

WEBINAR

The European Drug Report: using an open data approach to improve data visualisation

The logo for Data Europa Academy is located in the bottom left corner. It features a large green circle with a white circle inside it. The text "data.europa academy" is written in white lowercase letters inside the white circle. The word "data" is on the top line, "europa" is on the middle line, and "academy" is on the bottom line. There are small orange dots above the 'a' in "data" and above the 'o' in "europa".

data.
europa
academy

21 June 2024

10.00 — 11.30 CEST

Rules of the game



The webinar will be recorded and shared with you, and the material will be published in the data.europa academy



Please reserve 3 min after the workshop to help us improve by filling in our feedback form



For questions, please use the ClickMeeting chat



Introduction



Inmaculada Farfan Velasco
Data.europa academy
Publications Office of the EU



Rosemary Martin de Sousa
Head of Communication,
European Monitoring Centre for
Drugs and Drug
Addiction (EMCDDA)



Sonia Vicente
Digital production manager,
European Drug Report, European
Monitoring Centre for Drugs and
Drug Addiction (EMCDDA)



David Penny
Web manager, European
Monitoring Centre for Drugs and
Drug Addiction (EMCDDA)



Introduction

10.05 – 10.10	Opening and introduction – <i>Inmaculada Farfan Velasco</i>
10.10 – 10.25	How an open data approach transforms publications – <i>Rosemary Martin de Sousa</i>
10.25 – 10.50	The European Drug Report 2024 and its visualisations– <i>Sonia Vicente, David Penny</i>
10.50 – 11.10	Case studies: data re-use by media and press – <i>Rosemary Martin de Sousa</i>
11.10 – 11.25	Q&A session
11.25 – 11.30	Closing remarks – <i>Inmaculada Farfan Velasco</i>



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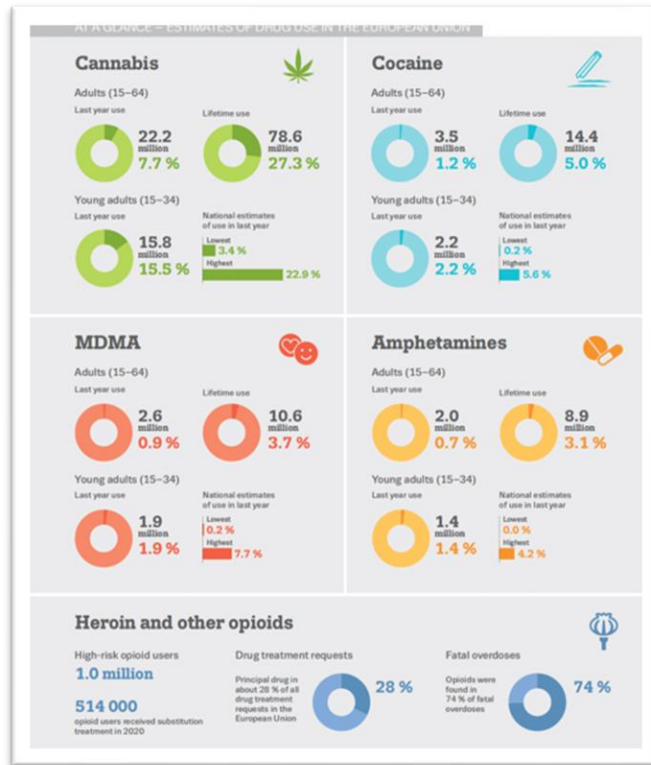
**How an open
data approach
transformed our
publications**

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)



- One of the EU's decentralised agencies, set up in **1993 in Lisbon**
- Specialised in **illicit drugs and drug addiction**, and their consequences
- National data provided by national focal points ('Reitox'): **EU, Norway and Türkiye**
- **Local and city-level data** by partnerships with specialised networks
- On 2 July 2024 the EMCDDA will become the **European Union Drugs Agency (EUDA)**

European Drug Report (print and PDF)



- Published every year **since 1996**
- The Agency's **flagship product**
- A concise **overview of the drug situation** in Europe
- Until 2023, conceived and designed for **print and PDF**
- **Graphic and data-rich**
- **Translated** into over 20 EU languages

European Drug Report print and PDF: a success story



- **4 500** downloads in 5 days post launch in 2022 (1 download every 2 minutes)
- **Consistently highly rated** by our partners and main customers
- **Strong press + media uptake**
- **Established production process:** Word, Excel and InDesign
- **Tried and trusted technologies:** PDF for the web, print for the real world
- **Something visually pleasing** to hand out to visitors, leave in the lobby, etc.

You want to do what...?

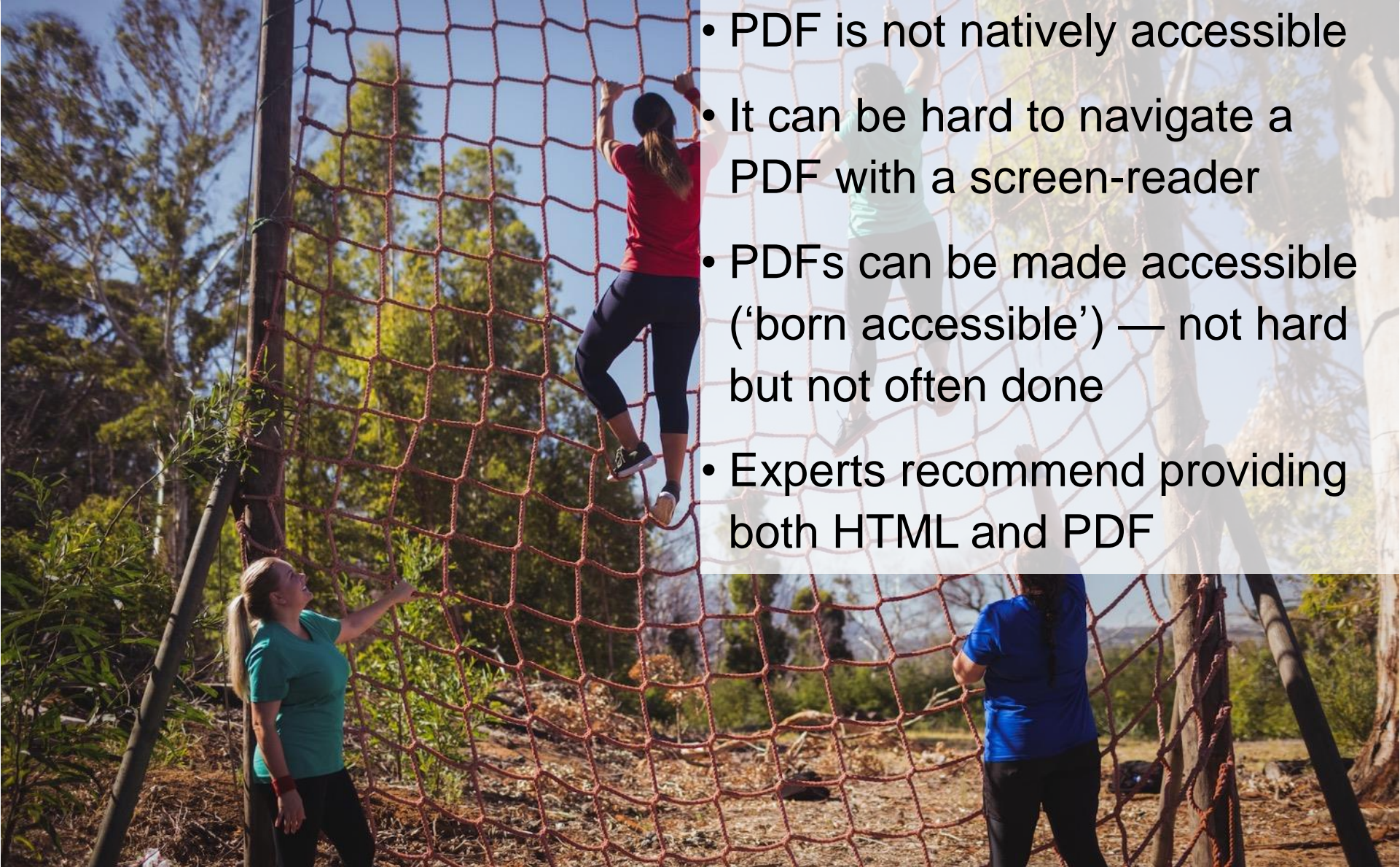


PDF process: error prone and NOT open data friendly



- Data often **ceases to be machine-readable** early in the production process
- **Corrections** are made directly in graphics or proofs
- **Process is error prone** and requires vigilance and continuous checking
- **Increasingly difficult to update** as process advances
- **'Source data'** often needs to be reconstructed at the end

PDF: an accessibility obstacle course



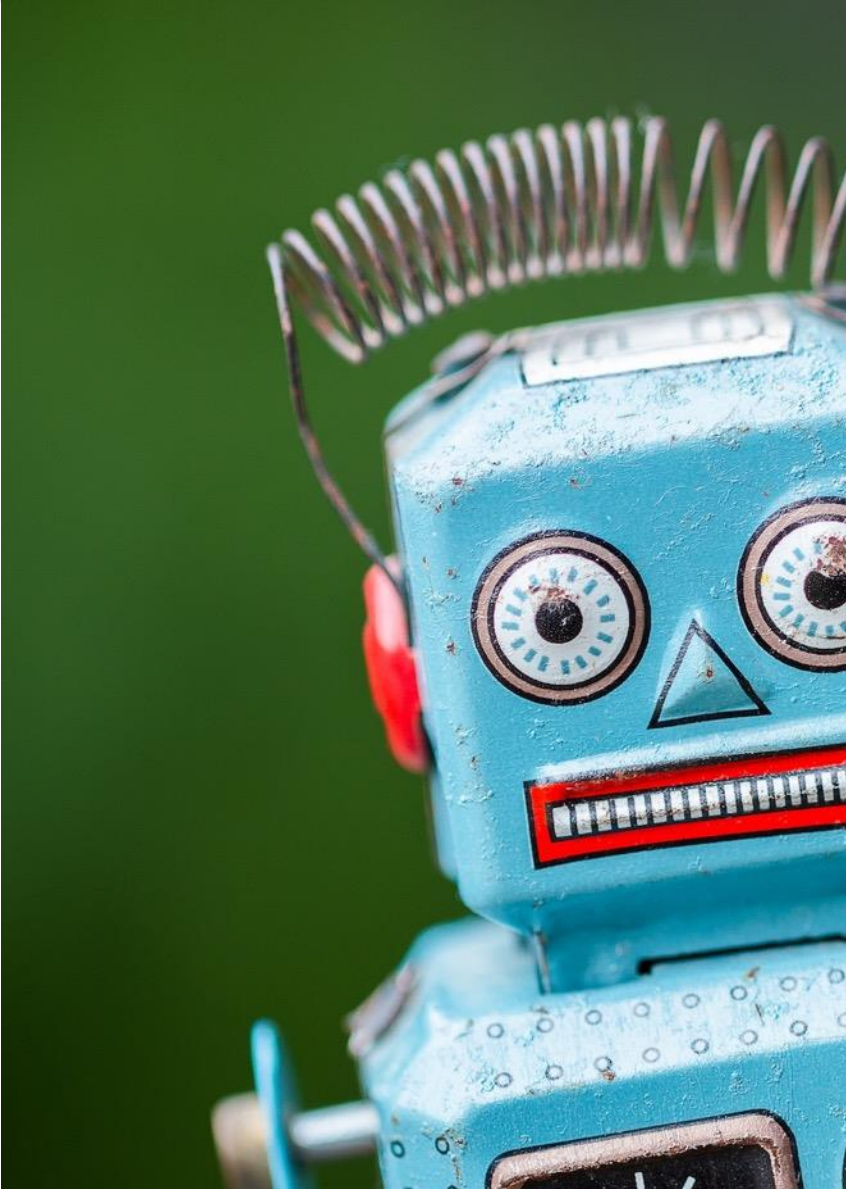
- PDF is not natively accessible
- It can be hard to navigate a PDF with a screen-reader
- PDFs can be made accessible ('born accessible') — not hard but not often done
- Experts recommend providing both HTML and PDF

60% of our visitors are using mobile...



