

# Drug Related Deaths in Ukraine

2017-2022

**Kyiv-2023**

# DRD data collected in Ukraine

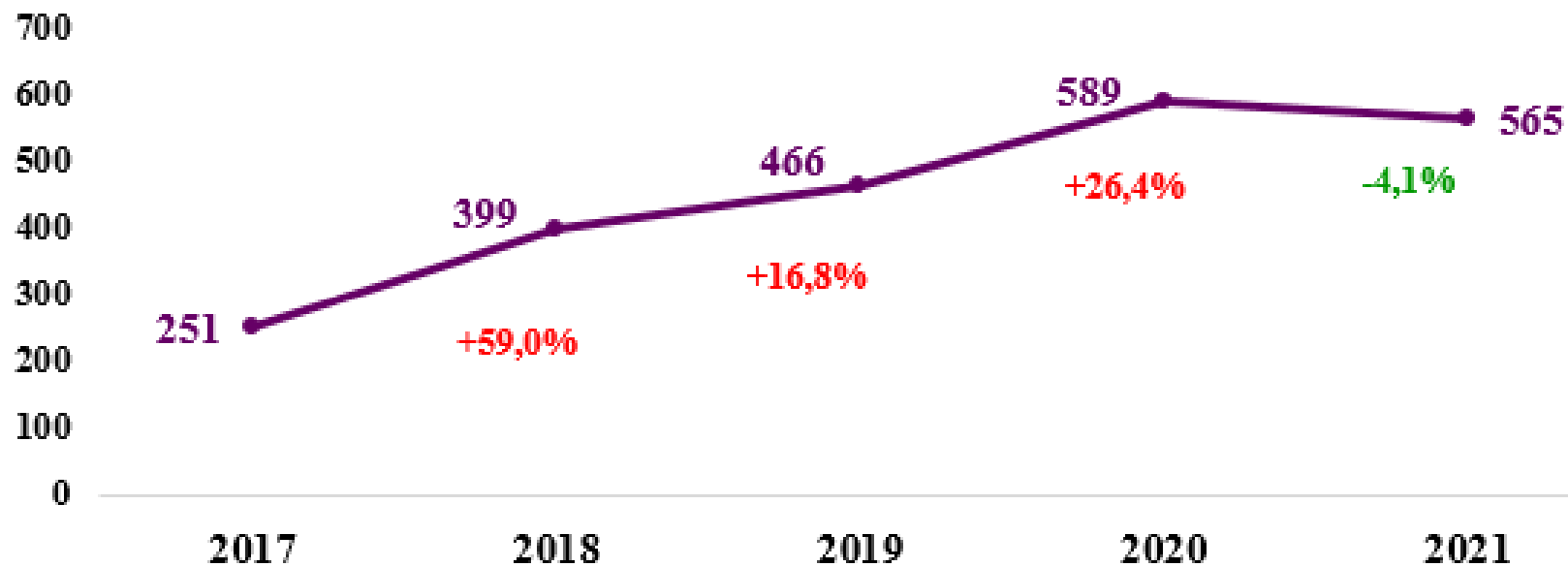
## Available data sets:

1. State Statistics Service of Ukraine provides quantitative data on people who died as a result of using substances in terms of gender, age group and cause of death, according to the International Statistical Classification of Diseases and Related Health Problems ([ICD-10](#)).
2. Bureaus of Forensic Medical Examination provide data on deaths with the identified evidence of substances in the biological material (during the autopsy carried out only under the request of prosecutor's office investigator).

# DRD data by State Statistics Service of Ukraine (2017-2021)

- The State Statistics Service of Ukraine ([Ukrstat](#)) provides data on deaths related to drug use and poisoning (overdose).
- This set incorporates quantitative data on people who died due to substance use: by gender, by age group and cause of death – according to the International Statistical Classification of Diseases and Related Health Problems ([ICD-10](#)).
- Codes: X41 (combined with T40.0-9 & T43.6); X42 (combined with T40.0-9 & T43.6); X61 (combined with T40.0-9 & T43.6); X62 (combined with T40.0-9 & T43.6); Y11 (combined with T40.0-9 & T43.6); Y12 (combined with T40.0-9 & T43.6).
- Key limitations of this data set:
  - Lack of more detailed breakdown of substances.
  - Incomplete data for 2021 and unavailable data for 2022 due to russian aggression-related issues (e.g. [Law of Ukraine No. 2115-IX](#) “On Protection of the Interests of report providers during Martial Law or a State of War”, allows individuals and legal entities not to submit statistical and financial reports).

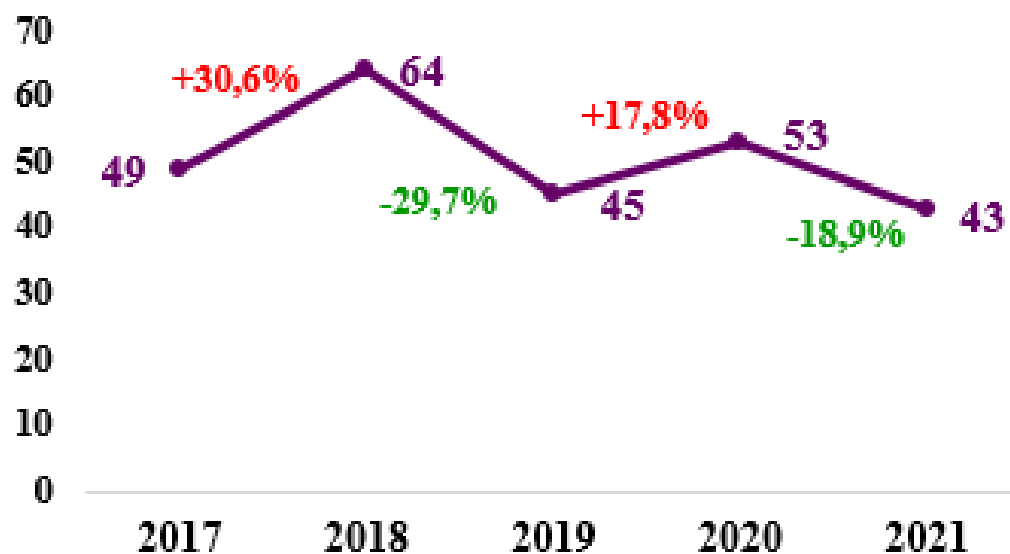
## Deaths related to substance use and poisoning in 2017-2021



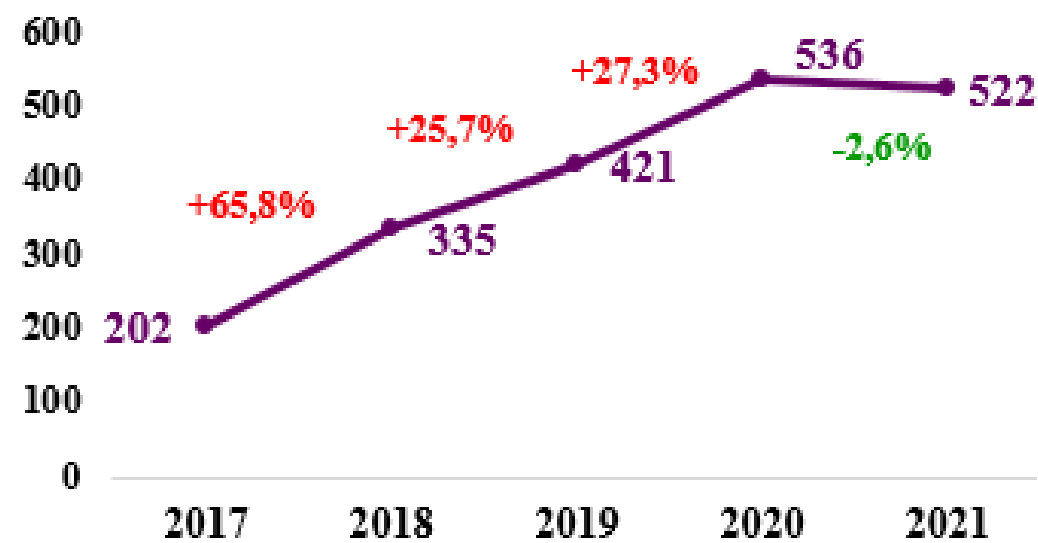
- Sustainable annual increase in general number of drug-related deaths in 2017-2020, with a dropdown by 4,1% in 2021.
- This general number of deaths includes:
  - ✓ deaths related to mental and behavioral disorders due to substance use
  - ✓ deaths related to substance poisoning (overdose)

## Deaths related to substance use and poisoning in 2017-2021

Deaths related to mental and behavioral disorders due to substance use in 2017-2021



