

Fatal poisonings caused by narcotic drugs and medicines

- the importance of separating overdoses and suicides and looking into background factors

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Socialstyrelsen

Assignment

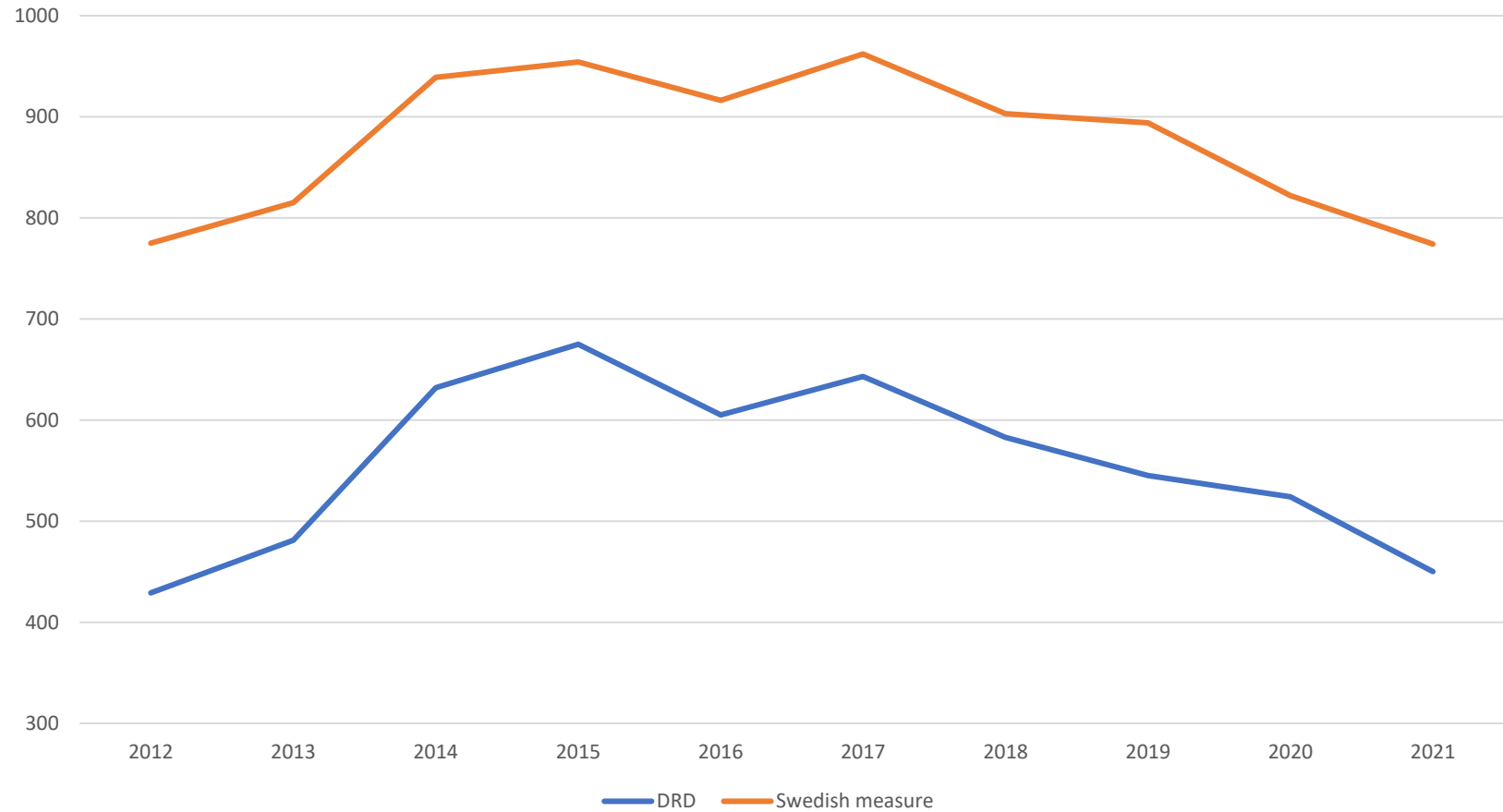
- Prevalence and development
- Registration practices
- Socio-demographics
- Co-morbidity
- Circumstances surrounding the death
- Substances
- International comparisons

