

West Virginia Epi-Aid Closeout Meeting: Preliminary Findings

June 24, 2021

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Epi-Aid objectives

1. **Conduct a rapid assessment with PWID and key stakeholders** to identify factors facilitating HIV transmission and barriers to accessing essential care and prevention services for PWID
2. **Review, abstract, and analyze data from medical records and other relevant sources** (e.g. community service providers, first responders, SUD treatment) to understand engagement with various services
3. **Review and analyze partner services procedures and data** from partner services interviews and HIV testing activities to better understand behaviors, networks, and geography of PWID

Epi-Aid timeline

May 17	WV BPH and KCHD requested Epi-Aid to assist with 3 investigation objectives
June 2	Epi-Aid kickoff meeting
June 24	Epi-Aid exit presentation with preliminary findings
Late July/Early August	Full report with findings and recommendations
TBD/ Ongoing	Continuing support provided as needed

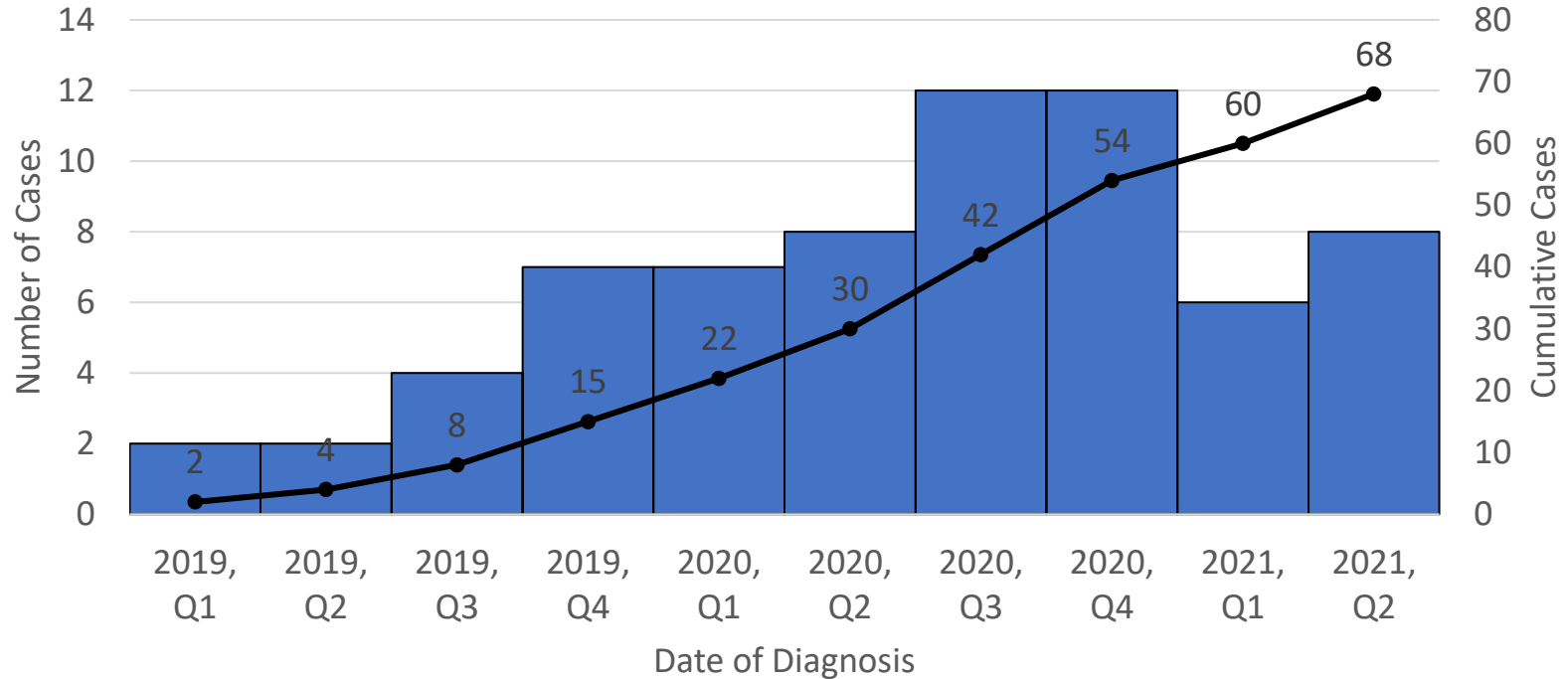
Outline

- Background
- Individual level records analysis
- Rapid assessment/qualitative interviews
- Discussion and questions