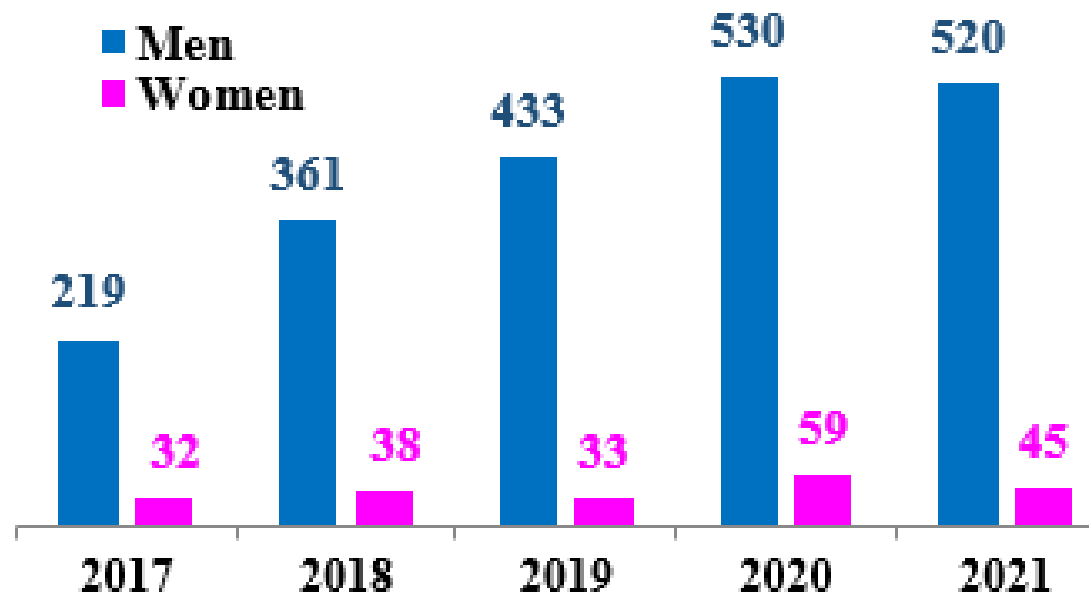
Deaths related to substance poisoning in 2017-2021



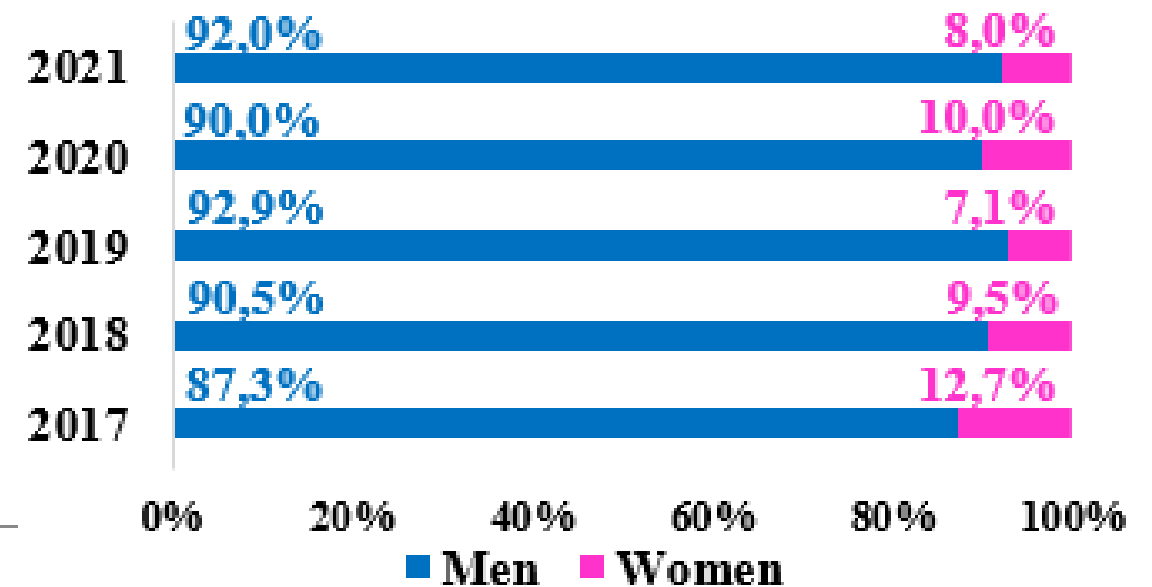
- Low numbers of deaths related to mental and behavioral disorders due to substance use with their increasing waves in 2018 & 2020, and decreasing waves in 2019 & 2021.
- Essential annual increase in deaths due to substance poisoning (overdoses) in 2017-2020 with a slight dropdown by 2,6% in 2021.

## Deaths related to substance use and poisoning, by gender

Number of deaths, by gender (persons)



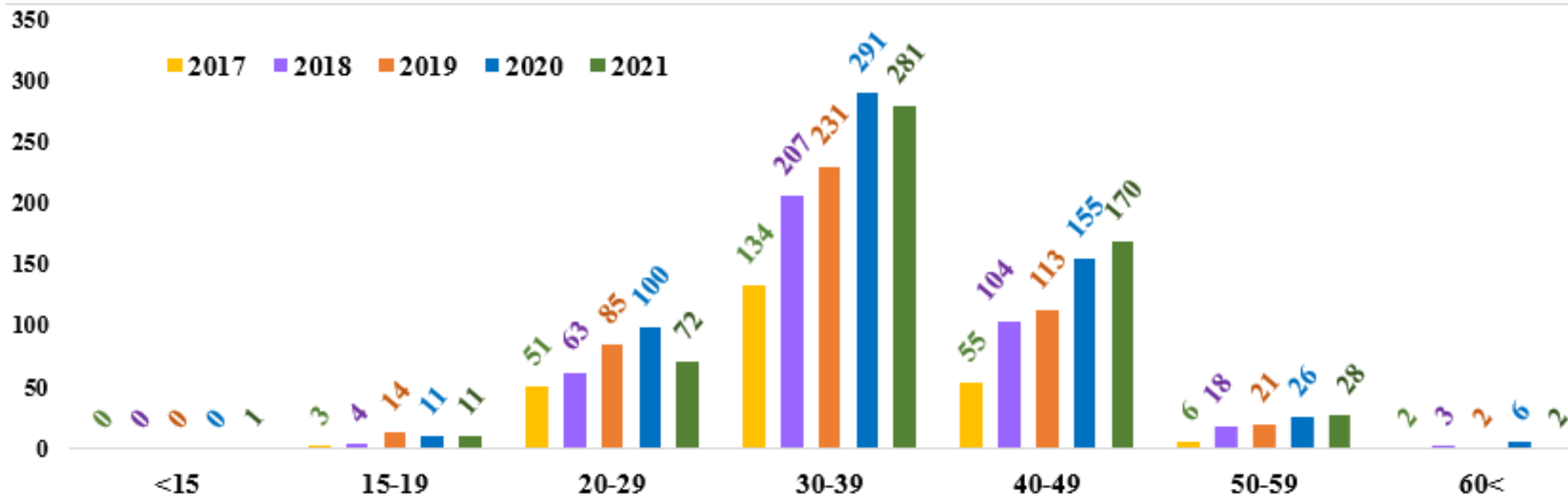
Proportion of deaths, by gender (%)



- Men's deaths have been sustainably growing up, but their number decreased by 1,9% in 2021, compared to 2020.
- Women's deaths increased importantly in 2020, and decreased essentially by 23,7%, compared to 2020.
- Average gender proportions for 2017-2021: 90,5% - men and 9,5% women.

## Deaths related to substance use and poisoning, by age group

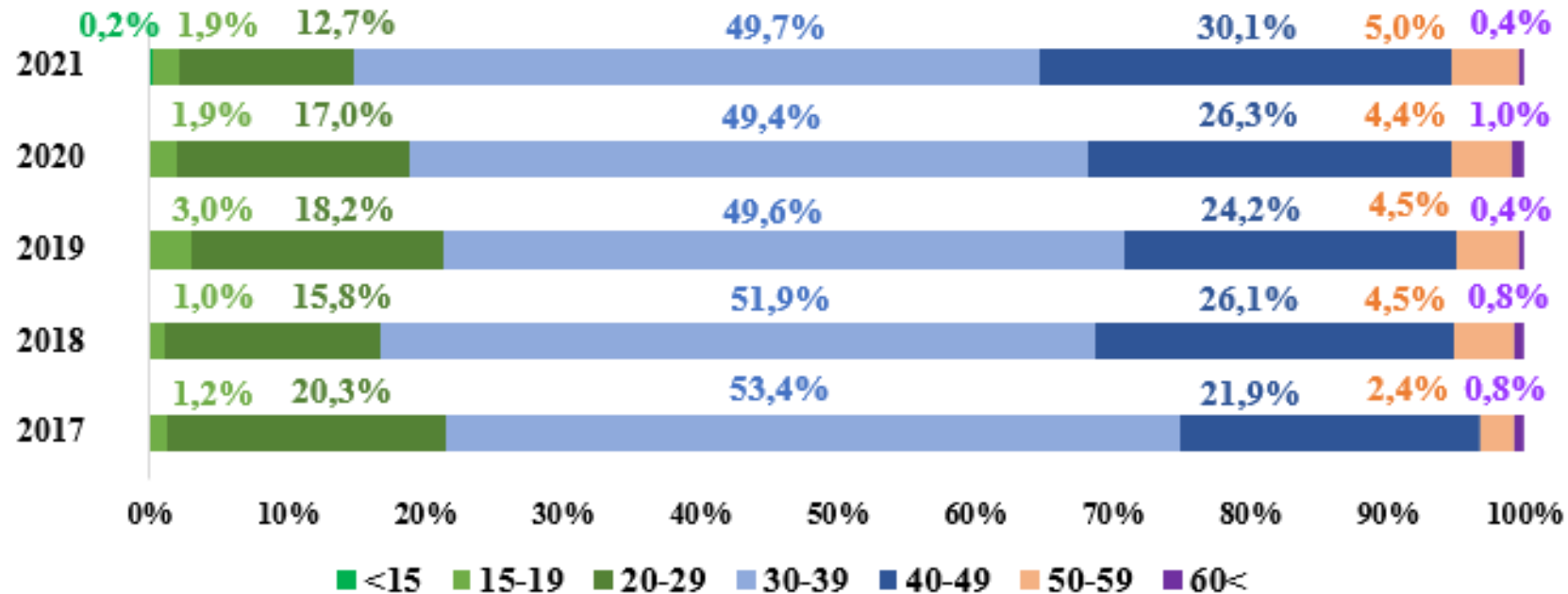
Number of deaths, by age (persons)



