TBHIVCARE

Innovations in Harm Reduction: Drug Checking and Overdose Prevention Site

Formative work and emerging lessons

Manezi Ncedani | TB HIV Care

SACENDU Symposia | October & November 2026

Overview

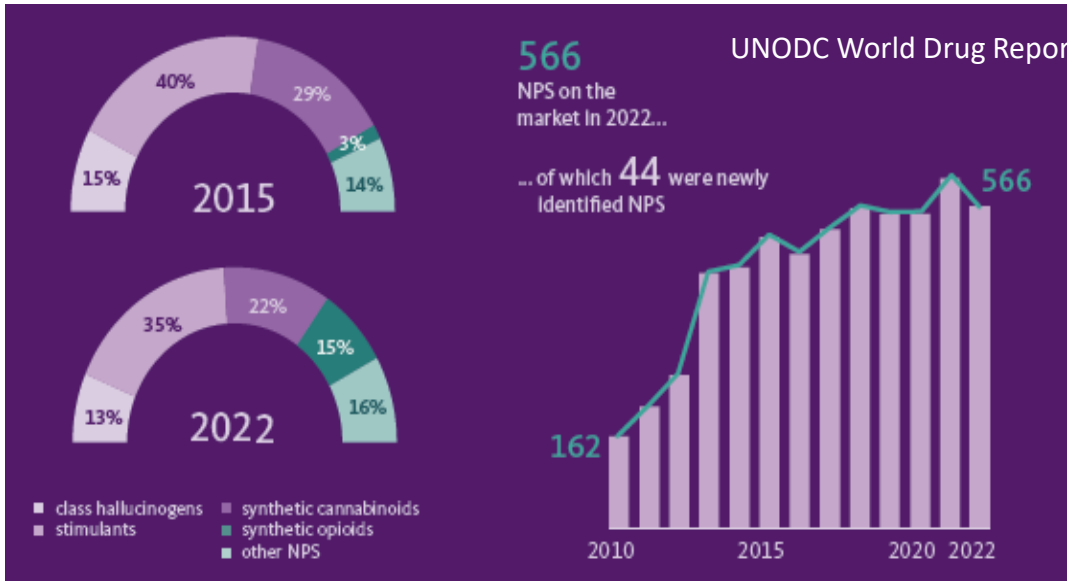
- Why are innovative harm reduction interventions needed?
- Opioid overdose
- What is Drug Checking?
- What are Overdose Prevention Sites?
- TB HIV Care's innovative harm reduction project
- Learning from Latin America
- Next steps

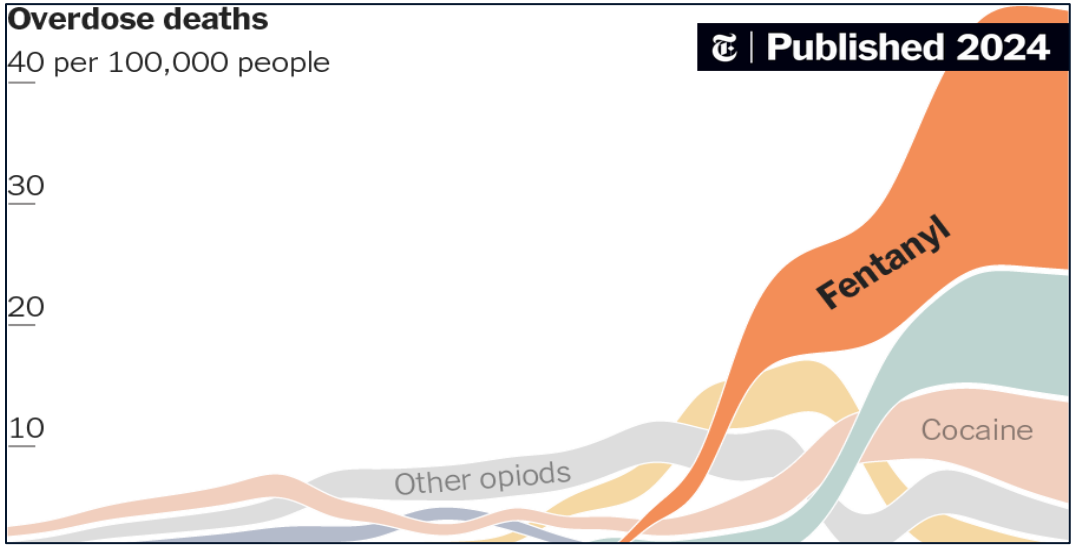


TBHIVCARE

Why are innovative harm reduction interventions needed?