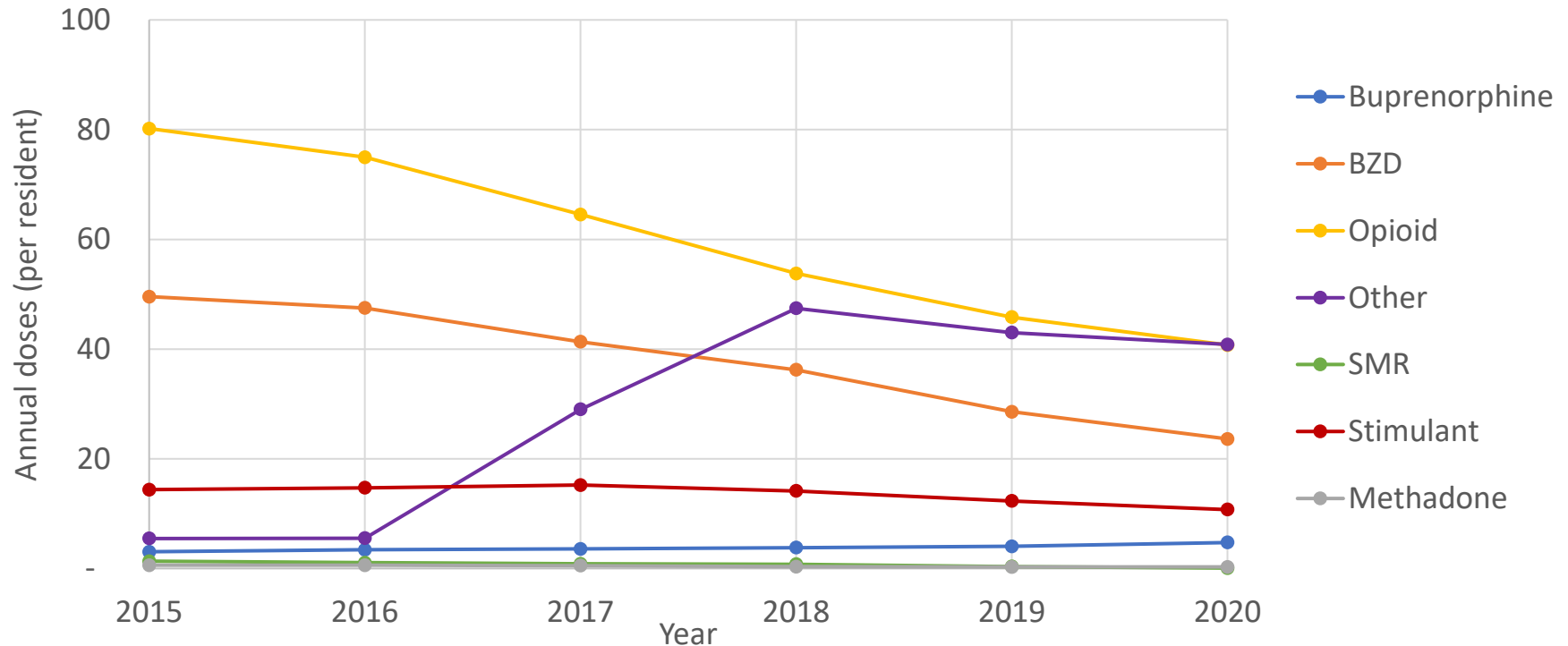
Background

New HIV Diagnoses by Quarter, Kanawha County*, 1/1/19 to 6/10/21

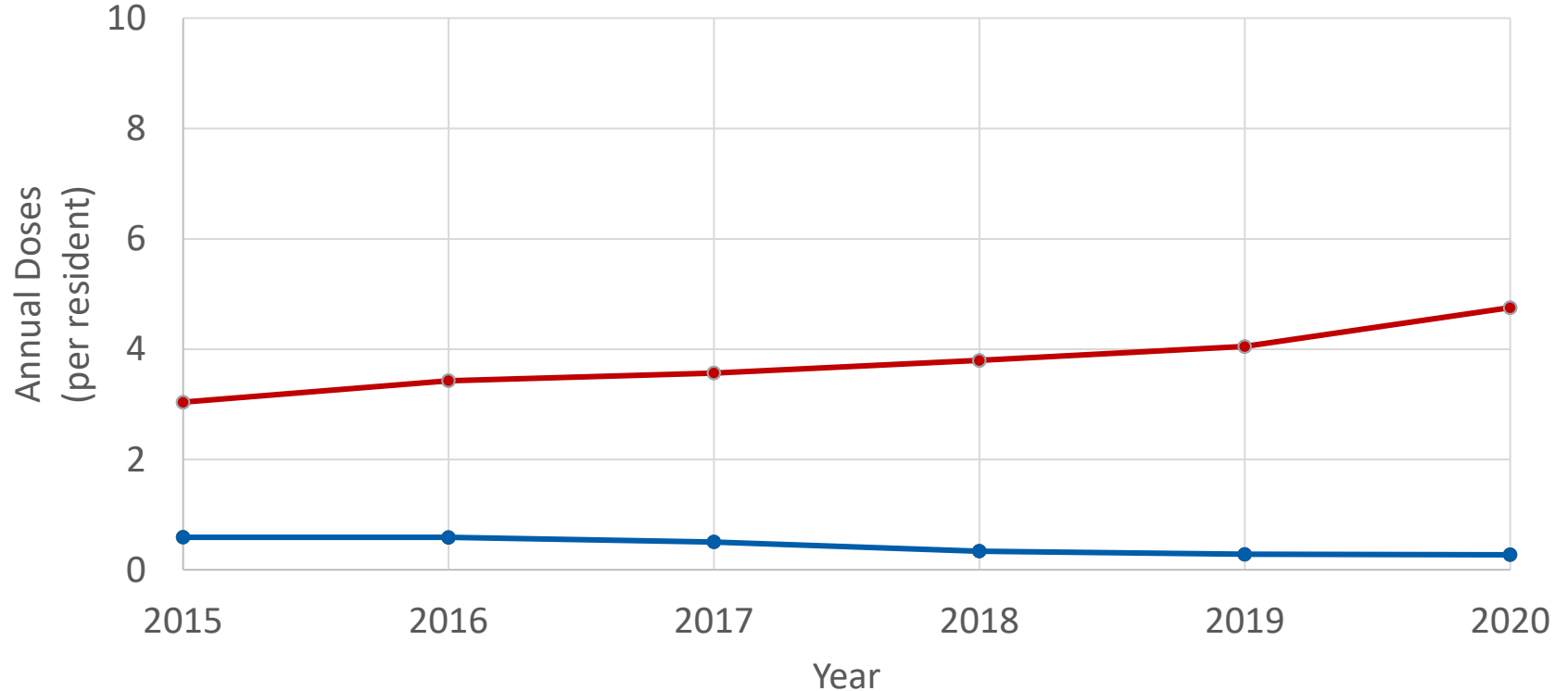


*residents or homeless in Kanawha County at time of HIV diagnosis

Controlled Substance Prescription Trends – Kanawha County

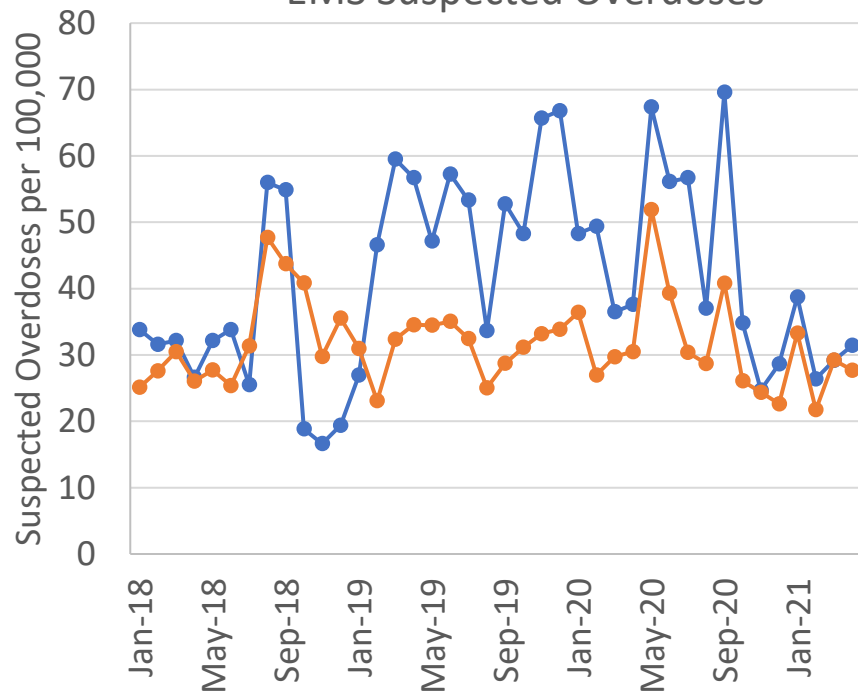


Buprenorphine prescribing slowly increasing, methadone decreasing

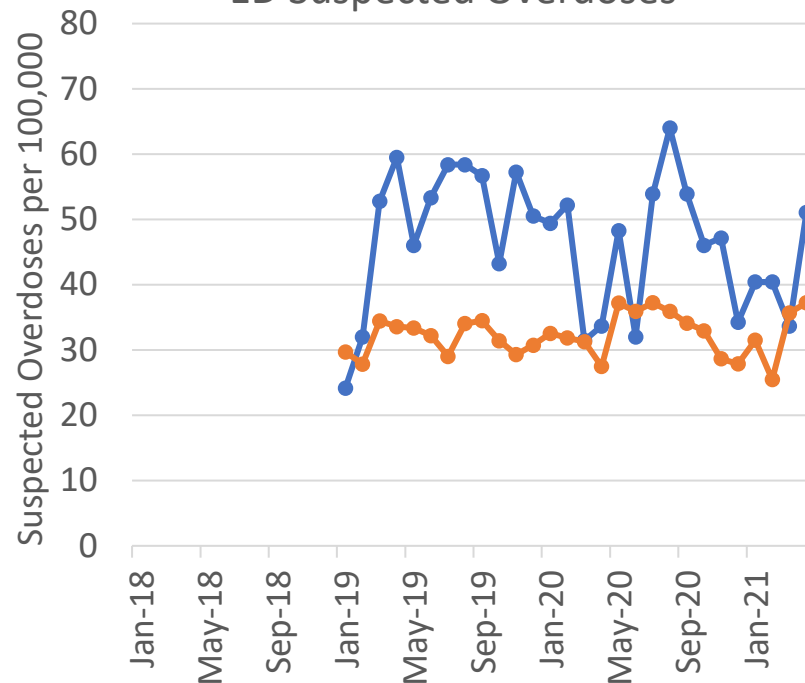


Suspected overdoses: Kanawha County & West Virginia

EMS Suspected Overdoses



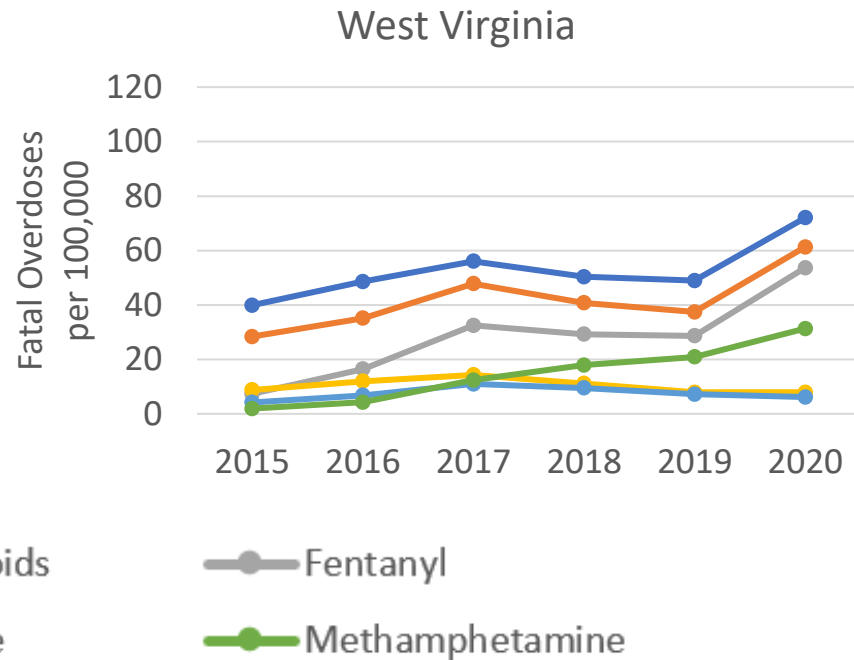
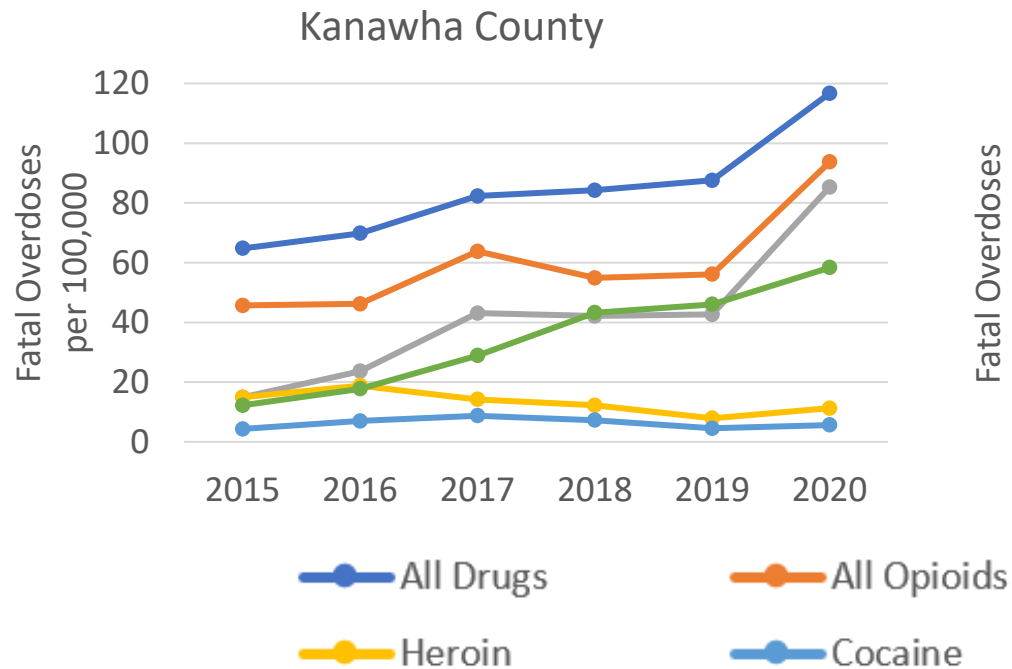
ED Suspected Overdoses