- The largest number of deaths is in the age group of 30-39 y.o.
- Age group of 40-49 y.o. shows a continuous increasing trend for all the taken period (2017-2021).
- Very few deaths in the age group of 60 y.o. and older, and nearly zero deaths of those younger 15 y.o.

## Deaths related to substance use and poisoning, by age group

Proportion of deaths, by age (%)

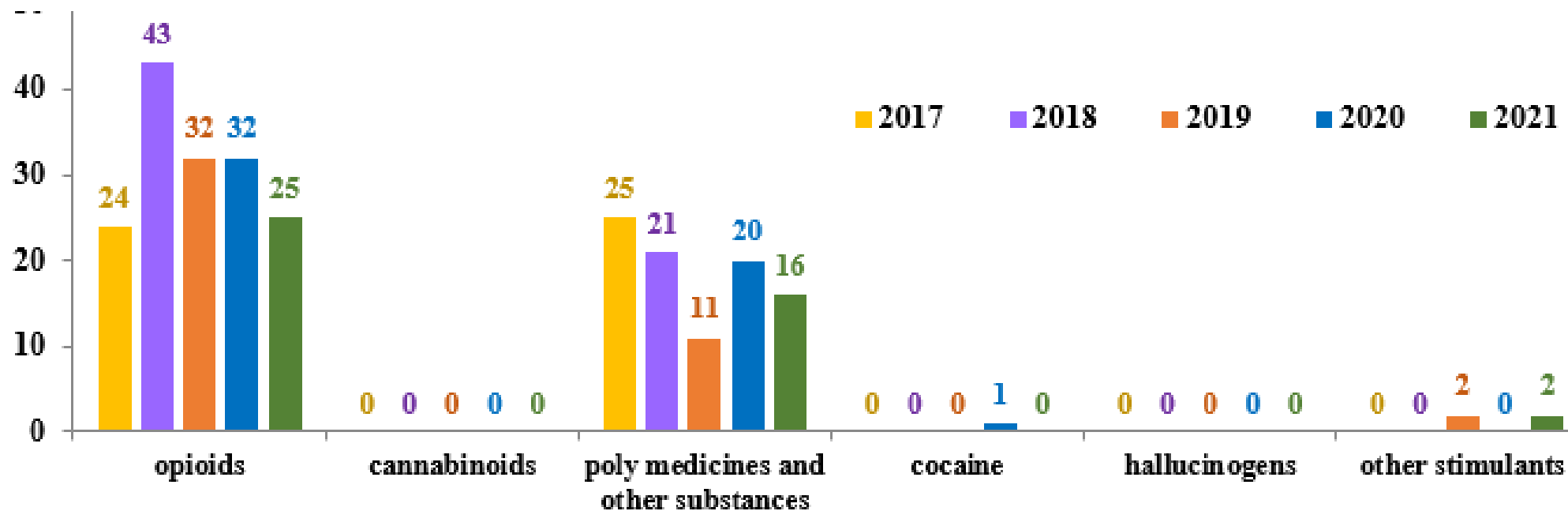


- The proportion of deaths in the age group of 30-39 y.o. has been keeping the leadership, although that proportion has been slightly reducing from year to year.
- Trend of annual decrease in the proportion of deaths in the age group of 20-29 y.o., while the proportion of deaths in the age group of 40-49 y.o. has been slightly growing up.



## Deaths related to disorders due to substance use, by substance

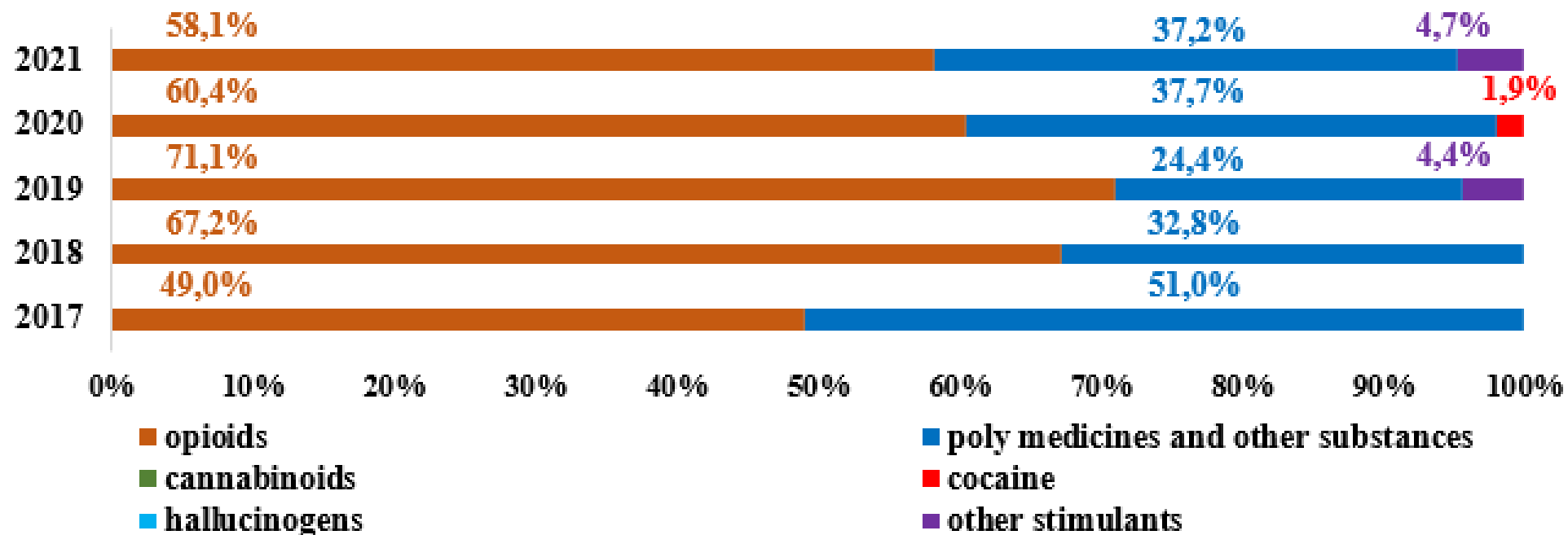
Number of deaths, by substance (persons)



- Deaths related to mental and behavioral disorders are due to two top substance categories: “opioids” and “several medicines and other substances”.
- The largest number of deaths due to opioid use was reported in 2018.
- Zero deaths due to cannabinoids and hallucinogens, and only 1 death due to cocaine use in 2020.

