

Drug-related deaths indicator

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Introduction

Drug use, in particular high-risk drug use, is one of the major causes of avoidable mortality among young people in Europe, both directly through overdose and indirectly through drug-related diseases, accidents, violence and suicide.

The Drug-related deaths (DRD) 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.

emcdda.europa.eu/activities/key-indicators

Objective

The primary purpose of the DRD indicator is to improve the understanding of the health impact of different forms of drug use and its correlates and determinants, in order to inform the development and evaluation of policies and interventions.

Data on the numbers and trends, characteristics and circumstances of deaths related directly or indirectly to drug use can fulfil several complementary purposes, especially when interpreted alongside other drug indicators.

Methods

Data are collected in all EU Member States, Norway and Turkey.

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. They also promote its use in policy-making and evaluation.

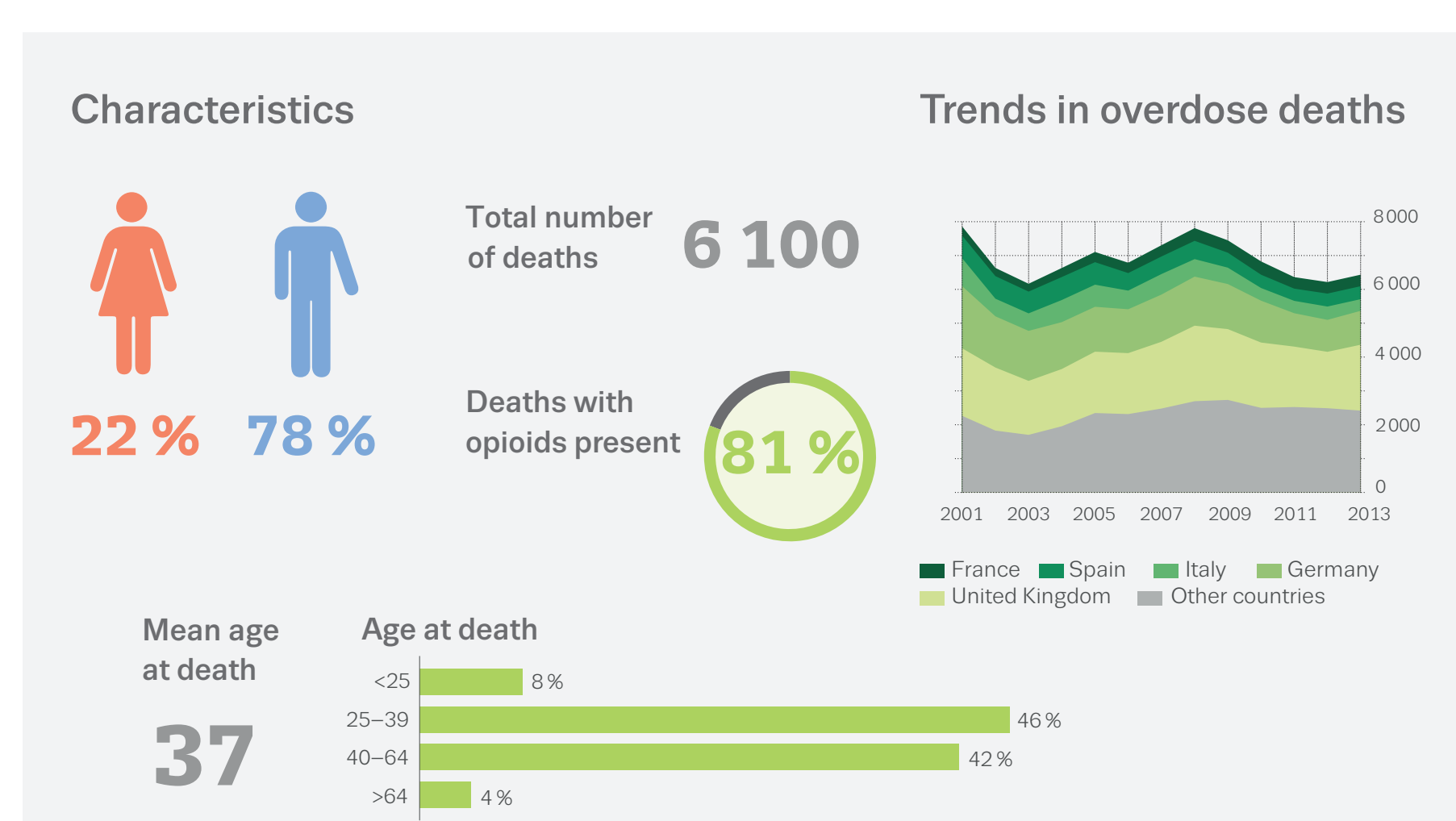
The indicator has two components:

Deaths attributed directly to illicit drug use (or 'overdose', 'drug-induced deaths')

Case definition: 'Deaths happening shortly after consumption of one or more illicit psychoactive drugs, and directly related to this consumption, although they often may happen in combination with other substances such as alcohol or psychoactive medicines'.

