



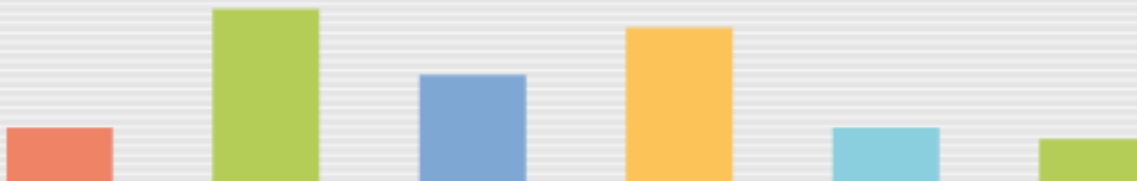
European Monitoring Centre  
for Drugs and Drug Addiction

# Fentanyl-related deaths and fentanyl acute toxicity presentations at emergency departments in Europe, 2014-2021

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Lisbon, 23 November 2022

Lisbon Addictions conference



# Disclosure

**No conflict of interest to disclose.**



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

- **European Drugs Agency**
- **European Union (EU) technical agency**
- **Based in Lisbon, established 1995**
- **Information hub on drugs**
- **Provide objective, reliable, timely information on drugs**
- **Cover: use, harms, markets and responses**
- **Work with a network of 29 national focal points**
- **Main customers: policy makers and practitioners**



Data Countries Topics Best practice Publications Events News About

## 2022 European Drug Report

What do the latest data tell us about trends in drug use and the market? What hazardous new drugs are emerging? What substances are posing the greatest health threats? Find out the answer to all of these questions, and more, in the *European Drug Report 2022: Trends and Developments*.

European Drug Report 2022

### Spotlight

- European Web Survey on Drugs 2021: top-level findings, 21 EU countries and Switzerland** (Image: Eye)
- Lisbon Addictions is back: Registration and call for abstracts are open!** (Image: Geometric shapes)
- Penalties for drug law offences in Europe at a glance** (Image: Scales of justice)
- Elimination barrier on viral hepatitis among people with inject drugs in EU** (Image: Blue abstract)

# Rationale and objective

- **Large fentanyl/opioid driven OD crisis in the US**
- **Concerns in other parts of the world including in the EU**
- **Objective: review the available evidence on fentanyl-related harms in Europe for preparedness and to inform policy-making**



# EMCDDA sources of information on fentanyl use and harm

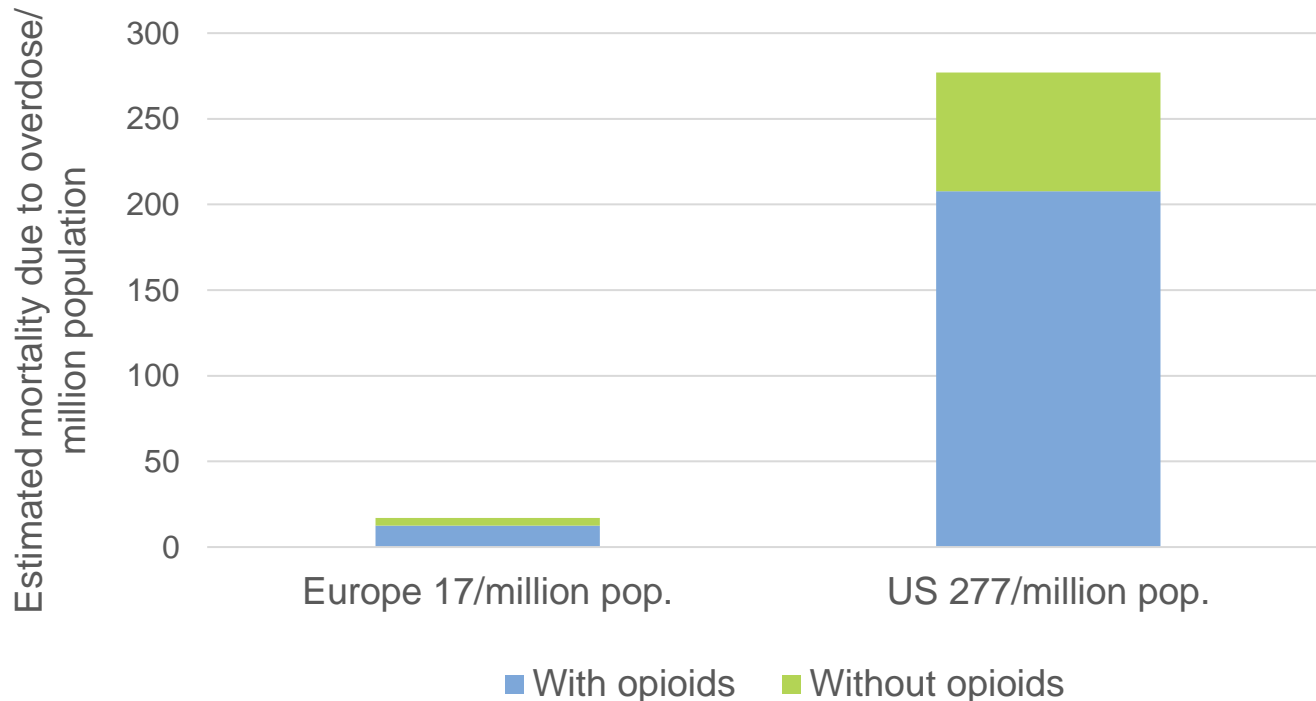
- **National mortality statistics (death certificates)**
- ***Special registers (forensic sources/police)***
- ***‘Sentinel’ hospital emergency room data on acute drug-toxicity presentations (Euro-DEN Plus)***
- ***Syringe residues monitoring (Escape)***