## Deaths related to disorders due to substance use, by substance

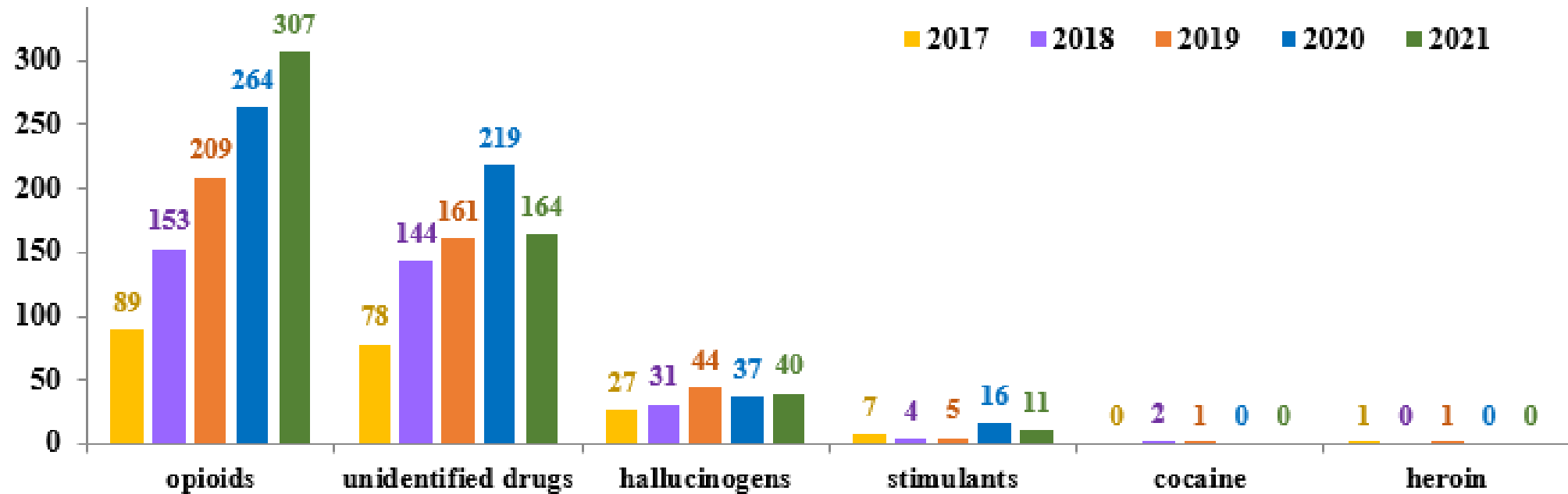
Proportion of deaths, by substance (%)



- The proportion of deaths related to the mental and behavioral disorders due to opioid use is the largest one, averaging 61,2% for 2017-2021.
- The average proportion of deaths related to the mental and behavioral disorders due to poly medicine use is 36,6% in 2017-2021.

## Deaths related to substance poisoning, by substance

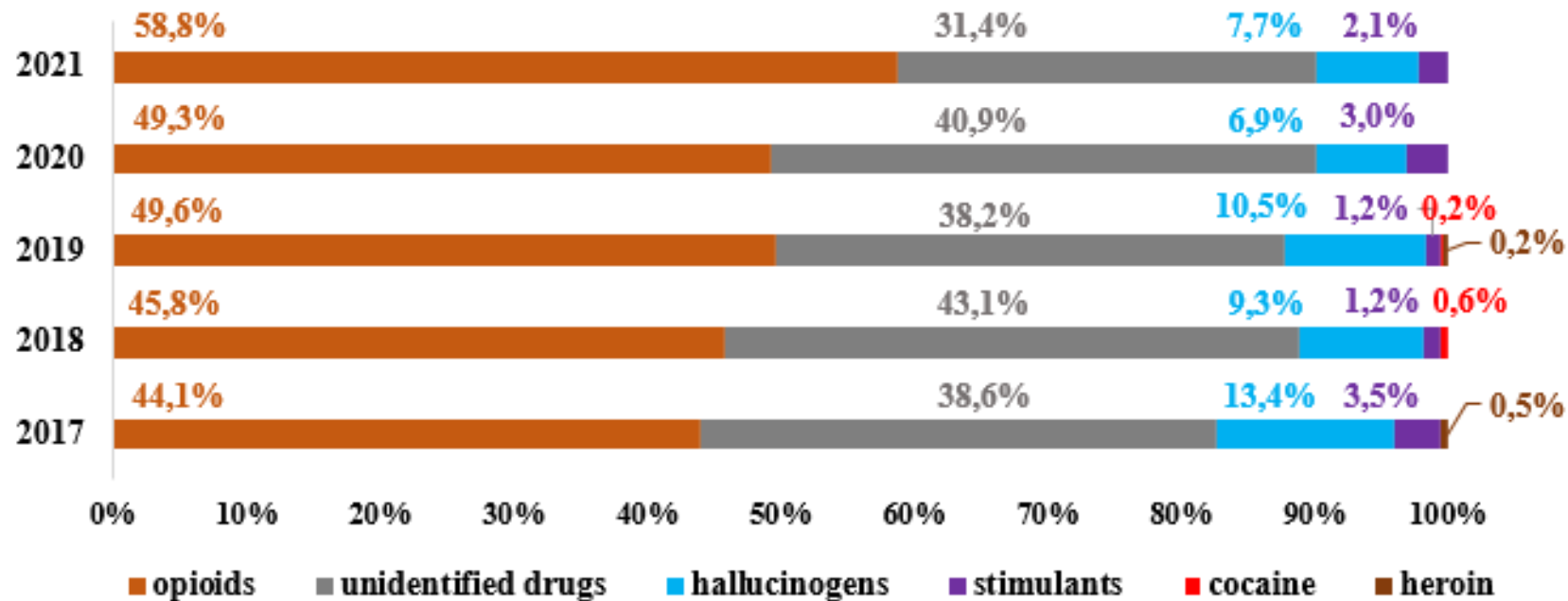
Number of deaths, by substance (persons)



- The largest numbers of deaths related to substance poisoning are due to two top substance categories: “opioids” and “unidentified drugs”.
- Sustainable trend of increase in deaths related to opioid poisoning in 2017-2021.
- The number of deaths due to hallucinogen poisoning remains barely unchanged in 2017-2021.
- Zero deaths due to heroin and cocaine poisoning reported in 2020 & 2021.

## Deaths related to substance poisoning, by substances

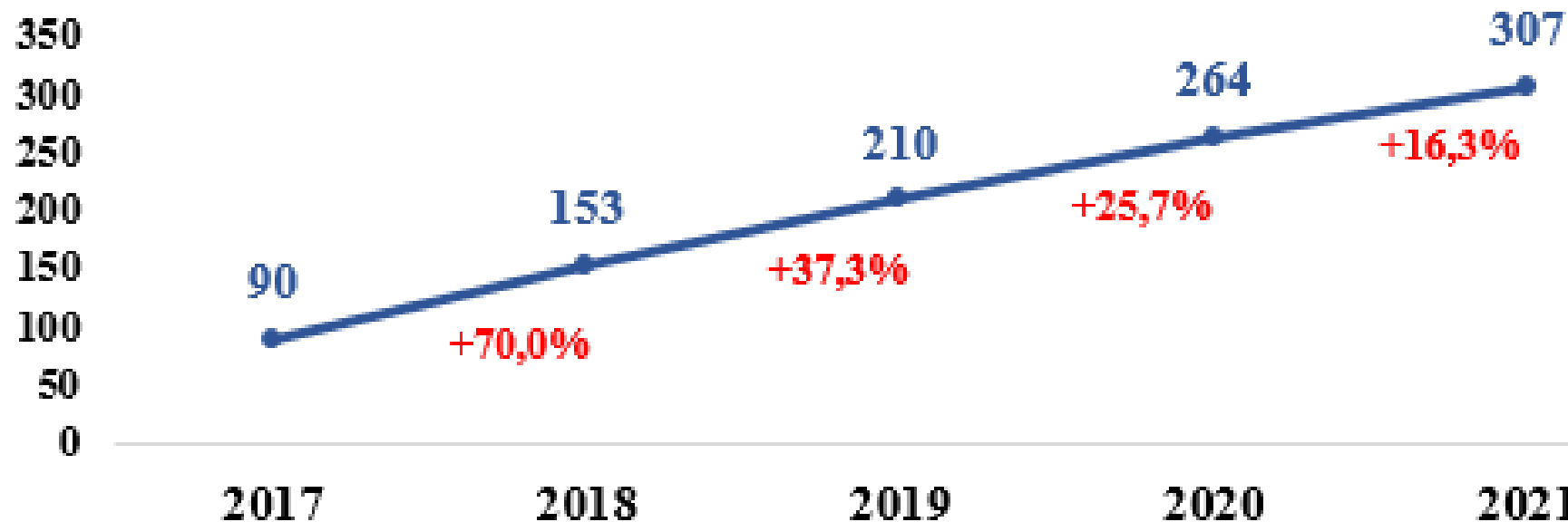
Proportion of deaths, by substance (%)



- The proportion of deaths related to opioid poisoning is the largest one (49,5% in average for 2017-2021) and it has been increasing every year.
- The proportion of deaths related to unidentified substance poisoning ranks second, averaging 38,4% for 2017-2021).
- The proportion of deaths related to hallucinogen poisoning (9,5% in average for 2017-2021) has been also decreasing.