- PDF provides a very poor experience on mobile
- Not 'responsive'
- Difficult to navigate
- Difficult to read
- Difficult to view data and charts
- Difficult to find information
- **Why are we doing this to the majority of our customers with our flagship publication?**

Search engine bots hate PDF...



- PDFs rank lower in search results than web pages
- Algorithms favour mobile-friendly and accessible information sources
- We saw very out-of-date content in HTML being served ahead of our most recent PDFs
- Search engines matter! 90% of all our visitors find our information through organic search

Downloading a report is not the same as reading a report



- A PDF is a metrics black hole
- After download, most people (~80%) came back and continued their information search
- For most visitors, a PDF is a very long web page with poor navigation and a poor user experience
- A PDF download is not the same as a 'read'
- The number of 'downloads' was actually dropping (**40% drop** between 2021 and 2022)

Going 'digital first'

- **Data to remain machine-readable** throughout the process
- **Data-driven visualisations** generated 'on the fly'
- **It should be born accessible**
- **Facilitate translation**
- **Format-neutral:** mobile, desktop, print
- **Search engine friendly**
- **Modular**

Managing the change

- **Changing the format** — fun mainly technical and design-orientated. Agile approach and worked in sprints.
- **Changing processes** — harder: early and regular stakeholder consultation highly recommended!



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The European Drug Report 2024

Open data in action. The structure of the report and behind the scenes.

European Drug Report 2024: structure

On this page

- [Introductory note](#)
- [Content](#)
 - [The drug situation in Europe up to 2024](#)
 - [Drug supply, production and precursors](#)
 - [Cannabis](#)
 - [Cocaine](#)
 - [Synthetic stimulants](#)
 - [MDMA](#)
 - [Heroin and other opioids](#)
 - [New psychoactive substances](#)
 - [Other drugs](#)
 - [Injecting drug use](#)
 - [Drug-related infectious diseases](#)
 - [Drug-induced deaths](#)
 - [Opioid agonist treatment](#)
 - [Harm reduction](#)
- [PDF version of full report](#)
- [List of figures](#)
- [Data visualisations](#)
- [Annex tables](#)

European Drug Report 2024: Trends and Developments

The *European Drug Report 2024: Trends and Developments* presents the EMCDDA's latest analysis of the drug situation in Europe. Focusing on illicit drug use, related harms and drug supply, the report provides a comprehensive set of national data across these themes, as well as on specialist drug treatment and key harm reduction interventions.

TABLE OF CONTENTS SEARCH WITHIN THE BOOK

European Drug Report 2024 – home	The drug situation in Europe up to 2024	Drug supply, production and precursors
Cannabis	Cocaine	Synthetic stimulants
Other drugs	MDMA	Heroin and other opioids
New psychoactive substances	Injecting drug use in Europe	Drug-related infectious diseases
Opioid agonist		

- Structured as thematic **modules**, that can be read in isolation
- Good for search and web metrics
- Also works as a single report (the ‘traditional report’) — important for researchers and stakeholders

Modules ('chapters'): 14 + annexes

European Drug Report 2024 main page

On this page

- High drug availability fuelled by large volume imports and production within the European Union
- Drug availability within the European Union
- Drug production within the European Union
- Key data and trends
- Drug supply trends
- Drug law offences trends
- EU production and precursors data for 2022
- Source data

Drug supply, production and precursors – the current situation in Europe (European Drug Report 2024)

Download as PDF

Analysis of the supply-related indicators for commonly used illicit drugs in the European Union suggests that availability remains high across all substance types. On this page, you can find an overview of drug supply in Europe based on the latest data, supported by the latest time trends in drug seizures and drug law offences, together with 2022 data on drug production and precursor seizures.

This page is part of the **European Drug Report 2024**, the EMCDDA's annual overview of the drug situation in Europe.

Last update: 11 June 2024

Table of contents/Search

High drug availability fuelled by large-volume imports and production within the European Union

Drug availability within the European Union

Analysis of supply-related indicators for illicit drugs in the European Union suggests that availability remains high across all substance types. In addition, the market is characterised by the widespread availability of a broader range of drugs, often available at high potency or purity, potentially increasing risks to health. These include novel substances, where both consumer and scientific knowledge about the health risks may be limited. There is also a growing diversity in the forms in which substances may be available on the market and, in some cases, such as cannabis, the routes of administration (e.g. vaping) by which they may be consumed. Together, these developments increase concerns that there is a potential for the greater use of illicit substances overall, and that the risks associated with some substances may be growing, especially among vulnerable users such as people experiencing social and economic marginalisation and depression. In particular, there are worries that people who use drugs may be at greater risk of adverse health outcomes, including poisonings and deaths, through consuming, possibly unknowingly, high-purity and potency drugs, especially more novel substances.

Globalisation in the operational methods used by organised crime groups appears to be an important facilitator of high drug availability in Europe. There is closer involvement of European drug producers and traffickers with international criminal networks, resulting in more resilience in the face of illicit drugs into and out of the European Union. Various countries in South America, West and South Asia and North Africa remain important source areas for illicit drugs entering Europe, while China and India remain important source countries for new psychoactive substances, with India now more important for some substances, such as synthetic cathinones. Drug precursors and related chemicals are also often reported to be sourced from China.

Large seizures of drugs, particularly cocaine, in intermodal shipping containers have continued to be detected in the last few years. For example, in 2023 Spain reported its largest seizure to date of 9.5 tonnes of cocaine in a single shipment concealed in bananas that originated in Ecuador (EU24-1.1.3). The drug trafficking operations of organised crime groups increasingly target legitimate commercial infrastructure involved in global trade. Documented instances show infiltration of supply chains and exploitation of key staff through intimidation and corruption. Moreover, there are increasing concerns regarding the recruitment and exploitation of juveniles by criminal networks in the illicit drug trade. This is reflected in the priority given to countering these threats by law enforcement agencies. More generally, and particularly in countries where large volumes of drugs are known to enter or be produced in Europe, there is growing recognition of the need to do more to counter the violence, corruption and criminal exploitation practices associated with drug market operations.

Figure 1.1. 'Operation Nano', 9.5 tonnes of cocaine seized in August 2023 at the Port of Algeciras (Cádiz), Spain

European Drug Report 2024 main page

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Figure 1.3. Drug seizures in the European Union – quantity of drugs seized, indexed trends (2012 = 100)

The indexed trends presented reflect relative changes in drug seizures over a 10-year period but give no indication of the actual amounts.

MCMV tablets were converted to mass equivalents by assuming a mass of 0.25 grams MCMV per tablet.

Interpreting trends in drug seizures is complicated by the fact that they are influenced by policing and law enforcement strategies and priorities, the success or otherwise of trafficking groups to avoid detection, and any underlying change in availability and use.

An estimated 1 million seizures were reported in 2022 in the European Union, with cannabis products being the most frequently seized, accounting for 71 % of the number of all seizures (EU24-1.4 and EU24-1.5).

Figure 1.4. Drug seizures in the European Union – number of reported drug seizures, breakdown by drug, 2022 (percent)

Show data table

European Drug Report 2024 main page

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Source data

The data used to generate infographics and charts on this page may be found below.

Show source tables

The complete set of source data for the **European Drug Report 2024** including metadata and methodological notes is available in our data catalogue.

A subset of this data, used to generate infographics, charts and similar elements on this page, may be found below.

Download all files (zip)

- Table EU24-Sup-1. Number of reported drug seizures, breakdown by drug, 2022
- Table EU24-Sup-2. Drug seizures in the European Union – number of drug seizures, indexed trends (2012 = 100)
- Table EU24-Sup-3. Drug seizures in the European Union – quantity of drugs seized, indexed trends (2012 = 100)
- Table EU24-Sup-4. Drug seizures in the European Union – number of seizures in 2022
- Table EU24-Sup-5. Drug seizures in the European Union – quantity seized in 2022 (tonnes)
- Table EU24-Sup-6. Drug law offences – possession/use offences, indexed trends (2012 = 100)
- Table EU24-Sup-7. Drug law offences – supply offences, indexed trends (2012 = 100)
- Table EU24-Sup-8. Drug law offences – number of offences, supply and use/offences, 2022
- Table EU24-Sup-9. Summary of seizures of EU-scheduled precursors and non-scheduled chemicals used for selected drugs produced in the European Union, 2021

Main subject
drug situation

Keywords
drug law offences drug markets precursors production of drugs supply of drugs trafficking

Target audience
EMCDDA partners general public policymaker Press and data journalists researcher

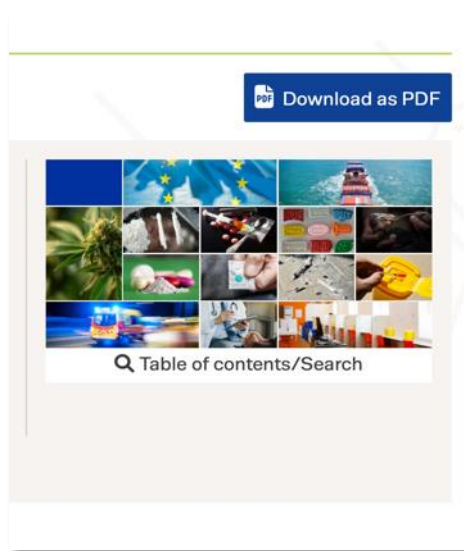
Publication type
European Drug Report

Was this page helpful? Yes No

Is there an issue with this page?