Source: WV Office of Drug Control Policy Dashboard

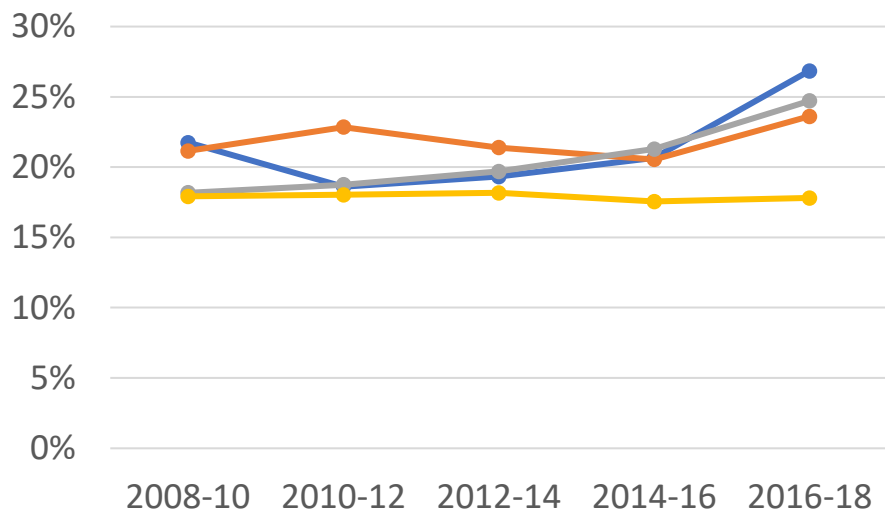
Note: ED suspected overdoses determined by discharge/SNOWMED codes and/or review of chief complaint text containing "drug" and "overdose"

Kanawha County fatal overdose rates ~2 times higher than West Virginia and steeply increase in 2020

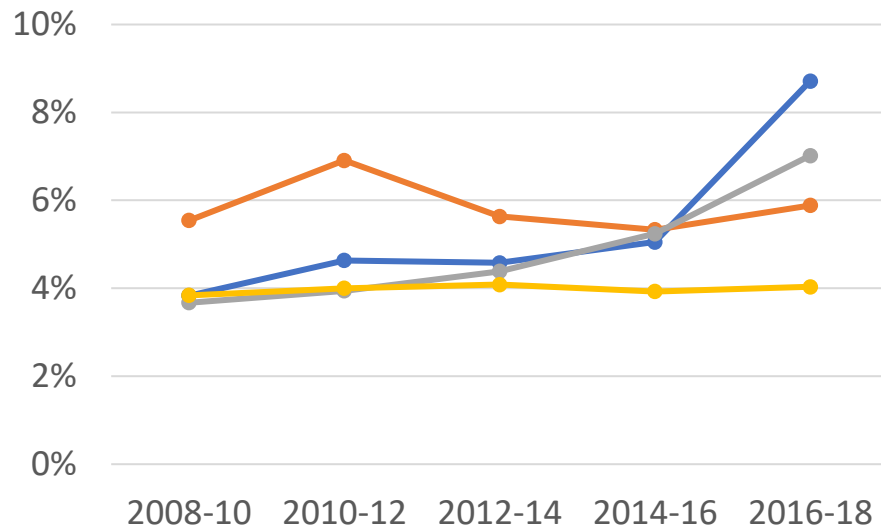


National Survey on Drug Use & Health: Mental Health

Any Mental Illness in Past Year

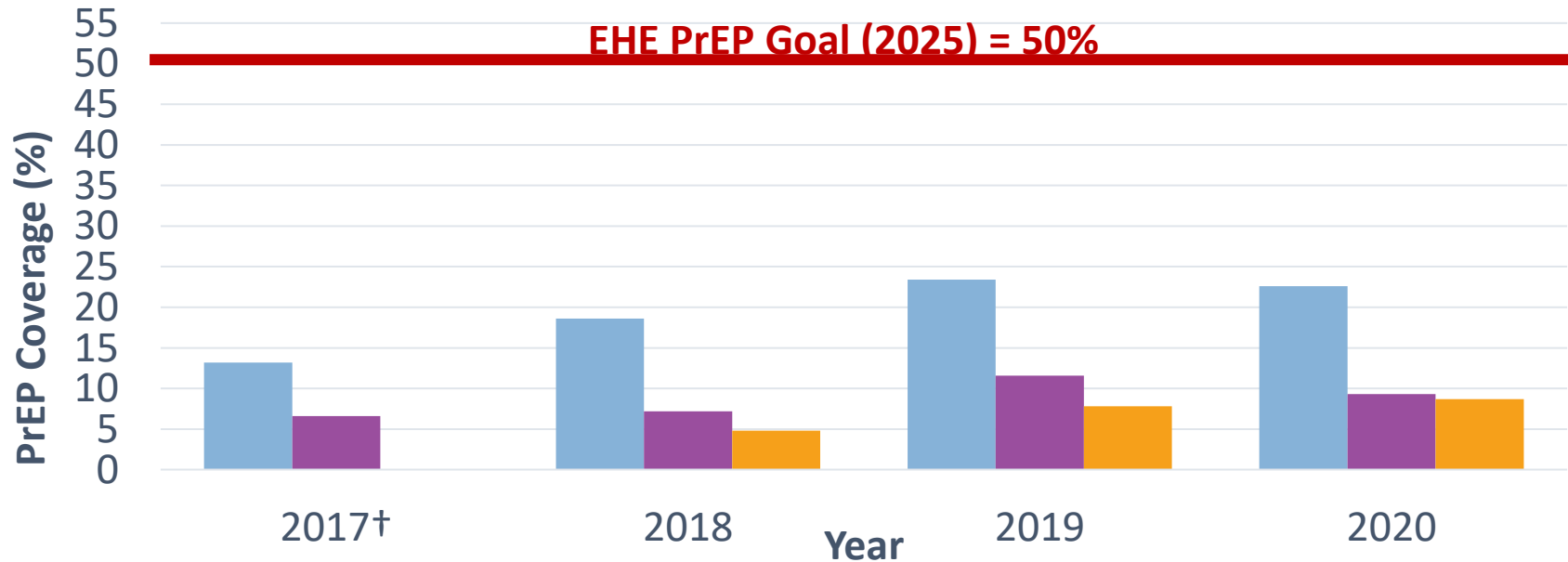


Serious Mental Illness in Past Year



—●— WV 18 to 25 —●— WV 26 or Older —●— US 18 to 25 —●— US 26 or Older

Pre-Exposure Prophylaxis (PrEP) coverage* for Kanawha County and WV lag significantly behind US average for 2017 - 2020[§]

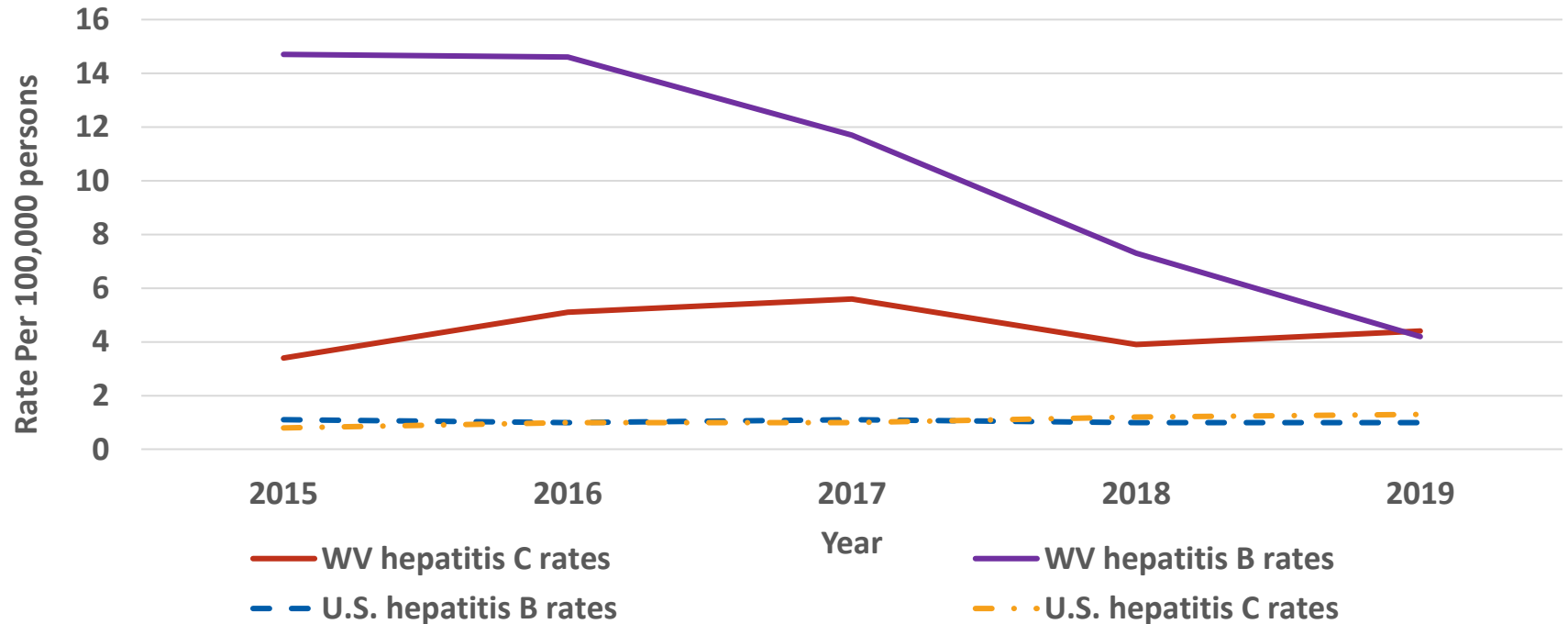


*PrEP Coverage is number of persons aged ≥16 years classified as having been prescribed PrEP divided by the estimated number of persons aged ≥16 years who had indications for PrEP

[†] 2017 Data for Kanawha County suppressed

[§] Source: National Center for HIV/AIDS, Viral Hepatitis, STDs and TB Prevention AtlasPlus. Retrieved from www.cdc.gov/nchhstp/atlas/index.htm. on June 18th, 2021.