## Deaths related to opioid poisoning

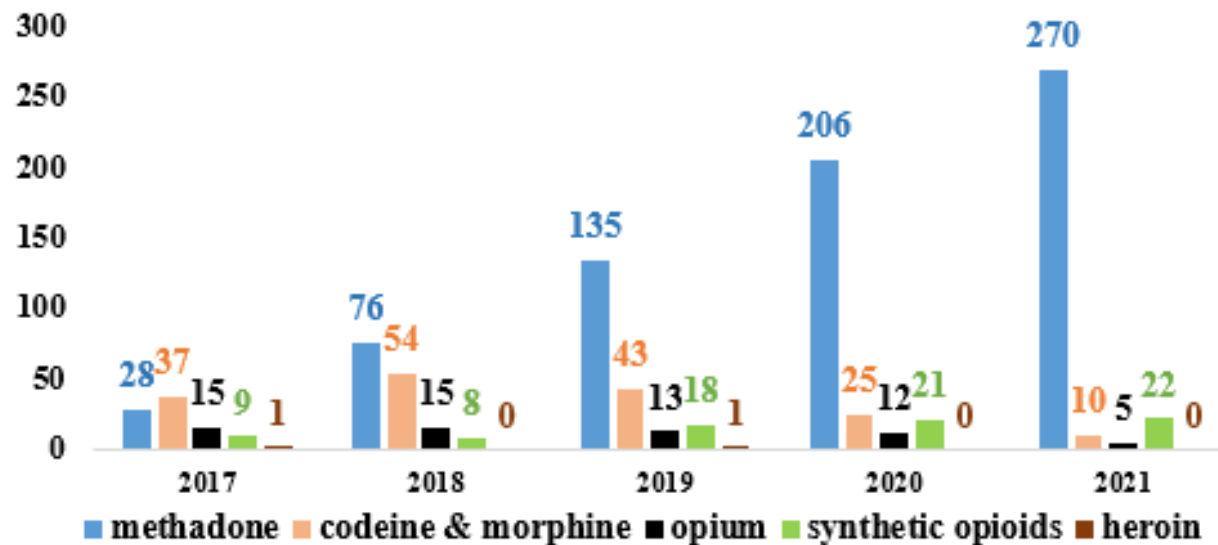
Number of deaths due to opioid poisoning in 2017-2021



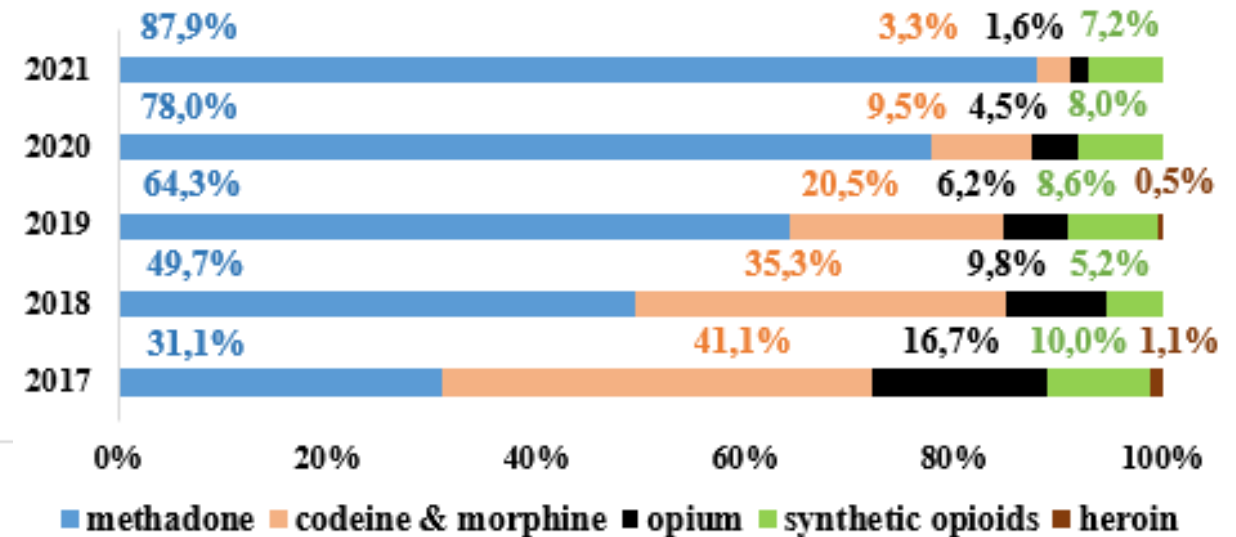
- Trend of increase in number of deaths due to opioid poisoning in 2017-2021, although the growth in percents has been decreasing.

## Deaths related to opioid poisoning, by substance

Number of deaths, by substance (persons)



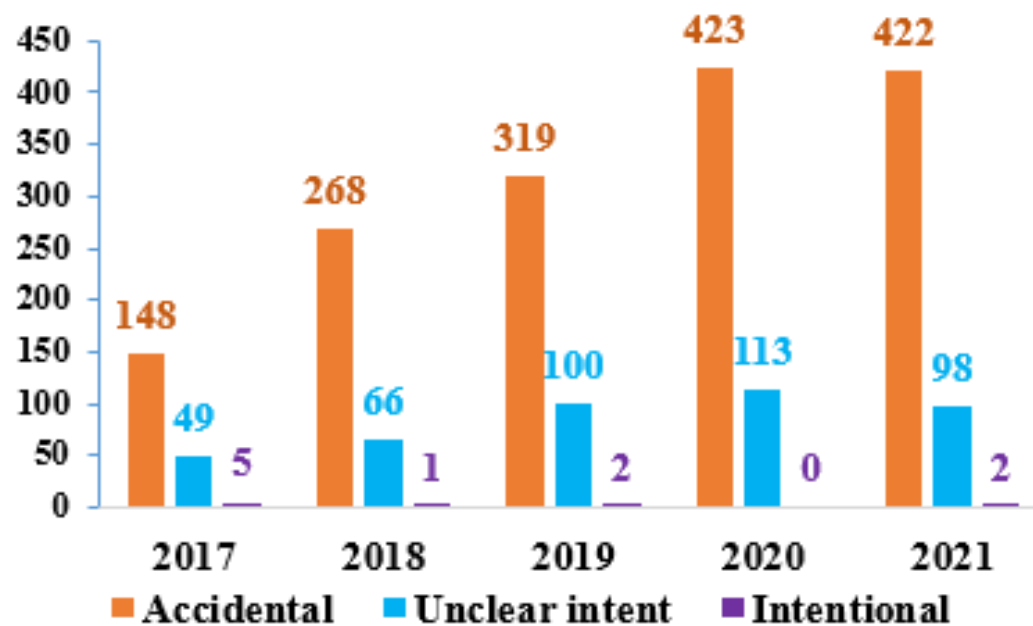
Proportion of deaths, by substance (%)



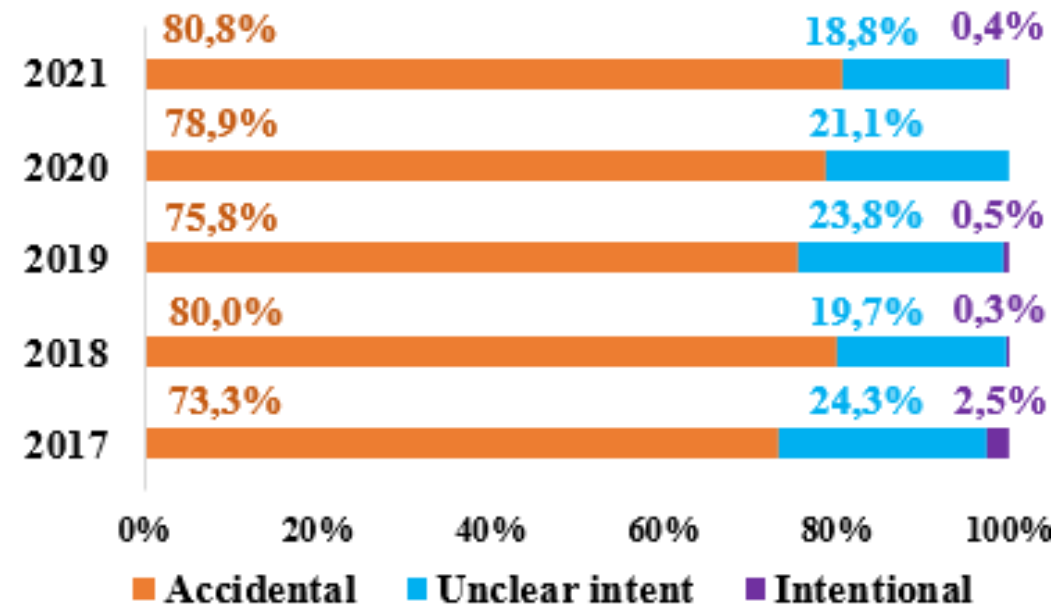
- Trend of remarkable increase in number and proportion of death related to poisoning by methadone.
- As of 2018, trend of increase in number and proportion of deaths related to poisoning by synthetic opioids.
- Trend of decrease in number and proportion of death related to poisoning by opium, as well as by codeine & morphine.

## Deaths related to substance poisoning, by intent

Number of deaths, by intent (persons)



Proportion of deaths, by intent (%)



- In terms of intent, accidental poisoning has the largest proportion. This trend has been maintained during 2017-2021 with the average value of 77.8% for the stated period.
- Very low numbers of deaths due to intentional poisoning by substances.

