

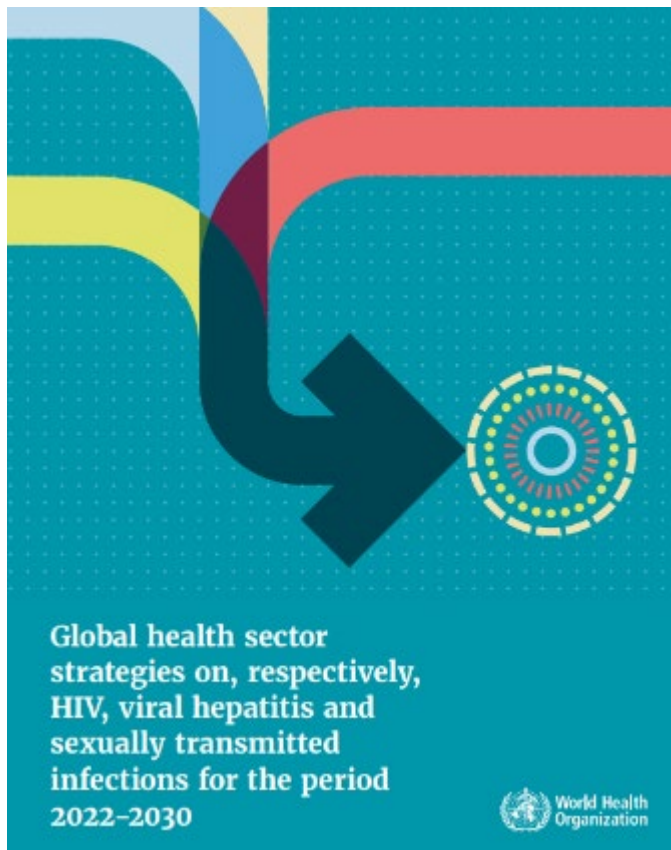
Hepatitis B and C virus infection and screening among migrants in EU/EEA countries

Ndeindo Ndeikoundam, ECDC

Viral Hepatitis Prevention Board, 26-27 March 2024

Global health sector strategies on HIV, viral hepatitis and STIs for 2022-2030; WHO Europe Regional action plan 2022-2030

- “End viral hepatitis as a major public health threat by 2030”



European Region

Regional Committee for Europe
72nd session

Tel Aviv, Israel, 12-14 September 2022

EUR/RC72/9
Provisional agenda item 7

11 August 2022 | 220605

ORIGINAL: ENGLISH

Regional action plans for ending AIDS and the epidemics of viral hepatitis and sexually transmitted infections 2022-2030

The burden of viral hepatitis B and C in the EU/EEA



Estimated numbers with chronic infection

3.6 million people living
with chronic HBV
(2016 estimate)

1.8 million people living
with chronic HCV
(2022 estimate)

Hepatitis B and C among migrant populations

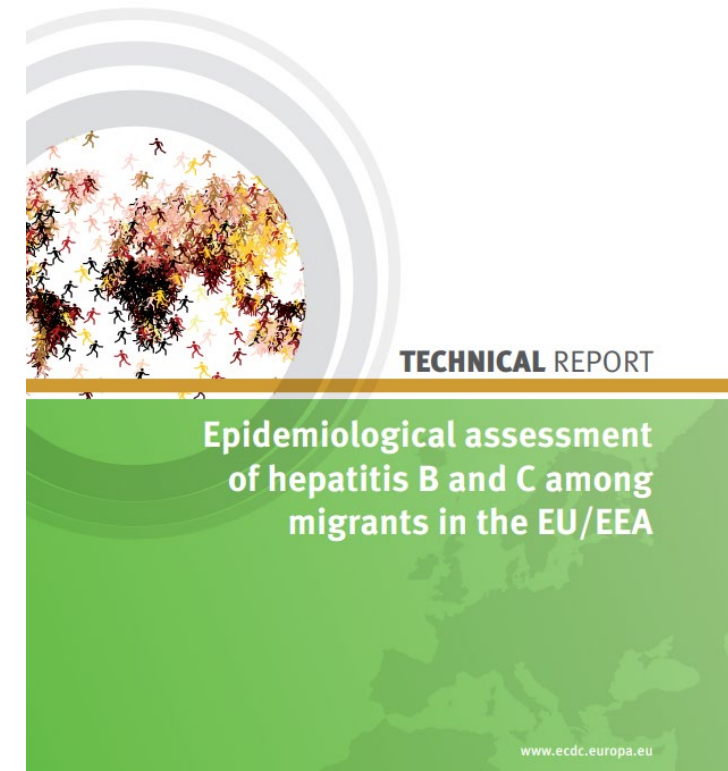
ECDC report in 2016 to estimate burden of hepatitis B and C among migrant populations in Europe

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%

Proportion of migrants (5%) in the total population in 2016 was considerably lower than in 2022 (8% : 5% from a non-EU country and 3% from of another EU country)



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%

Source: Bivegete S TA, et al. Estimates of hepatitis B virus prevalence among general population and key risk groups in EU/EEA/UK countries: a systematic review.

Submitted for peer review publication 2022; ECDC HCV MPES modelling work – publication pending; EMCDDA Viral Hepatitis Elimination Barometer

https://www.emcdda.europa.eu/publications/html/viral-hepatitis-elimination-barometer_en; ECDC hepatitis C prevalence data base <https://www.ecdc.europa.eu/en/infectious-disease-topics/z-disease-list/hepatitis-c/tools/hepatitis-c-prevalence-database>; Nakitanda et al. Hepatitis C virus infection in EU/EEA and United Kingdom prison: opportunities and challenges for action

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7650151/pdf/12889_2020_Article_9515.pdf.

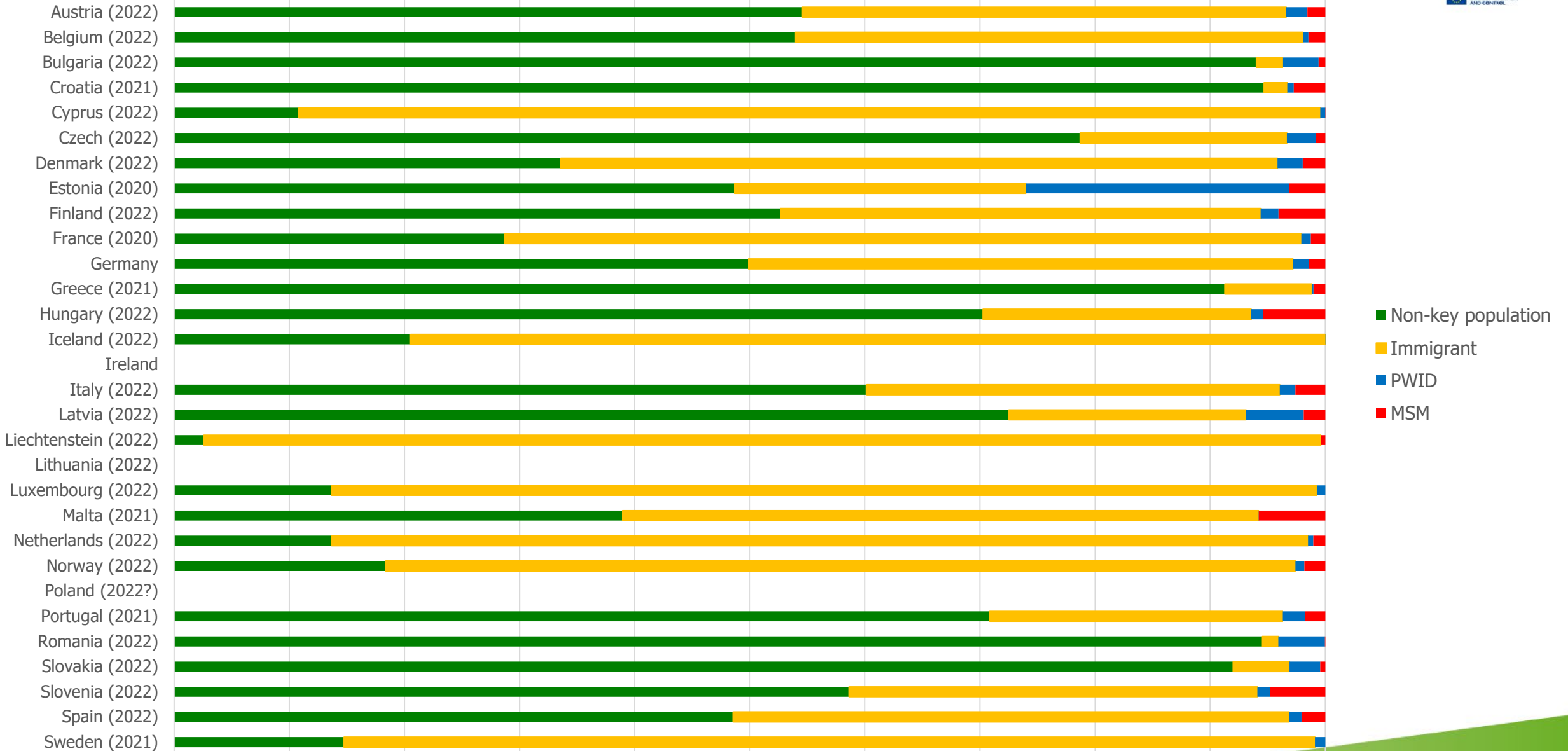
Workbook estimates of prevalence for chronic hepatitis B

	Non-key pop		Immigrant				PWID		MSM		Global			
	Population size	HBV	Population size	HBV point	HBV low	HBV high	Population size	HBV	Population size	HBV	Population size	HBV point	HBV low	HBV high
N	398,967,862	2,219,192	47,819,219	1,012,343	810,112	1,254,969	2,133,666	61,510	3,044,108	42,506	451,964,855	3,335,551	2,547,403	4,284,228
%	0.56		2.12		1.69	2.62	2.88		1.40		0.74		0.56	0.95