Separately for accidental and intentional poisonings

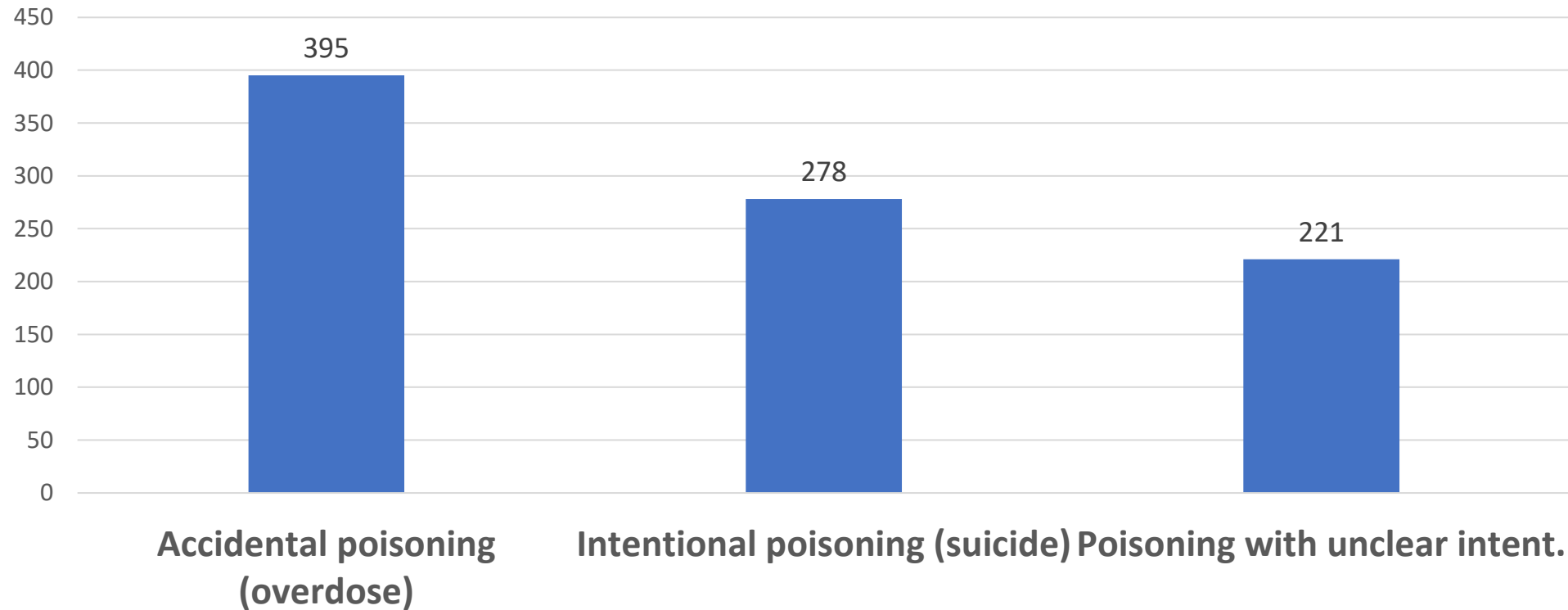
Swedish measure of fatal poisonings

- A broader measure also including drugs that are not classified as narcotics
- In 2021 there were 450 DRD deaths and 774 deaths according to national measure
- Similar characteristics and development over time