# Findings

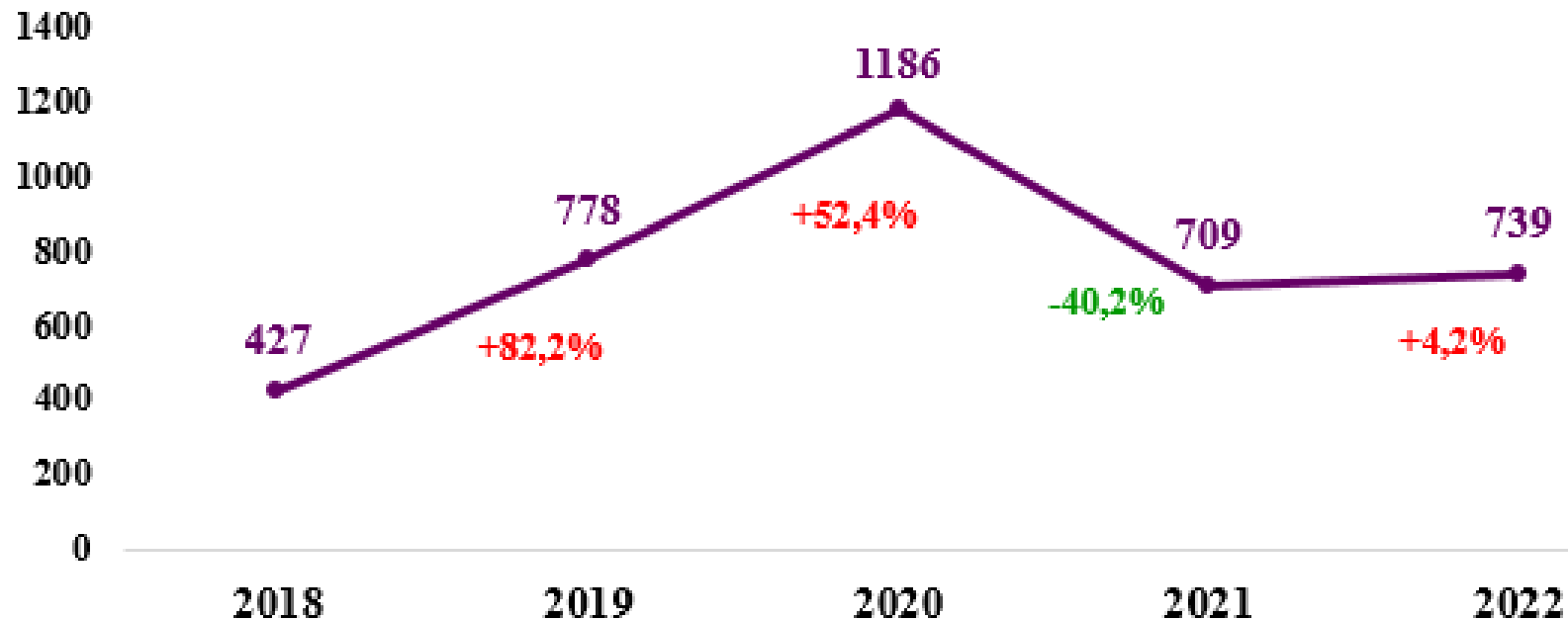
- ❖ In 2017-2020, the general number of deaths related to substance use and poisoning had been growing, but in **2021 it decreased by 4,1%**.
- ❖ Men's deaths have the largest proportion. The average one for 2017-2021 is **90,5% - men and 9,5% women**.
- ❖ The largest number and proportion of deaths is in the **age group of 30-39 y.o.**, at that there observed a continuous increasing trend of deaths in the age group of 40-49 y.o.
- ❖ Deaths related to the drug-induced mental and behavioral disorders, as well as death related to substance poisoning are mainly due to **the opioid use** with a trend of significant increase in number of deaths related to **opioid poisoning**, and first of all, **methadone overdoses**.
- ❖ As of 2018, there is a trend of increase in number and proportion of deaths related to **poisoning by synthetic opioids**, as well as decrease in number and proportion of death related to poisoning by opium, codeine & morphine.
- ❖ The most of overdoses are **accidental** (77,8% in average for 2017-2021).



# DRD data by Bureaus of Forensic Medical Examination (2018-2022)

- Bureaus of Forensic Medical Examination provide data on deaths with the identified evidence of substances in the biological material (results of the autopsies carried out only under the request of prosecutor's office investigator).
- The DRD-data collection from Bureaus started in 2019, and these data shall be provided by the Bureaus from each Region of Ukraine according to the [Resolution of the Cabinet of Ministers of Ukraine No. 689 of 10 July 2019 "Issues of Monitoring Drug and Alcohol Situation in Ukraine"](#).
- Key limitations of this data set:
  - Lack of human and financial resources for collecting and consolidating accurate statistics.
  - Lack of reagents and other laboratory stuff for high-quality and accurate tests.
  - Russian federation's aggression, i.e. occupation of part of Ukraine in 2014 and the invasion of Ukraine in 2022 resulted in failing to get data from a number of regional Bureaus.

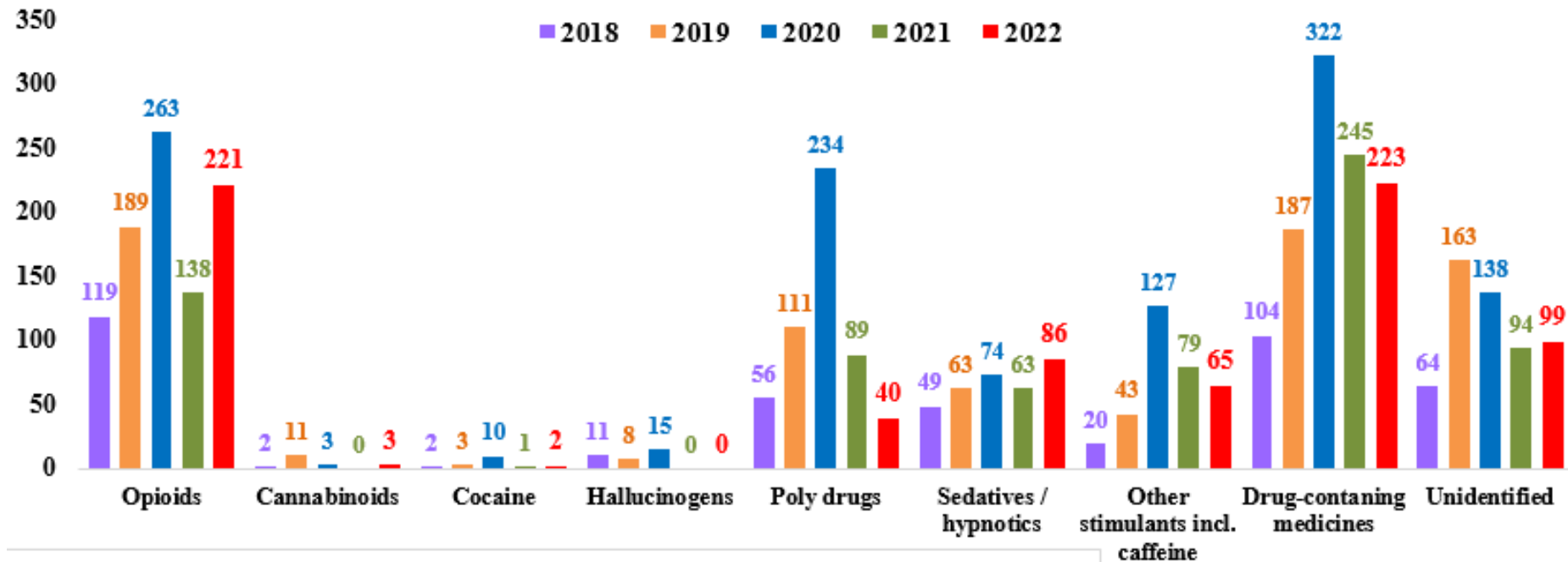
## Deaths with identified substances in the biological material in 2018-2022



- Data for 2021-2022 are incomplete, as it was impossible to get them from the Bureaus in some regions due to the temporary occupation of the territories of Ukraine and military operations.
- The number of deaths has been essentially increasing from 2018 up to 2020
- Considerable dropdown of number of deaths in 2021, followed by a slight increase in 2022.