- Side menus for in-page navigation
- Data visualisations generated dynamically from source data
- Source data for graphics always available on page

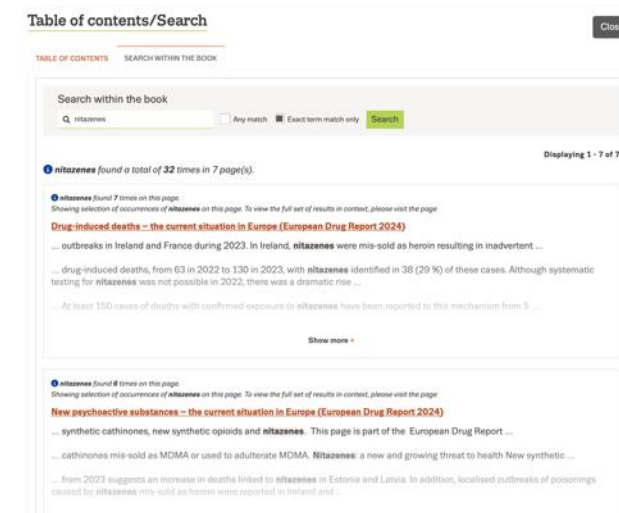
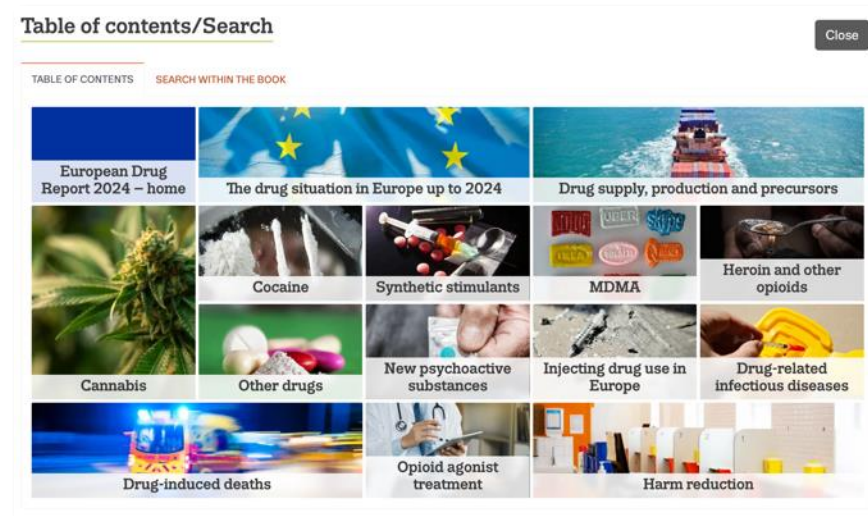
HTML *and* PDF



- A PDF can be generated 'on the fly' from any module
- PDF preserves structure and graphics
- Full compiled version from main page (**new for 2024**)
- Unlike traditional PDF, easy to make changes as needed

The 'mosaic'

- The 'mosaic' is a visual motif linking the modules
- Shape, pictures and size of tiles can be easily changed in the backend
- Also serves as the main navigational tool between each module
- Incorporates a powerful tool to search within entire report (**new for 2024**)



Making it easier to find and re-use the data


- Clear re-use license (CC-BY-4.0)
- All modules contain source data for the page
- The full data set is also contained in our Data Catalogue
- All data is now in CSV format (**new for 2024**)
- CSV bulk downloads (**new for 2024**)
- Data tables can be shown with copy-paste under each graphic (**new for 2024**)

Show source tables

The complete set of source data for the European Drug Report 2024 including metadata and methodological notes is available in our data catalogue.


A subset of this data, used to generate infographics, charts and similar elements on this page, may be found below.

Prevalence of drug use data tables including general population surveys and wastewater analysis (all substances)

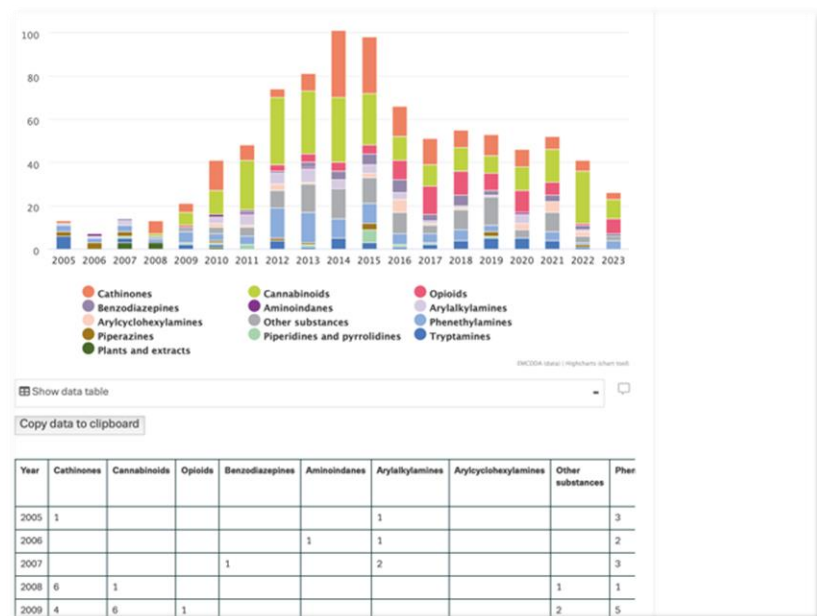
Download all files (zip) 

- Table EDR24-GPS-1. Prevalence of drug use in Europe, based on most recent general population surveys (2022 or most recent year)
- Table EDR24-GPS-2. Prevalence of drug use in Europe, trends
- Table EDR24-WW-1. Mean weekly measurements by targeted substance from wastewater analysis in selected European cities in 2023, in

Other data tables including tables specific to cannabis

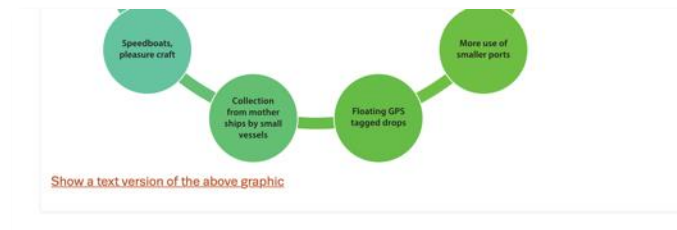
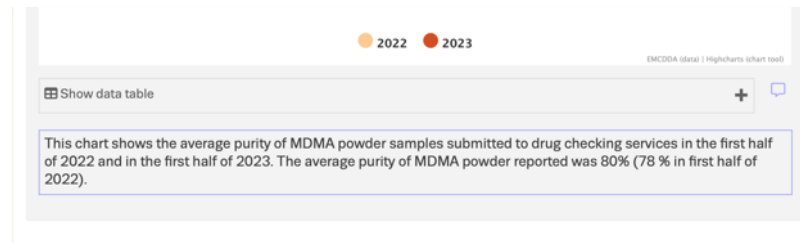
Download all files (zip) 

- Table EDR24-TDI-1. Treatment demand indicator (TDI) source data, client characteristics, European Drug Report, 2024. Percentages except where otherwise stated
- Table EDR24-Cannabis-3. Trends in first-time entrants, cannabis, selected countries
- Table EDR24-Cannabis-4. Cannabis markets seizures source data

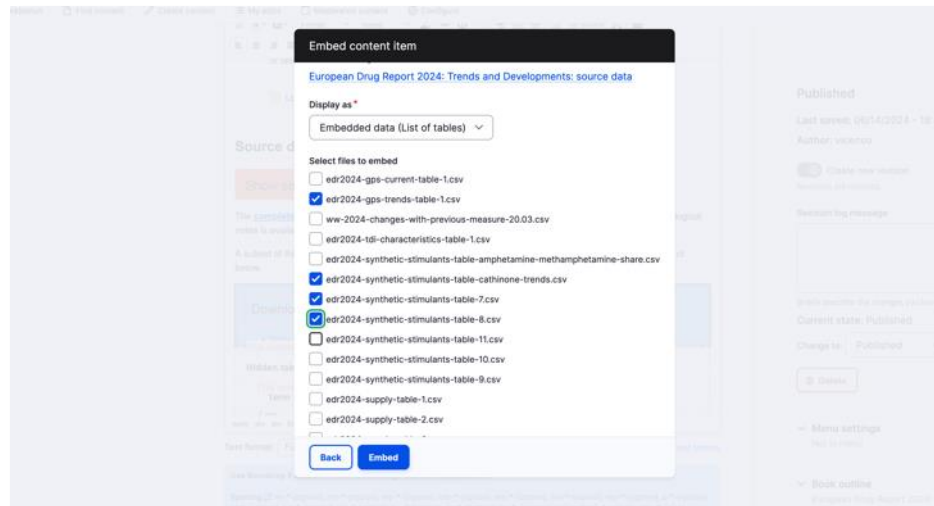
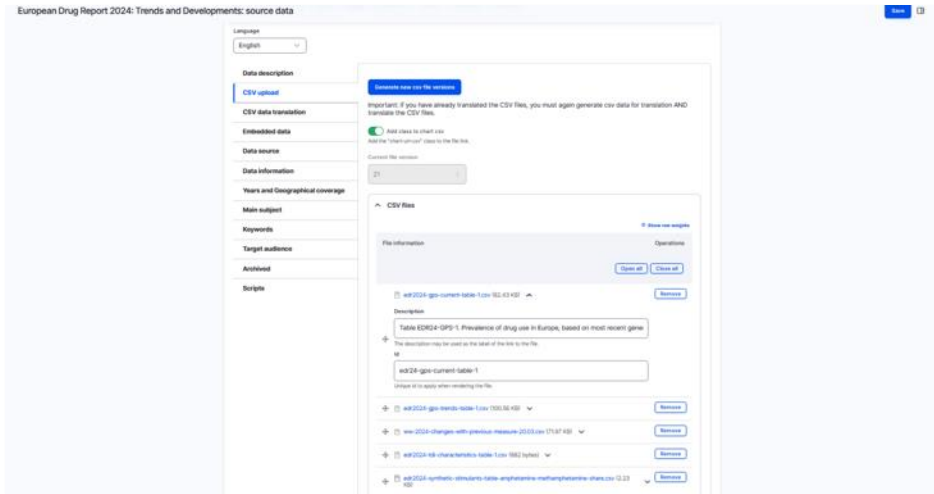


Improving accessibility for data visualisations

- Static images (e.g. photos) are assigned with 'alt' text
- Dynamic data visualisations are embedded with <div> tags and *role="img"* and *alt* attributes
- Alt text is dual-purposed to provide a description beneath each data visualisation (**new for 2024**)
- Text versions of complex graphics are provided

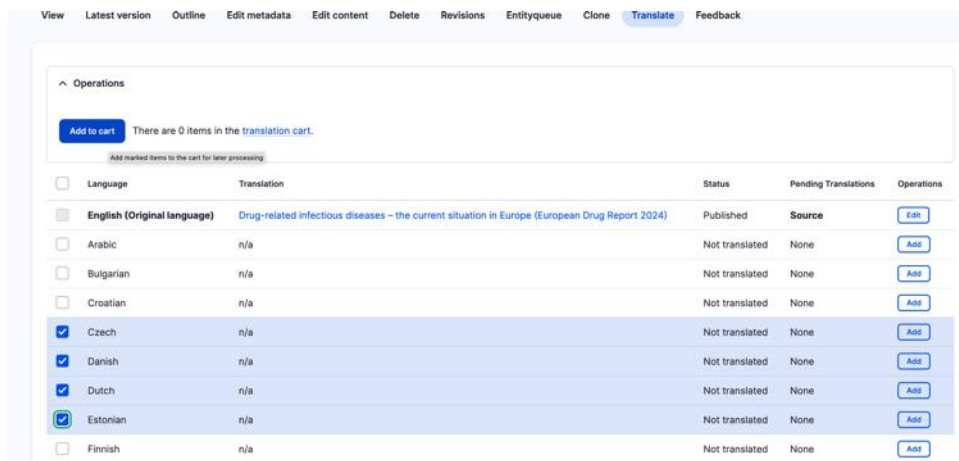


Backend: managing data



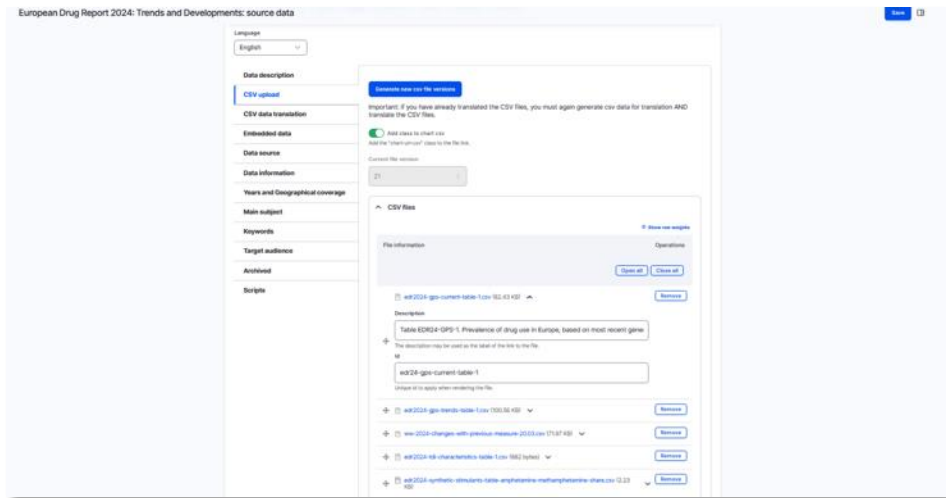
- Data is provided by data management team (110 CSV files)
- Custom-made Drupal data node assigns metadata to each file, auto-generates list and zip archive
- Easy 'drag and drop' updates
- Single source: data is embedded on pages
- Versioning (new update = new URI)

