Drug-related infectious diseases indicator

I. Giraudon, L. Wiessing, E. Kalamara, D. Hedrich, R. Simon, K. Palczak, J. Vicente

Introduction

Drug-related infectious diseases (DRID) are among the most serious health consequences of drug use. The DRID indicator collects data on the extent of drug-related infections among people who inject drugs. This group is a key population affected by blood-borne viruses primarily human immunodeficiency virus (HIV) and hepatitis C and B viruses (HCV and HBV) — which can be transmitted through sharing injection equipment and, to a lesser extent, through sexual contact.

The DRID indicator is one of a set of five key epidemiological indicators that are used by the EMCDDA to facilitate data collection, analysis and reporting on key aspects of the prevalence, patterns and consequences of drug use in Europe.

emcdda.europa.eu/activities/key-indicators

Objective

The primary purpose of the indicator is to describe the spread of drug-related infections, including mainly HIV, HCV and HBV, and related risk behaviours among people who inject drugs in Europe.

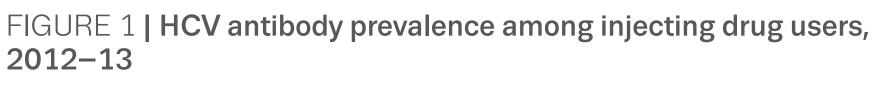
Methods

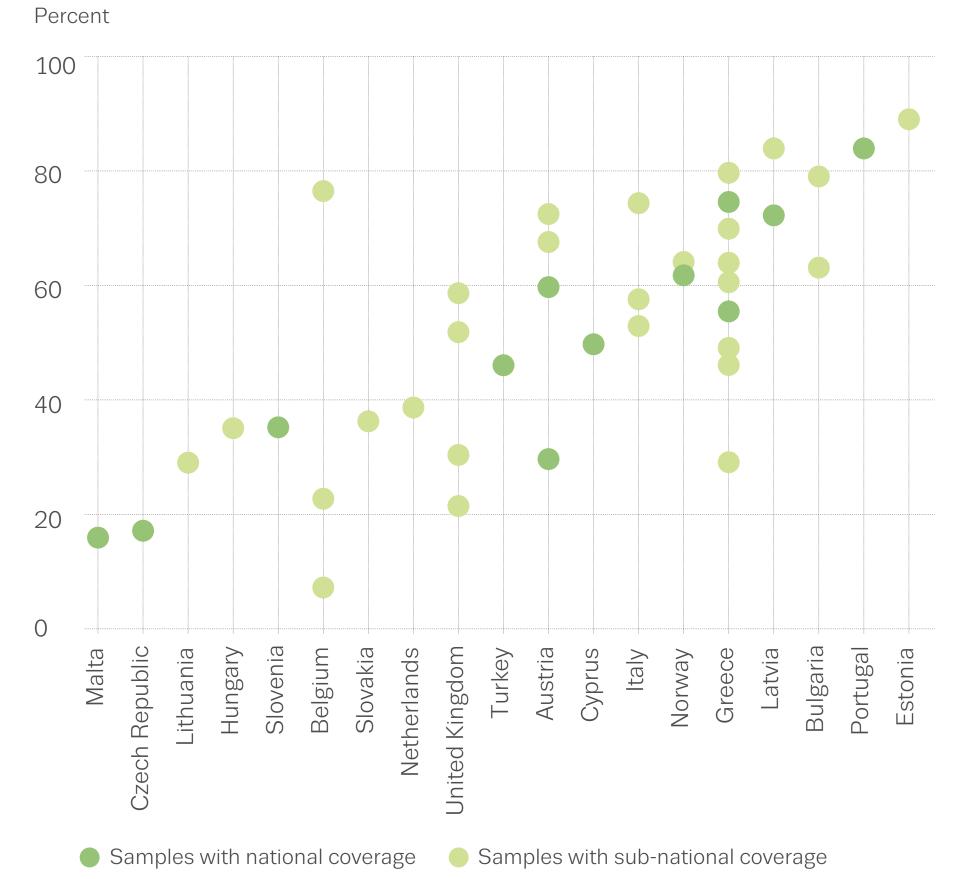
Data are routinely collected in the EU Member States, Norway and Turkey, and include:

- Prevalence estimates for HIV, HCV and HBV infection (surveys in samples of drug users and routine diagnostic testing);
- Behavioural indicators, including infection testing, injecting, sharing of injection equipment, use of condoms;
- Notifications (in collaboration with ECDC) of new HIV, HCV and HBV diagnoses.

Information on clusters or outbreaks of bacterial infections is also reported (including tuberculosis, sexually transmitted diseases, wound botulism and injection-related anthrax).

The national experts responsible for data collection and analysis in each country participate in a European network, which is fundamental to the implementation of the indicator.





Results

HCV is by far the most prevalent blood-borne virus infection among injecting drug users. In Europe, most estimates of HCV antibody prevalence among this group fall between 40 % and 80 % (Figure 1). The ongoing transmission of HCV among drug injectors in Europe is shown by data on infections among young and among new injectors. In half of the countries with available data, a quarter or more of new injectors (those who reported starting injecting within the last two years) tested were found to be infected.