Workbook estimates: proportion of Hepatitis B cases by population group

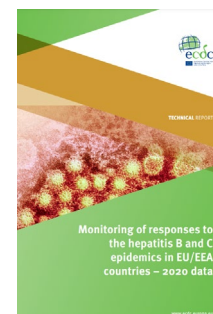
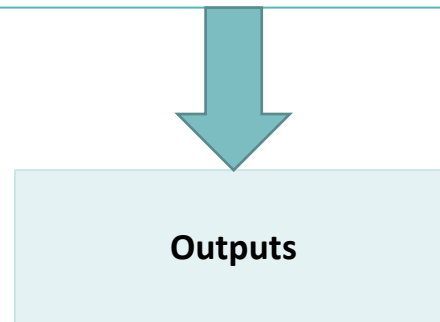
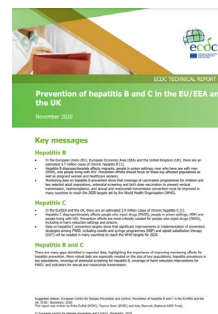
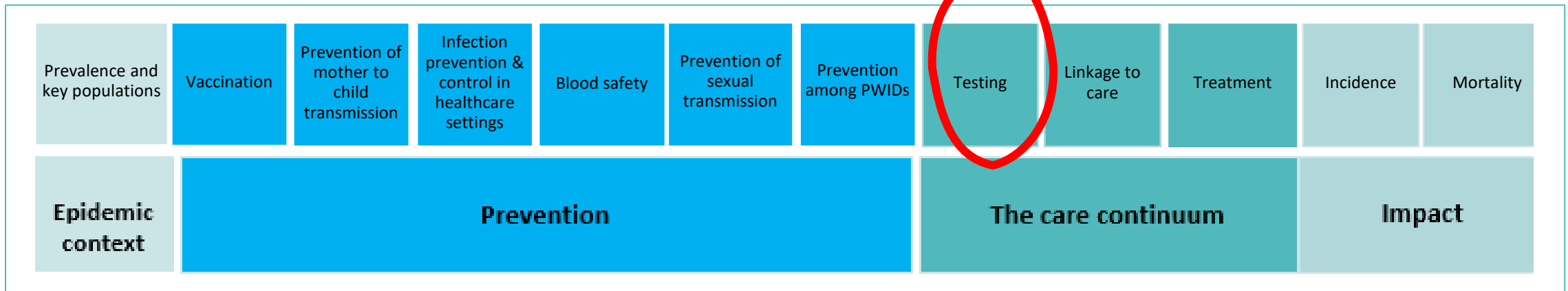


0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

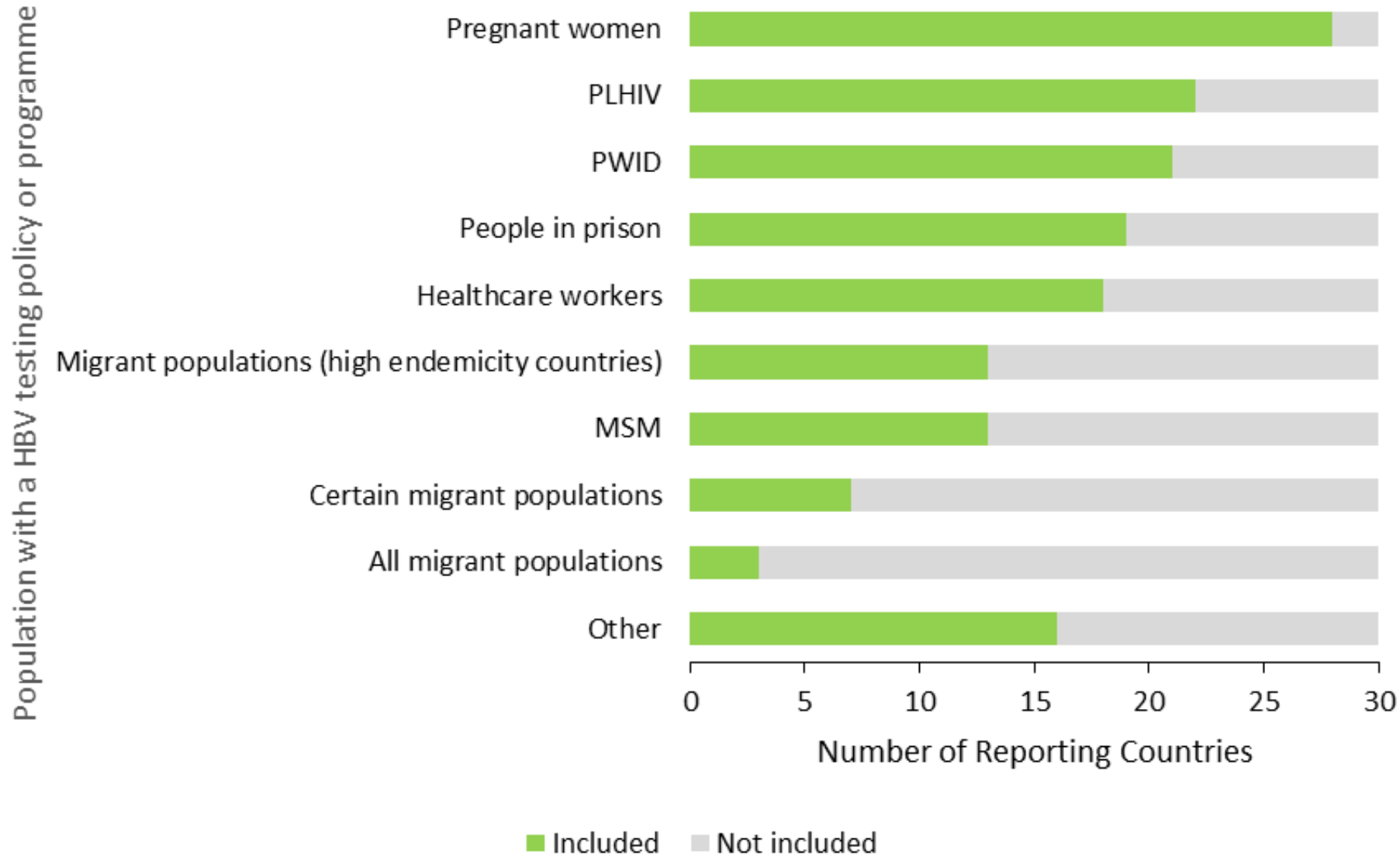


Source: Ana Paula Finatto-Canabaro, preliminary analysis, ECDC

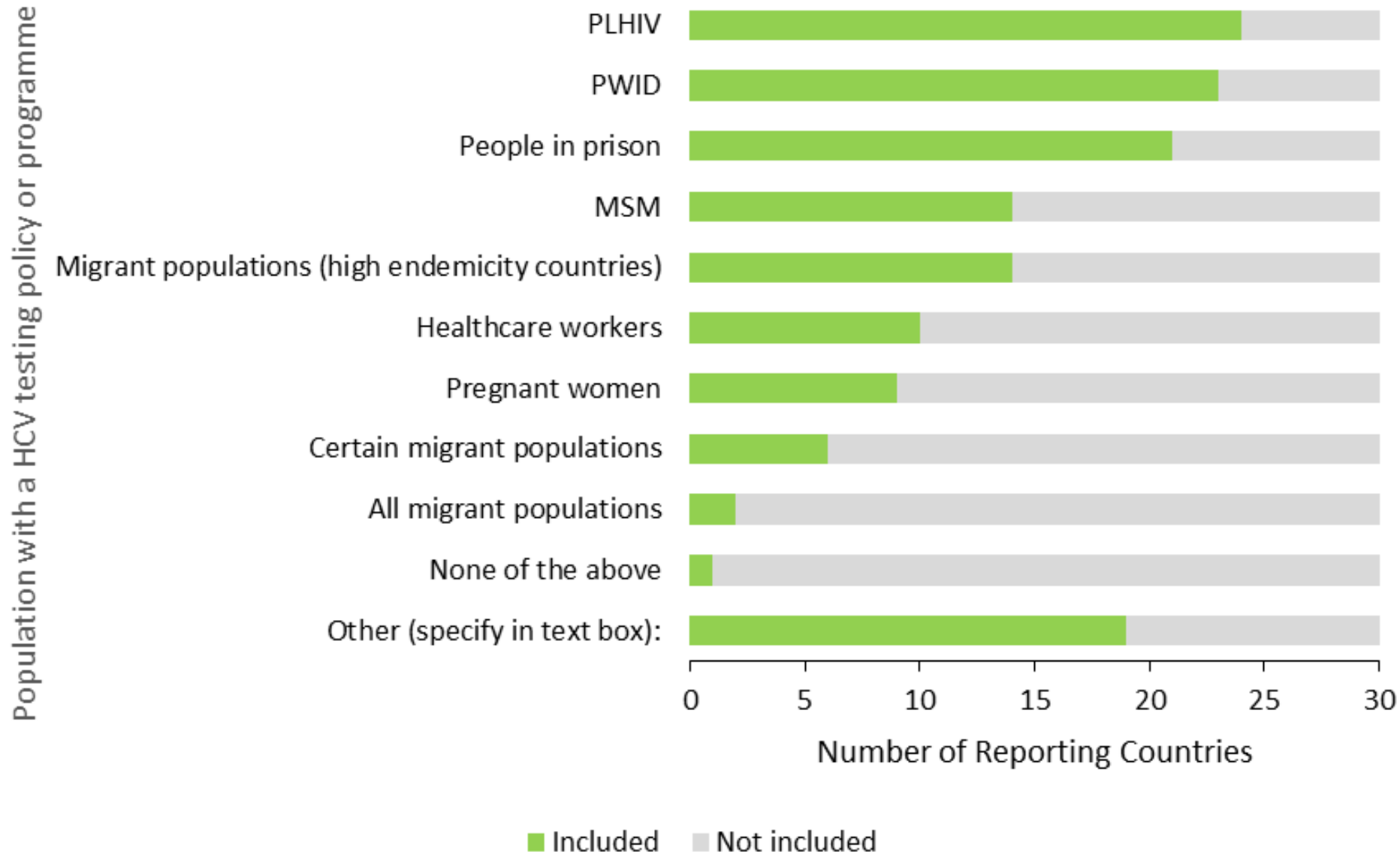
The EU hepatitis B and C monitoring system



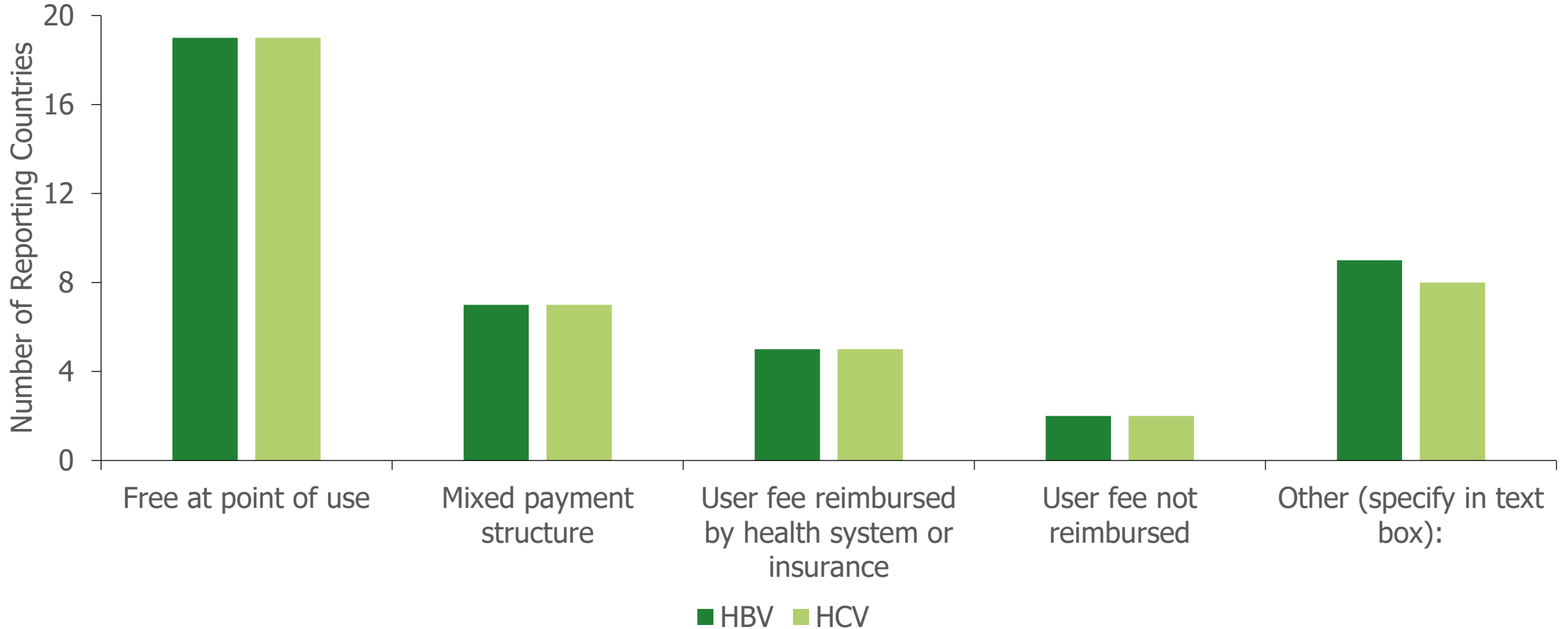
HBV testing policy or programme for key populations in countries in the EU/EEA, 2023