Translating content



- Use CdT (EU Translation Centre) module in Drupal
- Easy ‘shopping cart’ process to select and submit translations
- Translated items are sent back directly to Drupal to be published on website

Translating data and visualisations



- Translated data is needed for data visualisations
- Custom-code extracts terms and reduces size of translation
- A 'constraints' feature allows us to exclude columns
- Numerical data is not sent
- Data tables reconstructed as translated CSV files

2ii

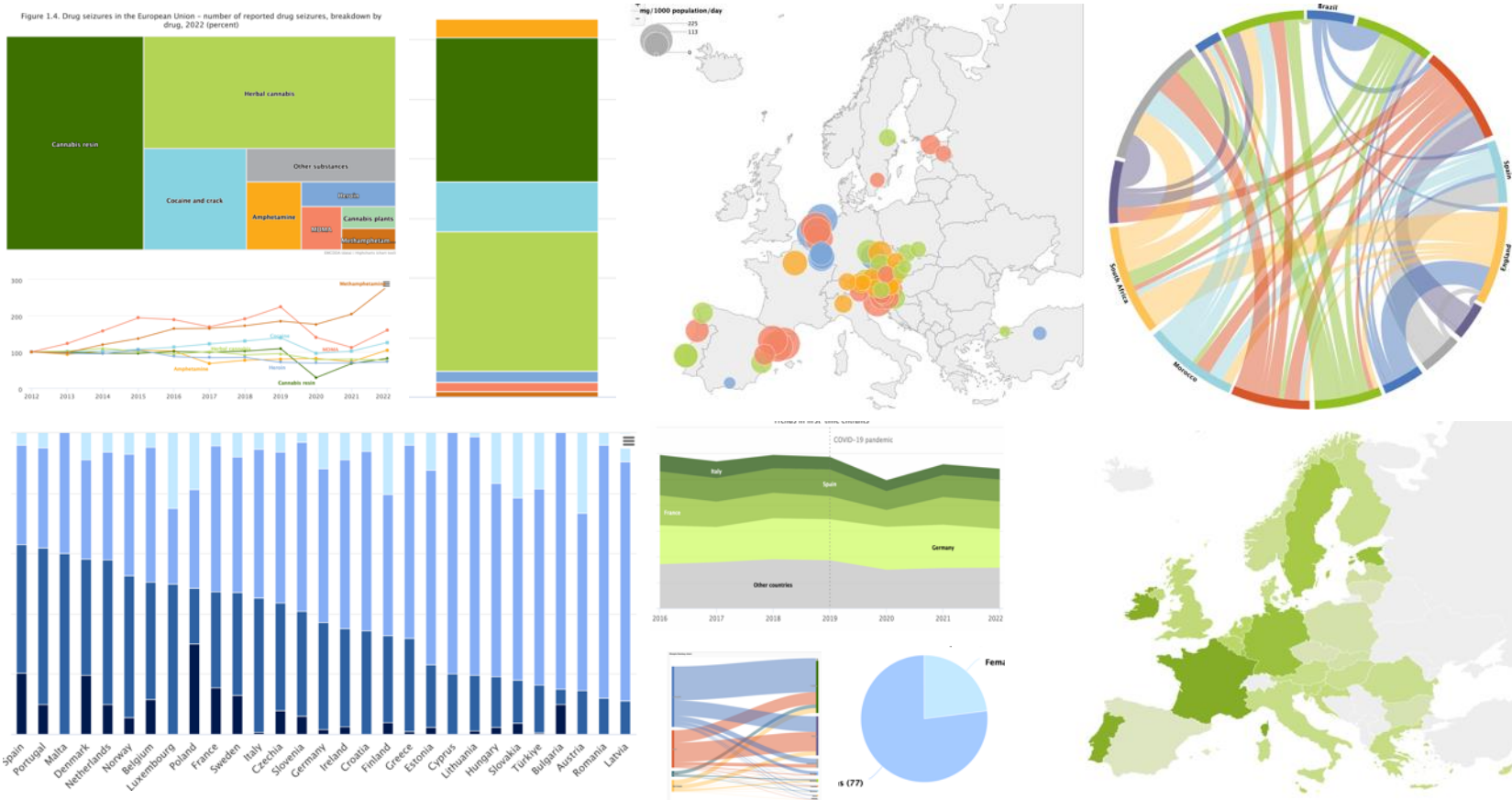


Data visualisations in the European Drug Report

Ensuring that the graphic-rich quality of the original printed version was maintained but with open data to the fore.

Dynamic data visualisation library

- Generate directly from data
- Easy to update
- Runs on browser (not server solution)
- 'No code' (uses data attributes in HTML)



Data visualisation library

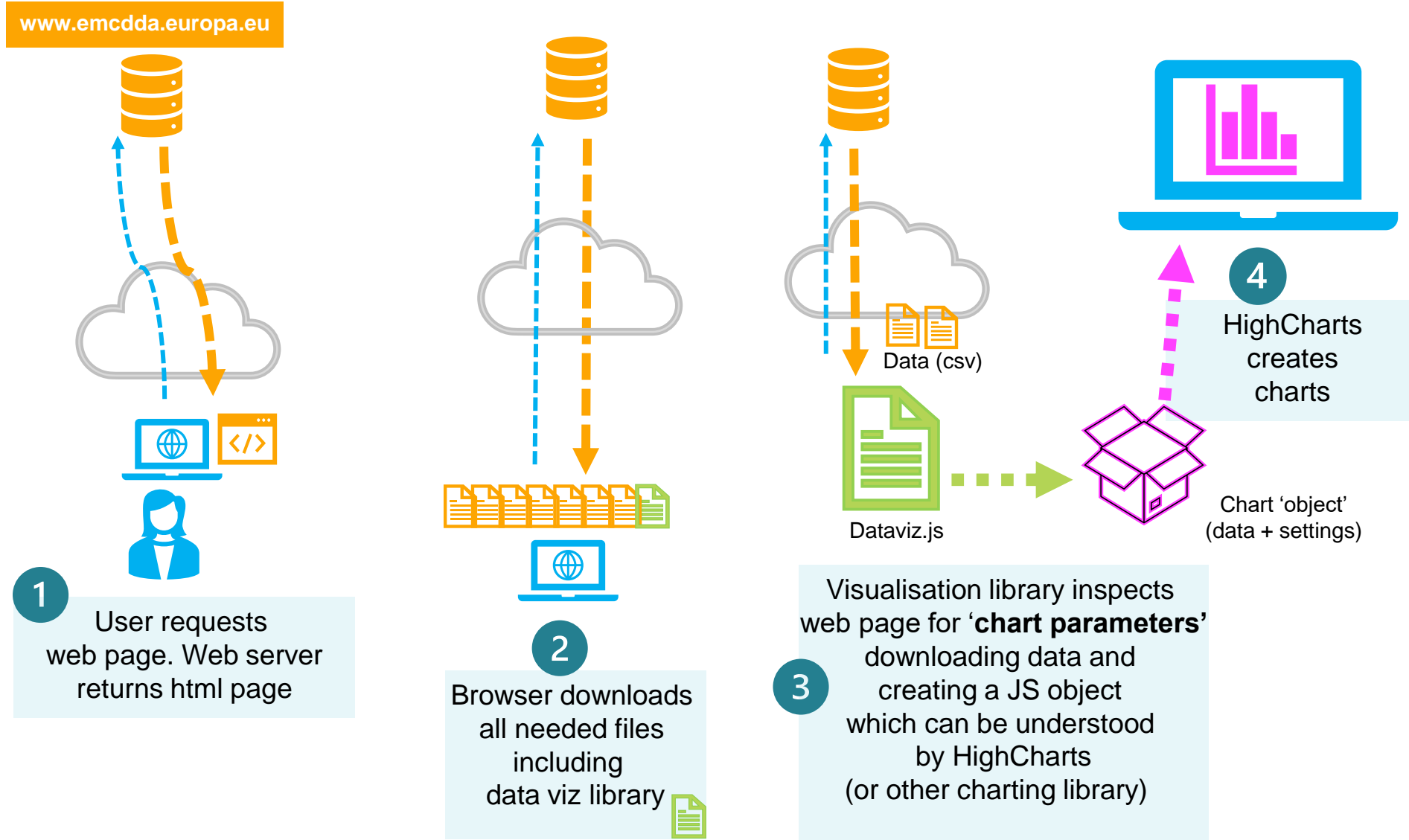


Chart parameters: example 1

- Chart parameters are standard HTML embedded on web pages
- Based on **data-*** attribute which can be used to embed custom data (instructions to build data visualisations in our case)

```
<div role="img" class="chart-parameters chart" data-chart-table="edr24-table-1" data-chart-type="column" data-chart-transform-keep-columns="1,2"> </div>
```