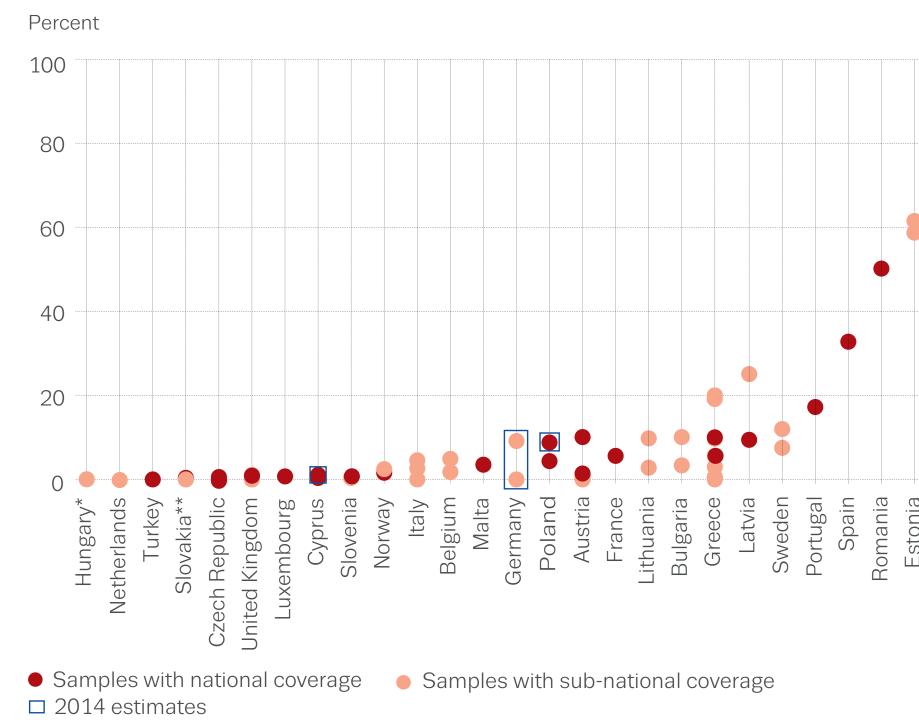
miv prevalence among people who inject drugs is typically below 5 % (Figure 2). Higher rates of HIV infection, however, are reported in countries with recent HIV outbreaks (Greece and Romania), in some Baltic and north European countries (Estonia, Latvia and Poland), and to a lesser extent in southwest Europe (Spain and Portugal). Provisional figures for 2013 show 1 458 newly reported HIV cases among injecting drug users (2.5 per million population), compared with 1 974 in 2012 and reversing the upward trend seen since 2010 (Figure 3). Considerable differences between the countries exist; for example in Estonia, this rate is 22 times higher than the EU average.

Outbreaks of wound botulism among injecting drug users have been reported in Scotland, Norway and Germany in 2013–14. Injecting of cathinones is leading to adverse health consequences and potential increased infection risk in Hungary, Ireland and Wales (UK).

Limitations

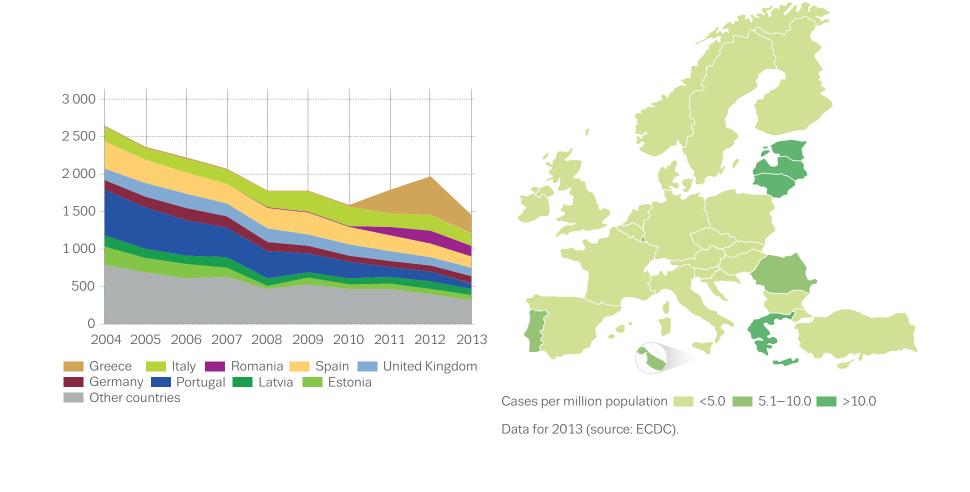
Prevalence data may be subject to different biases, as a result of methodological differences between surveys. Limitations include the inability to conduct trend analyses except in the small number of countries with repeated studies; the lack of recent estimates in some countries; country and study differences in the inclusion criteria for injecting drug users; and underestimation of incidence in notifications, especially for HCV.

FIGURE 2 | HIV prevalence among injecting drug users, 2012–13 (or 2014 updates where available)



* Hungary: two new HIV cases notified (none for many years). ** Slovakia: One new HIV case notified in 2014.

FIGURE 3 | Newly diagnosed HIV cases related to injecting drug use: trends in number of cases (left) and most recent data (right)



Future perspectives

The utility of the DRID indicator is improved by combining its findings with data on interventions targeting drug users (testing strategies and coverage, HBV vaccination, prevention, harm reduction, HIV and HCV treatment), and drug market (e.g. changes in new psychoactive drugs and related injection patterns). More focus could be put on certain sub-groups (men who have sex with men or new psychoactive drugs injectors); on outbreaks among drug injectors and on modelling the effect of HCV treatment as prevention.

info@emcdda.europa.eu emcdda.europa.eu