- To respond to emerging drug-related risks
- To prevent overdose and avoidable deaths
- To strengthen early warning and drug surveillance
- To promote informed decision-making
- To strengthen community participation
- To generate local evidence and improve services





TBHIVCARE

THE OVERDOSE CRISIS IN NORTH AMERICA



A preventable tragedy.

The overdose crisis continues to claim tens of thousands of lives across the United States, Canada and Mexico, with synthetic opioids — especially fentanyl — being the leading driver.

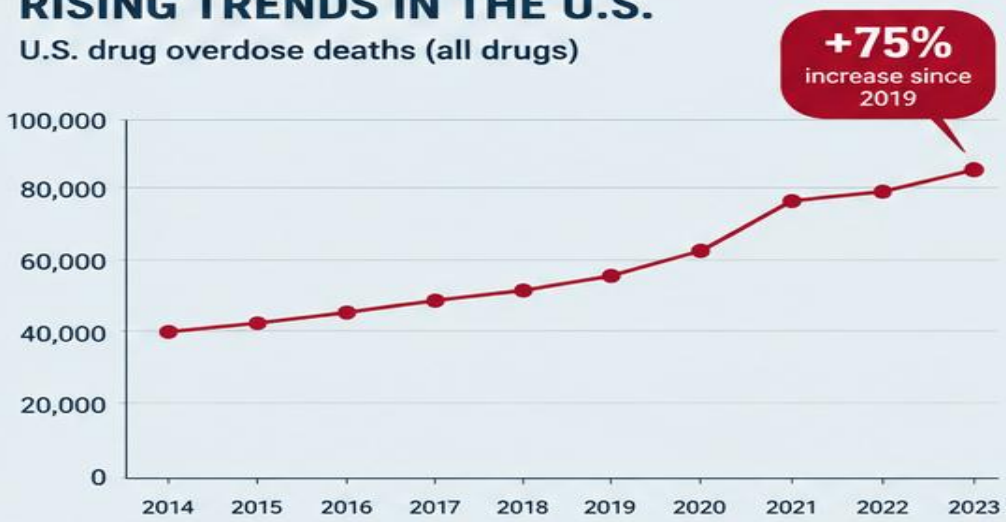
~ 83,000
overdose deaths in the U.S. in 2023
(approx. 228 deaths per day)

~ 7,000
overdose deaths in Canada in 2023
(approx. 19 deaths per day)

~ 4,000
overdose deaths in Mexico in 2023
(estimated, varies by source)

RISING TRENDS IN THE U.S.

U.S. drug overdose deaths (all drugs)



FENTANYL IS THE DEADLIEST DRUG IN NORTH AMERICA

Fentanyl and other synthetic opioids are now responsible for the majority of overdose deaths in the U.S. and Canada, and are increasingly impacting Mexico.



CANADA
~ 70%
of opioid deaths involve fentanyl (2023)

U.S.
~ 70%
of opioid deaths involve fentanyl (2023)

MEXICO
Fentanyl-related deaths are rising rapidly (2023)

KEY DRIVERS

- Synthetic opioids (e.g., fentanyl)
- Unregulated drug supply and adulterants (e.g., xylazine, benzodiazepines)
- Substance use disorders and mental health challenges
- Social and economic factors (poverty, homelessness, criminalisation)
- Limited access to harm reduction and treatment services

Fatal Drug Overdose in South Africa

- Largely unreported
- No integration of data from hospitals, mortuaries on overdose specifically

Fatal overdoses reported to SACENDU CHR Partners		
2025a	2025b	2026a
8	9	2

On 19 October THC was informed by SANPUD and Streetscape of a fatal opioid overdose in Cape Town

Contributing factors:

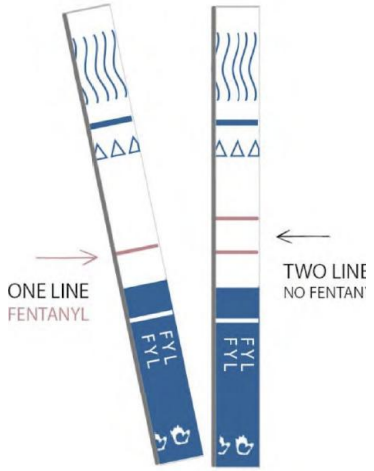
- Limited access to opioid agonist therapy
- No safe place to use drugs
- Unknown drug quality and constituents
- No access to naloxone in the community



TBHIVCARE

What is Drug Checking

A harm reduction intervention that uses analytical chemistry technologies to give PWUD more information about what they are consuming, empowering informed decisions about what, how, when, and how much to use in order to minimise their risk.





Returning information back to service users is key.

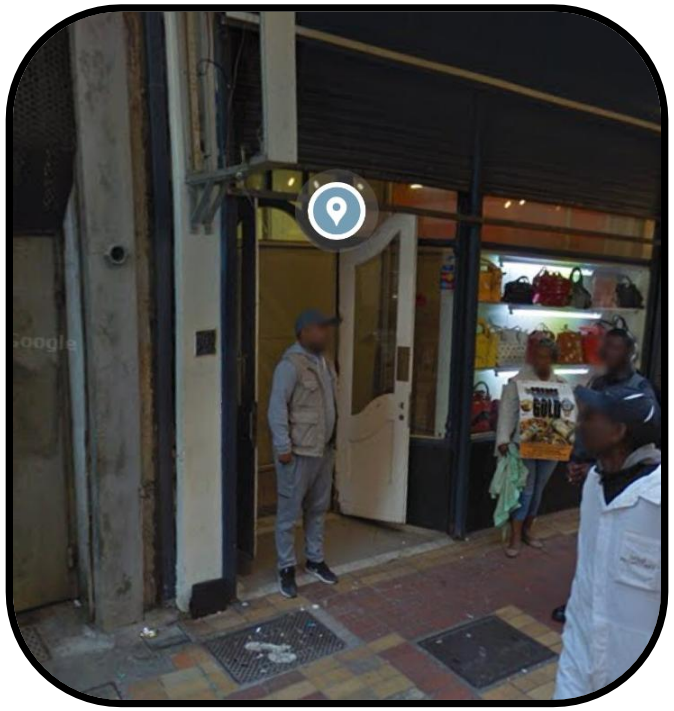
TBHIVCARE

Drug testing vs Drug Checking

Drug Testing	Drug Checking
Detects the presence or absence of a specific substance	Provides information about the composition of a drug sample and potential risks
Often targets one or a few specific substances	May use multiple testing methods
Often indicates whether a target substance was detected.	May identify expected or unexpected substances
Simply communicates a test result	Includes pre- and post-test counselling, risk communication, and harm reduction advice
Can support individual screening and targeted surveillance.	Can support individual risk reduction, community education, and early warning systems.

TBHIVCARE

Where Could Drug Checking Happen?







TBHIVCARE

What are Overdose Prevention Sites

- These are physical or community-based service points where people can receive support related to drug use and its associated risks

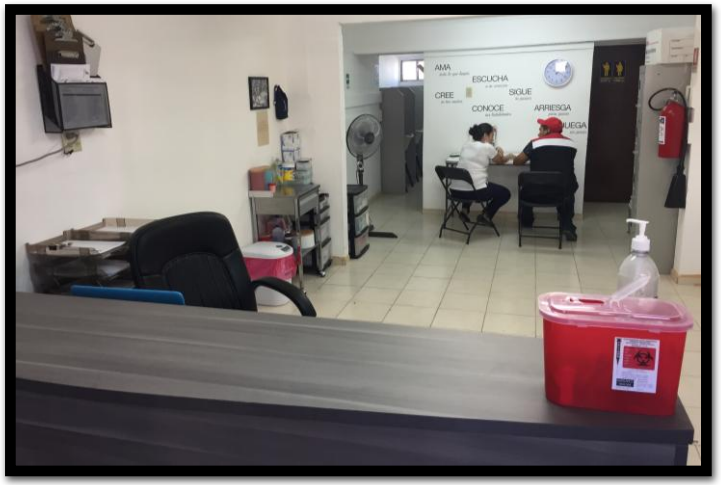
- **Services may include**:
  - Drug education and awareness.
  - Overdose prevention education and naloxone distribution.
  - HIV and hepatitis testing, prevention, and linkage to care.
  - Needle and syringe programmes.
  - Opioid agonist therapy.
  - Peer-led outreach, counselling, and referrals.
  - Drug checking and communication of emerging drug-related risks

TBHIVCARE

Overdose prevention sites:
A proven way to prevent overdose deaths and restore public order.