Country	Prevalence (%)	Survey year	Substance	Recall period	Age	Sample size	Males (%)	Females (%)
Austria	11.1	2020	Cannabis	Last year	Young adults (15-34)	1712	10.7	11.4
Belgium	13.6	2018	Cannabis	Last year	Young adults (15-34)	772	19.5	7.8
Bulgaria	5.9	2020	Cannabis	Last year	Young adults (15-34)	1401	5.7	6.1
Croatia	20.3	2019	Cannabis	Last year	Young adults (15-34)	1967	26.8	13.4
Cyprus	10.6	2022	Cannabis	Last year	Young adults (15-34)	1540	13.6	7.4
Czechia	22.9	2020	Cannabis	Last year	Young adults (15-34)	927	31.9	13.3
Denmark	12.5	2020	Cannabis	Last year	Young adults (15-34)	1030	15.8	9.3

edr24-table-1

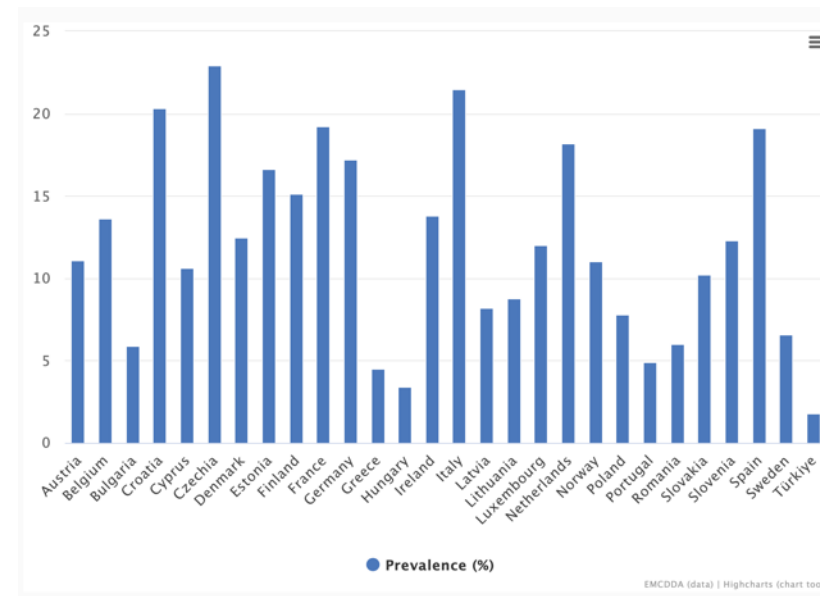
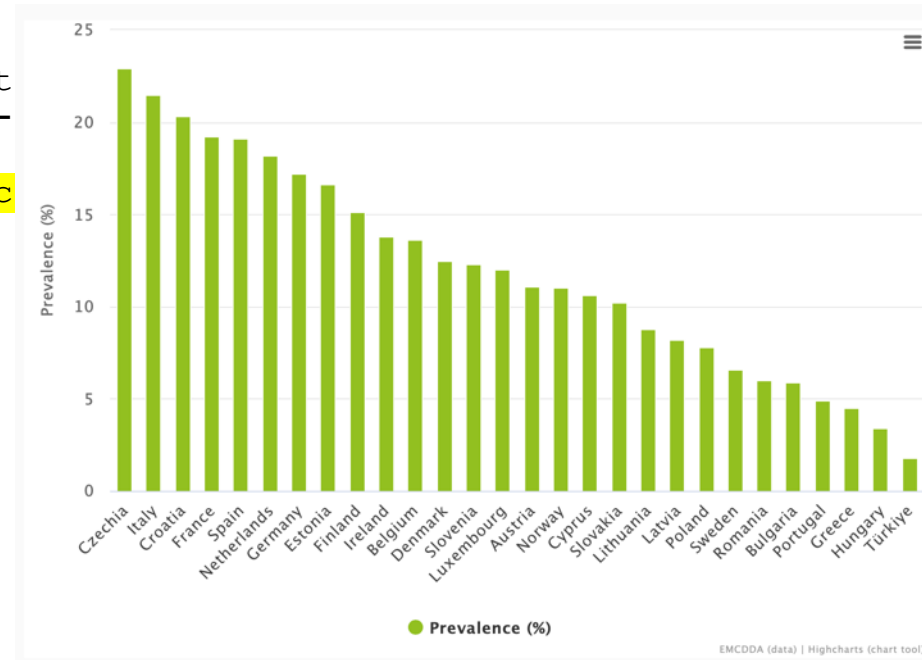


Chart parameters: example 2

- Colours can be changed (scheme or choice of colour within scheme)
- Data can be sorted by column, ascending or descending

```
<div role="img" class="chart-parameters  
chart" data-chart-table="edr24-table-1"  
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table-transform-keep-columns="1,2" data-  
chart-table-col-pre-sort="2,dsc" data-  
chart-colour="sequential-emcdda-green-hc  
9" div>
```

Country	Prevalence (%)	Survey year	Substance	Recall period	Age	Sample size	Males (%)	Females (%)
Austria	11.1	2020	Cannabis	Last year	Young adults (15-34)	1712	10.7	11.4
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Denmark	12.5	2023	Cannabis	Last year	Young adults (15-34)	1872	15.8	9.3



edr24-table-1

Chart parameters: example 3

- Chart types can be easily updated
- Target columns for value and category data can be changed through API

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chart" data-chart-table="edr24-table-1"
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data-chart-table-col-pre-sort="9, asc"
data-chart-colour-order="2, 5" ></div>
```

Country	Prevalence (%)	Survey year	Substance	Recall period	Age	Sample size	Males (%)	Females (%)
Austria	11.1	2020	Cannabis	Last year	Young adults (15-34)	1712	10.7	11.4
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Denmark	12.5	2023	Cannabis	Last year	Young adults (15-34)	1872	15.8	9.3

edr24-table-1

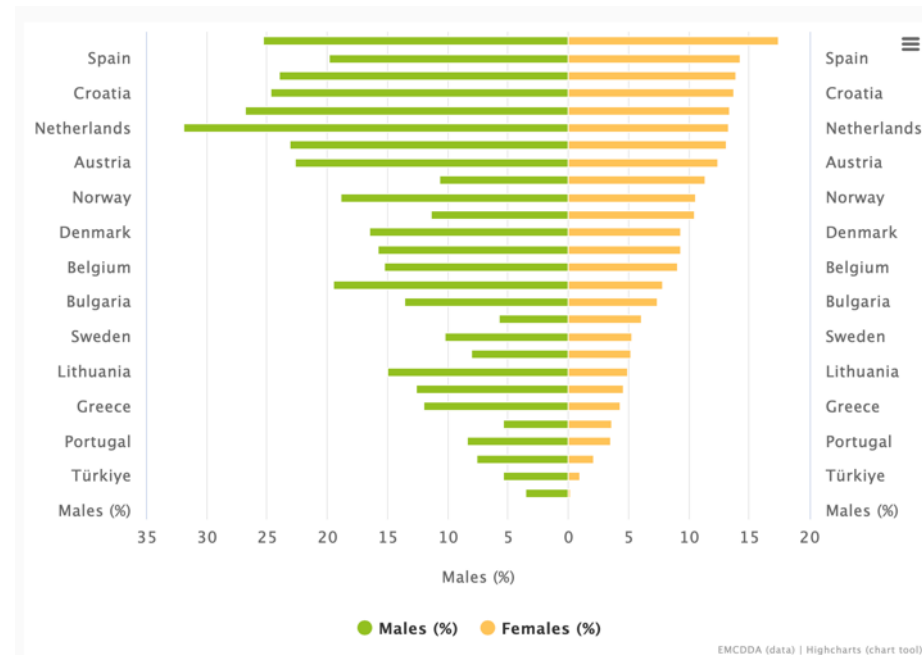


Chart parameters: example 4

- Text can be added directly in attributes but for translation purposes this is actually done with translation lookup tables (not used here) as HTML data attributes are not translated

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(%)" ></div>
```

Country	Prevalence (%)	Survey year	Substance	Recall period	Age	Sample size	Males (%)	Females (%)
Austria	11.1	2020	Cannabis	Last year	Young adults (15-34)	1712	10.7	11.4
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edr24-table-1

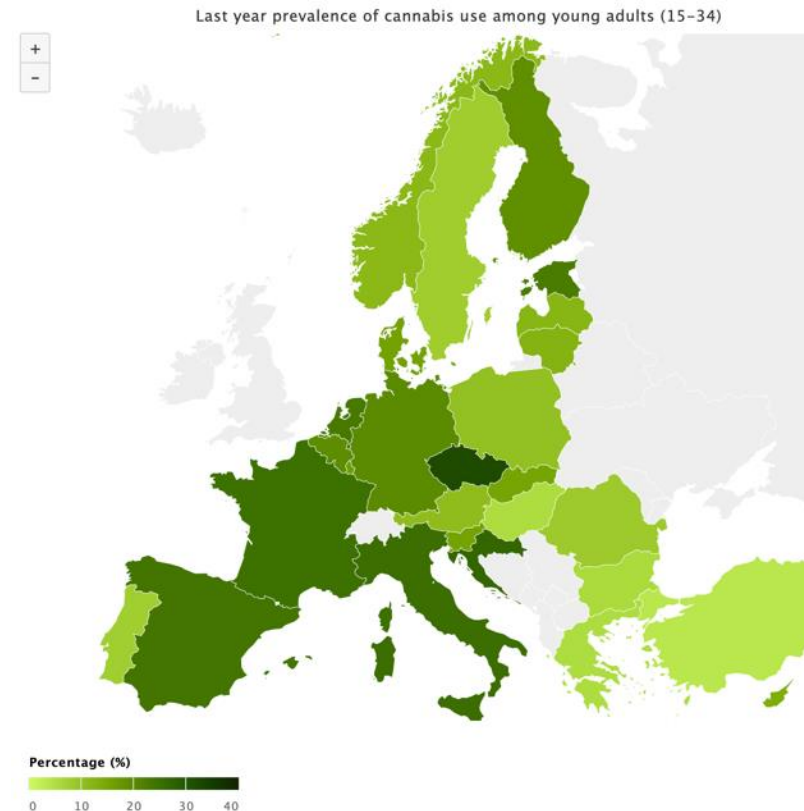


Chart parameters: example 5

- Geocoding can be done with country codes, names or lat,lon coordinates
- Labels can be customised, and set to different values
- Interactive tooltips can be configured to show specific columns

```
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colour="sequential-emcdda-blue-hc-9"  
data-chart-labelsize="7pt" data-chart-  
tooltip-keys="1,3,4,7,8,9"></div>
```

Country	Prevalence (%)	Survey year	Substance	Recall period	Age	Sample size	Males (%)	Females (%)
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Belgium	13.6	2018	Cannabis	Last year	Young adults (15-34)	772	19.5	7.8
Bulgaria	5.9	2020	Cannabis	Last year	Young adults (15-34)	1401	5.7	6.1
Croatia	20.3	2019	Cannabis	Last year	Young adults (15-34)	1967	26.8	13.4
Cyprus	10.6	2022	Cannabis	Last year	Young adults (15-34)	1540	13.6	7.4
Czechia	22.9	2020	Cannabis	Last year	Young adults (15-34)	927	31.9	13.3
Denmark	12.5	2023	Cannabis	Last year	Young adults (15-34)	1872	15.8	9.3