Development of DRD and Swedish measure

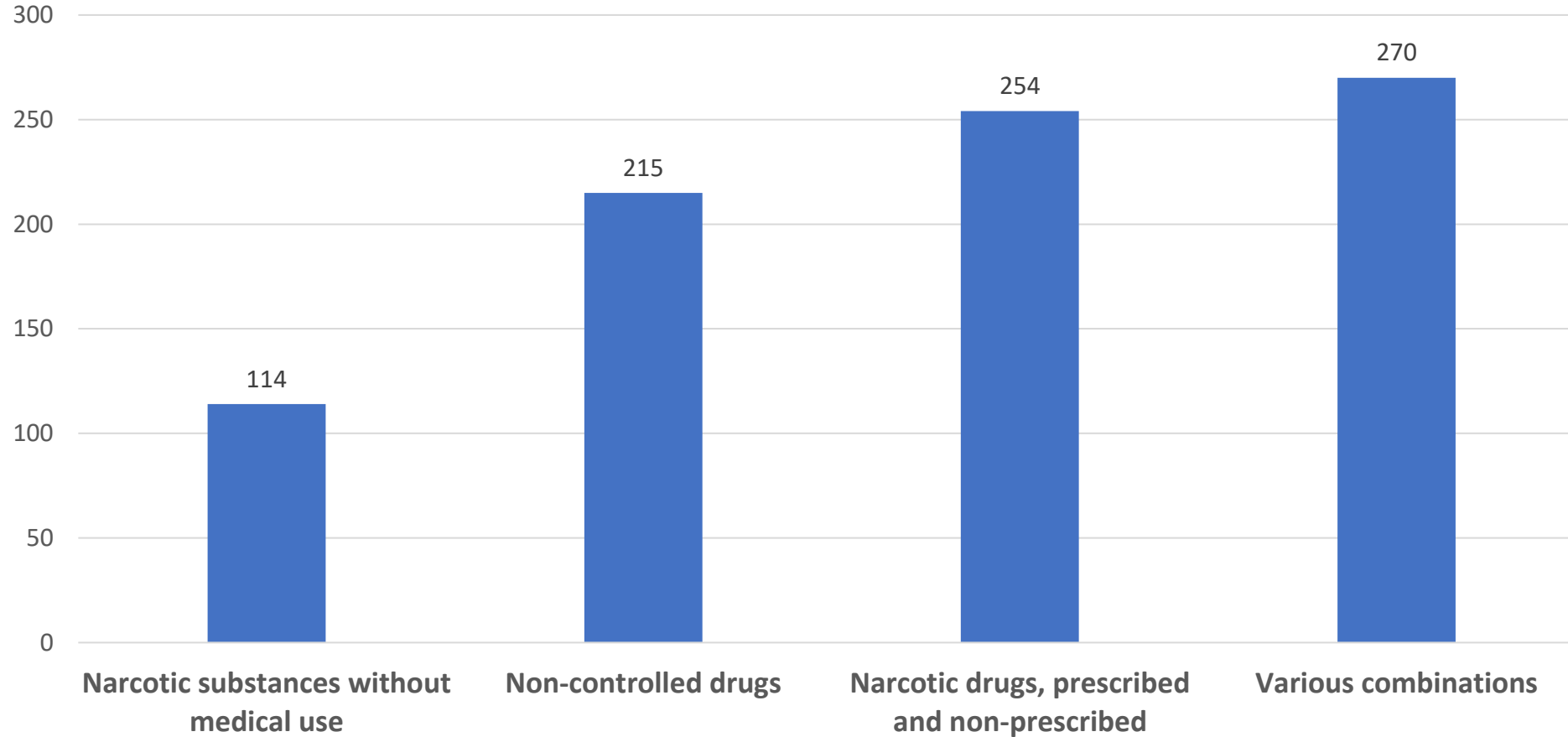


Three poisoning categories – intention (2019)