## Furthermore:

- **Early Warning System (EWS) on New Psychoactive Substances (NPS) and risk assessments**



# National statistics: Mortality due to overdose in Europe compared to the US



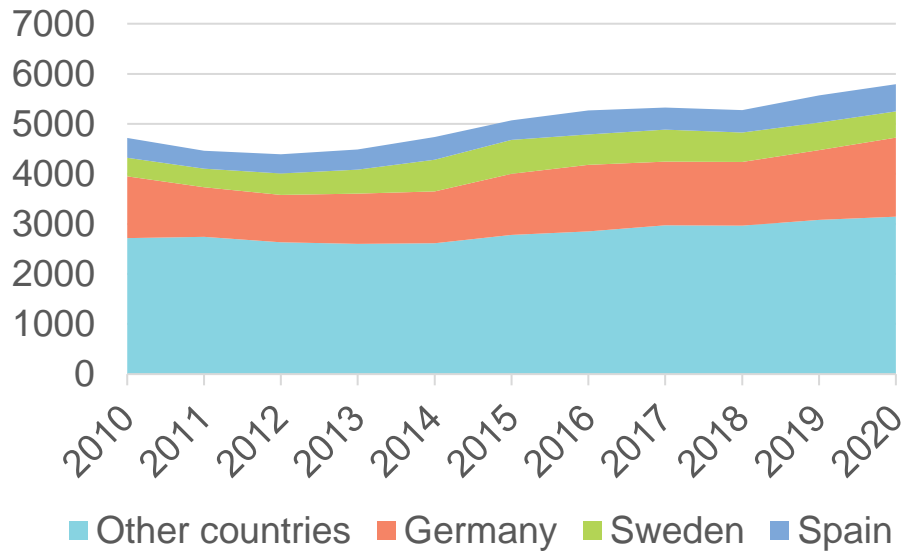
Source:

- EU: EMCDDA 2022 EDR. Estimated **17** deaths per million population aged 15-64 in 2020 (74% with opioids).
- US: **277** deaths per million population in 2020 (75% with opioids). 109 247 overdose deaths in the US during the 12-month period ending in March 2022 compared to 100,306 the previous year. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>