HCV testing policy or programme for key populations in countries in the EU/EEA, 2023



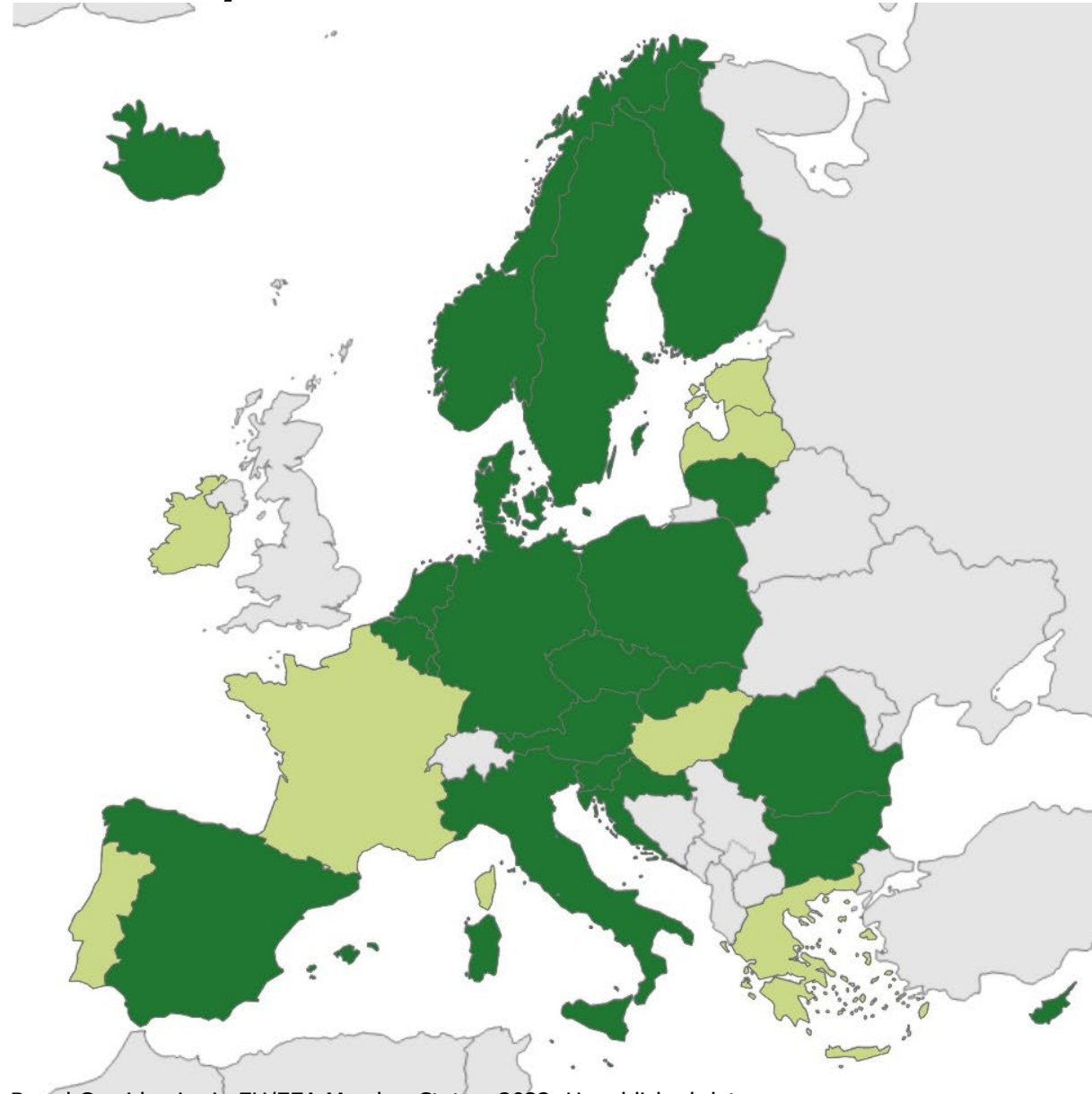
Coverage of HBV and HCV tests by the individual, in the EU/EEA, 2023



Countries where HBV/HCV tests must be administered by health care workers, 2023

Policy that HBV and/or HCV tests have to be performed by healthcare workers

- No
- Yes

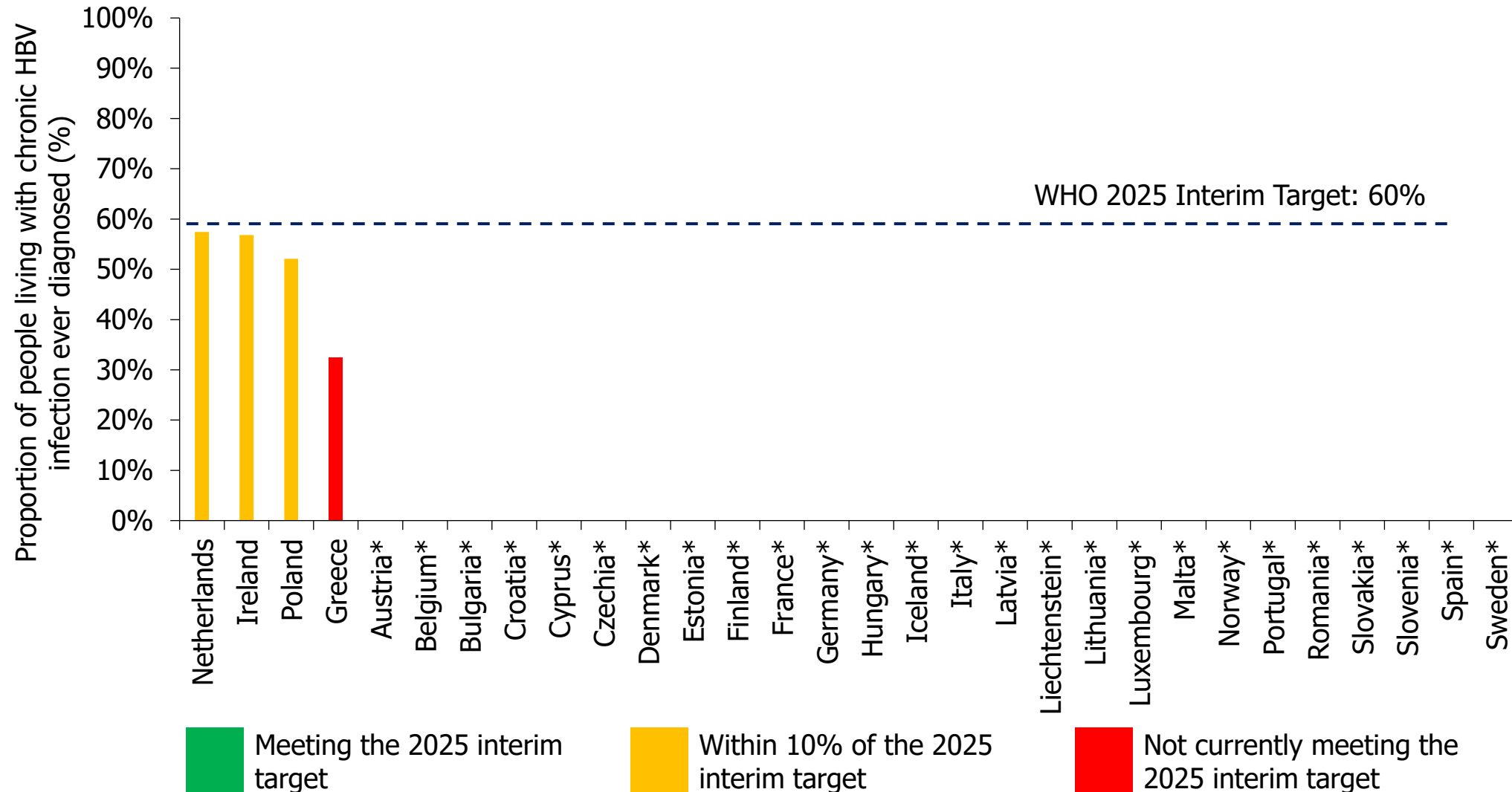


Countries not visible in the main map extent

- Malta
- Luxembourg
- Liechtenstein

7/30 reporting countries reported that HBV and HCV tests did not need to be administered by a healthcare worker