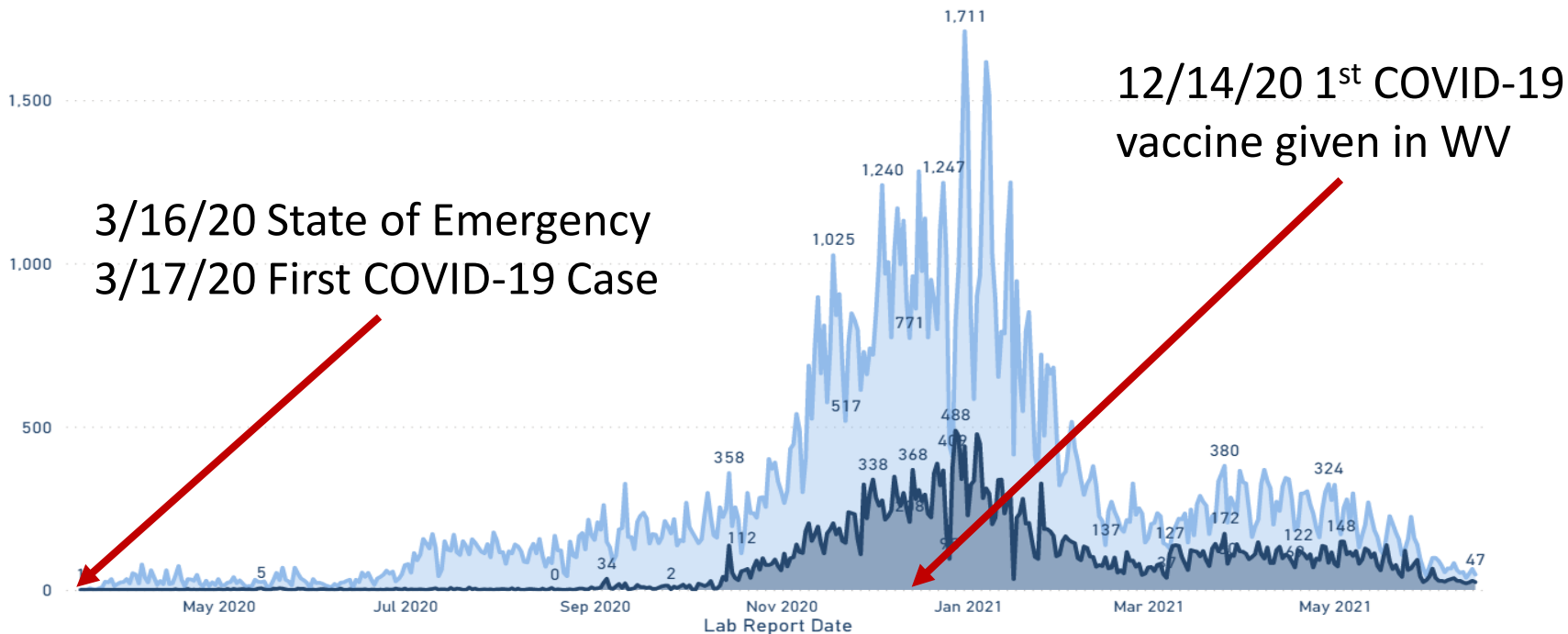
West Virginia hepatitis B and hepatitis C rates significantly above US averages



*Source: www.cdc.gov/hepatitis/statistics/2019surveillance/index.htm

Daily COVID-19 Cases in WV, 2020 – 2021

● Daily Confirmed Cases ● Daily Probable Cases



CAMC Ryan White Services Report: 2018 – 2020

	2018	2019	2020
Total Clients	362	375	396
Key Trends Among Clients	Number of Clients (%)		
Temporary or Unstable Housing	21 (6)	26 (7)	33 (8)
HIV Risk Factor - IDU	33 (9)	42 (11)	66 (17)
Not Prescribed Antiretroviral Therapy	0 (0)	5 (1)	9 (6)
Last Viral Load Test <200 copies	323 (89)	336 (90)	320 (81)
No Insurance/uninsured	5 (1)	15 (4)	23 (6)

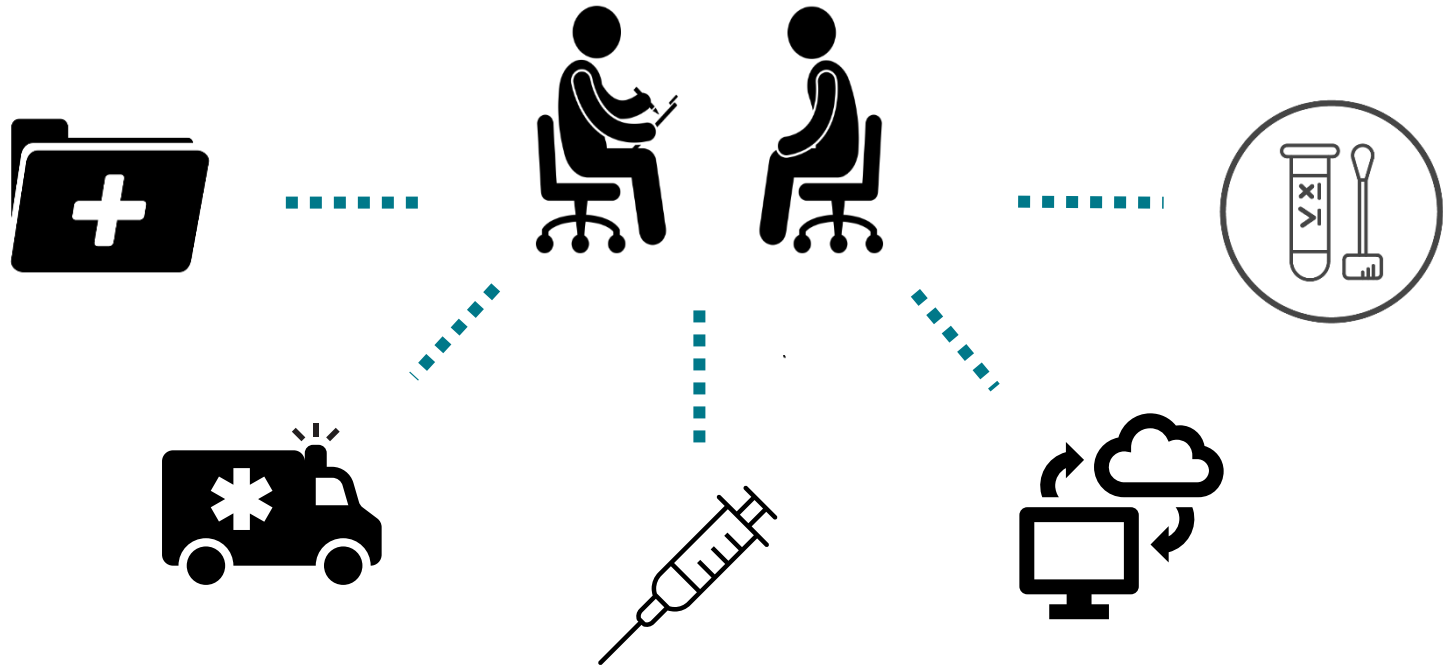


Objective 2: Chart Abstraction

Methods

- Persons who inject drugs with an HIV diagnosis 1/1/2019 or later who had ≥ 1 visit to CAMC or Health Right during review period
- Review period: 1 year prior to HIV diagnosis until present
- Only highest level of care recorded for an encounter

Methods: Data Sources



Methods: Variables Collected



Demographics



Risk Factors



Encounter Data



Labs



HIV Data



Immunization Data

Results

- 65 people with HIV included in the investigation
- 498 healthcare encounters reviewed in full from CAMC and Health Right
- 185 reviewed from WV HIN for date of encounter and location

Patient Demographics

- Median age: 34
- Gender: 54% male
- Race: 92% White, 3% Black, 5% Other, 0% Hispanic



