SURVEYING OVERDOSE INCIDENCE AMONGST PEOPLE WHO USE DRUGS (PWUD) IN 8 SOUTH AFRICAN CITIES

Andrews Y[1], Mahaso M[1], Padayachee K[1], [1] Networking HIV and AIDS Community of Southern Africa (NACOSA), People Who Use Drugs Programme

BACKGROUND

Worldwide, about **600 000 deaths** were attributable to drug use in 2019. Close to **80%** of these deaths are related to opioids, with about **25%** of those deaths caused by opioid overdose. The World Health Organization estimated that **125,000** people died from opioid overdoses globally in 2019, but there is limited statistics on opioid overdose deaths in South Africa. Overdose surveillance is weak; with overdoses often categorised under generic "accidental poisoning" or "exposure to noxious substances," which makes specific opioid overdose numbers unclear.

NACOSA implements a harm reduction programme for PWUD in eight cities in South Africa under a Global Fund grant. The programme includes heroin overdose prevention and management interventions which is challenging as Naloxone is only available as an intramuscular injection, requiring a doctor's prescription.

METHODS

To support advocacy for community-based distribution, in July 2024, NACOSA surveyed 1 037 PWUD in 8 cities **(City of Johannesburg, Ekurhuleni, Sedibeng, West Rand, Nelson Mandela Bay, City of Cape Town, eThekwini and uMgungundlovu)** over 9 days to determine overdose incidence. Respondents choose from predefined options. Of those surveyed, **84%** (872/1037) were male, **63%** (650) were 25-35 years old with the second largest age group being between 36-50 years old (**30%**); and **64%** (667) were homeless.

OVERDOSE INCIDENCE

1 037 Respondants
84% Male

63% (650) 25-35 years old
30% (312) 36-50 years old

64% (667) Homeless

MULTIPLE DRUG USE
66% Respondants
→ **793** Opiates | **329** Crystal Meth | **201** Mandrax | **103** Crack Cocaine (Rock)

NEVER OVERDOSED
72%

OVERDOSE
96% Opiates → *Breathing difficulties*, *Choking*, *Loss of consciousness*

33% Stimulants → *Rapid/Irregular heartbeat*, *Dangerously increased body temperature*

WITNESSED OVERDOSE
572

FATAL
72%

REPORTED/ WITNESSED OVERDOSE →
HELP AVAILABLE: **172** Community Members | **109** Ambulance

55% Unsure how to prevent overdose

45% Help not available

256 Experienced overdose →
30% Intentional | **84%** Accidental

73% Outside in the park/street

25% Early morning

56% Day

19% Night

NALOXONE

81% Don't know/ Unsure

72% Willing to carry

3% Ever used

RESULTS

Within the survey, **66%** respondents (687) indicated that they use multiple drugs; with **793** confirming opiate use, **329** indicating Crystal meth and **201** using Mandrax and **103** using Crack cocaine (Rock) as well. Poly substance use places people who use drugs at a higher risk of overdoses from opiates, stimulants and benzos.

Although **72%** (744) indicated never overdosing; of those that overdosed, **96%** reported an opiate overdose while **33%** reported a stimulant overdose. Most opiate overdose reports were from eThekwini (21%) and uMgungundlovu (17%). Opiate Overdose symptoms most experienced was breathing difficulties, choking, loss of consciousness. Stimulant overdose symptoms most experienced was rapid/ irregular heartbeat and dangerously increased body temperatures.