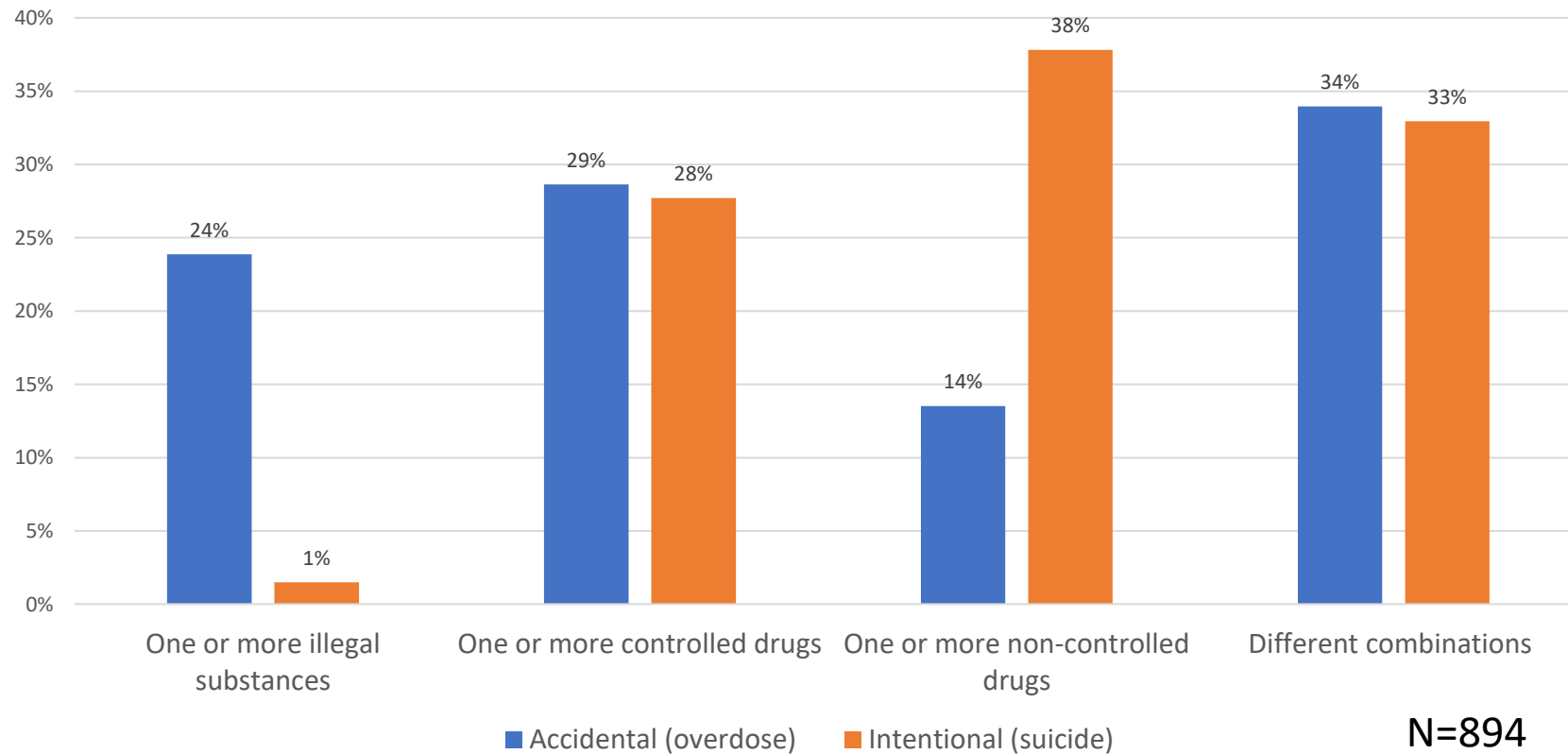
The same distribution across categories in 2021

Number of deaths per new grouping (2019)



Intention and grouping by substance (2019)

Portion of deaths caused by the different groups of substances



Most common substances registered on death certificates 2012–2020

Accidental poisoning (overdose)	Intentional poisoning (suicide)
Heroin	Zopiclone (sedative/hypnotic)
Buprenorphine	Propiomazine (sedative/hypnotic)
Methadone	Oxycodone (opioid)
Alprazolam (anti-anxiety agent)	Alimemazine (sedative/hypnotic)
Amphetamine	Paracetamol