Medicaid 85%
Ryan White 20%
Self-pay 14%

Risk factors



**61% ever
homeless/unstably
housed**



**31% ever
incarcerated**

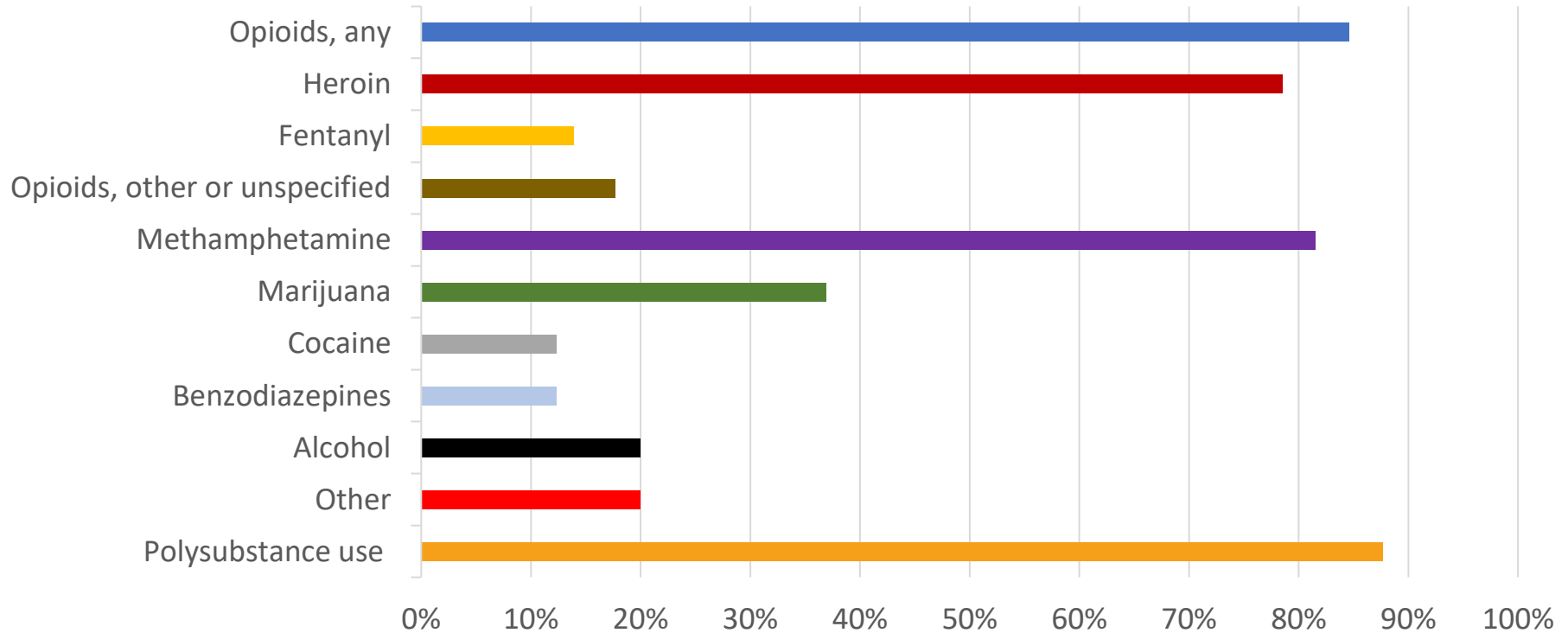


**36% with mental
health condition**

**Ongoing risk: 74% injecting
drugs within 6 months of
last health care encounter**

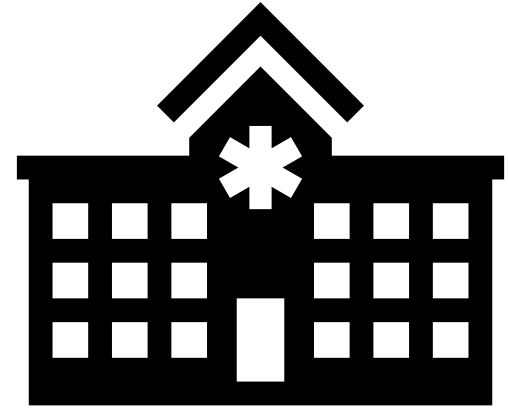


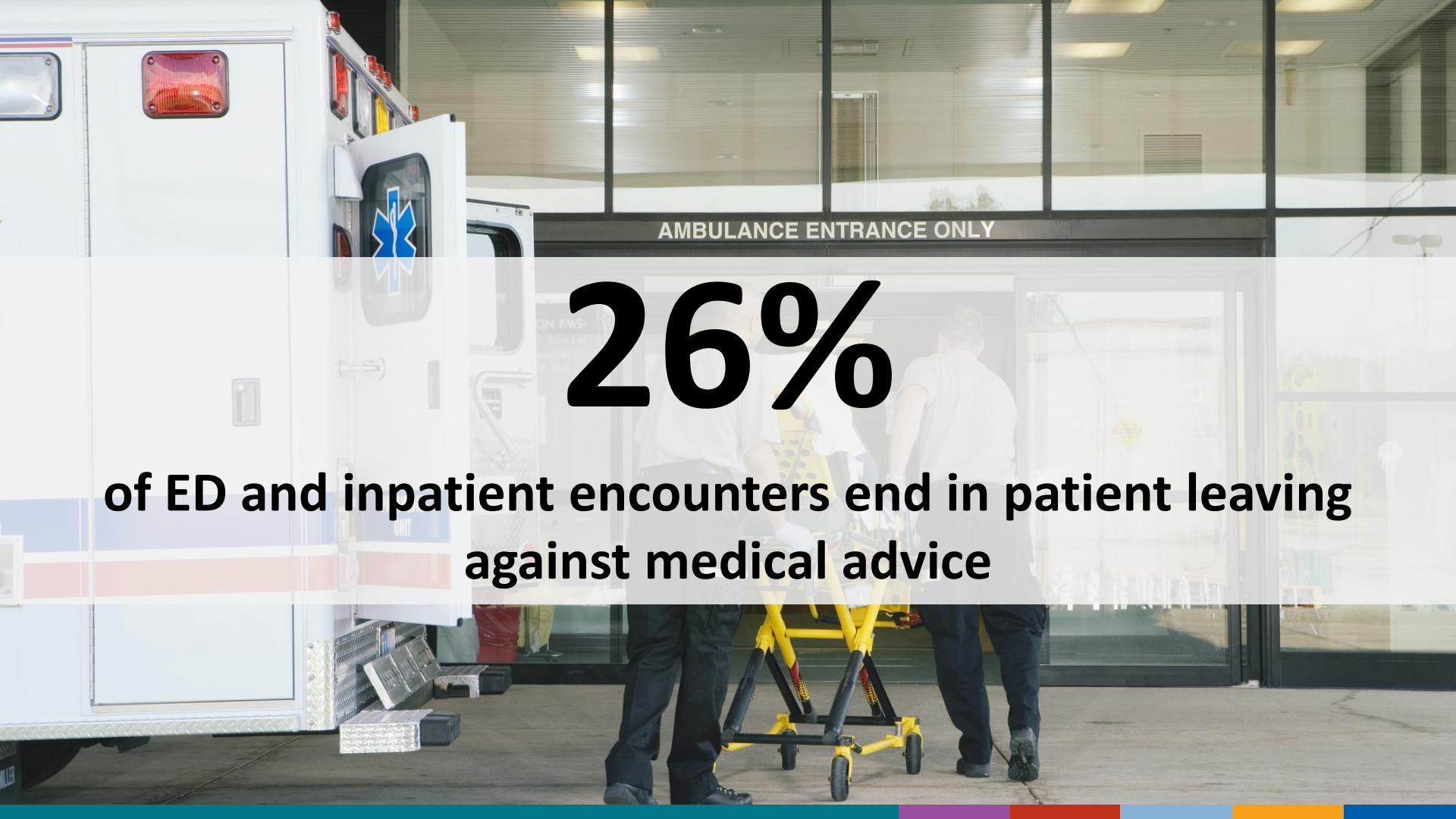
Heroin and methamphetamines were most common substances used



Healthcare Utilization – 498 Encounters

- Median total visits: 5 (IQR 2-10)
- Emergency Dept: 42%
- Inpatient: 20%
- Outpatient, other: 19%
- Ryan White HIV/AIDS Program: 16%
- Health Right: 3%



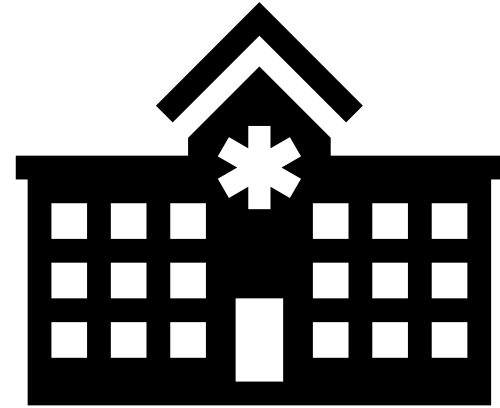
A photograph of an ambulance parked at the entrance of a hospital. The ambulance is white with blue and red stripes and has a blue Star of Life on its side. The hospital entrance has large glass windows and a sign that reads "AMBULANCE ENTRANCE ONLY". Two paramedics in white uniforms are visible, one pushing a yellow gurney. The scene is overlaid with a semi-transparent white box containing text.