edr24-table-1

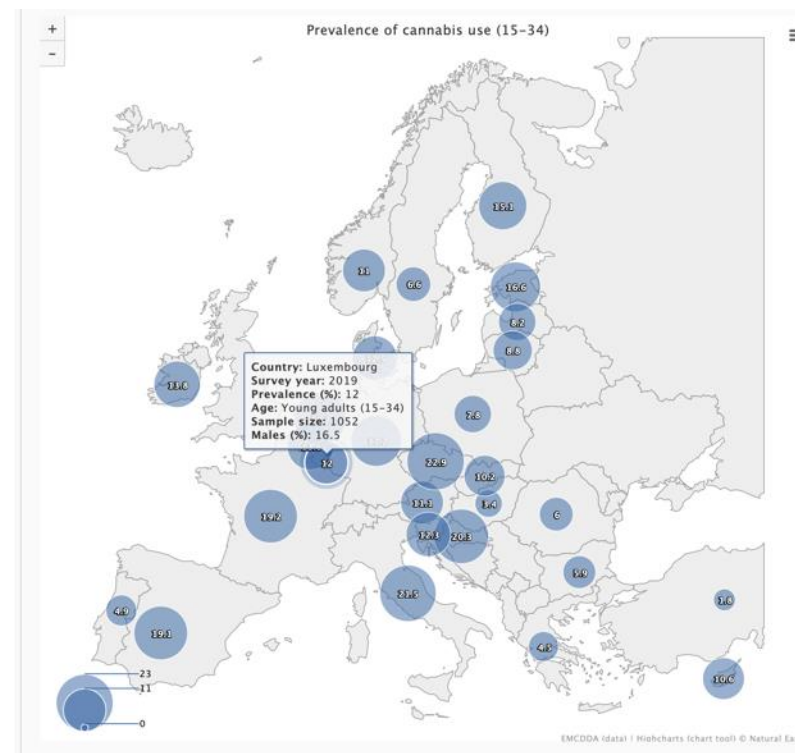
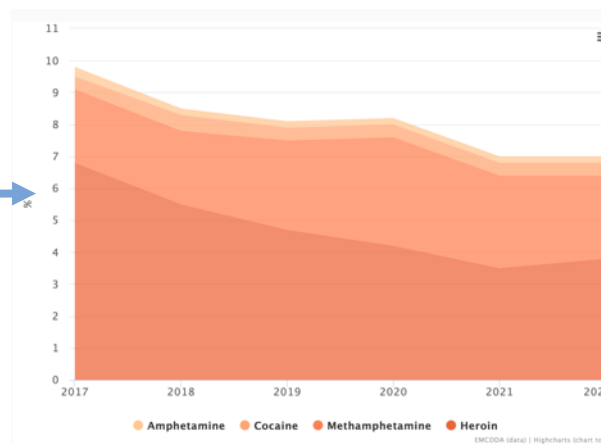


Chart parameters: example 6

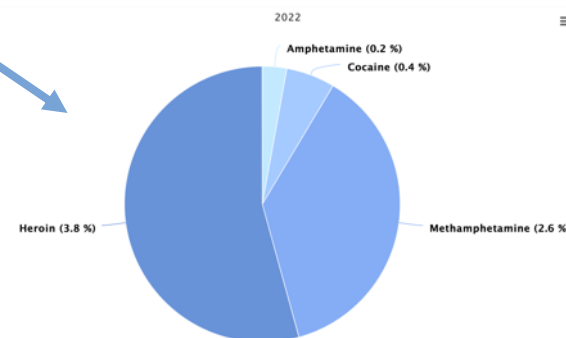
- Data table can be transformed, sorted, filtered, mixed with other tables, etc.
- Non-destructive: same data table can be used for any number of charts

```
<div role="img" class="chart-parameters chart" data-chart-table="edr24-table-2" data-chart-type="stackedArea" data-chart-colour="sequential-emcdda-red-hc-9" data-chart-y-title="%" ></div>
```



```
<div role="img" class="chart-parameters chart" data-chart-table="edr24-table-2" data-chart-type="pie" data-chart-colour="sequential-emcdda-blue-hc-9" data-chart-virtual-column="*col1* (*col7*%) |combine-columns|*" ></div>
```

Substance	2017	2018	2019	2020	2021	2022
Amphetamine	0.3	0.2	0.2	0.2	0.2	0.2
Cocaine	0.4	0.5	0.4	0.4	0.4	0.4
Methamphetamine	2.3	2.3	2.8	3.4	2.9	2.6
Heroin	6.8	5.5	4.7	4.2	3.5	3.8

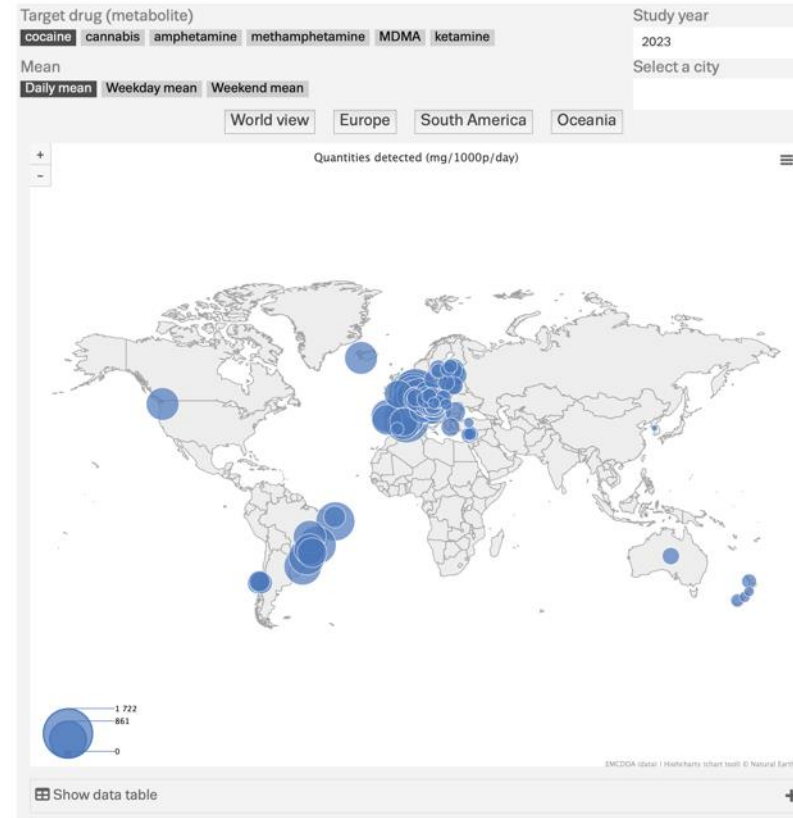


edr24-table-2

Chart parameters: example 7

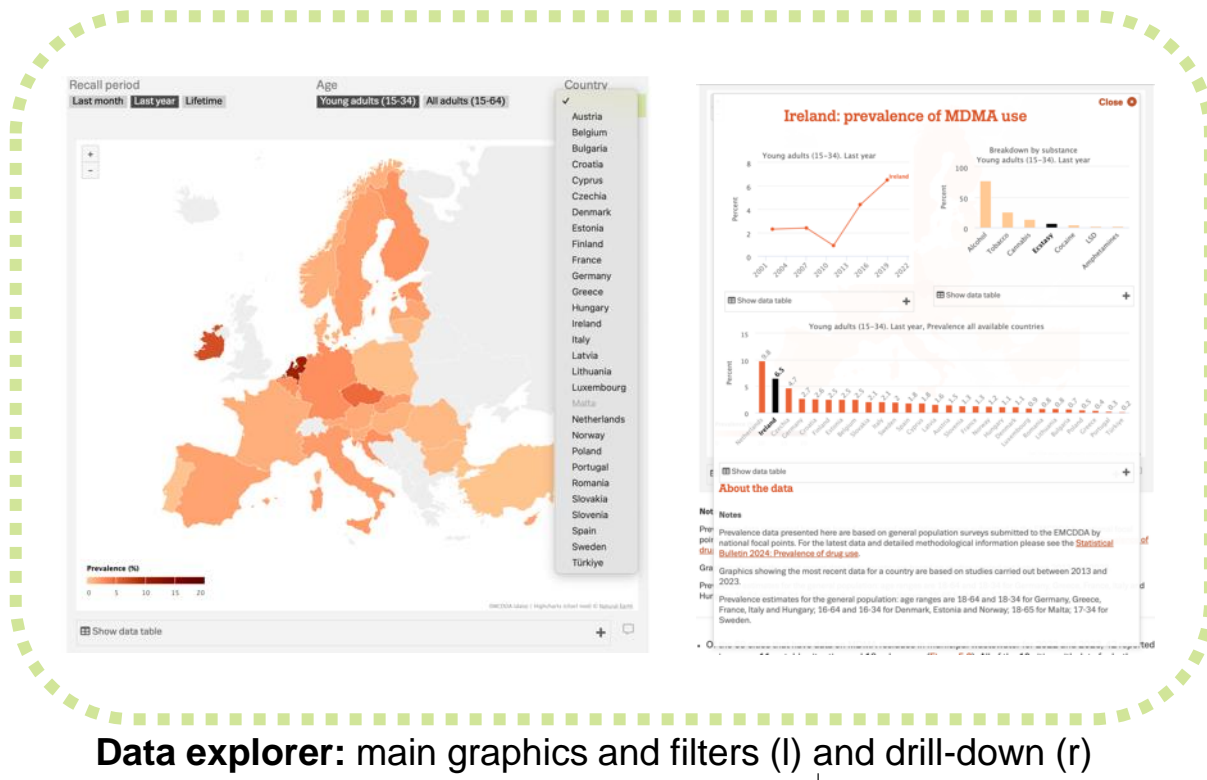
- Using the same principles, more complex visualisations can be built

```
<div class="data-explorer chart-parameters" data-chart-explorer-  
chart-attributes="data-chart-type==bubbleMap;data-chart-label-  
enabled==false;data-chart-colour==emcdda-mix;data-chart-colour-  
order==*filters[1];data-chart-header-  
keys==16=lat,17=lon,20=id,*filters[4]=z;data-chart-secondary-  
chart-trigger==click;data-chart-secondary-chart-  
parameter==col20,col14;data-chart-in-data-explorer==yes;data-chart-  
fixed-upper-value==*filters[1];data-chart-bubble-  
opacity==0.7;data-chart-tooltip-keys==1,2,5,4,13,14,15;data-chart-  
embedded-title==_t[12];data-chart-map==World;data-chart-map-set-  
view=4426,7260,-3.105823743513199" data-chart-explorer-  
filters="type=row,style=buttons,col=2,label=_t[1],valueType=text,m  
annualSortTable=filter-  
sort:2,fixedUpperValue=3000|300|1000|1000|400|50,colour=1|2|3|4|5|  
6|;type=row,style=dropdown,col=1,label=_t[3],valueType=number,sort  
=dsc;type=row,paramFilter=1,style=dropdown,col=20,valueType=text,s  
ort=asc,label=_t[5],selected=-  
1;type=column,style=buttons,col=13|14|15,valueType=text,sort=asc,l  
abel=_t[2],select=main" data-chart-explorer-  
layout="<filters><row><col-9>f-1</col><col-3>f-  
2</col></row><row><col-9>f-4</col><col-3>f-  
3</col></row></filters><row><col-3></col><col-9><div  
id='explorer1-map-zoom'></div></col></row><sc><h2 class='align-  
center'>title=*col5*, *col18* (*col1*)</h2><row><col-6>sc-  
1</col><col-6>sc-2</col></row><row><col-7>sc-3</col><col-5>sc-  
4</col></row>" data-chart-table="wastewater24-AllData" data-  
chart-translation-table="ww24-translation-table" data-chart-  
type="data-explorer" data-chart-virtual-column="5,6,4,3|table-  
lookup|*|ww2024-siteInfoTableV1|3|1;*col4*: *col5*|combine-  
columns|*" id="ww-data-explorer" style="min-height:800px"></div>
```



Data explorers and dashboards

- Data explorers: allow users to explore larger data sets (always dynamic) using filters and drill-downs
- Dashboard: simpler view of multiple charts within a pre-defined frame (fixed or dynamic)
- Both fully customisable (and support templating to facilitate creation)



