



Infectious diseases among drug users in Europe

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Introduction

Injecting drugs is a key risk factor for contracting viral and other infections. Blood-borne infections acquired through the sharing of injecting equipment are among the most serious health harms of drug use. The drug-related infectious disease (DRID) indicator collects data on the extent of such infections, primarily human immunodeficiency virus (HIV) and hepatitis B and C viruses (HBV and HCV), among people who inject drugs (PWID).

The DRID is one of the five key epidemiological indicators, which provide methodological guidelines for data collection, analysis and reporting in five domains that address key aspects of the prevalence and consequences of drug use.

emcdda.europa.eu/activities/key-indicators

Objective

The primary purpose of the DRID indicator is to obtain valid, reliable and comparable measures of incidence and prevalence of HIV, HBV and HCV infection among PWID. It also monitors outbreaks and gathers information on risk behaviours and characteristics among PWID (e.g. injection, sharing injecting equipment, having been tested) in order to evaluate the risk of acquiring infection, or the risk to have a late diagnosis and delayed treatment.

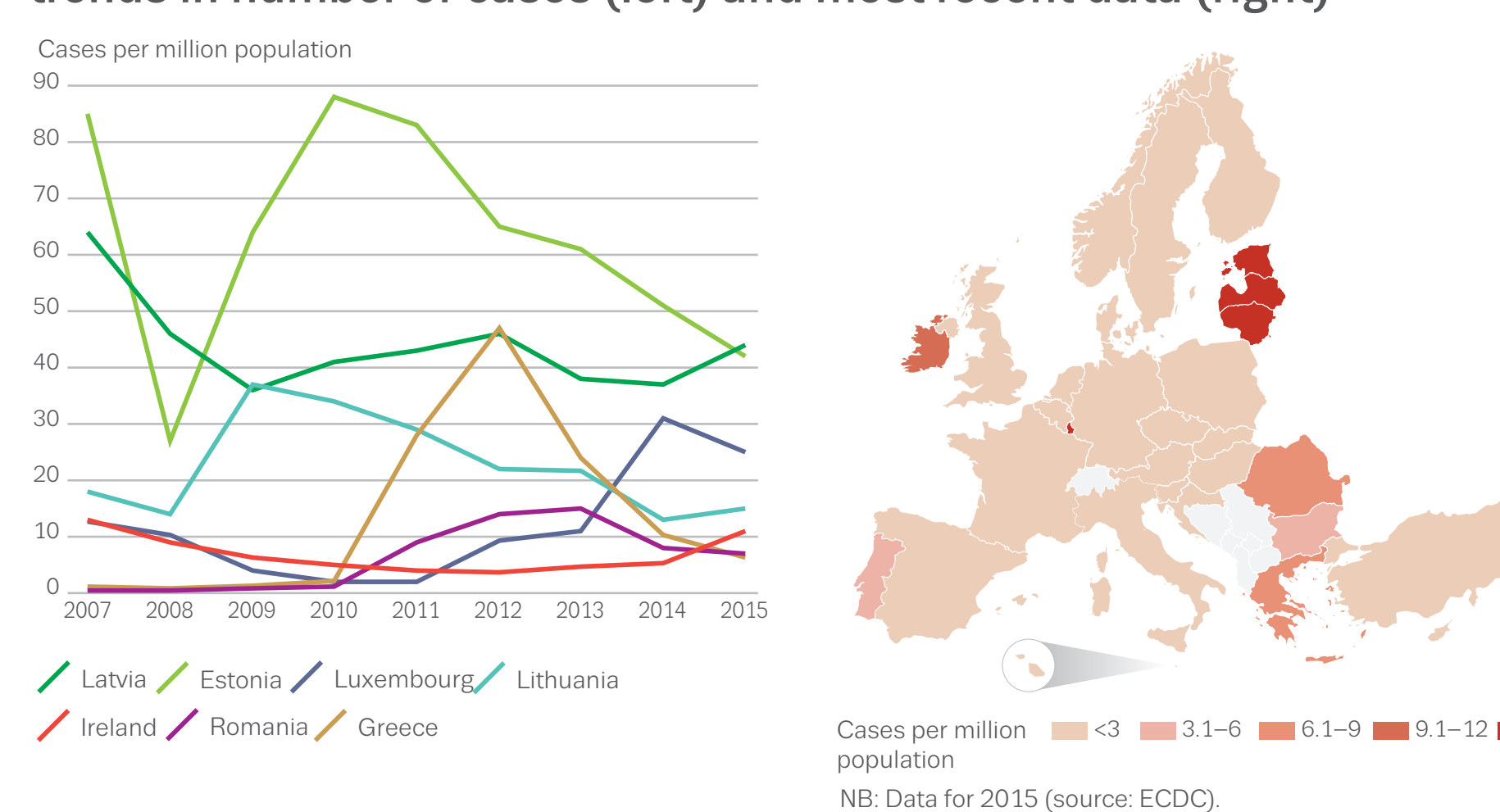
Methods

The information is collected in the 28 EU Member States, Norway and Turkey, for each calendar year using two main methods. These are: (a) surveys among PWID that include serological testing and (b) the monitoring of routine diagnostic testing for HIV, HCV and HBV infection among PWID. The current toolkit for data collection, with modules concerning infectious diseases (notifications and studies) and behavioural indicators, is available on the DRID pages of the EMCDDA website. In addition to these, surveillance of HIV, HCV and HBV notifications is conducted in close collaboration with ECDC.

A network of European national experts is responsible for data collection and analysis at national level. The network is essential to the implementation and development of the indicator.

A system to assess the data quality of the indicators has been established in agreement with the national

FIGURE 1 | Newly diagnosed HIV cases related to injecting drug use: trends in number of cases (left) and most recent data (right)



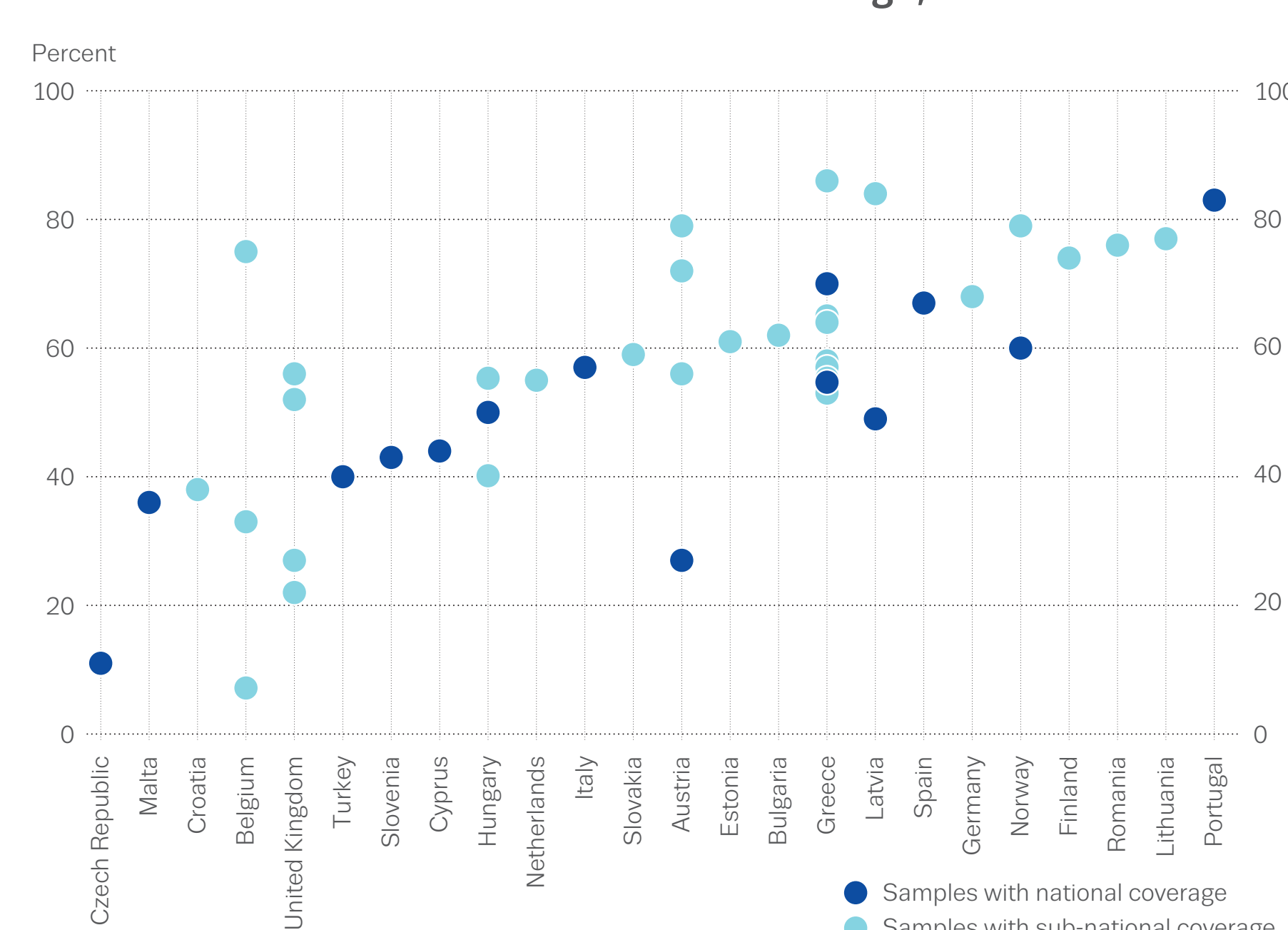
experts and the national focal points. Common criteria to evaluate the scientific quality of the data and the level of process implementation are the basis for a triennial evaluation.