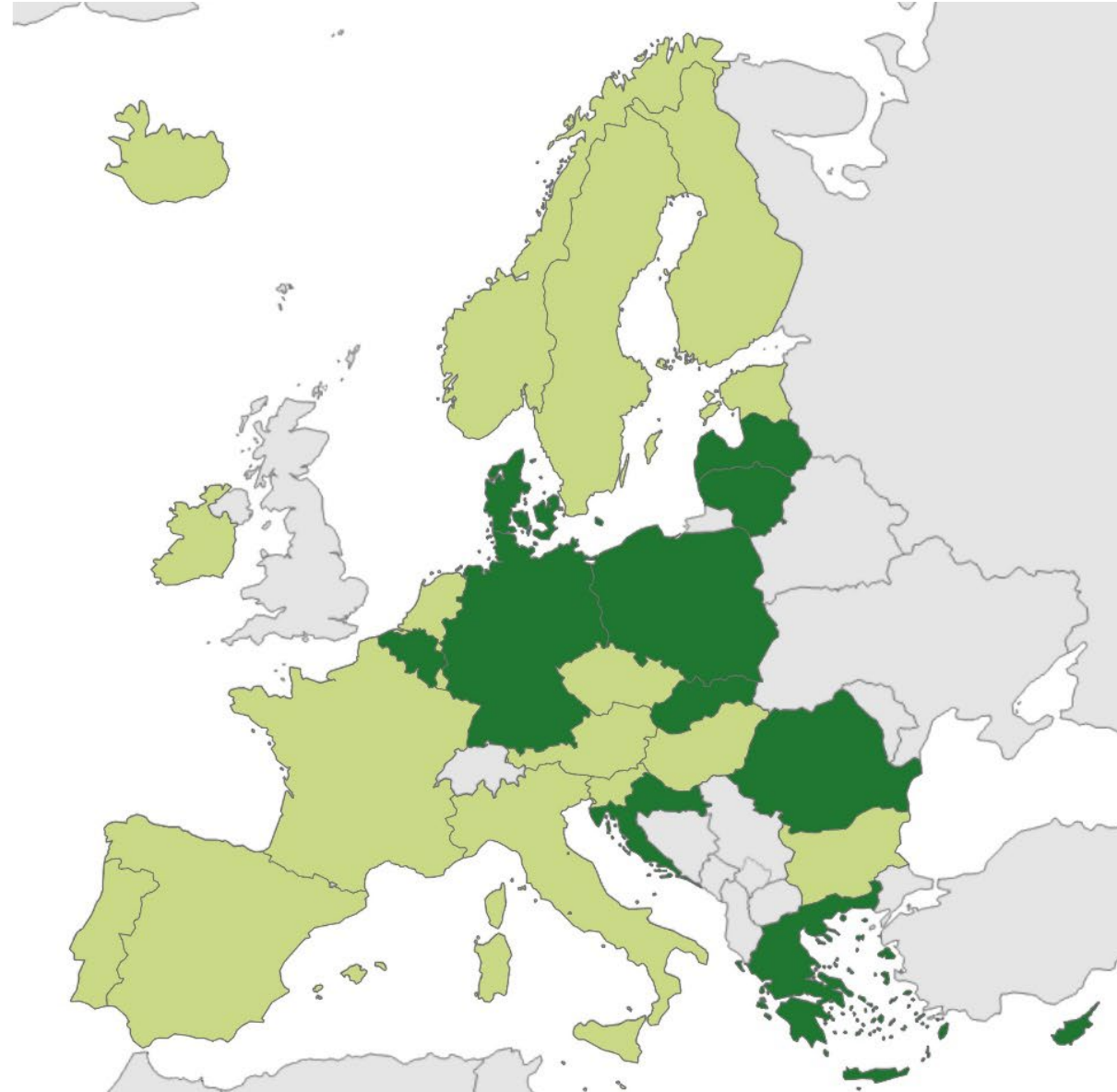
Proportion of all people living with chronic HBV infection ever diagnosed by the end of 2022 in the EU/EEA



Existence of restrictions on access to HBV/HCV treatment, in the EU/EEA, 2023

Restrictions/limitations on access to HBV/HCV treatment

- No restrictions/limitations
- Restrictions exist



Countries not visible in the main map extent

- Malta
- Luxembourg
- Liechtenstein

19/30 countries (63%) reported no restrictions on access to HBV and HCV treatment

Types of HBV/HCV treatment restrictions, by country, 2023

HBV/HCV Treatment Restrictions	
Belgium	HBV/HCV: Undocumented migrants; Prisoners
Croatia	HBV/HCV: People who inject drugs - current injectors
Cyprus	HBV/HCV: Undocumented migrants
Denmark	HBV/HCV: Undocumented migrants (excluding those with acute HBV/HCV)
Germany	HBV: Undocumented migrants HCV: Undocumented migrants; people in prisons (prison dependent; treatment usually not provided to people with short term sentences)
Greece	HBV/HCV: Undocumented migrants
Latvia	HBV: Undocumented migrants, patients with liver fibrosis (F)<2 HCV: Undocumented migrants
Lithuania	HBV/HCV: Undocumented migrants, patients with liver fibrosis (F)<2
Poland	HBV/HCV: Undocumented migrants; specialistic prescription only
Romania	HBV/HCV: Uninsured persons, except foreign/stateless persons in special situations and migrants from Ukraine
Slovakia	HBV: Undocumented migrants; Clinical restrictions HCV: Undocumented migrants

Migrant related variables collected through The European Surveillance System (TESSy)

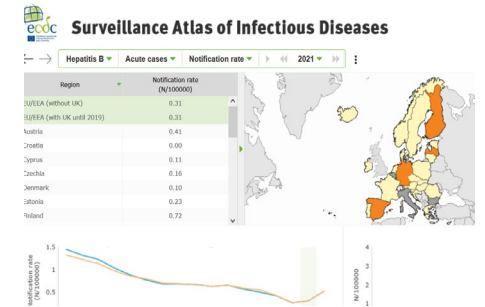
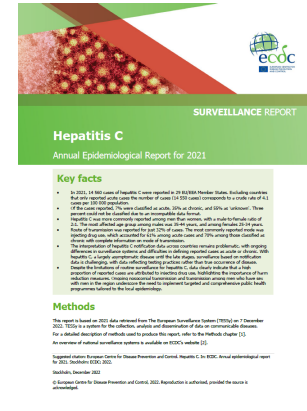
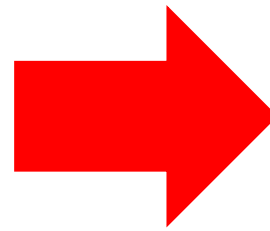
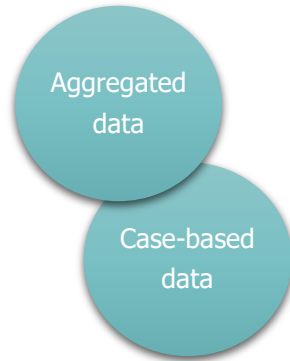
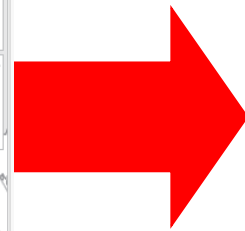
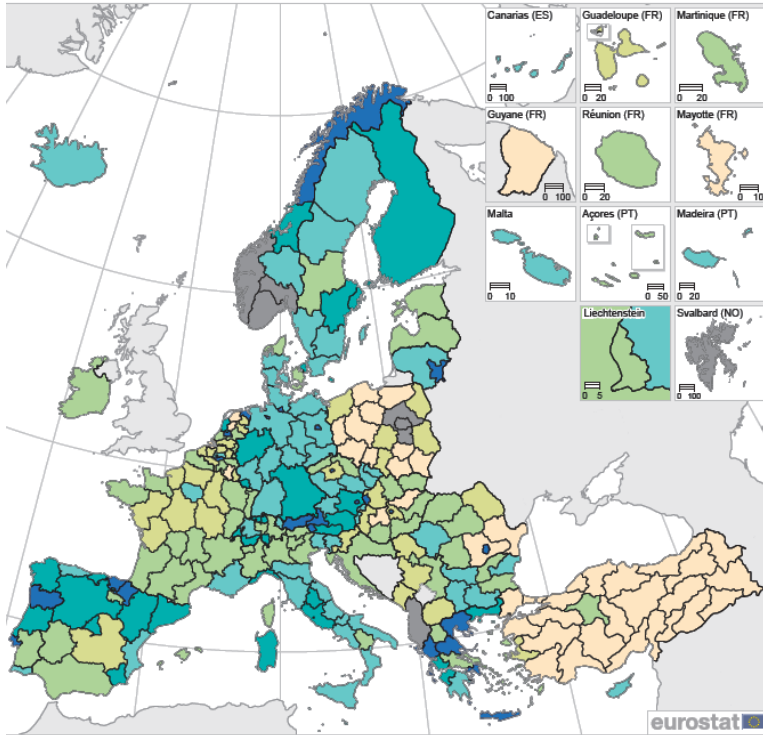
Variable	HIV	TB	HBV	HCV	Gonorrhoea	Syphilis	Measles	Rubella	Malaria	Chagas disease*
Country of birth										
Country of nationality										
Probable country of infection										
Imported										
Region of origin										

*Not under EU surveillance

European Network for Hepatitis B and C Surveillance : 30 EU/EEA countries provide data through TESSy



Medical doctors, 2019
per 100 000 inhabitants, by NUTS 2 regions)



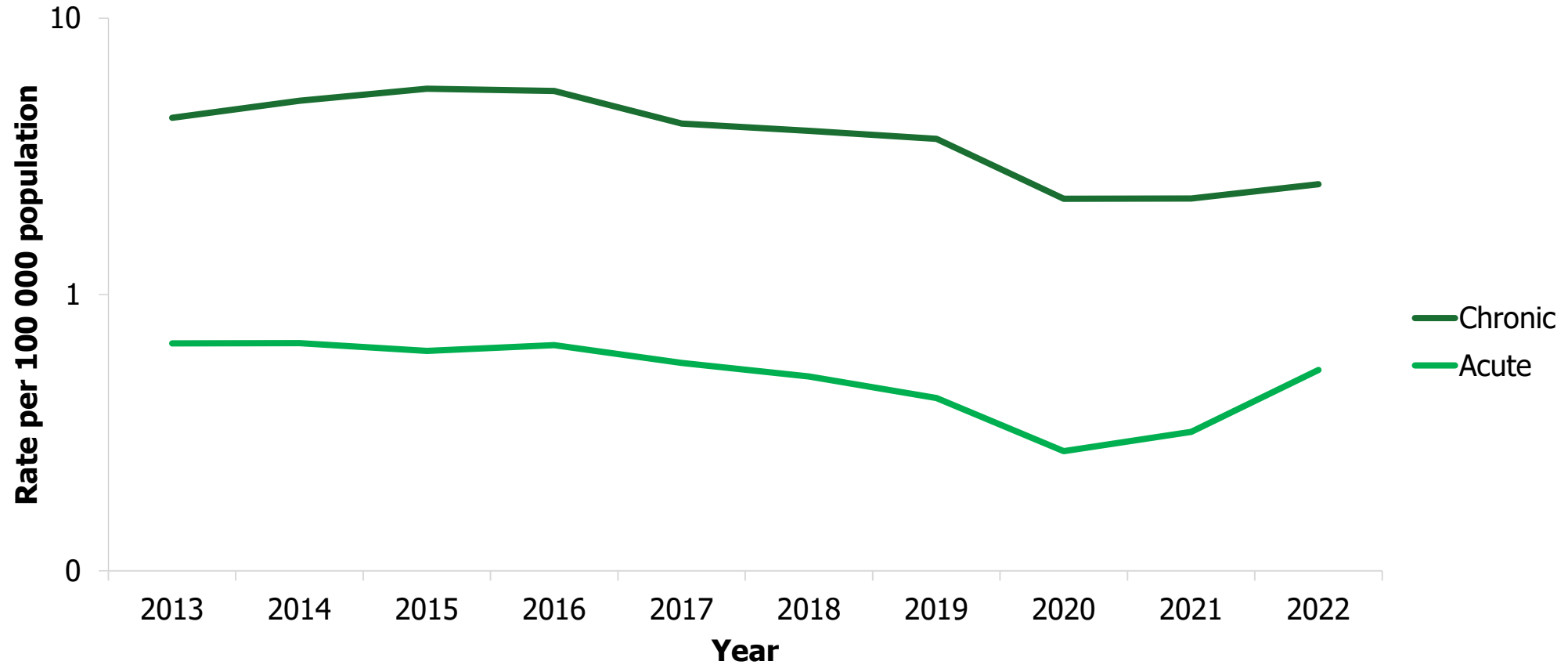
National focal points & National operational points
From 30 EU/EEA countries



Notification rates of acute and chronic hepatitis B per 100 000 population by year in EU/EEA countries reporting consistently, 2013–2022



Logarithmic scale



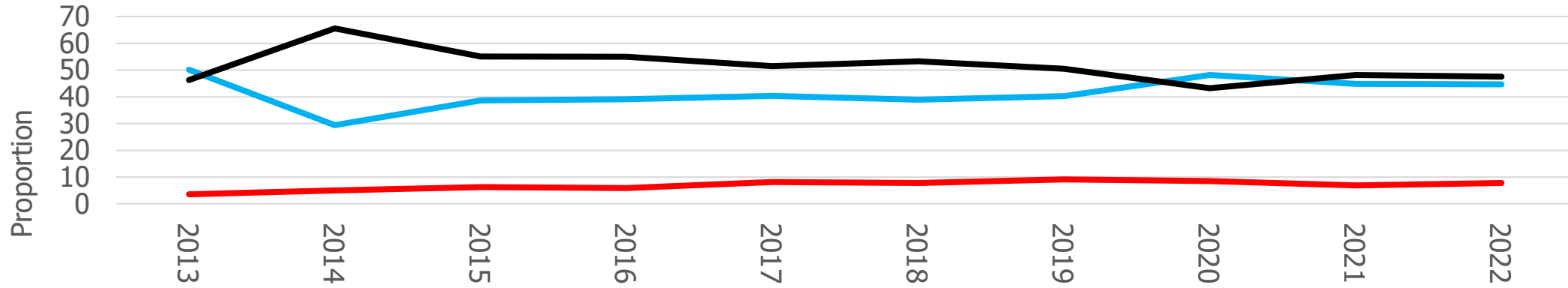
Source: Country reports.

