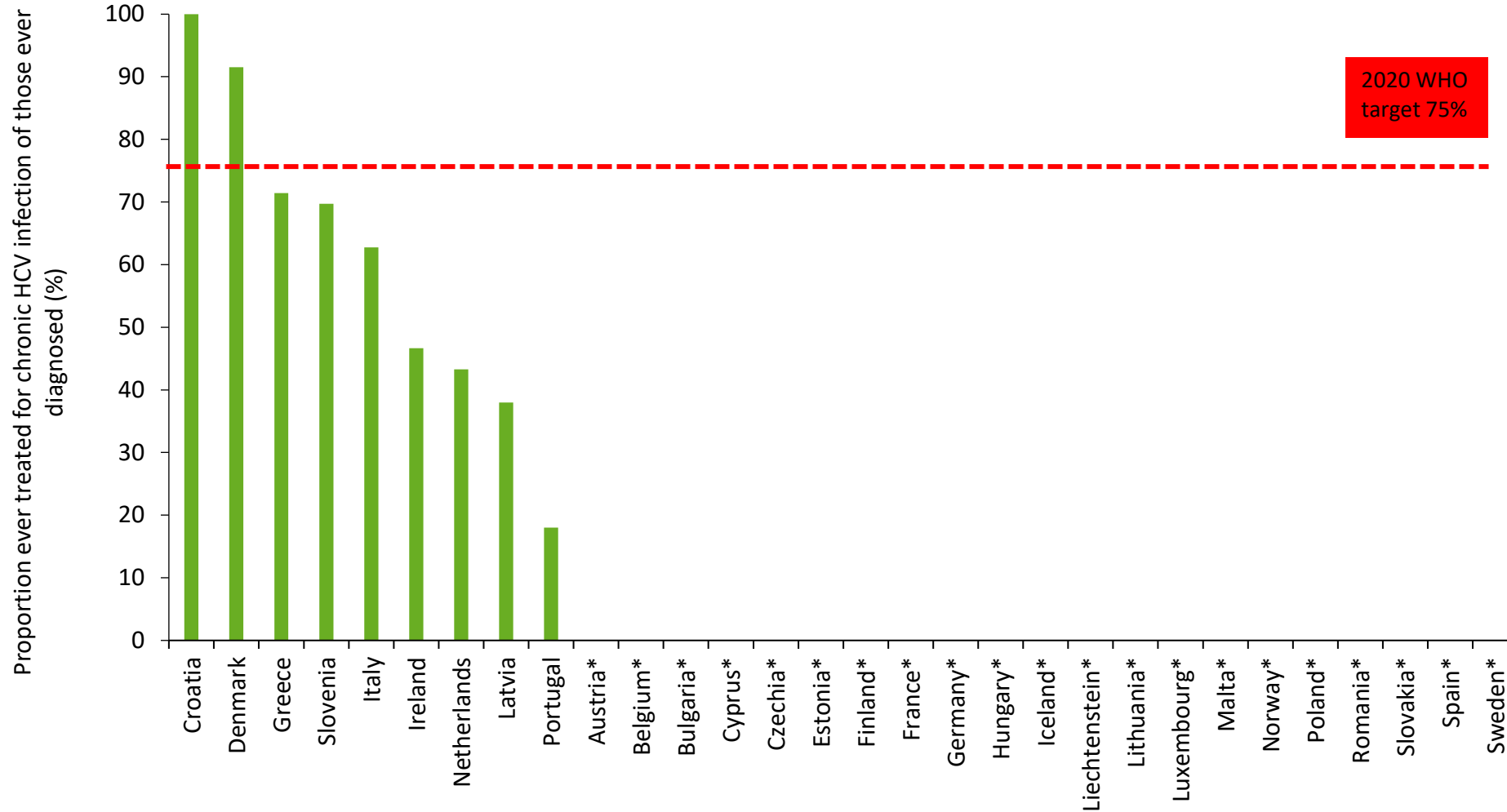
Existence of restrictions on access to HBV/HCV treatment in EU/EEA countries, 2021



12 of the 26 responding countries reported restrictions on access for:

- Undocumented migrants (9 countries)
- current injectors (3 countries)
- former injectors (1 country)
- Other (1 country).

Proportion ever diagnosed with chronic HCV infection who were ever treated in the EU/EEA, by the end of 2020**



- Data lacking
- **No country** providing data achieved the 2020 targets:
 - > 90% of diagnosed HBV patients linked to care
 - > 75% treatment coverage of people with HBV

Source: ECDC. Monitoring the responses to hepatitis B and C epidemics in the EU/EEA Member States, 2022.

* Country did not provide data in monitoring survey.

**2020 or most recent year with available data.

Denmark: sub-national data from the West of Denmark (Region, North, Central, and South), scaled up to national level.

Acknowledgements



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