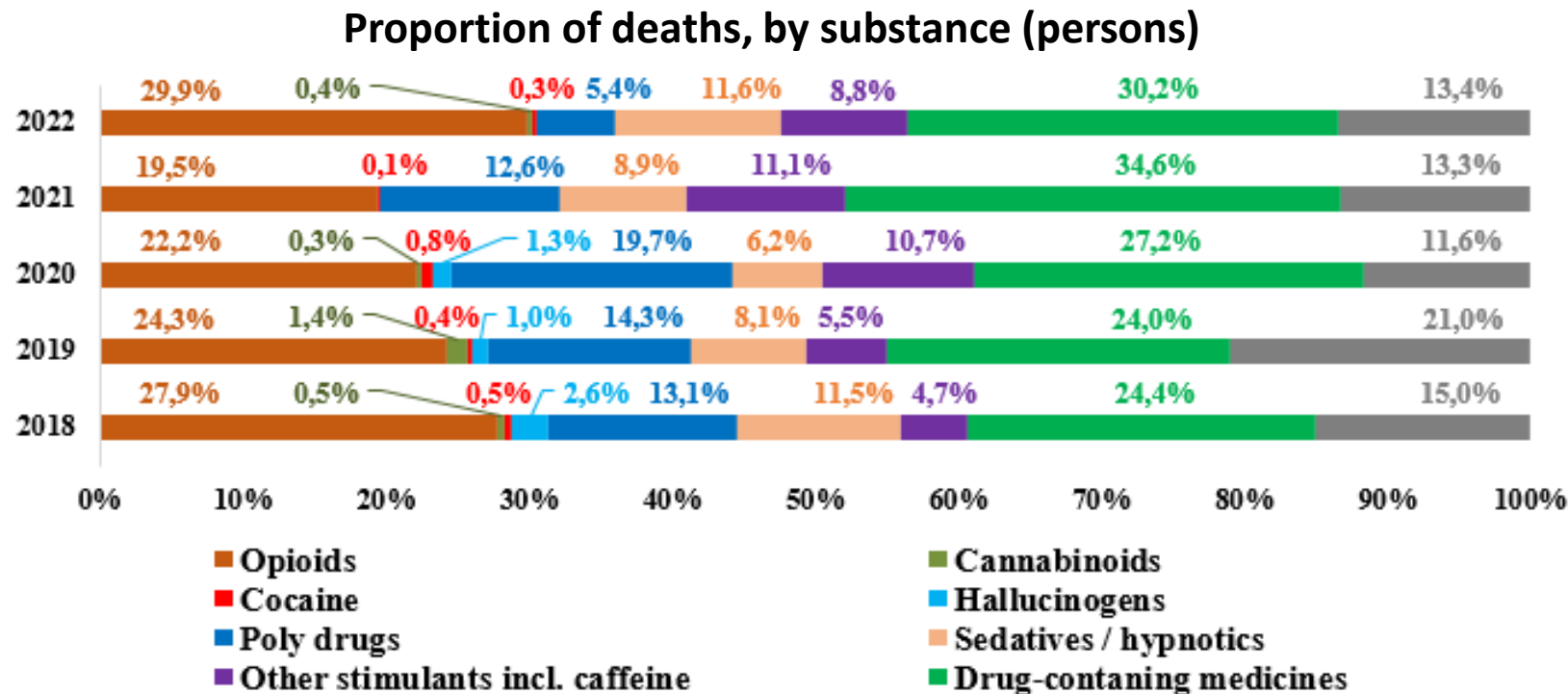
## Deaths with identified substances in the biological material, by substance

Number of deaths, by substance (persons)



- Up to 2020 there was a general increasing trend of all identified substances except for cannabinoids and hallucinogens.
- Drug-containing medicines and opioids are the leader substances detected in biological material of the dead bodies.
- In 2022, the number of deaths with identified opioids increased by 60,1% compared to 2021, while the number of deaths with detected poly drugs decreased by 55,1%.
- The number of deaths with detected cocaine doubled in 2022, compared to 2021, but the figures remain low (2 vs 1).

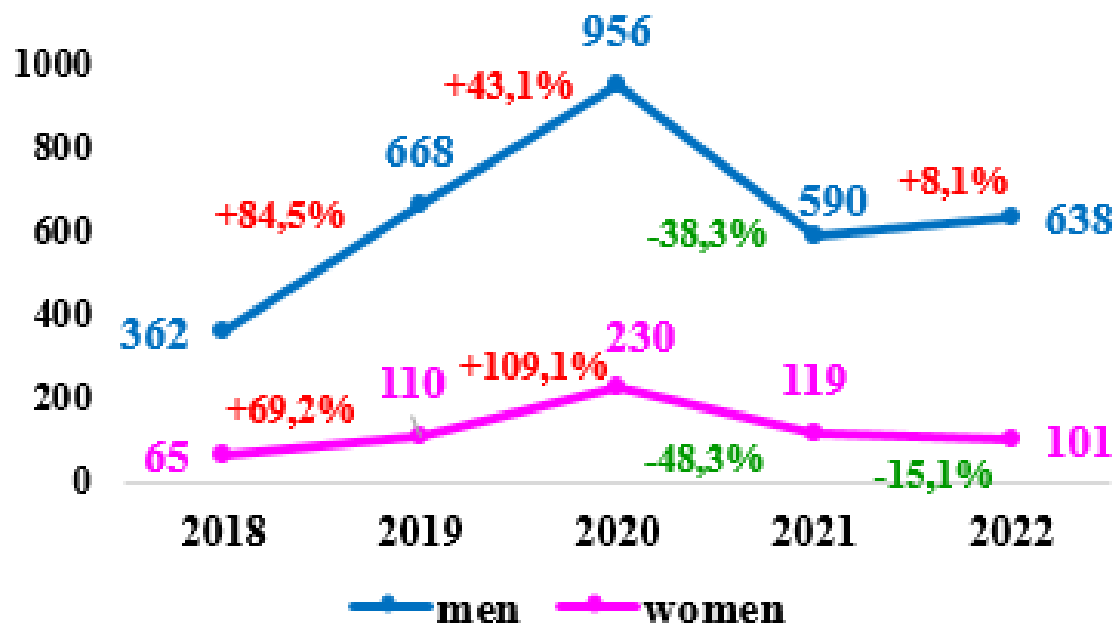
## Deaths with the identified substances in the biological material, by substance



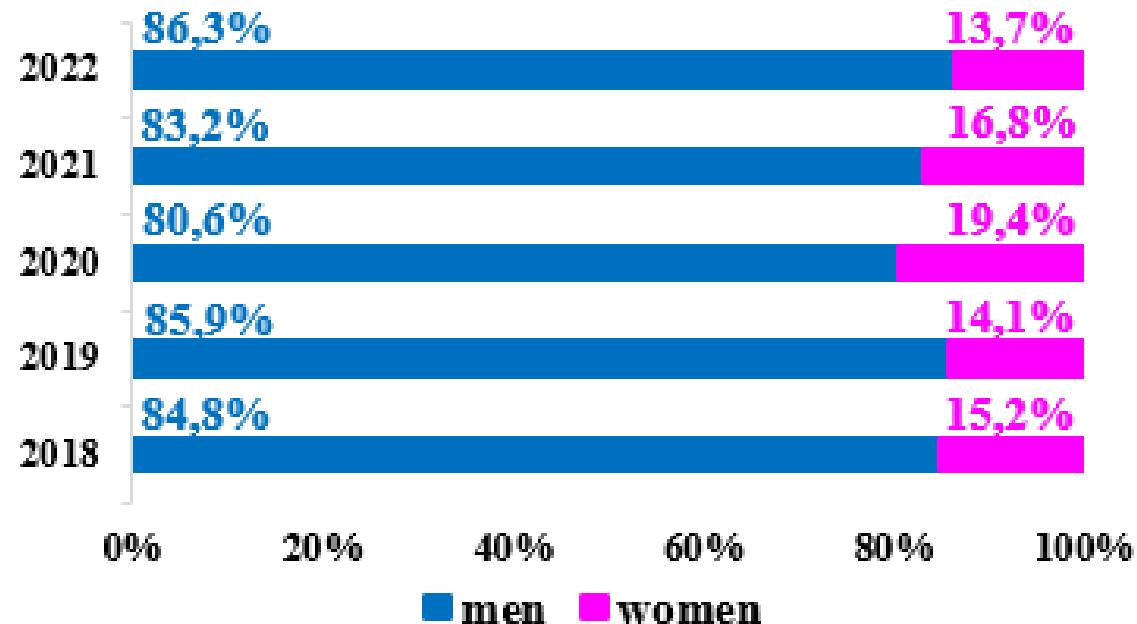
- Drug-containing medicines and opioids have the largest proportions in the structure of identified substances in 2018-2022 (28,1% and 24,7% in average, respectively).
- The proportion of deaths with evidence of poly drugs decreased by 56,9% in 2022, compared to 2021, followed by other stimulants with a dropdown by 21,1%.
- The proportion of deaths with evidence of cocaine increased by 91,9% in 2022, compared to 2021, followed by opioids with a growth by 53,6% and sedatives / hypnotics by 31,0%.