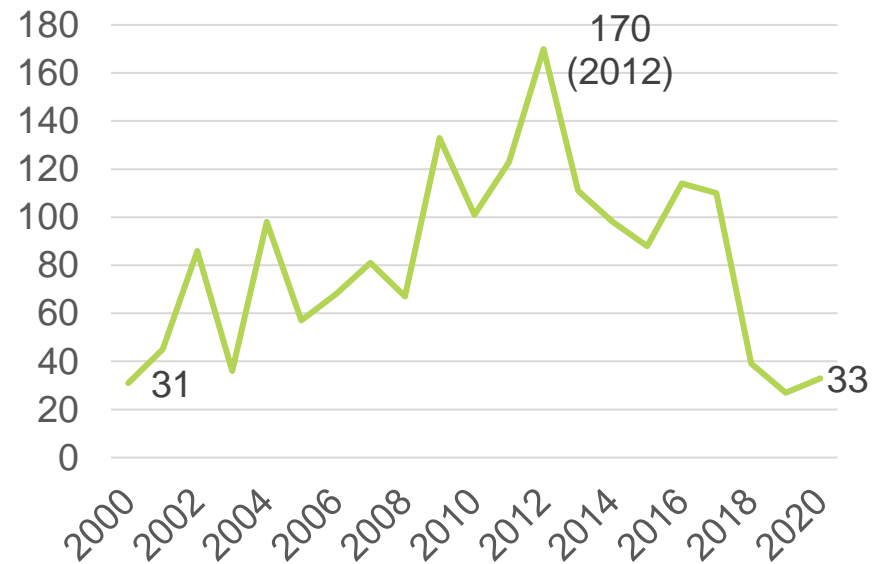
# Trends and case of Estonia

OD deaths in EU27, 2010-2020



Source: Adapted from European Drug Report 2022

OD deaths in Estonia, 2000-2020

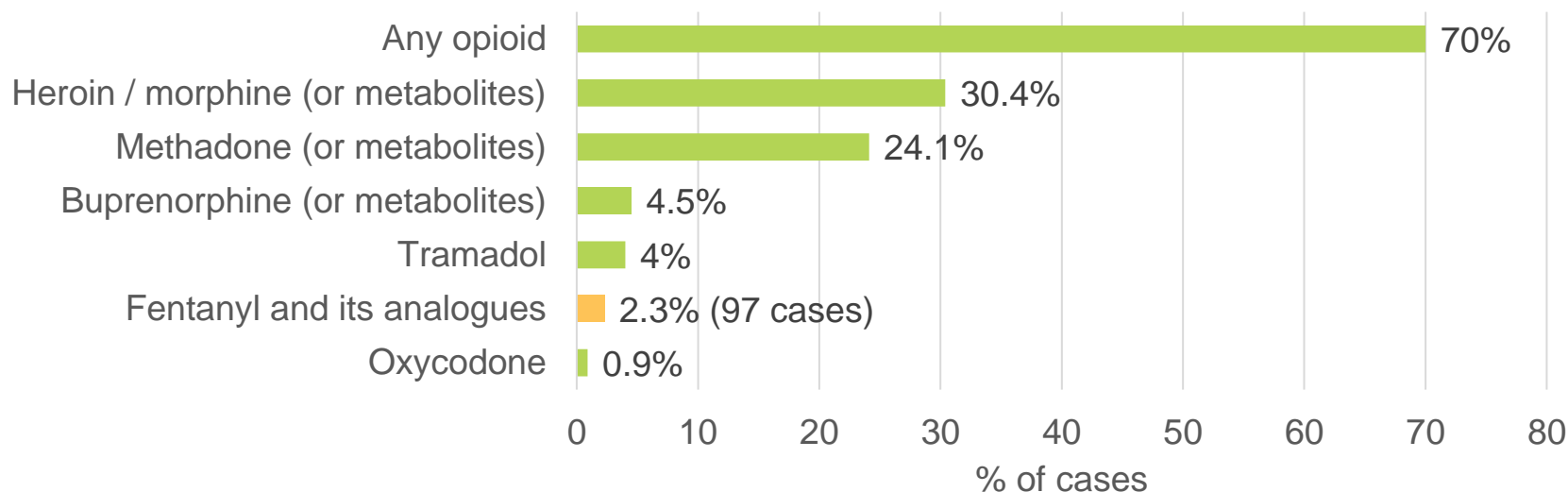


Source: EMCDDA Statistical Bulletin 2022

# Post mortem findings on causes of death from forensic sources ('special' mortality registers)

**For 2020, we have toxicological results for 4200 cases (72% of 5800 estimated OD deaths), from 22/27 countries**

EU: opioids involved in OD deaths, 2020



Source: Annual reports of the REITOX National Focal Points to the EMCDDA Fonte data collection tool.

Please note that some of this data has been submitted in 2022 and is still preliminary.