VANCOUVER, CANADA



MEXICALI, MEXICO

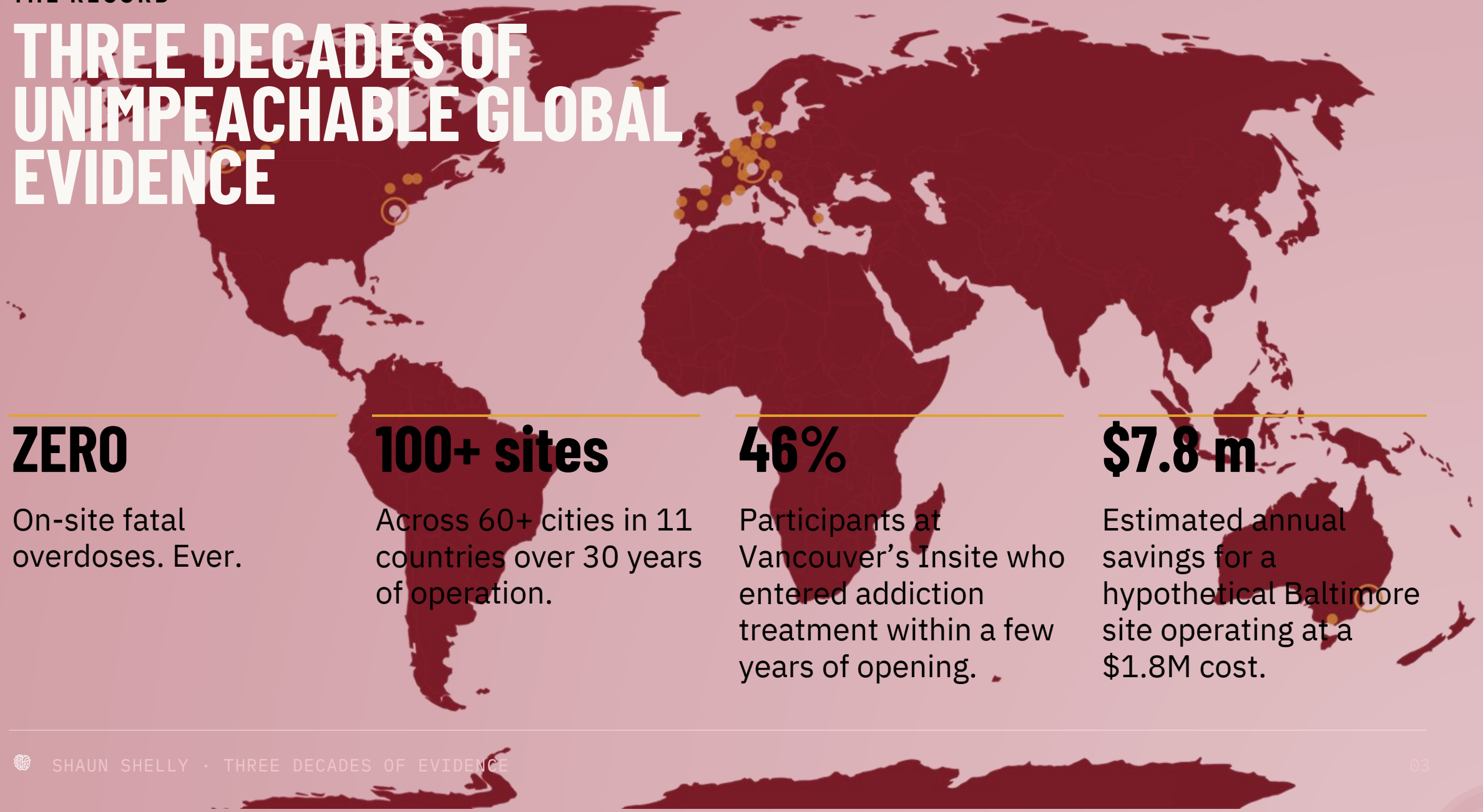


CALI, COLOMBIA

Exist in over 100 cities around the world.