Acute cases: Country reports from Austria, Cyprus, Czechia, Denmark, Estonia, Finland, France*, Germany, Greece, Hungary, Iceland, Ireland, Latvia, Lithuania, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.

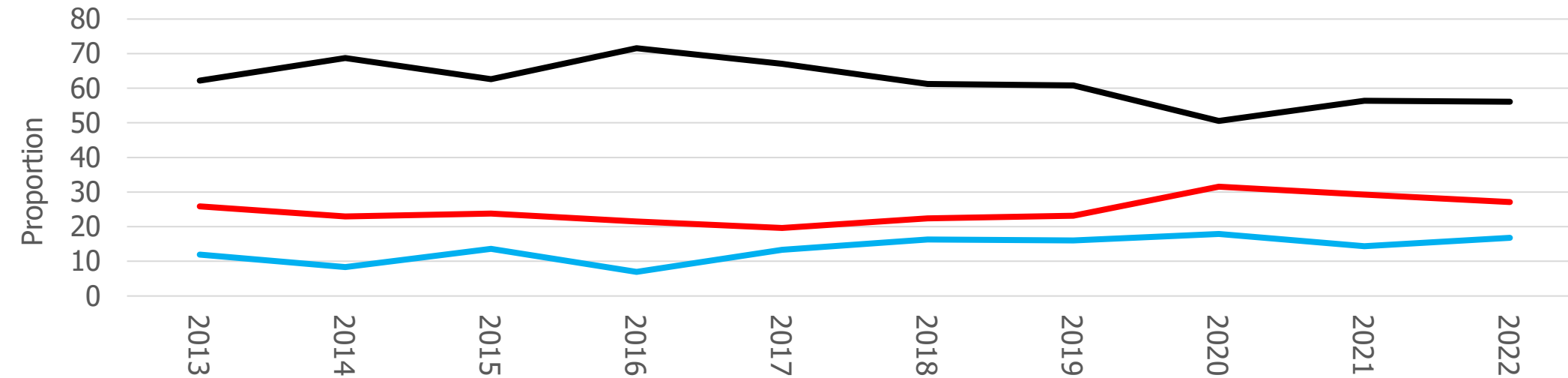
Chronic cases: Country reports from Austria, Cyprus, Denmark, Estonia, Finland, Ireland, Latvia, Luxembourg, Malta, the Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia and Sweden

Imported cases of hepatitis B in EU/EEA, 2013-2022

Acute

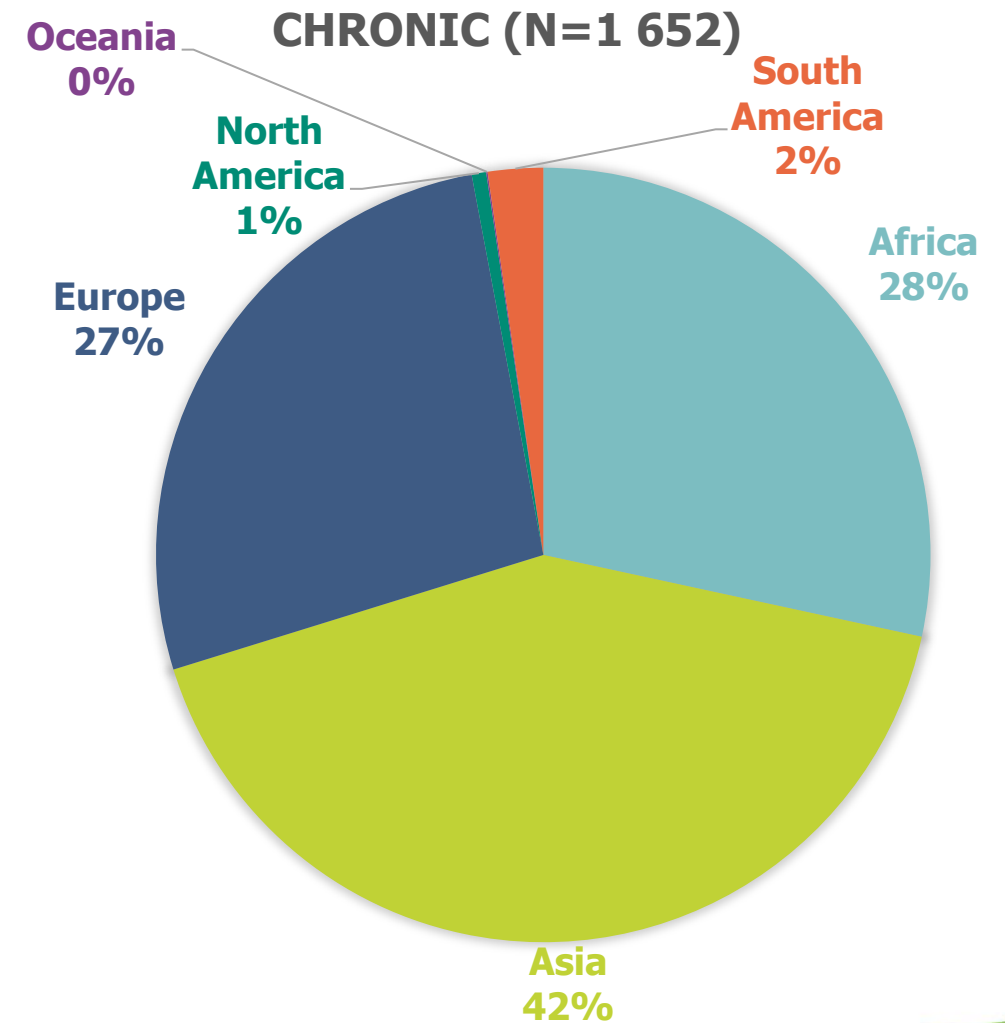
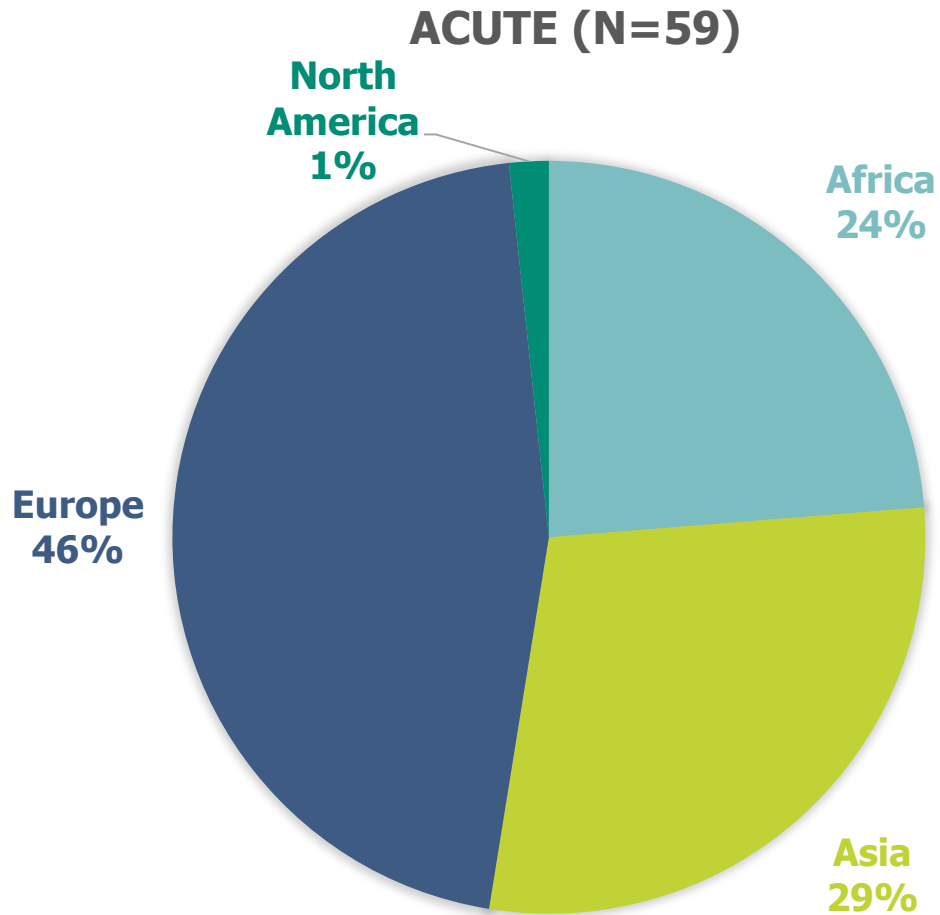