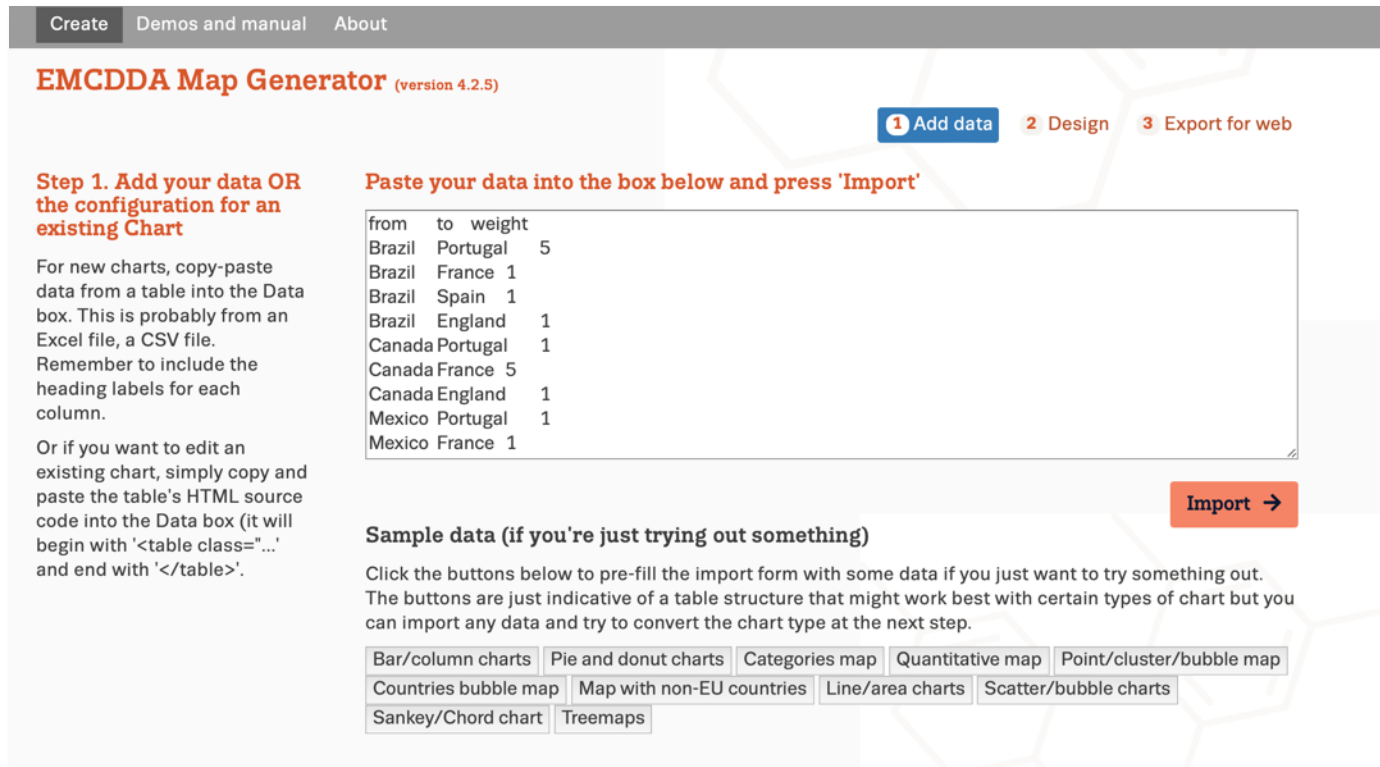
Data explorer: main graphics and filters (l) and drill-down (r)



Dashboard

Map and Chart Generator 1

- Map and Chart Generator: 'no code' tool for creating visualisations
- Data can be copied-pasted



The screenshot shows the 'EMCDDA Map Generator' interface at version 4.2.5. The navigation bar includes 'Create', 'Demos and manual', and 'About'. The main heading is 'EMCDDA Map Generator (version 4.2.5)'. A progress indicator shows three steps: '1 Add data' (active), '2 Design', and '3 Export for web'. The 'Add data' step is detailed with instructions and a data input box.

Step 1. Add your data OR the configuration for an existing Chart

For new charts, copy-paste data from a table into the Data box. This is probably from an Excel file, a CSV file. Remember to include the heading labels for each column.

Or if you want to edit an existing chart, simply copy and paste the table's HTML source code into the Data box (it will begin with '<table class="..."' and end with '</table>').

Paste your data into the box below and press 'Import'

from	to	weight
Brazil	Portugal	5
Brazil	France	1
Brazil	Spain	1
Brazil	England	1
Canada	Portugal	1
Canada	France	5
Canada	England	1
Mexico	Portugal	1
Mexico	France	1

Import →

Sample data (if you're just trying out something)

Click the buttons below to pre-fill the import form with some data if you just want to try something out. The buttons are just indicative of a table structure that might work best with certain types of chart but you can import any data and try to convert the chart type at the next step.

Bar/column charts | Pie and donut charts | Categories map | Quantitative map | Point/cluster/bubble map
Countries bubble map | Map with non-EU countries | Line/area charts | Scatter/bubble charts
Sankey/Chord chart | Treemaps

Map and Chart Generator 2

- Settings panel allows users to quickly create visualisations
- Final code snippets ('chart parameters') are exported to be embedded in Drupal alongside data
- Open data by design: data is not embedded and must be available through a public web call

The screenshot displays the 'Map and Chart Generator 2' interface. On the left is a settings panel with the following sections:

- General settings**
 - Chart type: Chord diagram
 - Caption: Title of figure
 - Header keys: 1=name,3=z
- Appearance**
 - Colour scheme: [dropdown]
 - Reverse colours: -- Default order --
 - Colour order: ex.2,4,1,5,3,6
 - Chart height: an integer. e.g. 800, 1000, etc
 - Transparent background: No
 - Credits: [dropdown]
 - Credits text: EMCDDA (data) | Highcharts
 - Margin bottom: 12
 - Margin left: 12
- Text, legends, labels**
- X and Y axes**
- Maps**
- Data options**
- HTML settings**
- Sankey, chord and flows**
- Table pre-processing**
- Plotlines**
- Miscellaneous and advanced settings**

On the right is a 'Chart preview' window showing a circular chord diagram with segments for Brazil, South Africa, Morocco, England, and Spain. The interface includes a progress bar at the top with steps: 1 Add data, 2 Design (active), 3 Export for web. At the bottom of the preview window, there is a 'Show data table' button with a plus icon.

Data visualisations: lessons learned so far

- Open data approach: makes it **much easier** to create, update and translate visualisations
- **Use a single source** for the data and embed where needed
- **Data explorers:** use to complement story but remember they will not work in PDF or print
- **Dashboards:** visually nice on desktop and PDF but on mobile can be tricky for users
- **Keep text and related graphics** near each other — good for accessibility
- **Helps if writers can see text and graphics** as they are drafting



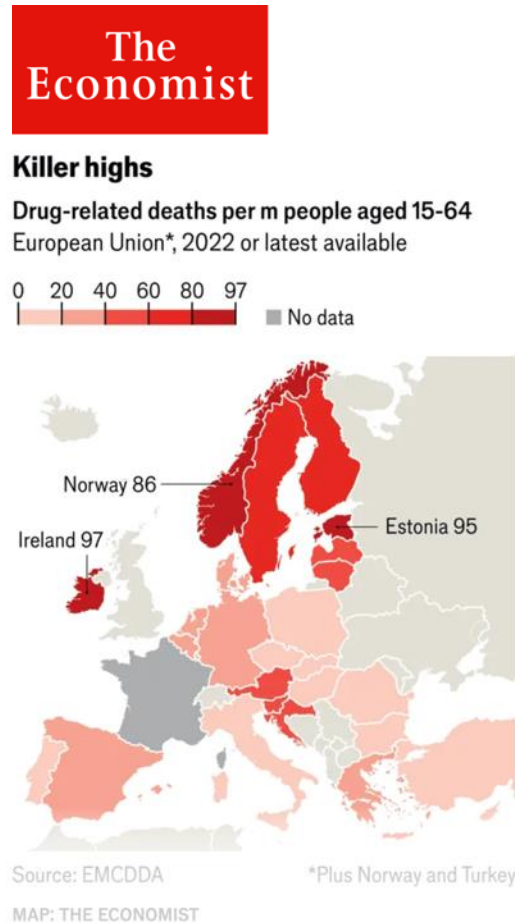
4



Case studies: data re-use by media and press

How an open data approach makes it easier and more likely for journalists and others to reuse our data

The Economist, June 2024



- Article: ‘The drug-overdose capitals of Europe’*
- Original graphic in Drug-induced deaths chapter of European Drug Report 2024 and supplemented with open data from EMCDDA Statistical Bulletin (and Eurostat population data)
- Journalist reached out and worked with relevant expert and data manager before publication

*<https://www.economist.com/graphic-detail/2024/06/12/the-drug-overdose-capitals-of-europe>

Czech television, June 2024

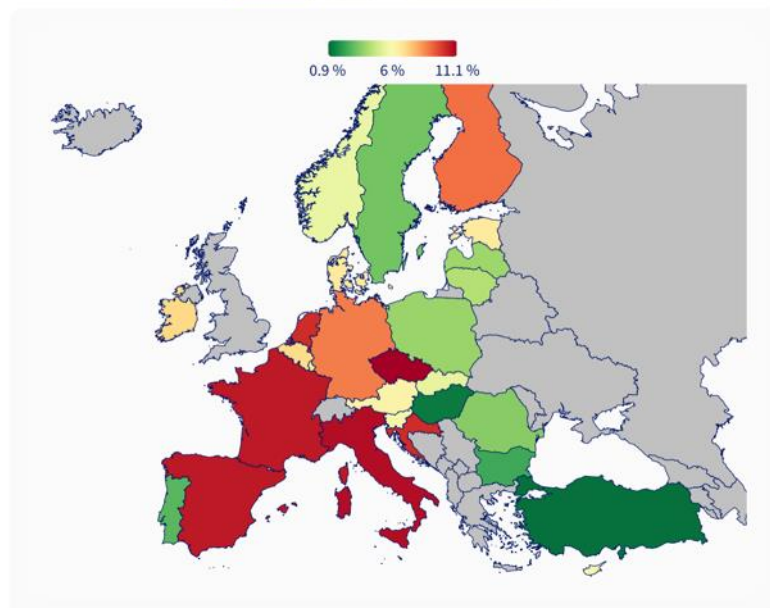


Rozšíření užívání drog v Evropě

Poslední dostupná data mezi dospělými 15 - 64 let



Marihuana Kokain Syntetické stimulanty



Zdroj: EMCDDA

A Flourish data visualization

- Article: ‘Narůstá hrozba syntetických drog, varuje nová zpráva’*
- Mini-data explorer made with Flourish and using drug prevalence data from the European Drug Report
- Good example of reaching a wider audience, helped by making our data open and easy to re-use