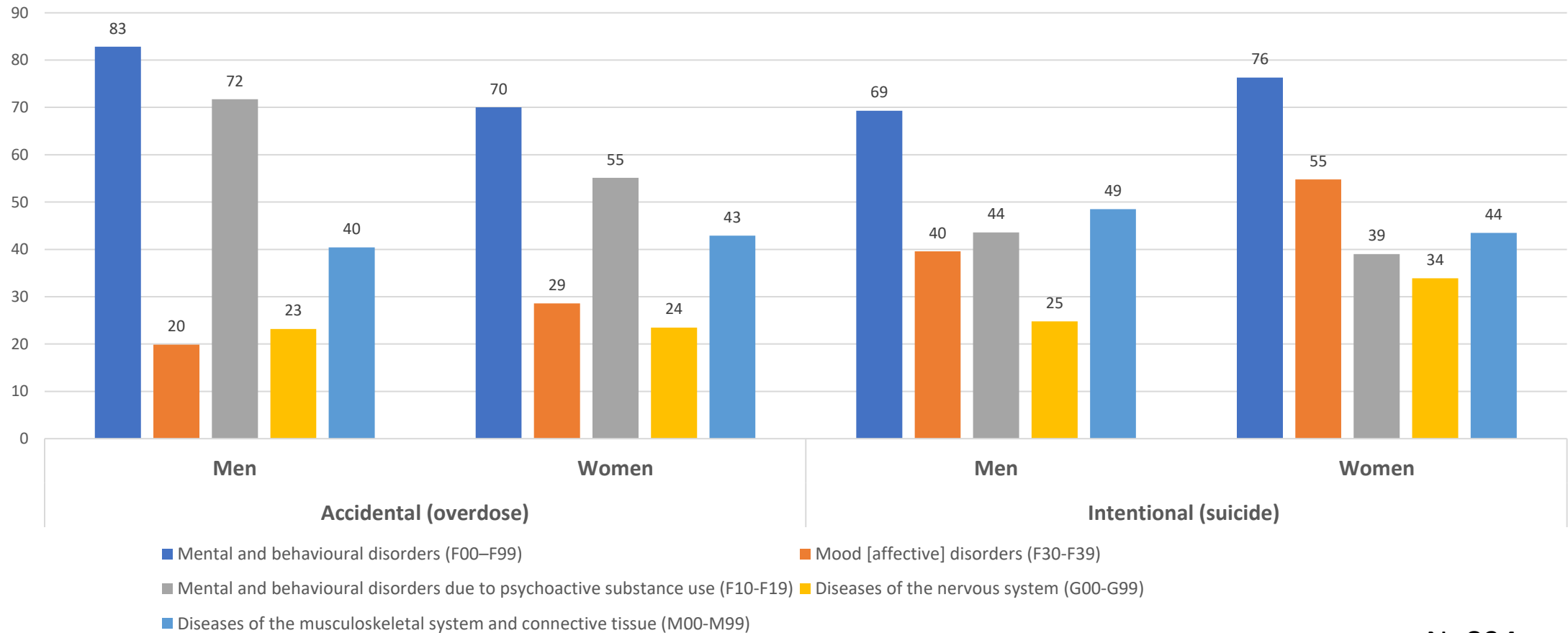
Source: Statistics on cause of death due to narcotic drug and medicinal poisonings 2012–2020, Swedish National Board of Health and Welfare 2021

Development over the 2010–2019 period

	Accidental poisonings (overdose)	Intentional poisonings (suicide)	Death with unclear intent
Women	+138%*	+34%*	+40%*
Men	+77%*	-23%*	+10%
Total	+88%*	+20%	+20%

* Significant change

Diagnoses five years before death, % (2019)



N=894

Circumstances surrounding death (2019)

	Overdose		Suicide	
Home	55 %		76 %	
Care facility	14 %		10 %	
Other accomodation	26 %		9 %	
Alone	20 %		44 %	
Obtained OST-prescription (<5 years)	Men	Women	Men	Women
	12 %	4 %	1 %	1 %

N=894

Socio-demographics (all deaths 2015 to 2019, N=4 629)

Accidental (overdose)

Highest risk:

- Men
- Aged 30–44
- Highest level of education: secondary school
- Born in other Nordic countries followed by Sweden
- Live in Västernorrland and Västra Götaland

Intentional (suicide)

Highest risk:

- Women
- Age 45–64 (women) and 30–44 (men)
- Highest level of education: secondary school
- Born in other Nordic countries followed by Sweden
- Live in Kronoberg, Stockholm and Västra Götaland