Chronic

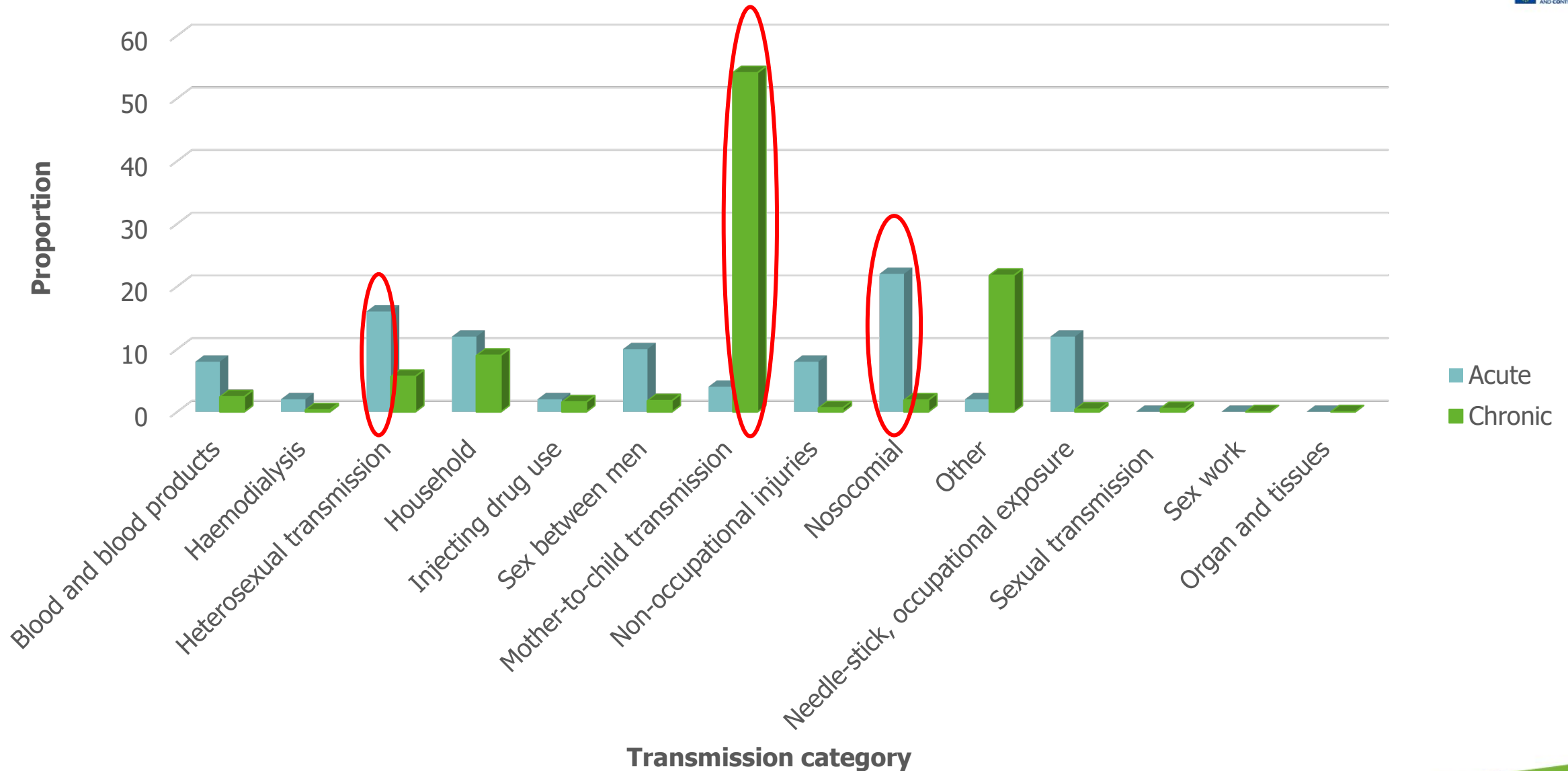


— Not imported (%) — Missing information (%) — Imported (%)

Continent of birth for imported cases of hepatitis B in EU/EEA, 2022

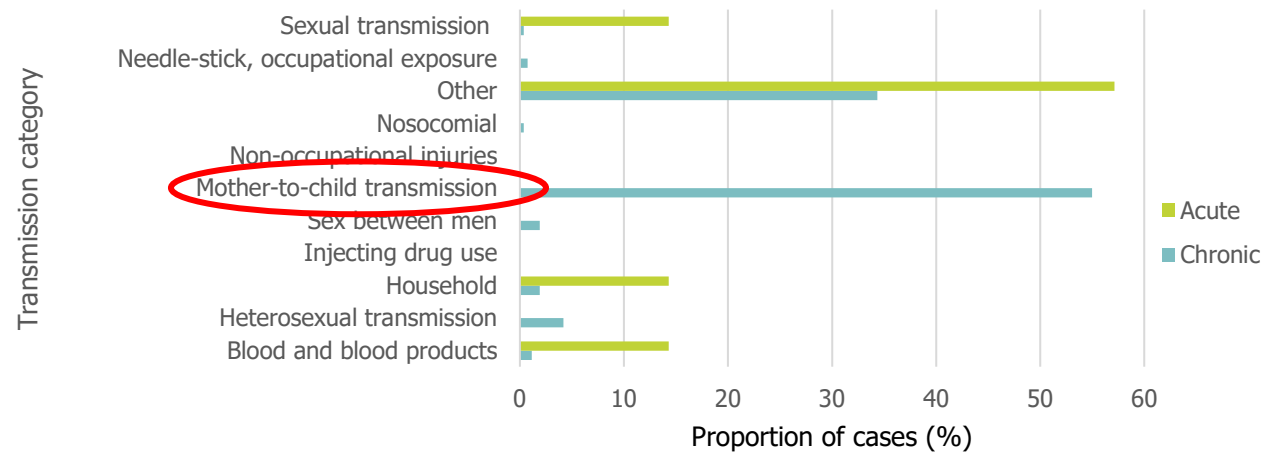


Routes of transmission among imported hepatitis B (n=50 acute and n=956 chronic cases), 2022