26%

**of ED and inpatient encounters end in patient leaving
against medical advice**

Prior to HIV Diagnosis – 212 Encounters

- Median (IQR) encounters prior to HIV diagnosis: 2 (1-4)
- Emergency Dept.: 60%
- Inpatient: 27%
- Outpatient, other: 9%
- Health Right: 3%





**5 HIV-negative tests recorded
across 212 pre-HIV encounters**

Prior to HIV – Diagnoses at Medical Encounters

- Overdose: 8 (4%)
- Intoxication: 5 (2%)
- IDU-associated infections: 107 (51%)
 - Skin/soft tissue infection: 73%
 - Sepsis: 25%
 - Bacteremia: 9%
 - Endocarditis: 9%
 - Osteomyelitis: 8%
- STI: 3 (1%)



0%

of individuals prescribed PrEP prior to HIV diagnosis

Substance Use Related Services

- Among IDU-related encounters* (n=198), naloxone prescribed or documented at 10% of encounters
- Among OUD-related encounters** (n=284), medications for opioid use disorder prescribed or documented at 20% of encounters
- 6% of individuals received syringe services

*IDU-related encounters includes diagnoses of overdose, intoxication, or IDU-associated infections

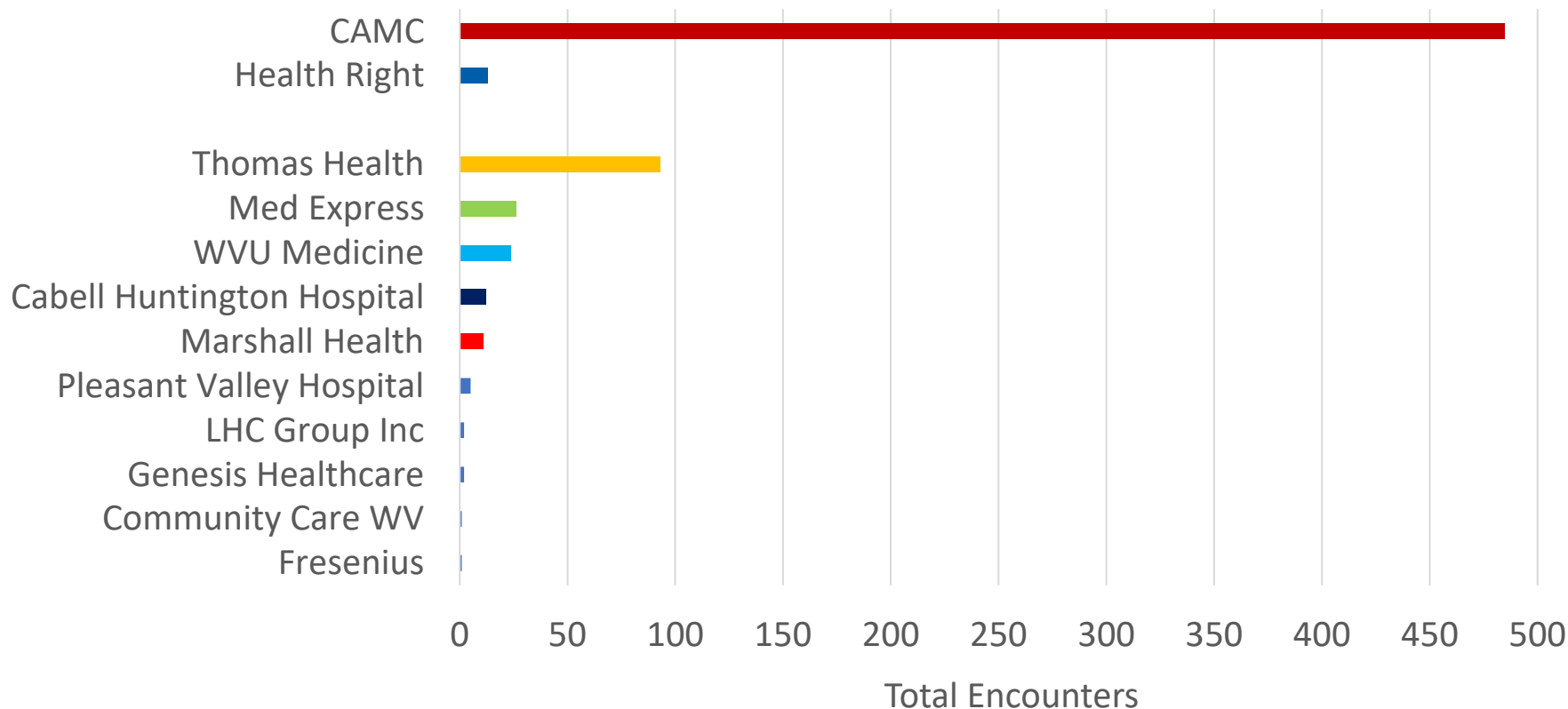
**OUD-related encounters refers to any encounter in which opioids were documented in clinician notes

HIV Care

- CD4 at HIV diagnosis, median (IQR): 436 (274-616)
- Time to linkage to care, median (IQR): 15 days (4-66)
- Evidence of care in last 3 months: 30%
- ART prescribed, ever: 68%
- Virally suppressed, ever: 34%