Source: General mortality registers (or office for national deaths statistics) and where available,

FIGURE 1 | Drug-induced deaths in Europe in 2013



special mortality registers (e.g. police, forensic institutions).

Cases are extracted following the ICD codes for the underlying cause of death and criteria of the current DRD EMCDDA protocol (V3.2).

Overall and cause-specific mortality among cohorts of drug users

Guidelines for carrying out, reporting and analysing the results of mortality cohort studies are available in the current EMCDDA protocol.

Results

Drug overdose accounted for an estimated 6 100 deaths in the European Union, a slight increase from the 2012 total (Figure 1). This number is equivalent to an average mortality rate of 16 deaths per million population aged 15–64, and is a minimum estimate. Heroin or its metabolites are present in the majority of the cases, often in combination with other substances. The majority of overdose victims are male (78%), with a mean age of 37 years (only 8% of cases are younger than 25 years), and there is a clear ageing trend (Figure 2).

Recent cohort studies put mortality rates among problem drug users in the range of 1–2% per year, and it has been estimated that between 10 000 and 20 000 opioid users die each year in

FIGURE 2 | Drug-induced deaths by age group in 2006 and in 2013

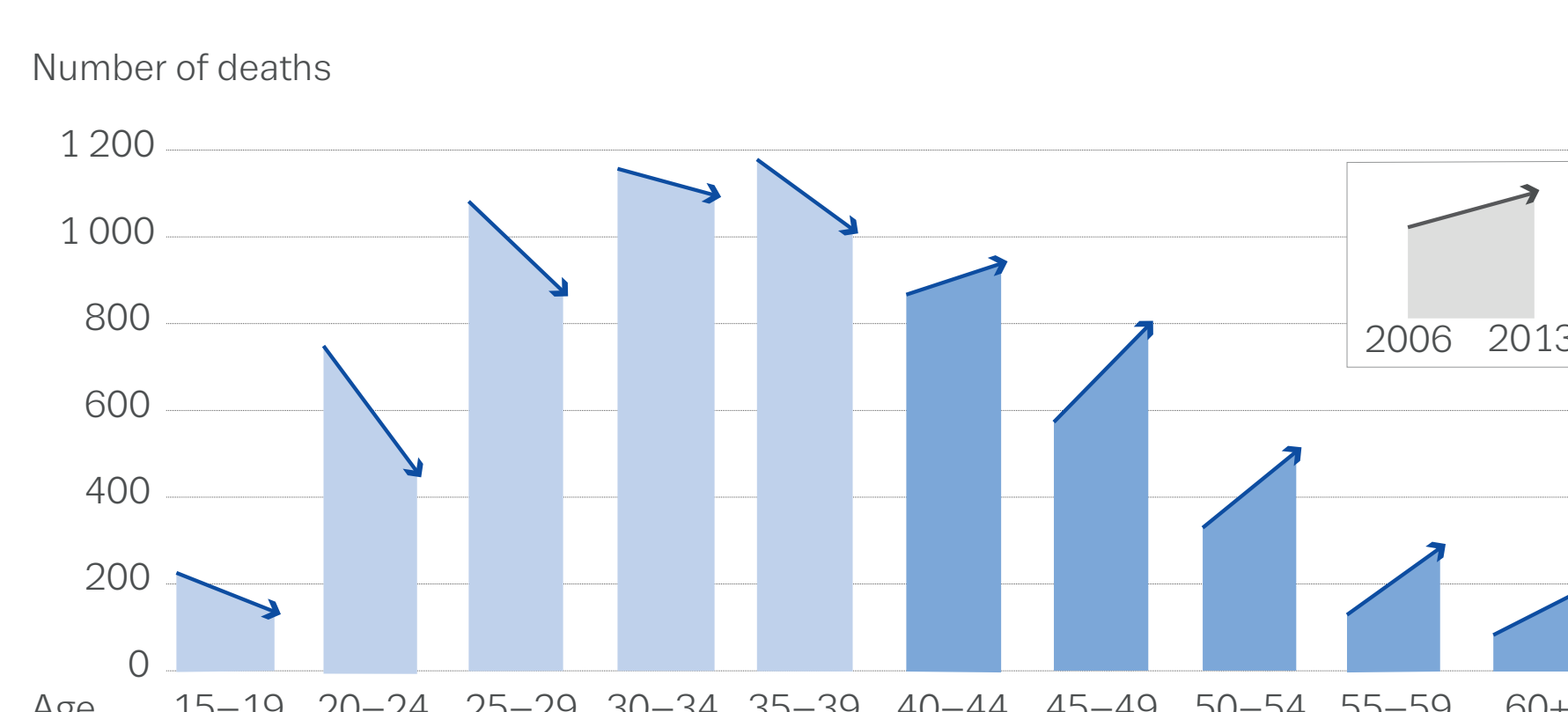
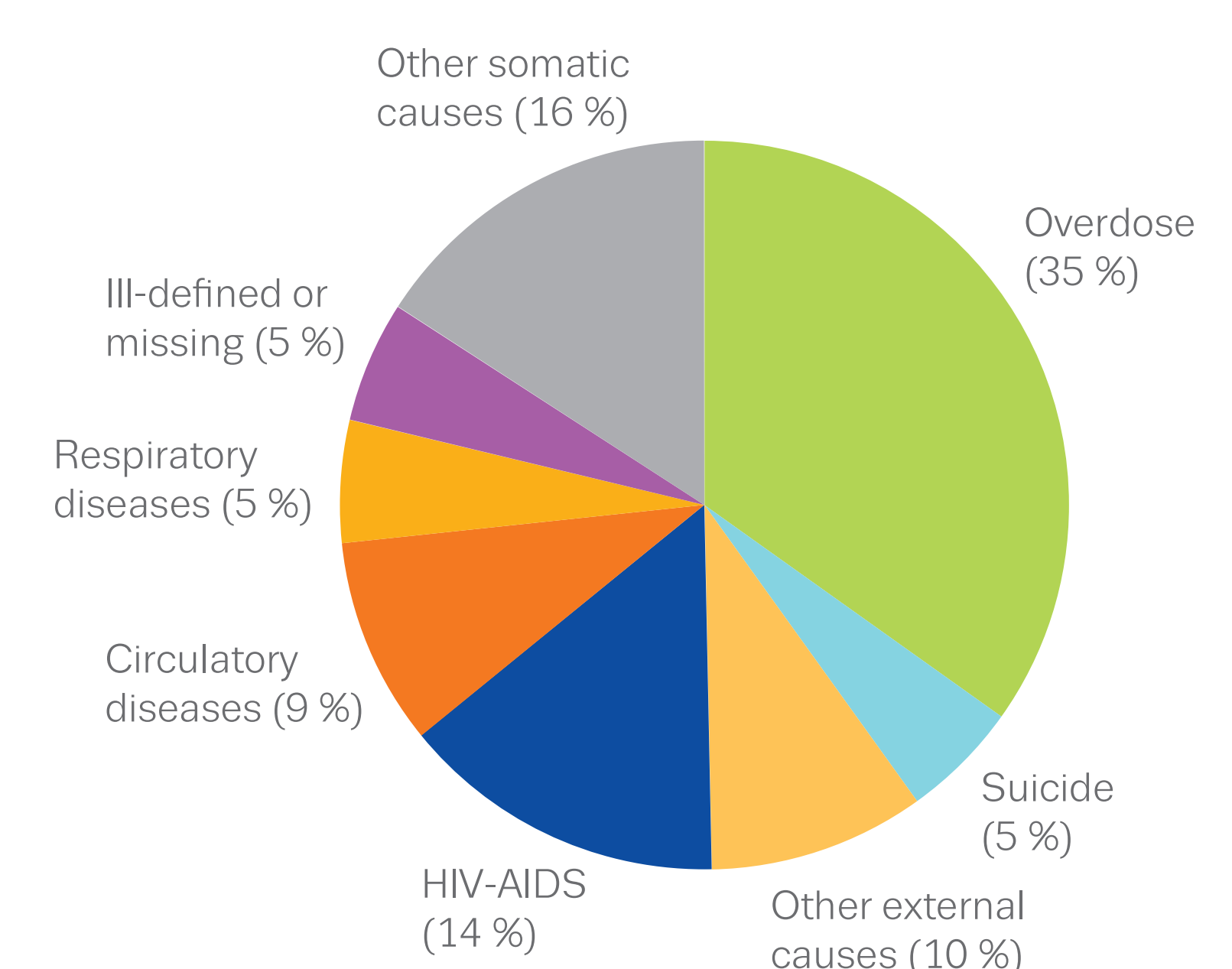


FIGURE 3 | Distribution of the causes of death among a multi-site pooled European cohort study (2 043 deaths among drug users in seven countries)



Europe. Overall, opioid users are at least 10 times more likely to die than their peers of the same age and gender. Drug overdose continues to be the main cause of death among high-risk drug users (Figure 3).

Limitations

Differences exist between countries in the availability and nature of post-mortem investigations and certification practices. The comparability of the national figures depends, among other factors, on the harmonisation of coding practices and on whether forensic information is used for death certification and coding. Also general mortality registers usually do not specify new psychoactive substances and autopsies often do not search for these substances. Caution is required when interpreting the EU total, for a number of reasons, including systematic under-reporting in some countries and registration delays.

Future perspectives

The objective of the DRD indicator is to contribute to our understanding of the drug problem in Europe, and to facilitate policy-making. Information from this indicator should be analysed together with information from other indicators and qualitative data. More focus could be placed on improving the availability of toxicological information, including the implication of prescription medicines. Cohort studies need to explore further relatively neglected causes of deaths including hepatitis as well as suicide and violence.