## Deaths with identified substances in the biological material, by gender

Number of deaths, by gender (persons)

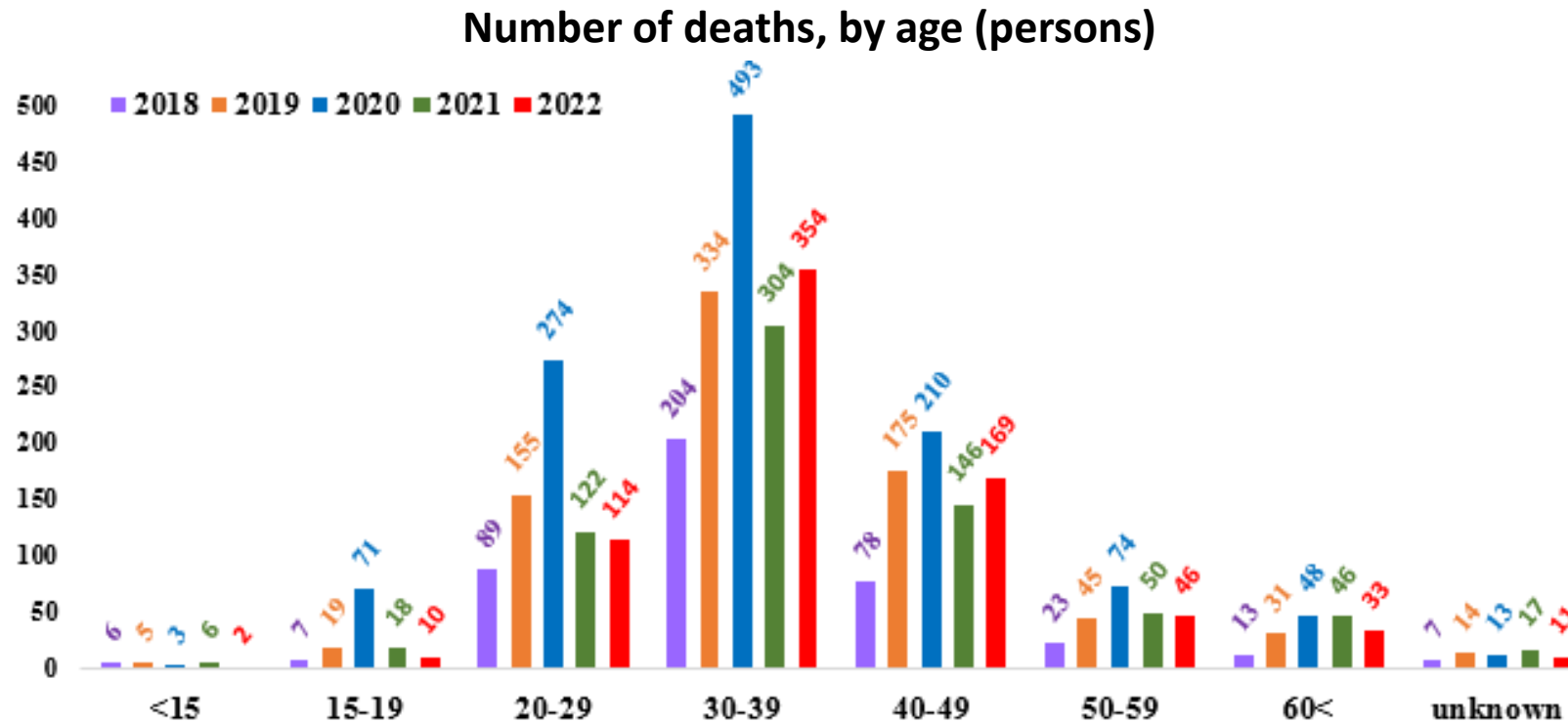


Proportion of deaths, by gender (%)



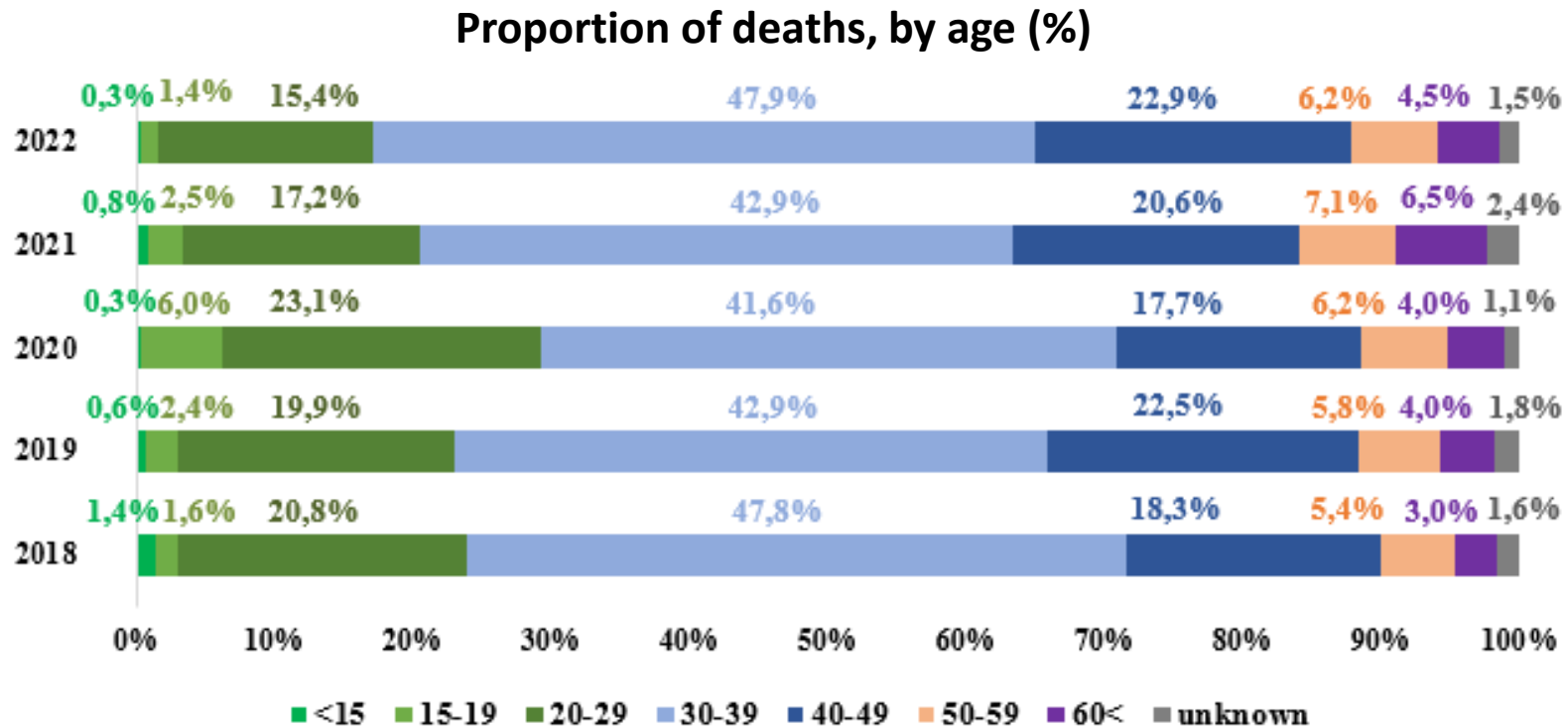
- Men's deaths have been importantly increasing up to 2020, followed by serious decrease in 2021 and a slight increase in 2022.
- Women's deaths more than doubled in 2020, followed by a significant dropdown in 2021 and 2022.
- Average gender proportions for 2018-2022: 84,2% - men and 15,8% women.

## Deaths with identified substances in the biological material, by age



- In 2018-2022, the largest number of deaths has been remaining in the age group of 30-39 y.o.
- Up to 2020, there was a trend of increase in number of deaths in all age groups but those of younger 15 y.o. and older 60 y.o.

## Deaths with identified substances in the biological material, by age



- The proportion of deaths in the age group of 30-39 y.o. is the largest one in 2018-2022 (44,6% in average).
- Decreasing trend of the proportion of deaths in the age group of 20-29 y.o.
- Barely unchanged values of the proportion of deaths in the age group of 40-49 y.o.

# Findings

- ❖ Up to 2020, there was a trend of **increase in number of deaths** with identified substances in the biological material of dead bodies, with a dropdown in 2021 that can be explained with their incompleteness, given data collection problems due to the war in Ukraine.
- ❖ Men's deaths are predominant, and the average gender proportions for 2018-2022 are **84,2% - men and 15,8% women**.
- ❖ **Drug-containing medicines and opioids** are the leader substances detected in biological material of the dead with average proportions of 28,1% & 24,7%, respectively, followed by unidentified substances (14,8%) and poly drugs (13,0%).
- ❖ The largest proportion of deaths is in the age group of 30-39 (44,6% in average). Up to 2020, there was a trend of increase in number of deaths in all age groups but those of younger 15 y.o. and older 60 y.o.



## Common findings for 2 data sets

- Two data collection sources in Ukraine (State Statistics Service and Bureaus of Forensic Medical Examinations) provide data that differ by substances breakdown and number of death cases.
- Data collection problems due to the war in Ukraine.
- Men's deaths are predominant (in average: 84,2% according to Bureaus, and 90,5% according to the State Statistics Service).
- The largest proportion of deaths is in the age group of 30-39 (in average: 44,6% according to Bureaus, and 49,7% according to the State Statistics Service).
- Opioid-related deaths are among the leaders (in average: 24,7% according to Bureaus, and 49,5% according to the State Statistics Service).