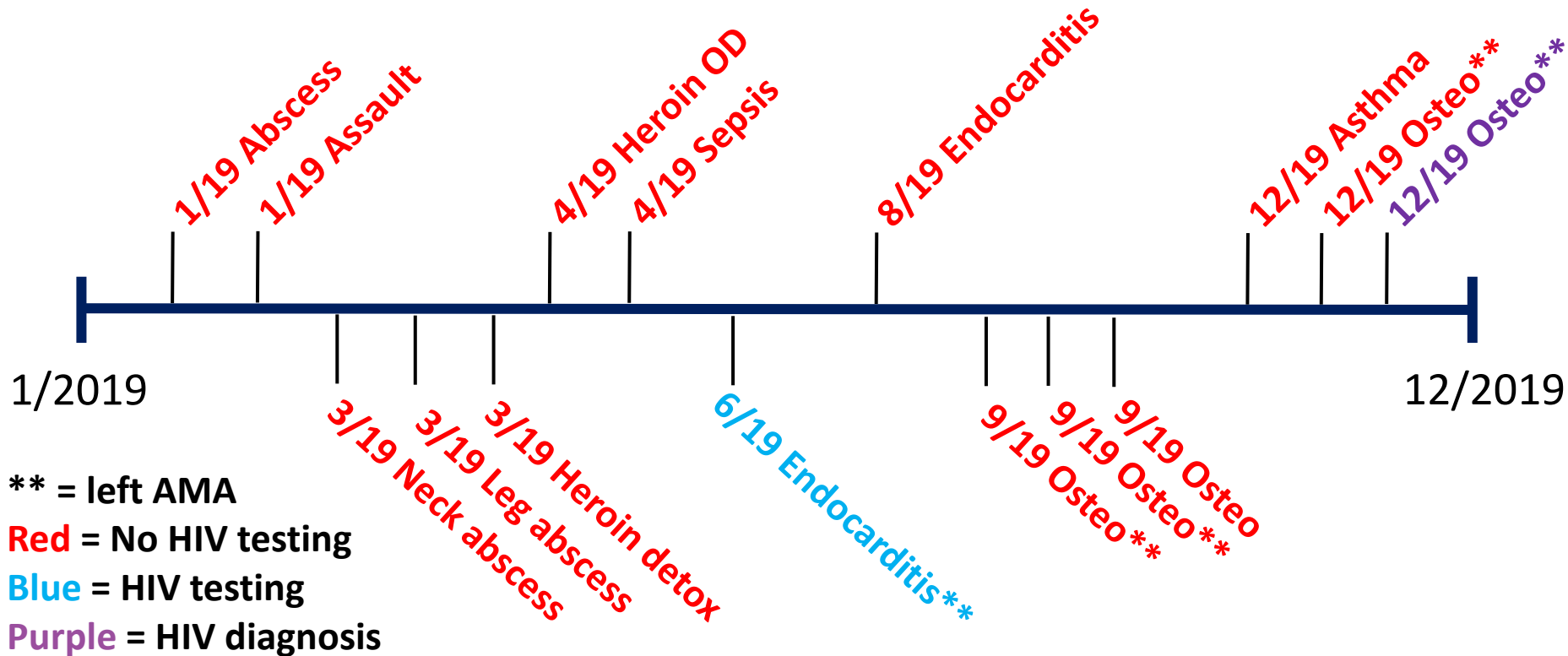


WV HIN shows most patients seek care at CAMC



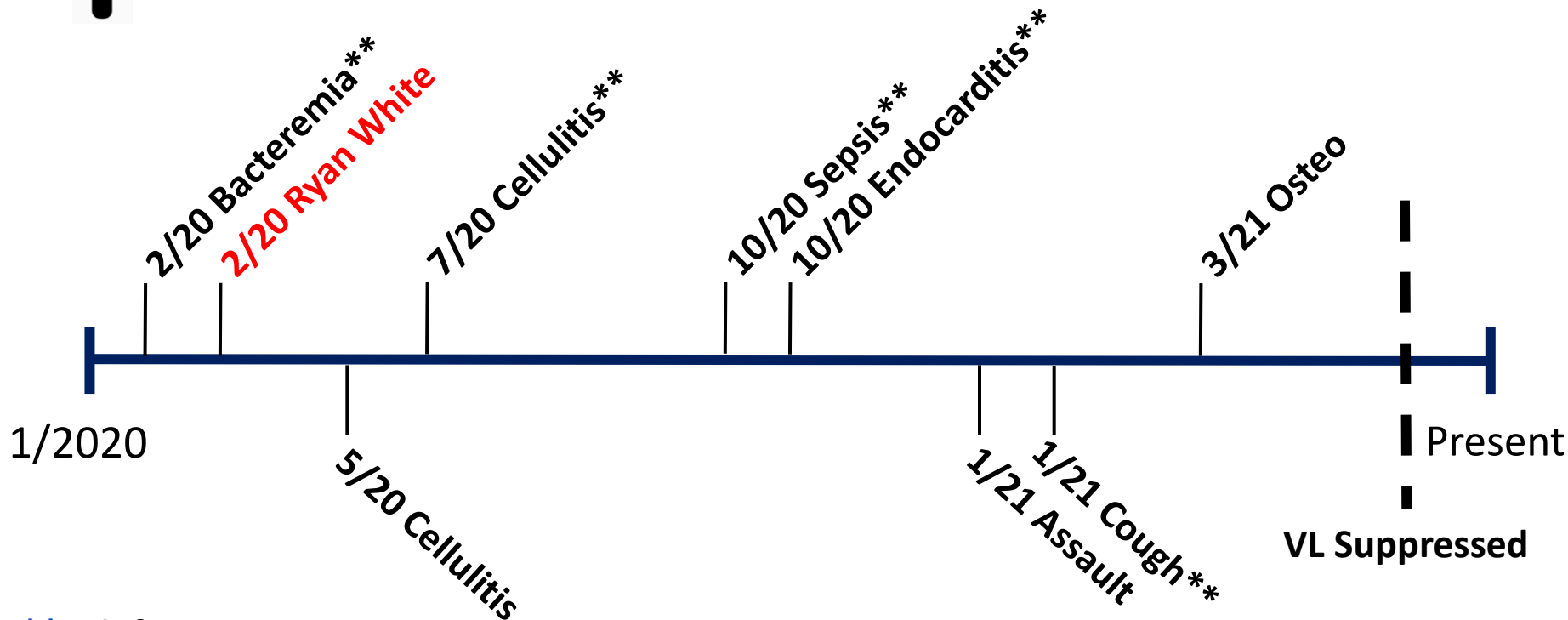


Patient 1 – Prior to HIV Diagnosis





Patient 1 – After HIV Diagnosis



** = left AMA

Red = HIV care visit

Major Findings From Healthcare Encounters

Healthcare
utilization high,
especially for
ED & inpatient

Patients leave
against medical
advice
frequently

HIV testing is
infrequent

PrEP not
prescribed at
any encounter

Major Findings From Healthcare Encounters

Medication for
opioid use
disorder
infrequently
prescribed

Over 80% of
individuals
covered by
Medicaid

Medical
encounters for
overdose and
STIs infrequent

High frequency
of IDU-
associated
infections

Homelessness
& incarceration
are prevalent



Objective 1: Rapid Assessment

We conducted interviews with PWID and stakeholders in the community.



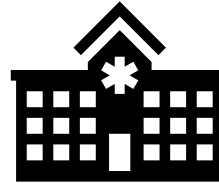
People with and
without HIV



People engaged
and not
engaged in care



People actively
using and in
recovery



Medical and
substance use
treatment
providers



Social service
providers



Law
enforcement



Other
community
leaders

PWID were recruited through provider referral or outreach activities.

- **Purposive sampling**
- **Eligibility criteria**
 - 18 years of age or older
 - Currently living or accessing services in Kanawha County
 - Injected drugs in the last 12 months



Recruited through public health outreach activities

Data collection was completed from June 7–23.

- **Semi-structured qualitative interviews**
 - Note-taking
 - Audio recording, if permitted
- **Interview debrief**
 - Document key findings
- **Daily group debrief**
 - Capture key themes



Data were analyzed by identifying themes across areas of interest.

- **Areas of interest**
 - Drug use behavior
 - HIV risk behavior (needle / equipment sharing, unprotected sex, exchange sex)
 - Barriers to accessing HIV or substance use services
 - Suggestions to address HIV outbreak
- **Identified patterns across interviews and between sub-groups (i.e., people who use meth vs those who use heroin)**
 - Compared responses across participants for each topic area

Providers with long-standing, trusting relationships helped recruit PWID for interviews.

- HIV testing event
- Social service provider
- Medical service provider
- Public health practitioner
- Recovery house



Recruited at HIV testing event

Characteristics of PWID who were interviewed (n=26)

- 42% were aged ≤ 35 years
- 58% male, 42% female
- 85% identified as White & 15% identified as African American
- 72% had lived in Kanawha County ≥ 5 years
- 50% spend time West Side, 31% East End, 12% Kanawha City, 7% Dunbar
- Substance use
 - 55% reported injecting >1 /day (range: 1-10 injections/day)
 - 73% reported polysubstance use
 - 23% were in recovery

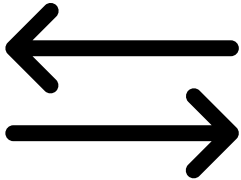
Incarceration, homelessness, and exchange sex among people who were interviewed



33% reported being detained or incarcerated in the last year



35% reported currently experiencing homelessness



15% reported having sex in exchange for money, drugs or food

HIV status and engagement in HIV services among people who were interviewed



16/18 of PWID without HIV reported getting HIV tested in the past 6 months



8/26 reported receiving an HIV-positive test result



6/8 of PWID with HIV visited an HIV provider in the past 6 months

A total of 37 stakeholders were interviewed.

Medical and Substance Use Treatment Providers, n=22

- HIV providers
- MAT providers
- Primary care clinicians
- ER & Infectious Disease clinicians
- Addiction & harm reduction
specialists
- EMS/paramedics

Social Service Providers, n=4

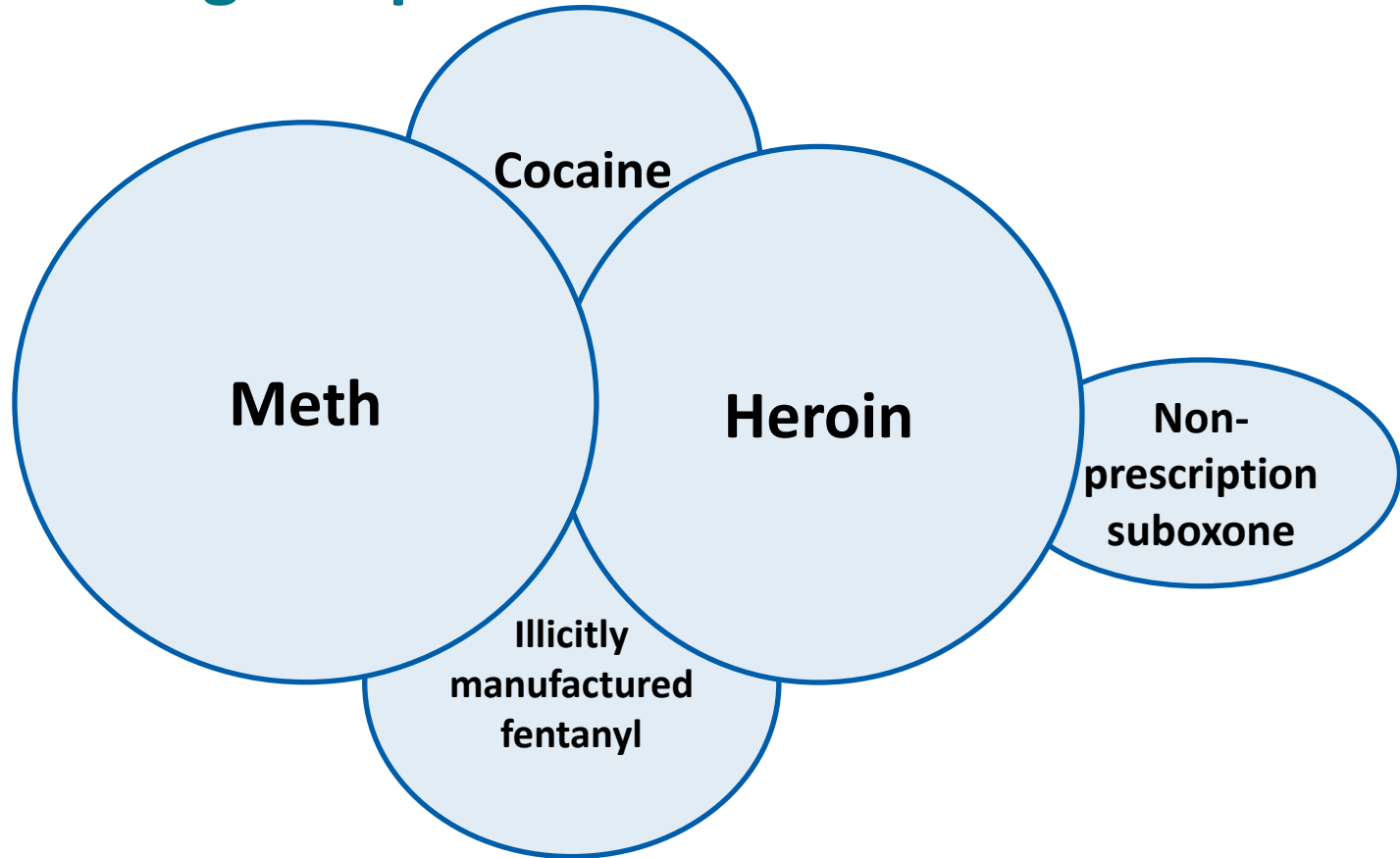
Law Enforcement Personnel, n=3

Other Community Leaders, n=8

- Policymakers
- Religious leaders

PWID and stakeholders' descriptions of current drug use patterns

Drug use
behavior



People are facing multiple, co-occurring complex challenges.

**Substance
use disorder
(SUD)**

**Trauma &
loss**

**Depression
& anxiety**

Unemployment

Hopelessness

Chronic pain

**Unstable
housing**

**Food
insecurity**

HIV

People described using substances to cope with trauma, loss, and hopelessness.

Drug use
behavior

I was feeling **hopeless, homeless, and going through a lot**, and just got caught up my feelings and ended up in a bad day...See, that's the thing, **I had been clean**...I was living, actually living in a shelter. But I was just a **little hopeless, and shelter life was overwhelming**, and I really **don't have family or nobody here**. And I was feeling stupid cause I gave up my apartment, come stay with my son's girlfriend, and that didn't work out. So I end up in the shelter, so I was just down, having a bad day.