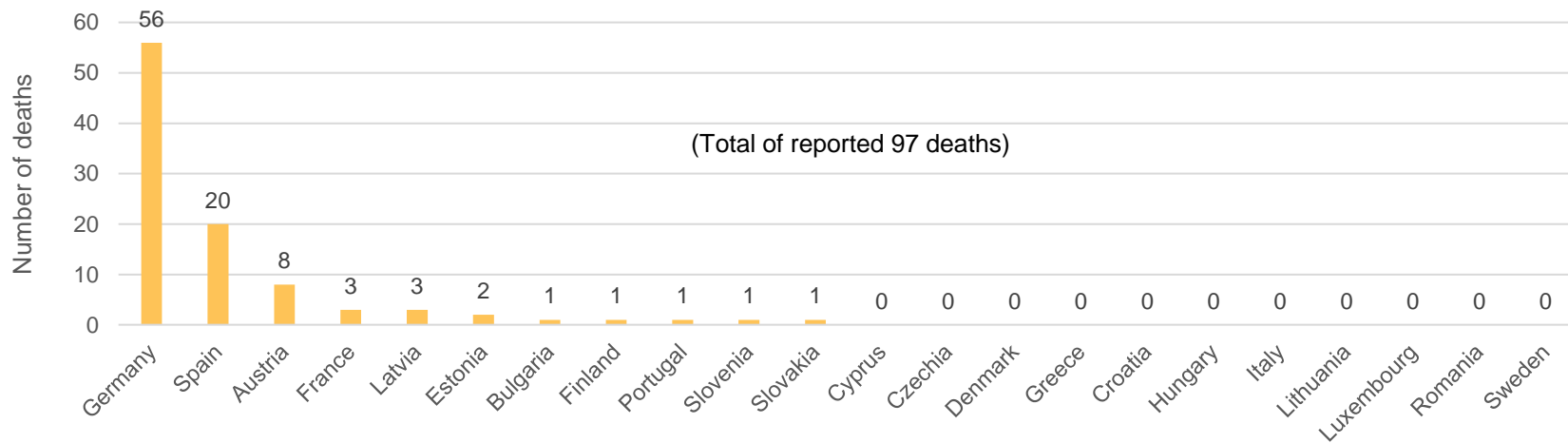
Methods and level of detail differ between countries. One death can involve more than one substance/opioid.



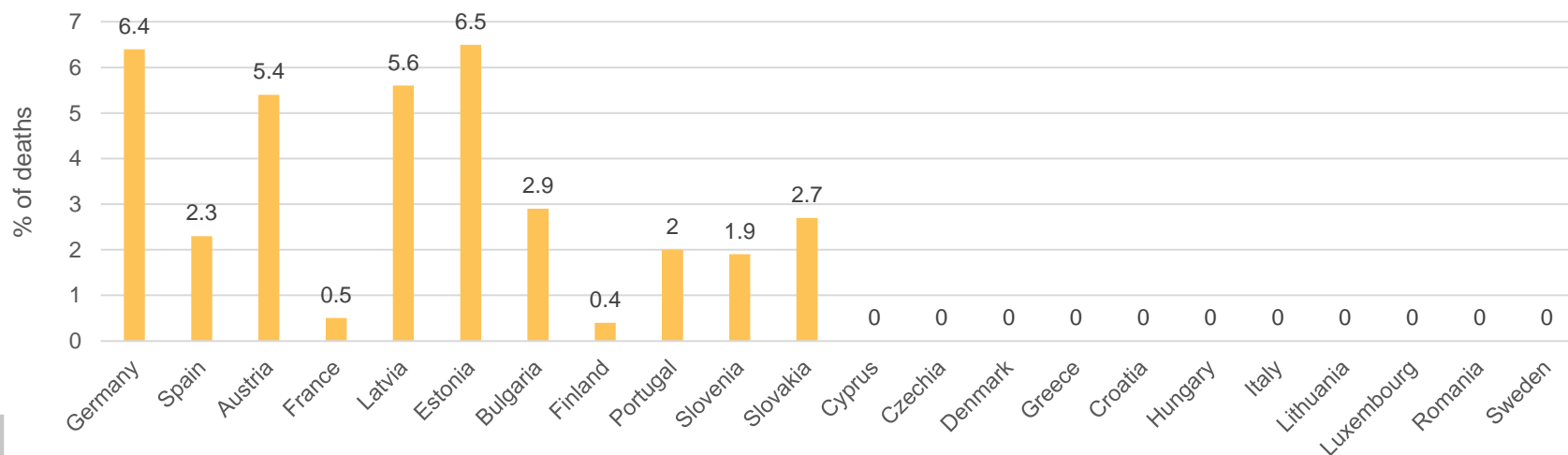


# Location of fentanyl-related deaths in the EU (2020)

Number of OD deaths involving fentanyl (2020, forensic sources)



% of OD deaths involving fentanyl (2020, forensic sources)