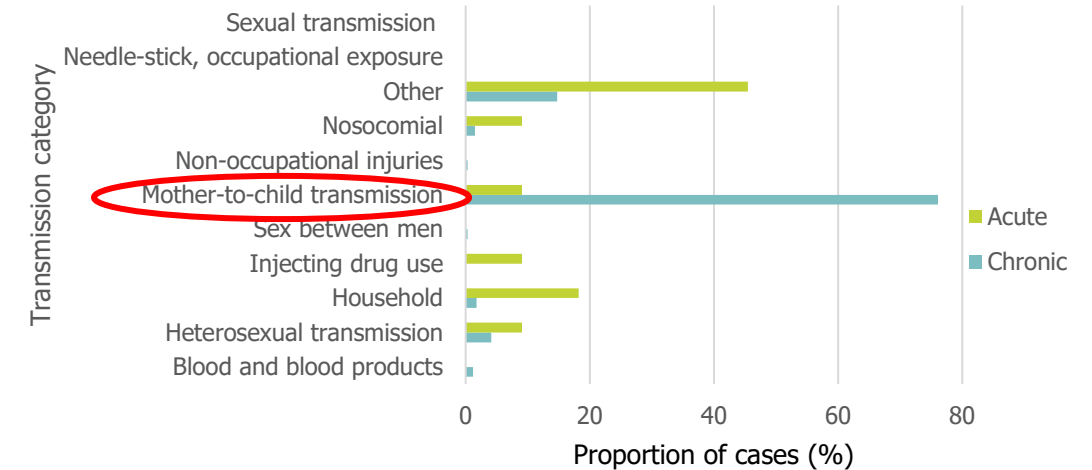


Routes of transmission among imported hepatitis B by continent of birth, 2022

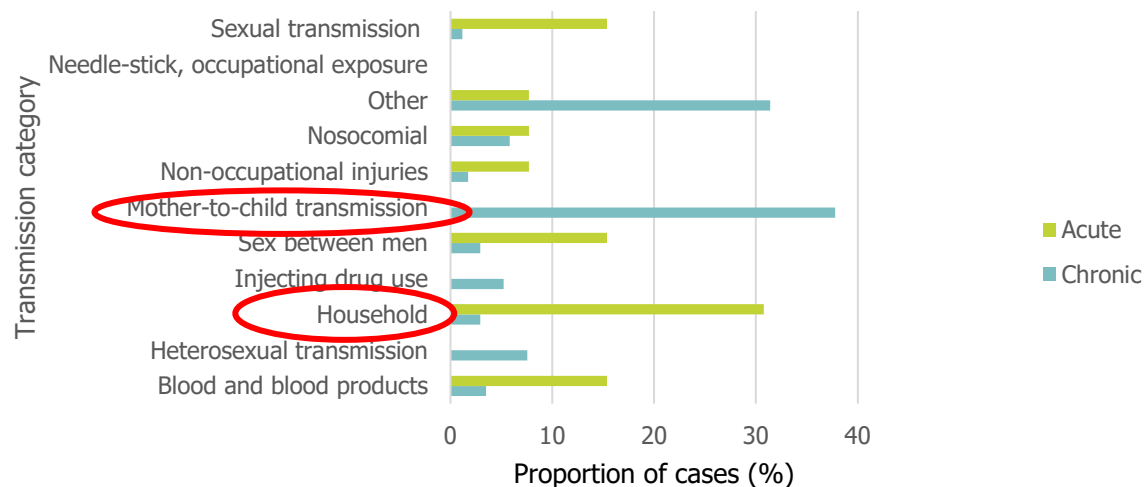
Africa : 7 acute and 262 chronic cases



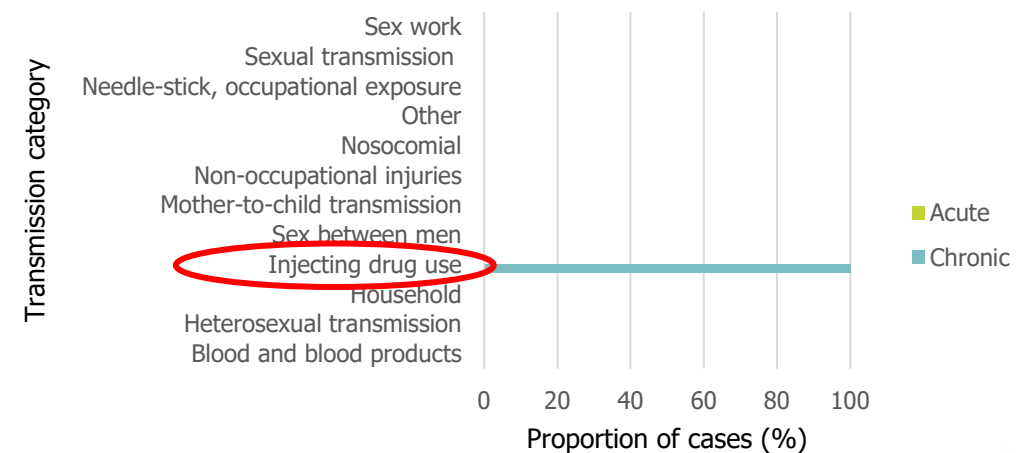
Asia : 11 acute and 339 chronic cases



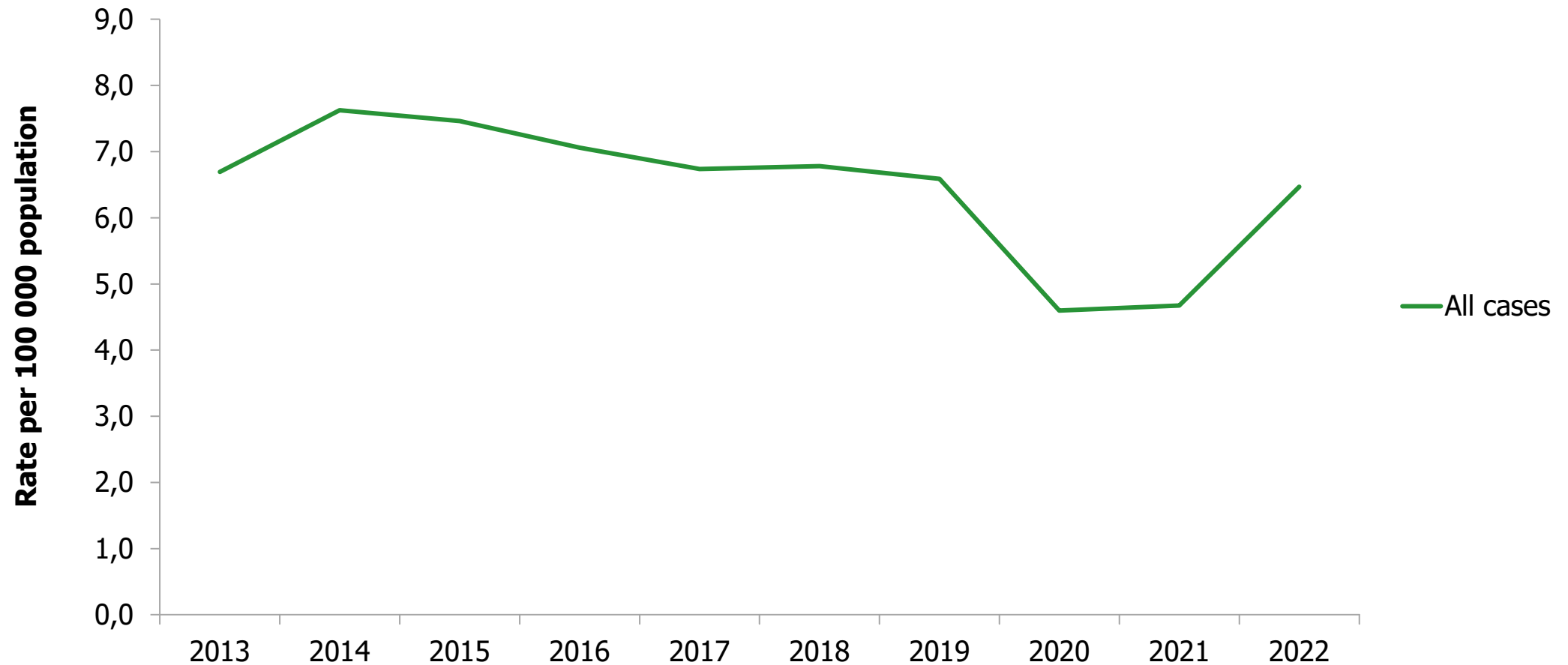
Europe : 13 acute and 172 chronic cases



North America: 0 acute and 3 chronic cases



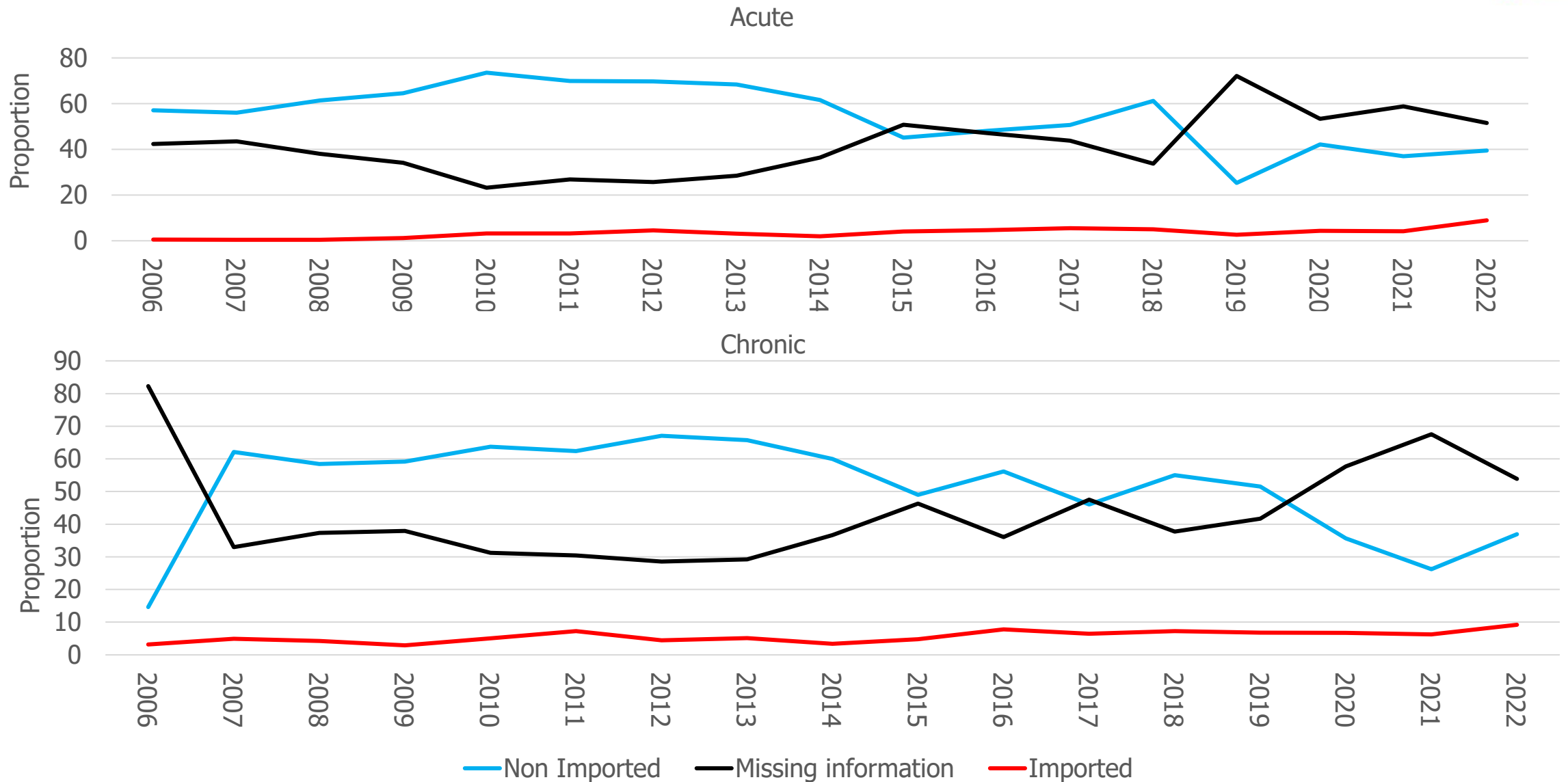
Notification rates of acute and chronic hepatitis C per 100 000 population by year in EU/EEA countries reporting consistently, 2013–2022



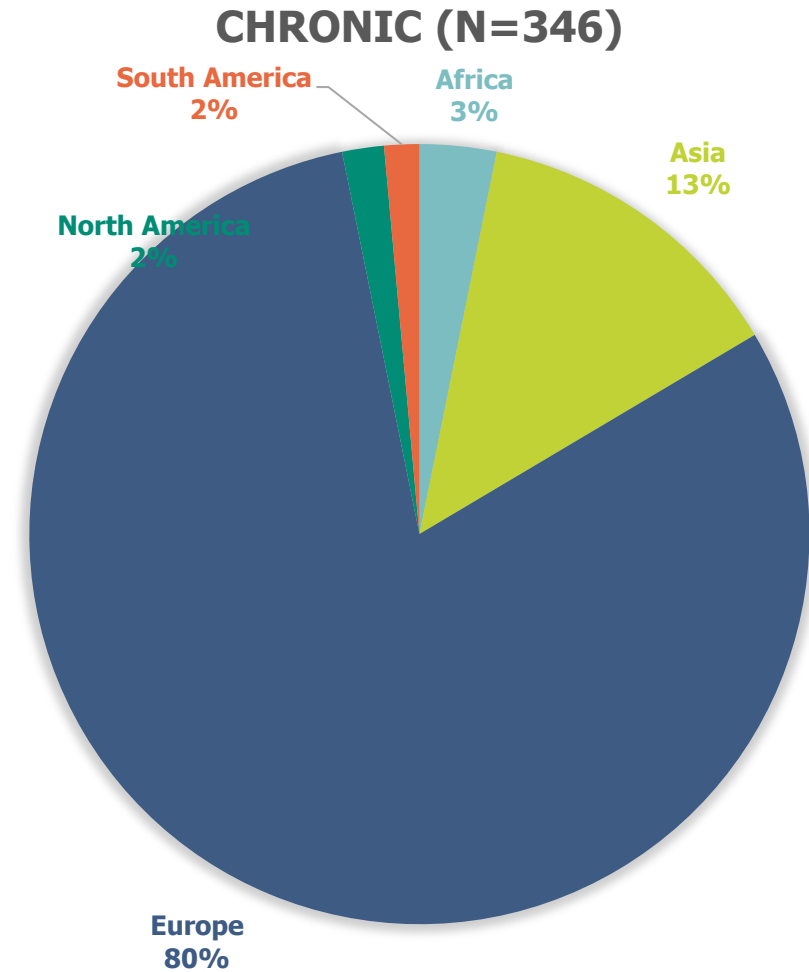
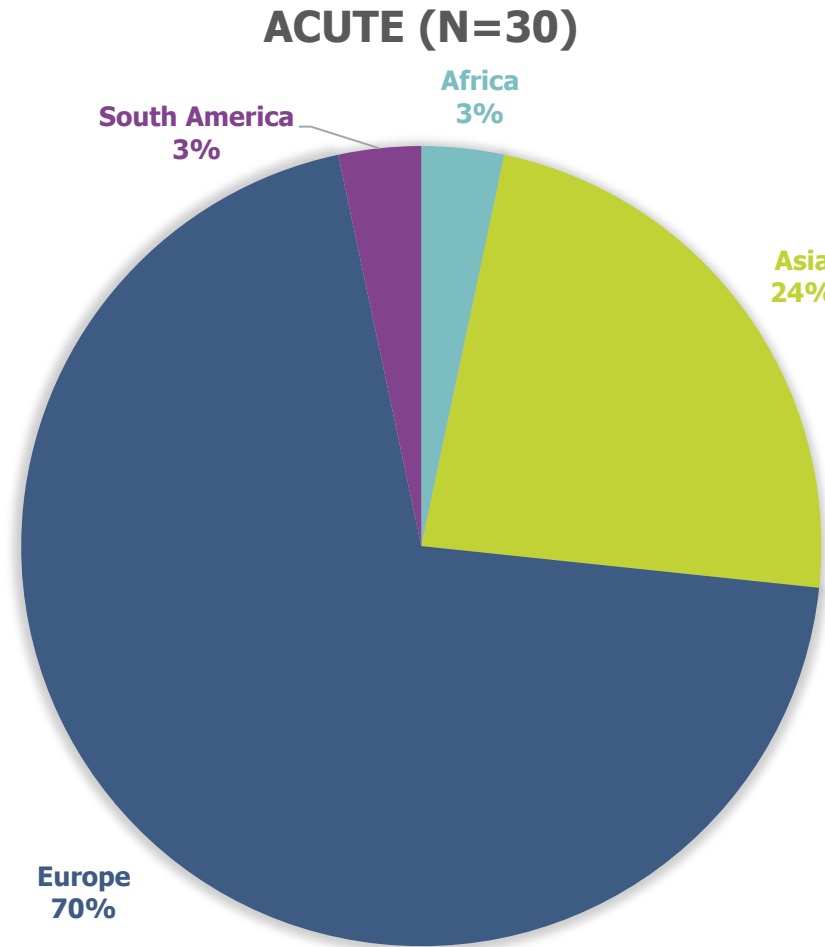
Source: Country reports from Austria, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, Germany, Greece, Iceland, Ireland, Italy, Latvia, Luxembourg, Malta, Norway, Poland, Portugal, Slovakia, Slovenia, and Sweden.