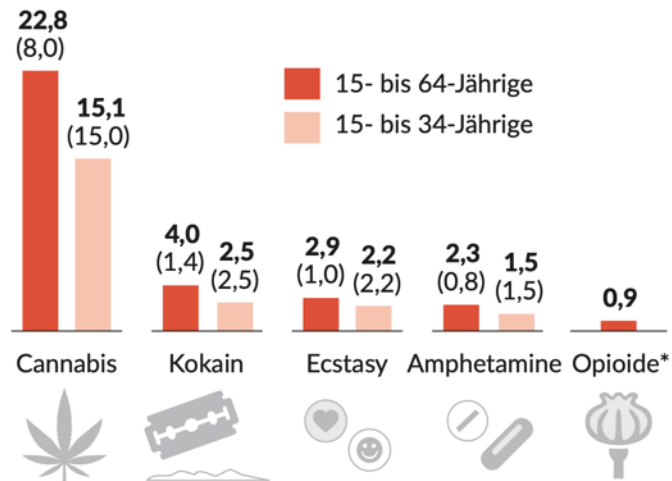
*<https://ct24.ceskatelevize.cz/clanek/domaci/narusta-hrozba-syntetickych-drog-silnejsich-nez-fentanyl-varuje-ve-zprave-evropska-agentura-350141>

Austria Presse Agentur, June 2024

Tiroler Tageszeitung

Drogenkonsum in der EU

Konsumenten im vergangenen Jahr, in Mio., geschätzt
(Anteil an der jeweiligen Altersgruppe in Prozent)



* Hochrisikokonsum, alle Altersgruppen, 2022

Grafik: © APA,
Quelle: Europäischer Drogenbericht 2024

Tiroler Tageszeitung

- Austria Presse Agentur, recreating the 'At a glance' dashboard from the European Drug Report 2024
- Data is included in source directly on the page
- Infographic appears in multiple other Austrian media outlets
- Good example of how a press agency can multiply a message

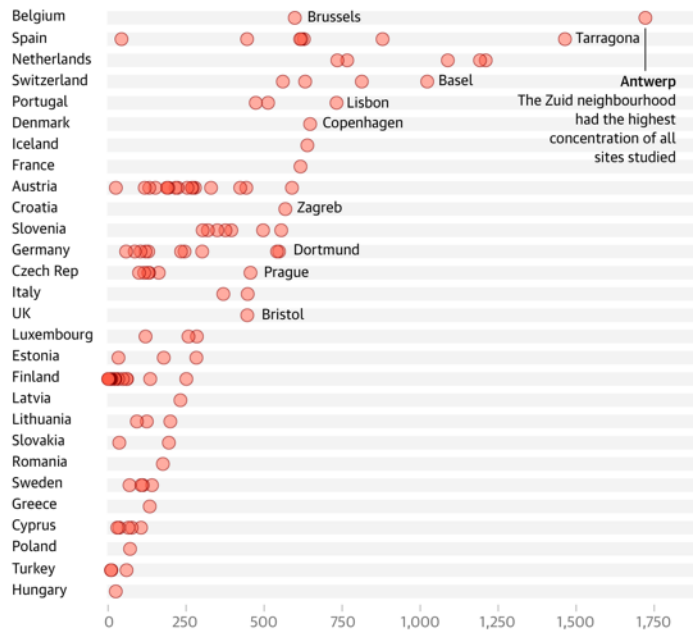
*<https://www.tt.com/artikel/30884565/drogengefahr-steigt-durch-neue-mischungen-und-veraenderten-konsum>

The Guardian, June 2024



Cocaine residues found in the wastewater of European cities

Selected European cities in 2022-23, daily mean mg, per 1,000 population



Guardian graphic. Source: EMCDDA, Sewage analysis CORe group (SCORE), 2022 and 2023. Note: study measures levels of Benzoylcegonine, the main metabolite of cocaine excreted in urine

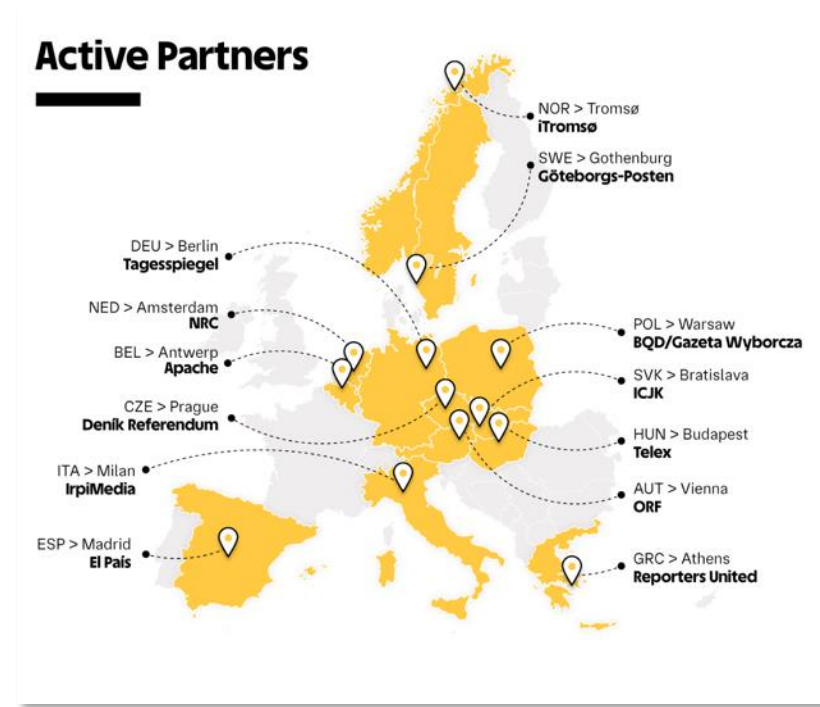
- Article by The Guardian* uses multiple sources about Cocaine in Europe, following launch of Drug Report
- Uses open data published by the EMCDDA, including data published in partnership with the SCORE network on wastewater analysis
- Good example of collaboration between different organisations using multiple data sources
- Good example of how we can use data visualisations by others to inspire our work

*<https://www.theguardian.com/global-development/article/2024/jun/11/how-big-is-europes-cocaine-problem-and-what-is-the-human-cost>



Urban Journalism Network

The Urban Journalism Network aims to promote high-quality digital journalism by collaborating across European cities to investigate urban issues

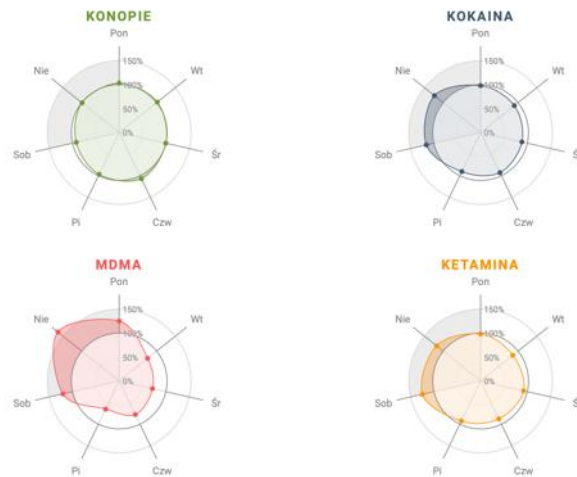


Urban Journalism Network, March 2024



Trawa do pracy, MDMA na weekend: Jak zmienia się spożycie narkotyków w ciągu tygodnia

Dzienne stężenie pozostałości narkotyków w miejskich ściekach (średnie dla miast biorących udział w badaniu). 100% odnosi się do średniego tygodniowego stężenia



Pobieranie próbek odbywało się w różnych oczyszczalniach, niekoniecznie obejmowało obszar całych miast.
European Monitoring Centre for Drugs and Drug Addiction, SCORE / Tapesspiegel Innovation Lab, Urban Journalism Network, Gazeta Wyborcza

Example article form Wyborcza.pl (Poland)

- Worked with us* prior to the release of our annual wastewater analysis publication in collaboration with the SCORE network
- Sharing the data prior to launch was easy and did not require specific extractions. Data management team formatted the data for us to use in the publication, exactly as needed, and this format also worked for the data journalists
- Resulted in a lot of coverage across multiple quality European press outlets
- Nice example of European wide data collaboration: SCORE-EMCDDA-Urban Journalism Network

*<https://urbanjournalism.org/cities-comparisons/>

5



Lessons learned and next steps

Benefits of digital-first approach

- Production process very efficient compared to print/PDF
- Much less error-prone (less manual intervention)
- Easy to update data and visualisations (single source)
- Good search engine ranking for most pages
- Positive feedback and more buy-in for open data from stakeholders
- Data journalists are directly using the data
- Changes are generally system-based so the benefits are across all products and can be re-used

Lessons learned

- Involve stakeholders early in process and update regularly
- PDF is still very important for many stakeholders
- Be aware of impact on upstream workflows with data management teams, editors and writers (digital transformation) as well as external partners for consultation
- Be aware that translating data can require a different approach to text

Next steps on our open data journey

- Provide data in more formats and additional view modes for visitors
- Explore more automation for data updating
- Improve accessibility of our visualisations
- Continue digital transformation across our range of products and publications
- Keep raising awareness with colleagues and partners of benefits of, and need for, open data
- Keep improving our open data offer, following data.europa.eu guidance and uploading our data sets

Thank you!

Questions & Answers



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Web manager, European
Monitoring Centre for Drugs and
Drug Addiction (EMCDDA)



Stay up-to-date on our activities!

The logo for Data Europa Academy is located in the bottom-left corner. It features a large green circle with a white circle inside it. The text "data.europa academy" is written in white lowercase letters within the white circle. The word "data" is on the top line, "europa" is on the middle line, and "academy" is on the bottom line. There are small orange dots above the 'a' in "data" and above the 'o' in "europa".

data.
europa
academy

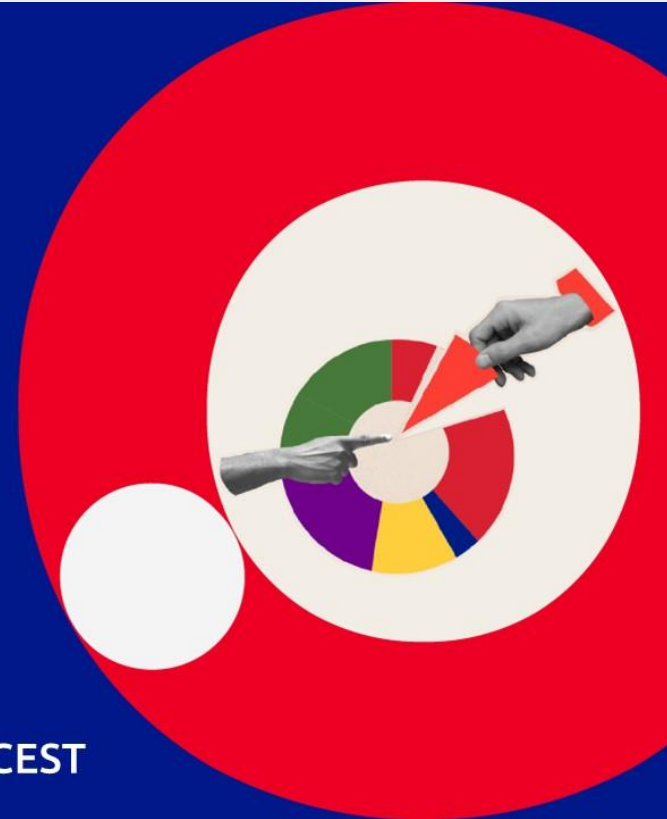
Join our next webinar!

WEBINAR

Stories from the Use
Case Observatory -
Volume 2

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28 June 2024
10.00 – 11.30 CEST



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Your opinion is important to us



Thank you!