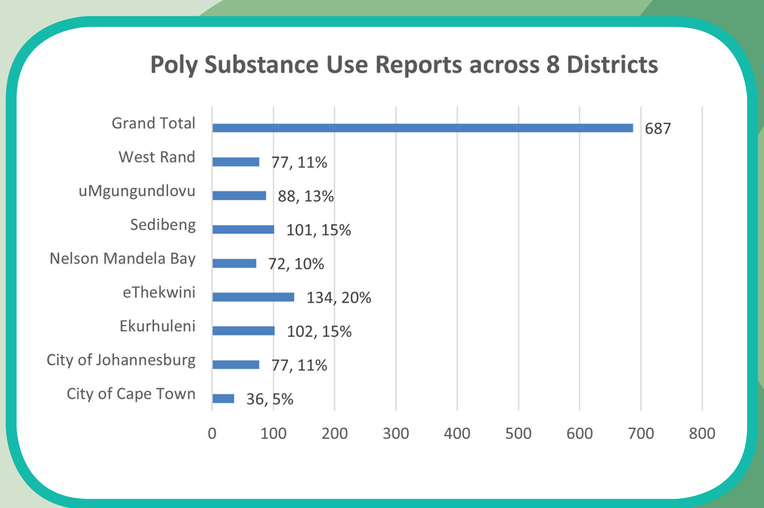
Of those reporting an overdose, **84%** (215) were accidental overdoses but **30%** (78) were intentional; raising concerns on the state of the community's mental health and the urgency for psychosocial support services to be prioritized within harm reduction programming.

55% (572) of the respondents indicated they witnessed or knew of someone else that overdosed with **72%** (412/572) reporting those as fatal overdoses. Ekurhuleni and eThekwini particularly reported a high rate of overdose fatalities at **17%** and **29%** respectively.

Of those reporting an overdose, **73%** of those overdoses happened outside in the street; with most occurring during the day (56%) but **25%** in the early morning or at night (19%) where the already limited health services are even more inaccessible.

Infact, **45%** of those that reported experiencing or witnessing an overdose said that assistance was not available. Where help was available, majority was from community members (172) and ambulance (109).

Concerning that **55%** did not know or were unsure of how to prevent overdosing. Showing increased need for education on overdose prevention and management as **81%** did not know about naloxone. Only **3%** (31) reported ever using or accessing naloxone, but **72%** (750) indicated that they would be willing to carry it on their person if made available.



CONCLUSION

Survey confirms the need for community-based naloxone distribution programmes, improvements in peer-led overdose education, harm reduction interventions for polysubstance users and the establishment of Safe Drug Consumption rooms to reduce overdosing.

While continuing its national advocacy for accessibility, NACOSA piloted naloxone distribution to 119 OST (OAT) and needle and syringe beneficiaries in Nelson Mandela Bay (Eastern Cape) and uMgungundlovu (KwaZulu-Natal). From December 2024 to June 2025, the pilot was implemented to reduce opioid and stimulant overdoses by distributing overdose prevention kits that included patient scripted injectable naloxone and mouth resuscitators. Overdose training was provided to these pilot beneficiaries and their supporters to safely administer naloxone and do CPR if needed. The pilot recorded a 99% success rate, and supports the recommendation that overdose management be decentralized to a community level to ensure accessibility to all that are in need.

ACKNOWLEDGEMENTS

NACOSA programme management: Yolaan Andrews, Memory Mahaso, Kalvanya Padayachee, Andrico Stephanus and Rachel Saker.

Programme implementers: ANOVA Health Institute; TB HIV Care; Tintswalo Home Based Care; Indibano Victim Empowerment Project; Inkunzi Isematholeni; and Tshepo Ya Bana.

Programme beneficiaries: Our heartfelt appreciation to the people who use drugs for sharing their invaluable insights.

This programme is made possible with the support of the Global Fund. The views described herein do not represent the views or opinions of the Global Fund to Fight AIDS, Tuberculosis and Malaria, nor is there any approval or authorization of this material express or implied, by the Global Fund to Fight AIDS, Tuberculosis and Malaria.

NACOSA

For more information, stories, and research, visit: WWW.NACOSA.ORG.ZA
Yolaan Andrews
NACOSA
Yolaan@nacosa.org.za

Disclosure of Interest Statement:
No conflict of Interest

References

1. WHO (2019). International Classification of Diseases for Mortality and Morbidity Statistics. Eleventh Revision.
2. Institute for Health Metrics and Evaluation. Global Burden of Disease Results Tool Seattle, WA 98121, USA: University of Washington; [Accessed 2021 23 August]. Available from: http://ghdx.healthdata.org/gbd-results-tool.