Results

In 2015, 1 233 new HIV diagnoses in people infected through injecting drug use were notified in the European Union, representing 5 % of diagnoses for which the route of transmission is known. This proportion has remained low and stable for the last decade. New HIV infections among people who inject drugs have declined in most European countries, with an overall decrease of 41 % between 2007 and 2015, but incidence rates and trends vary between countries (Figure 1). In 2015, there were 479 injection-related AIDS notifications in Europe, most of which were in Greece, Latvia and Romania.

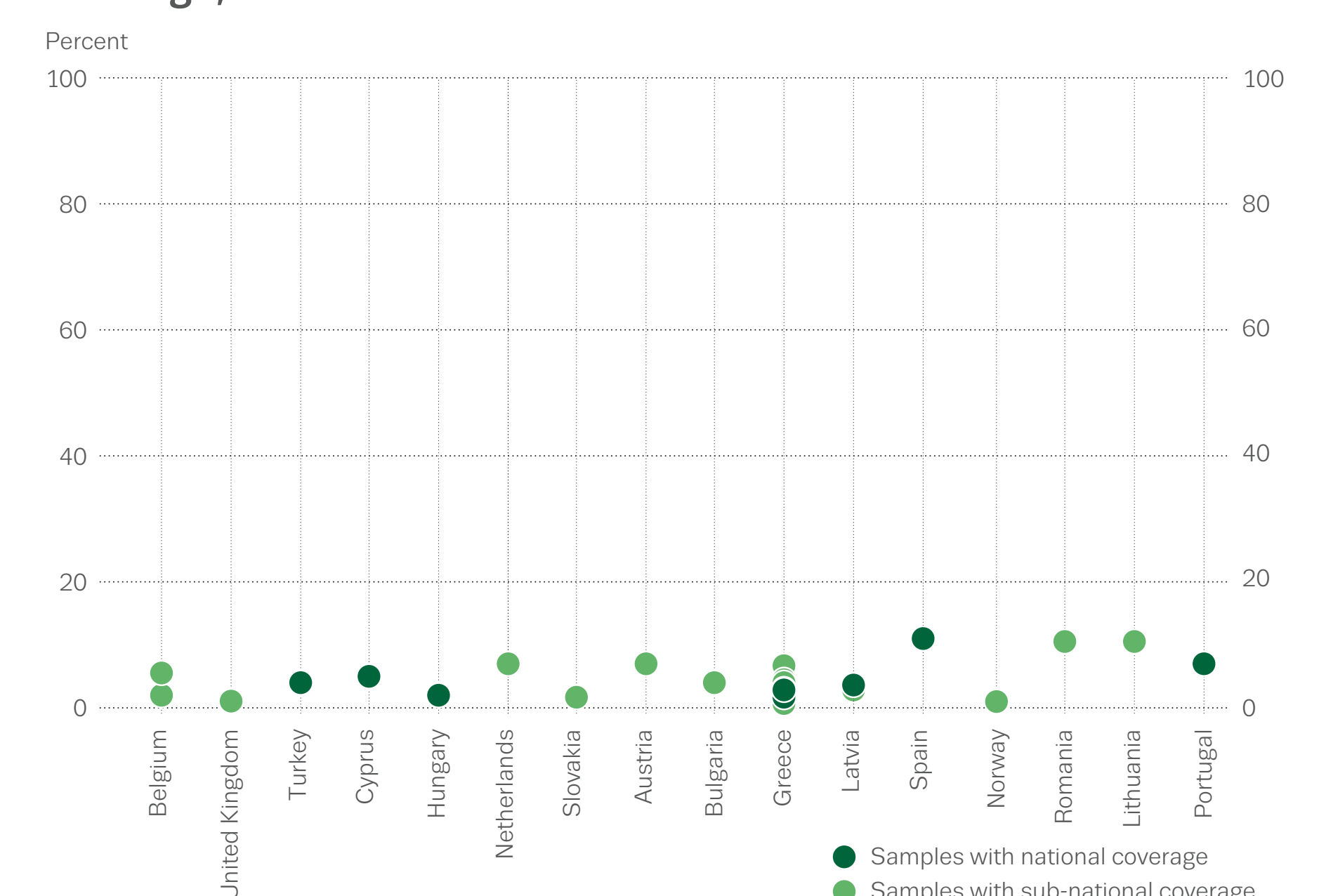
HCV infection is highly prevalent among PWID. The prevalence of antibodies to HCV, indicating present or past infection, among national samples of injecting drug users in 2014–15, varied from 16 % to 84 %, with 5 out of the 13 countries with national data reporting a rate in excess of 50 % (Figure 2). Among the countries with national trend data for the period 2010–15, declining HCV prevalence in injecting drug users was reported in 4 countries, while 3 observed an increase.

FIGURE 2 | HCV antibody prevalence among injecting drug users: studies with national and subnational coverage, 2014 to 2015



Among drug users, current infection with hepatitis B virus (acute or chronic), identified by the presence of the HBV surface antigen, is less common than chronic HCV infection. Despite universal HBV immunisation in several countries and targeted immunisation in others, in the 7 countries with national data, between 1.7 % and 11 % of drug injectors were estimated to be currently infected with HBV (Figure 3).

FIGURE 3 | HBV surface antigen prevalence (HBsAg) among injecting drug users: studies with national and subnational coverage, 2014 to 2015



Limitations

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.

Future perspectives

The DRID indicator aims to look further at incidence and prevalence of chronic cases, as well as at multi-indicator 'risk assessment' approaches. It needs to monitor changing patterns of drug uses (new psychoactive substances in particular), and to measure the impact of the new testing and treatment options now available, in HCV in particular. Its utility is improved by triangulation with other information and epidemiological indicators, such as estimates of the size of the populations at risk (primarily PWID estimates), interventions targeting drug users (prevention, treatment and harm reduction), and market and supply. Qualitative information and the use of innovative research and monitoring methods can further improve the indicator's informative dimension.

Acknowledgements: DRID national experts network