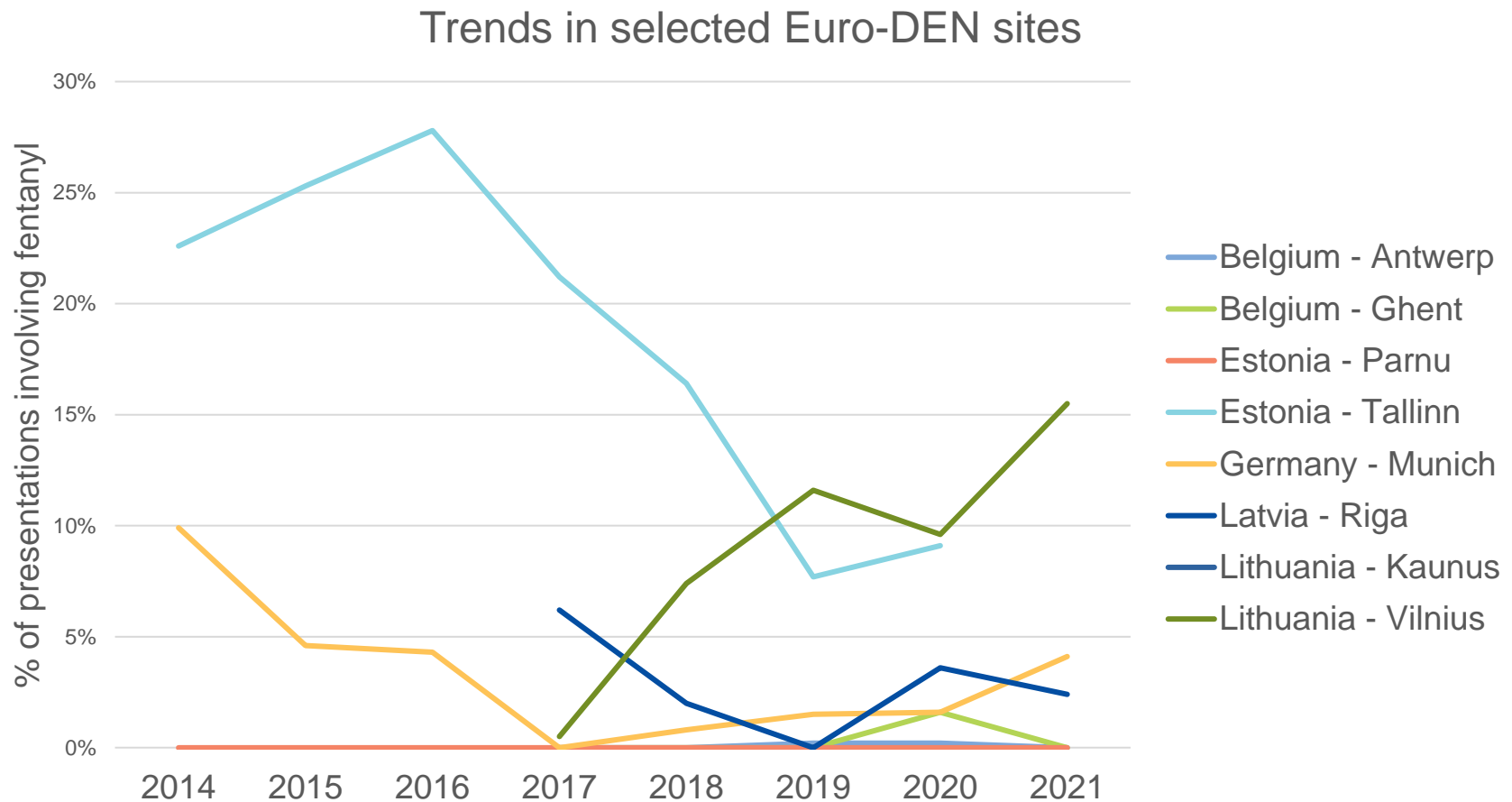


# Acute toxicity presentations involving fentanyl in emergency rooms, sentinel sites, EU, 2014-2021 (Euro-DEN Plus network)

Country	Centres	Presentations involving fentanyl	Fatalities (in hospital) involving fentanyl	Total presentations	% of presentations involving fentanyl
Estonia	Parnu, Tallinn	122	8	790	15.4
Lithuania	Kaunas, Vilnius	60	0	850	7.1
Germany	Munich	41	1	1055	3.9
Latvia	Riga	9	1	272	3.3
Czechia	Prague	2	0	70	2.9
Finland	Helsinki	2	0	253	0.8
Slovakia	Bratislava	2	0	408	0.5
Poland	Gdansk	2	0	935	0.2
Belgium	Antwerp, Ghent	4	1	3643	0.1
Netherlands	Utrecht, Amsterdam	3	0	3696	0.1
Malta	Msida	2	0	2787	0.1
Ireland	Drogheda, Dublin	2	0	4627	0
Spain	Barcelona, Mallorca	1	0	4251	0
Bulgaria	Sofia	0	0	363	0
Denmark	Copenhagen, Roskilde	0	0	310	0
France	Paris	0	0	2281	0
Italy	Monza	0	0	208	0
Romania	Bucharest	0	0	133	0
Slovenia	Ljubljana	0	0	698	0
Total	-	252	11	27630	0.9