Source: ECDC. Hepatitis B and C in EU/EEA Member States, preliminary analysis.

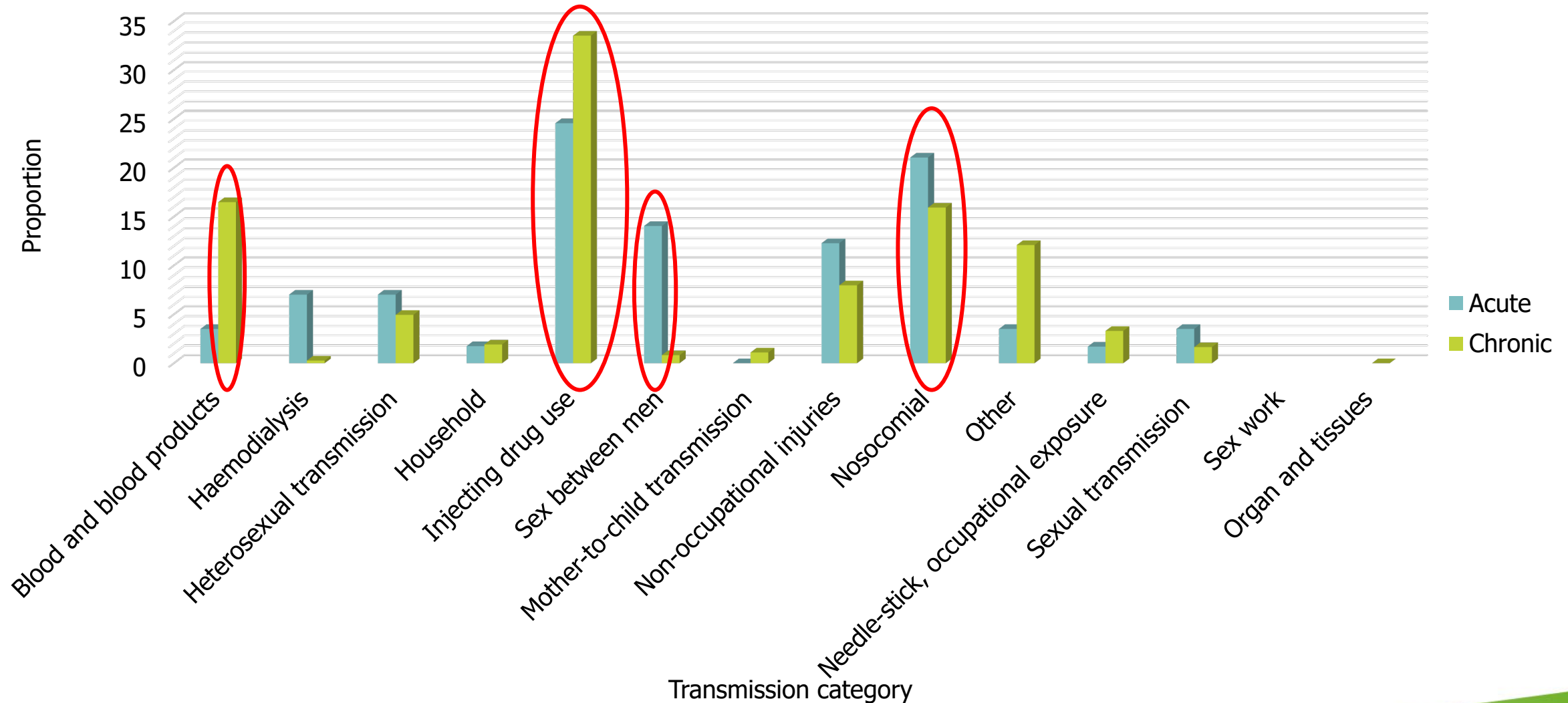
Imported cases of hepatitis C in EU/EEA, 2013-2022



Continent of birth for imported cases of hepatitis C in EU/EEA, 2022



Routes of transmission among imported hepatitis C (n=57 acute and n=364 chronic cases), 2022

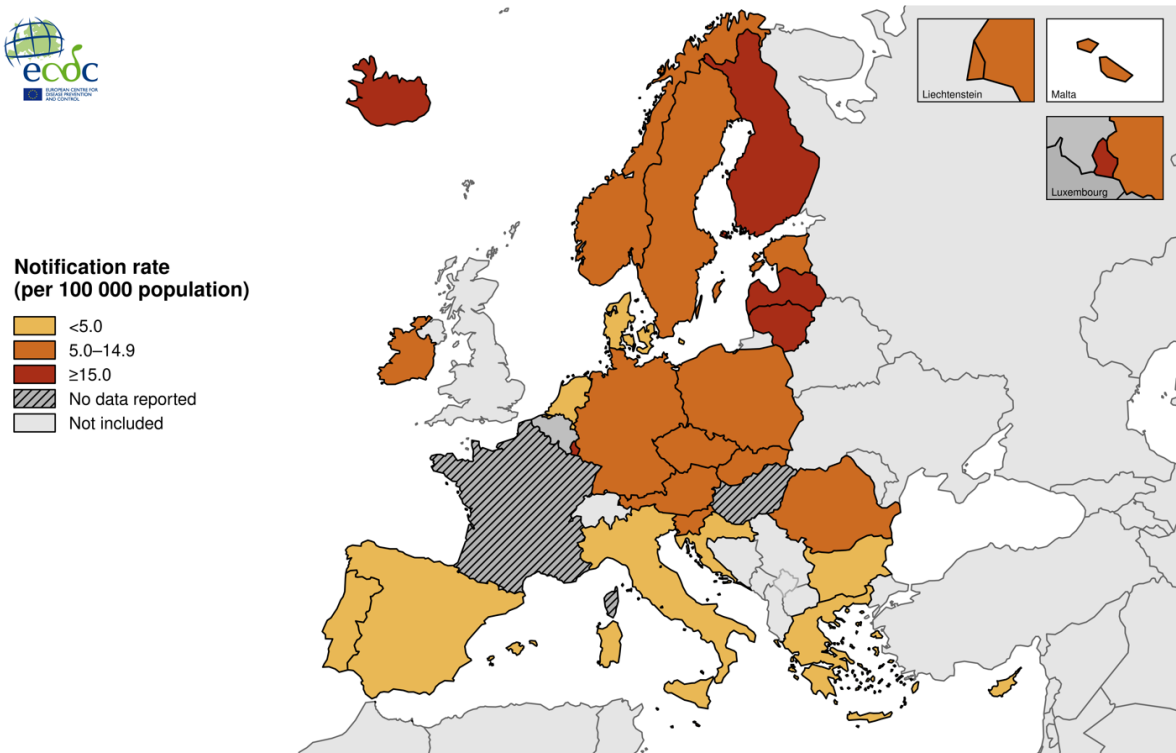


Limitations of European surveillance data through TESSy

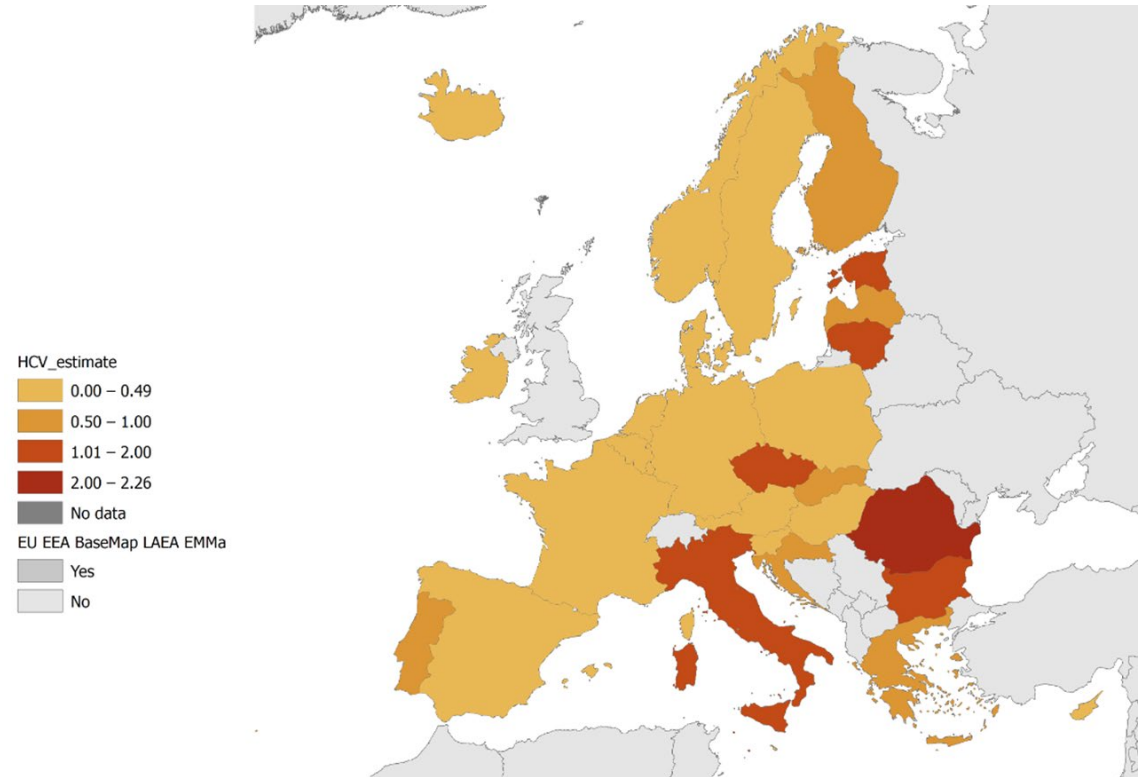
Representativeness, coverage, comprehensiveness, completeness...

Notification rate of newly diagnosed hepatitis C cases per 100 000 population by country*, EU/EEA, 2022

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



Administration boundaries: © Eurographics
The boundaries and names shown on this map do not imply official endorsement or acceptance by the European Union. ECDC. Map produced on 5 March 2024.



Source: ECDC HCV prevalence estimates (collected as part of the HCV modelling project – work currently unpublished)

Conclusions

- Gaps in national and European data surveillance systems
 - Need to work with European Member States to better collect the 'country of birth' variable
- In 2016, estimated burden is higher in (some) migrant populations than in general population in the EU/EEA:
 - 25% of the chronic hepatitis B among migrant populations
 - 14% of hepatitis C
 - Proportion of migrants in the total population at that time was lower (5%)
- Need to upscale prevention and control intervention for key populations, including migrants to achieve elimination of viral hepatitis B and C in EU/EEA

Thank you!

ECDC hepatitis surveillance and monitoring focal points

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