THE RECORD

THREE DECADES OF UNIMPEACHABLE GLOBAL EVIDENCE



ZERO

On-site fatal overdoses. Ever.

100+ sites

Across 60+ cities in 11 countries over 30 years of operation.

46%

Participants at Vancouver's Insite who entered addiction treatment within a few years of opening.

$7.8 m

Estimated annual savings for a hypothetical Baltimore site operating at a $1.8M cost.

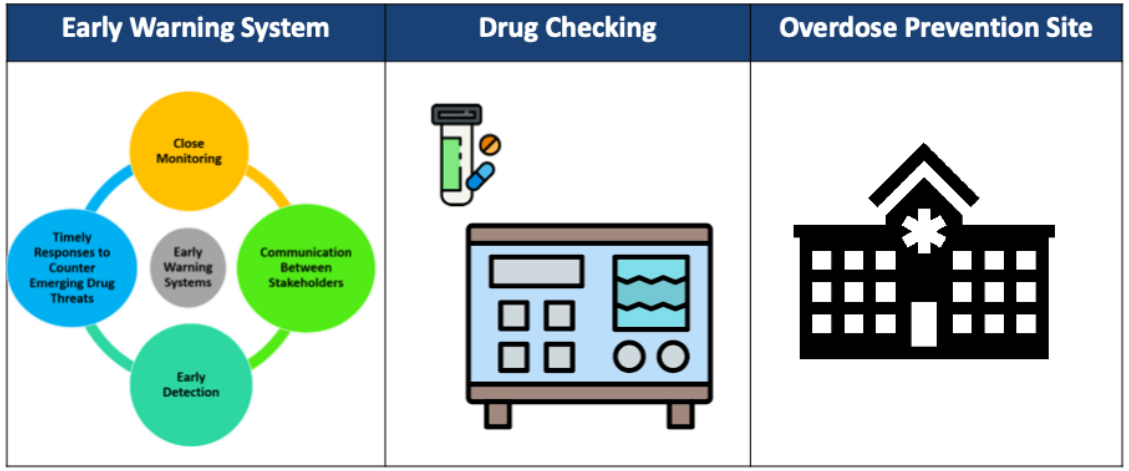
TBHIVCARE

Innovative harm reduction project

Innovative harm reduction

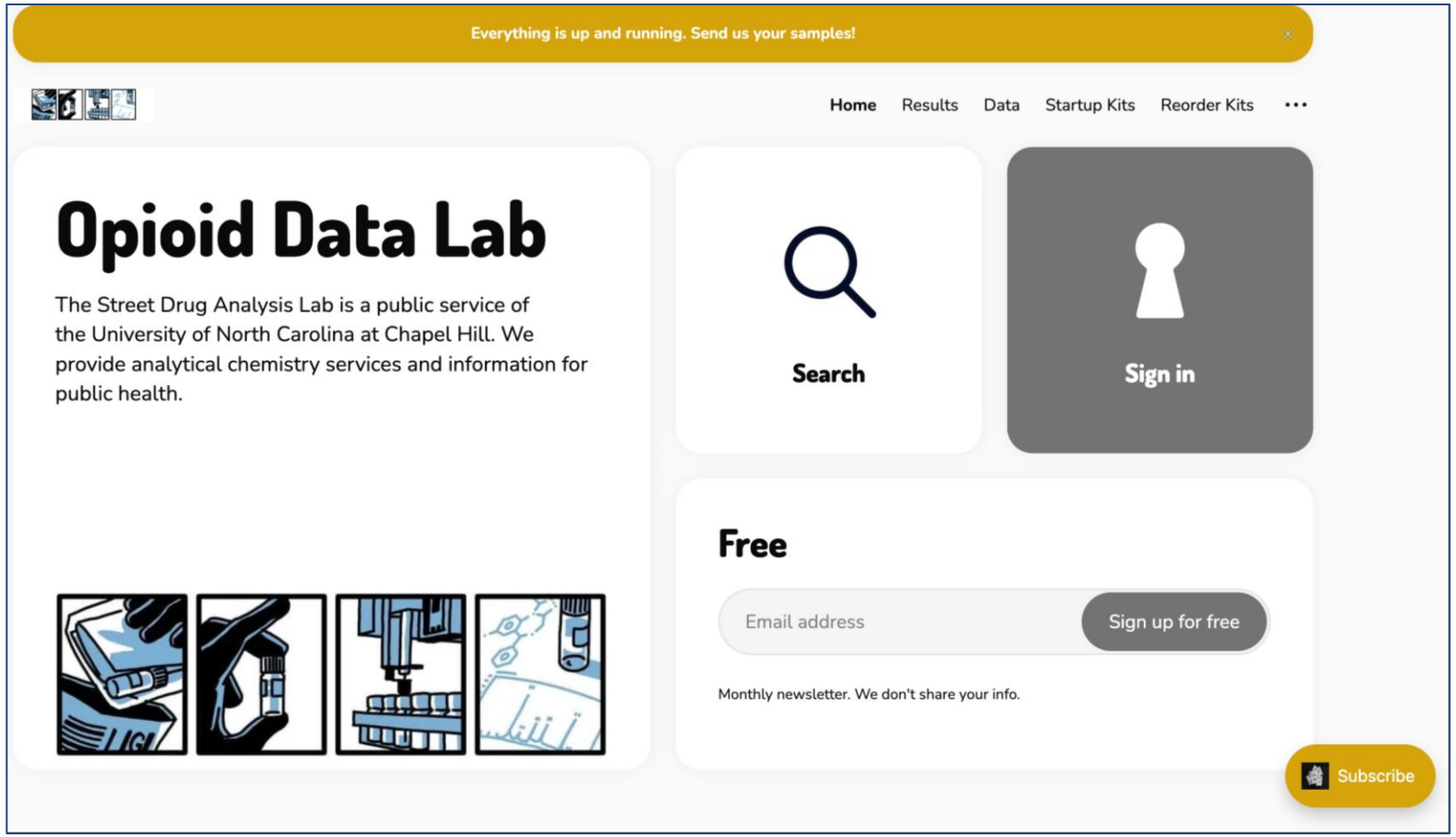
Work to date

- Focus group discussions to obtain insights into Drug checking
- Established technical advisory groups (Drug Checking & Overdose Prevention Sites)
- Developed & tested systems, tools, workflows and community-engagement
- Drafting drug checking research protocol with SA MRC
- Completed a Community Advisory Group (in Heideveld) to explore local drug market, polydrug use
- Overdose Awareness event
- Establishing global network



TBHIVCARE

International collaboration: University of North Carolina



https://www.opioiddata.org/

Learning from Latin America

Drug checking, Overdose prevention sites and Early Warning exist in Mexico and Colombia

Webinar series take aways:

- Feasible & effective in Global South
- Make overdose prevention supplies accessible
- Share expertise through peer-learning networks
- Bring services to where people are
- Protect confidentiality and dignity
- Make results useful to communities
- Focus on needs of women who use drugs
- Standardise approaches, have audit trail
- Integrate services



Next steps

1. Finalise governance and protocol for drug checking
2. Test tools and workflows
3. Continue community learning
4. Operationalise
5. Establish a monitoring framework
6. Continue advocating around Overdose prevention sites

Conclusion

Innovative harm reduction services are needed to respond to emerging drug-related health issues.

Drug checking can:

- Provide information for people who use drugs to make informed decisions around drug use
- Provide information to inform trends and public health responses

Overdose prevention sites can:

- Mitigate risks of public drug use
- Provide access points to services
- Reduce concerns of public safety



Acknowledgements

With thanks to; Shaun Shelly, Claire Schmidt, Jaime Arredondo Sanchez Lira, Alejandro Ángel, MJ Stowe, Open Society Foundations & UNC drug lab

Manezi Ncedani

Manezi.Ncedani@tbhivcare.org

TBHIVCARE

saMRC advancinglife

THE AURUM INSTITUTE