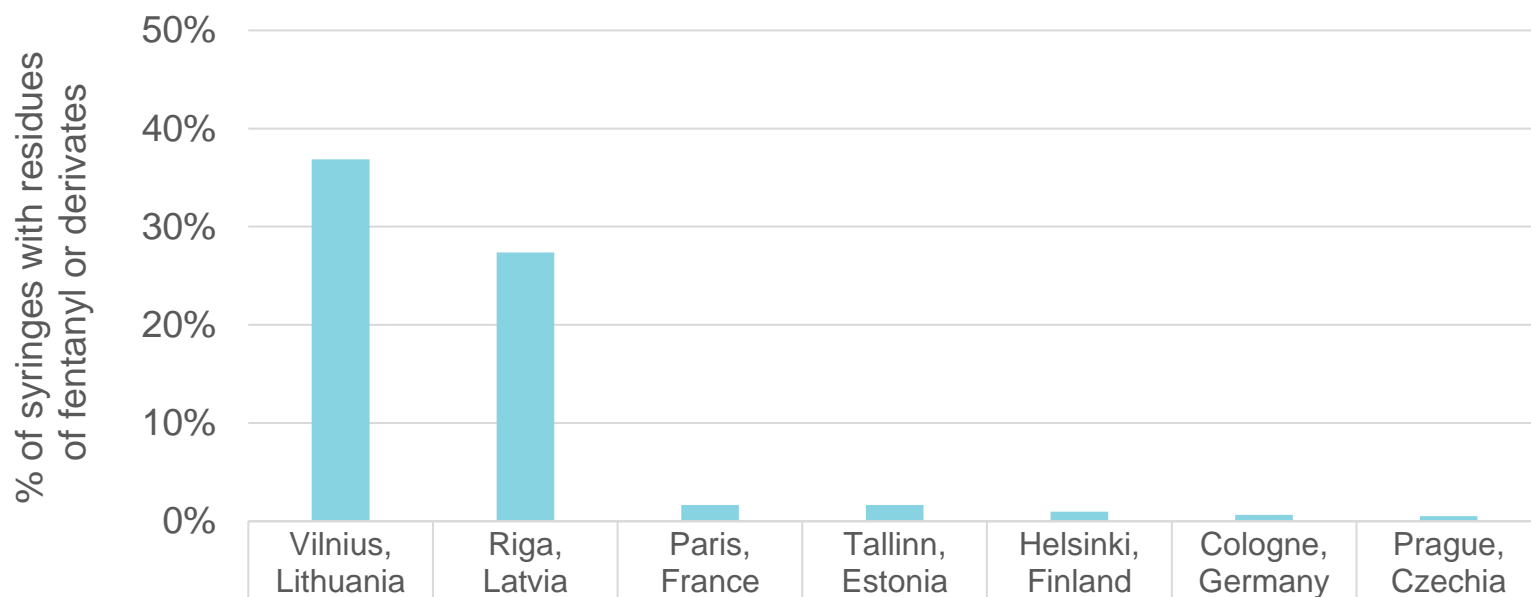


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# Syringe residues analysis

Residues of fentanyl or derivatives found in syringes from low threshold services (2019-2021, ESCAPE project)



# Limitations

- **Issues with timeliness and lack of coverage.**
- **Possible under-ascertainment and underreporting of fentanyl cases.**
- **Toxicological confirmation not systematic in emergency room cases (in line with clinical guidelines)**



# Summary and discussion

- **Number of OD deaths in Europe much lower than in the US and Canada, and among these deaths, fentanyl and analogues play a much less important role.**
- **Known fentanyl deaths are mainly concentrated in the Baltic states and Germany.**
- **Need for robust multifaceted monitoring for preparedness.**



# Acknowledgements

**Thank you for your attention!**

**Special thanks to all data providers, in particular:**

- **REITOX network and their experts on drug-related deaths**
- **Euro-DEN Plus coordination centre and research group**
- **ESCAPE network**