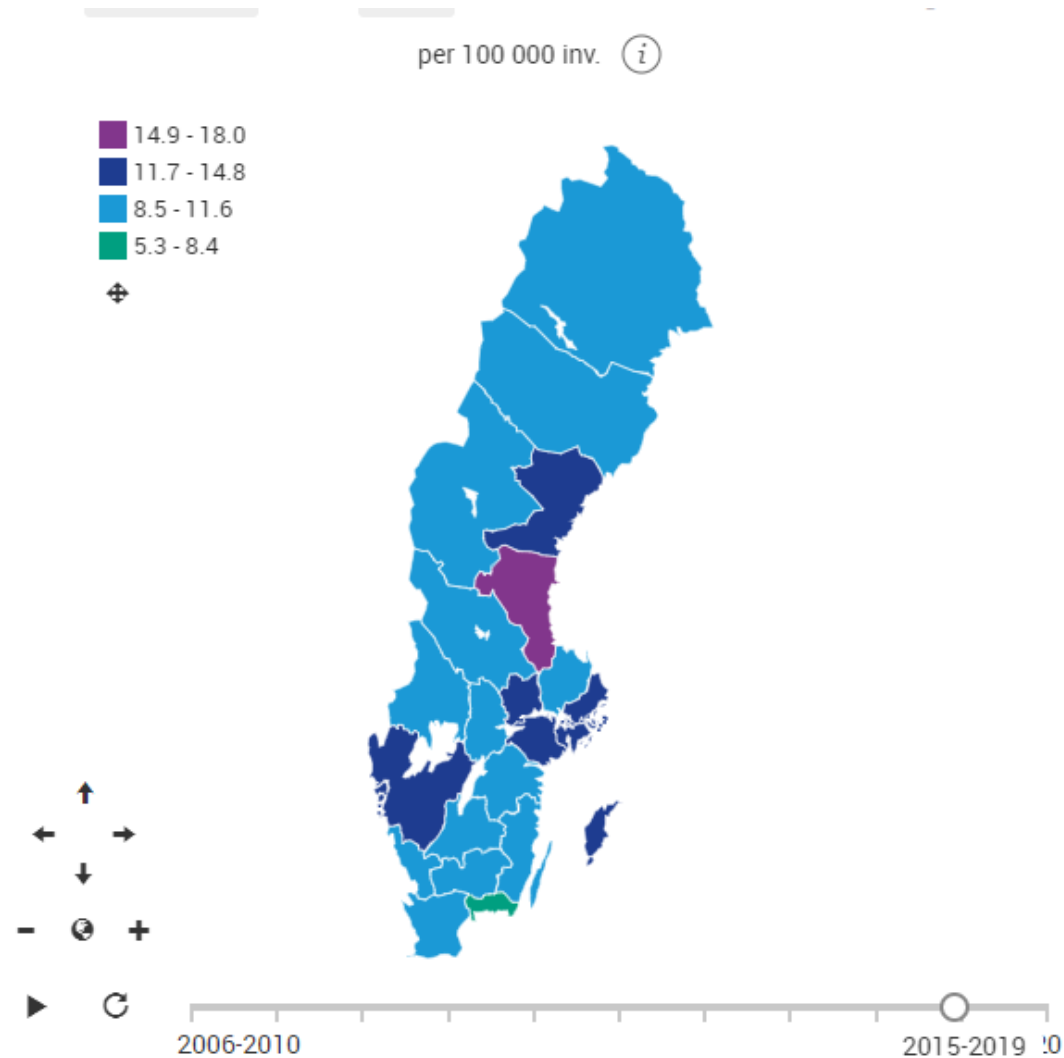
Deaths with unclear intent are a mix of intentional and accidental deaths.

Health inequalities (all deaths 2015 to 2019)

	Overdose	Suicide	Unclear intent
Secondary education	10.7 (8.7–13.1)	2.3 (1.9–2.8)	6.1 (4.1–8.9)
Upper-secondary education	3.6 (3.0–4.4)	1.7 (1.4–2.0)	3.4 (2.4–4.7)
Post-secondary education	Reference group	Reference group	Reference group

Relative risk, RR (95% confidence interval, KI) of death following poisoning from medicines and narcotic drugs for different groups between 2015 and 2019 (N=4 629)

Regional variations



<https://www.folkhalsomyndigheten.se/foolkhalsorapportering-statistik/tolkad-rapportering/folkhalsans-utveckling/resultat/halsa/lakemedels-och-narkotikarforgiftningar/>

Conclusions

- Low education: 10-fold higher risk
- Regional variations: Higher risk in some regions
- Co-morbidity: 80 % previous diagnoses
- Gender differences: Worse development for women
- Place of death: 3 out of 4 deaths at home (suicides), half (overdoses)
- Company at time of death: 44 % are alone (suicides), 20 % (overdoses)

Thank you for your attention!

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