-- PWID, woman without HIV

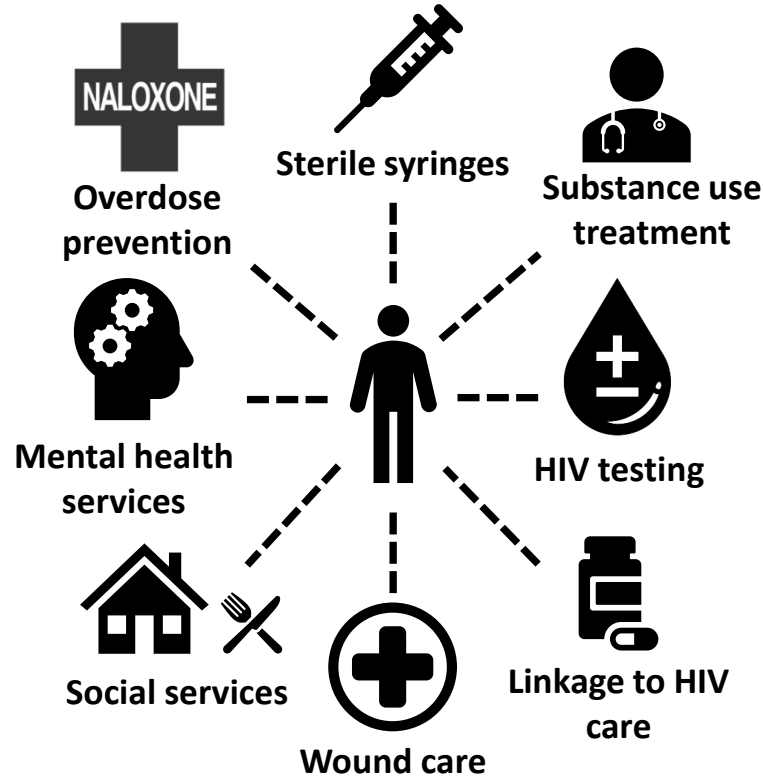
Medical and social service providers are making efforts to address co-occurring health and social issues that PWID face.

We used to refer to [job placements services], but we didn't have a single outcome from that... So we started **taking it upon ourselves**. In individual therapy, I **help people fill out job applications**.

-- SUD treatment provider

Participants suggested implementing low-barrier one-stop-shop models and improving service integration.

Suggestions



People have low access to clean syringes,
leading many to reuse or share needles.

We [PWID] **use the same needle until we can't...** I say that from experience because that's how I got it [HIV]... I don't feel like [HIV] rates would be so high if we had needle exchange.

-- PWID, woman with HIV

People mainly reported having low access to clean syringes due to the closure of syringe services programs (SSPs).

- Closure of previous SSPs
- Low awareness of syringe services elsewhere
- High-barrier access to existing syringe services, such as photo ID requirement
- Pharmacist refusals to provide syringes

Despite low access to clean needles, some people described using HIV risk reduction strategies.

- Disposing own used needles
- Collecting and disposing syringe litter found in hot-spot IDU areas
- Distributing clean needles
- Reducing size of injection network
 - Only sharing with close circle/main sexual partner
- Encouraging people to avoid re-using or sharing needles
- Disclosing HIV or hepatitis C status before sharing drugs or equipment with others
- HIV and hepatitis C testing regularly
- Smoking or snorting when clean needles are unavailable
- Using bleach to clean needles
- Backloading or frontloading with clean needles

There were numerous misconceptions about HIV transmission, prevention, and treatment.

If I was having sex with you, we was having a sexual relationship, **I didn't care to share a needle because we had sex.** To me, there wasn't no big difference because I didn't ever use a condom or anything.

-- PWID, man without HIV

Well, yeah [interested in PrEP] but I'm not a slut. I got morals, you understand? **I don't sleep with everybody...** because a lot of people don't have no respect for their self.

-- PWID, man without HIV

Provide health education to PWID

- HIV prevention (risk, safe injection)
- HIV treatment
- Overdose prevention
- Substance use treatment



PWID and stakeholders noted that exchange sex is contributing to the HIV outbreak.

Prostitution is a big part of [the increasing HIV infection rate], but a lot of it is sharing needles and stuff... But the thought of like these old men that are picking these girls up... I'm talking about 50, 60, 70 year old men who I'm sure are probably married, that are being infected with HIV and have absolutely no clue, no clue at all. And you know when it comes to men, a lot of men don't like to go to the doctor, period.

-- PWID, woman with HIV

PWID expressed strong negative views towards hospitals.

Barriers to
HIV services

[Hospital providers] have no respect. They see you as a user and they automatically are real nasty people. They're nasty. That's what I can say about them...That's probably why, well **another reason why I wouldn't go to the hospital unless I was dying, because they don't care about you.**

-- PWID, man without HIV

Every single person you run into in the hospital treats an addict like you are the **scum of the earth**...they basically make you feel like you **wish you were dead.**

-- PWID, man with HIV

[PWID have] been let down by the healthcare system and mistreated.

-- Medical provider

Providers understood the significance of the HIV outbreak but had **competing priorities** to address.

Barriers to
HIV services

Substance
use disorder
(SUD)

Trauma &
loss

Depression
& anxiety

Unemployment

Competing Priorities to Address

Chronic pain

Unstable
housing

Food
insecurity

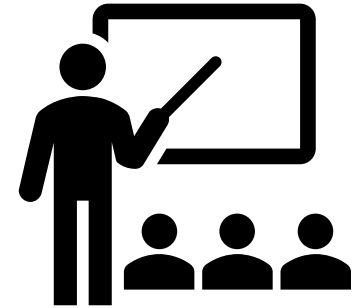
Acute
medical
conditions

Patients with SUD in the ED and across the hospital are not being routinely screened for HIV.

Barriers to
HIV services

Suggestions

- Medical providers have competing priorities (acute medical conditions)
- Participants suggested the following:
 - Train medical providers on SUD, substance use treatment, and stigma reduction
 - Link patients with SUD to the Ryan White program for testing and linkage to treatment

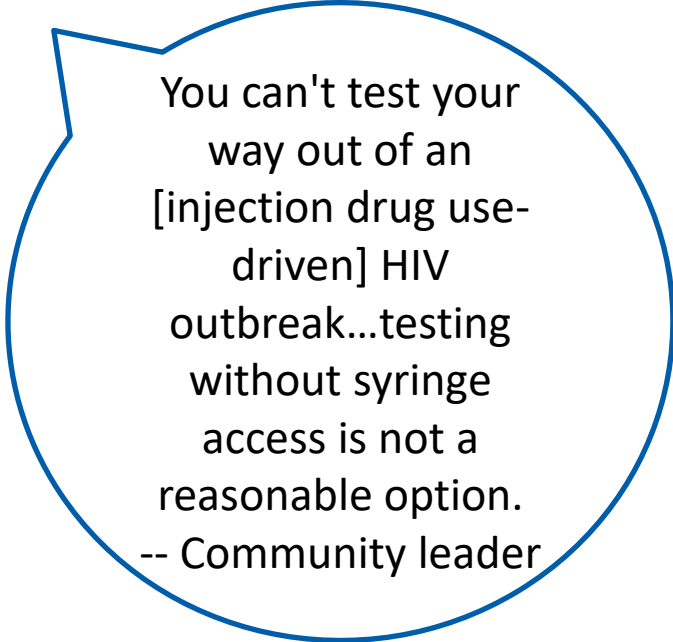


HIV testing outreach events are not reaching people at highest risk for HIV infection.

Barriers to
HIV services

Suggestions

- HIV testing outreach events could be improved
- Participants suggested the following:
 - Increase focus on hot-spot areas (West Side, Kanawha City, South Charleston)
 - Operate in the afternoons and evenings
 - Pair discrete, mobile outreach with stationed testing event
 - Provide comprehensive services (wound care, linkage to services)



You can't test your way out of an [injection drug use-driven] HIV outbreak...testing without syringe access is not a reasonable option.
-- Community leader

PWID and stakeholders had mixed views on the role of PrEP in HIV prevention.

I mean, if [PrEP] was affordable to me. I mean, taking the pill that would actually work. Advertise it. Tell people about it. Tell one person about it... The funny thing is, especially with homeless people, **tell one person, by an hour it gets spread all over town**, to every homeless person.
-- PWID, man without HIV

I've always found that a person who is appropriate for [PrEP], who would take that, probably would behave differently...I think the **appropriate population is extremely rare** around here. So the answer is, **I don't think it's offered often.**
-- Medical provider

Some people with HIV face multiple barriers to engagement & retention in care.

Barriers to
HIV services

- Need to enroll in Medicaid and get a photo ID
- Low awareness of Ryan White across hospital
- Medical providers outside of Ryan White have competing priorities
- High medical mistrust (especially in hospitals) due to previous experiences with provider stigma and discrimination
- Leaving hospital against medical advice without linkage to HIV care
- Long waiting times to complete necessary labs and provider visits (anxiety about or actual experience of withdrawal symptoms)
- Stolen medications due to unstable housing
- Fear of HIV disclosure and HIV stigma

People who accessed HIV testing or treatment in the past 6 months had positive experiences.

HIV services

I had one **[HIV test]** in the **parking lot** over here, just like the little finger tab test. They said in six months or something like that, it can take a while for it to show up, so **I done it again** and I was clean again... I was **walking by**, and I walked there to see what was going on and yeah, got me a **\$10 gift card... It was something to do. I was just curious.**

-- PWID, man without HIV

Oh, I love them [Ryan White clinicians]. They're **good people. Down to earth.** Talk to you like I'm talking to you...[ART has] worked on me very well. I've missed a day or two here and there. I try not to, but I can tell in my body when I do. Then I get back on it. **I... take it every night before I go to bed.** That way I don't forget.

-- PWID, woman with HIV


Misconceptions about SUD treatment, stigma, delayed linkage, and relapse triggers pose barriers to engagement and retention.

Barriers to
SUD services

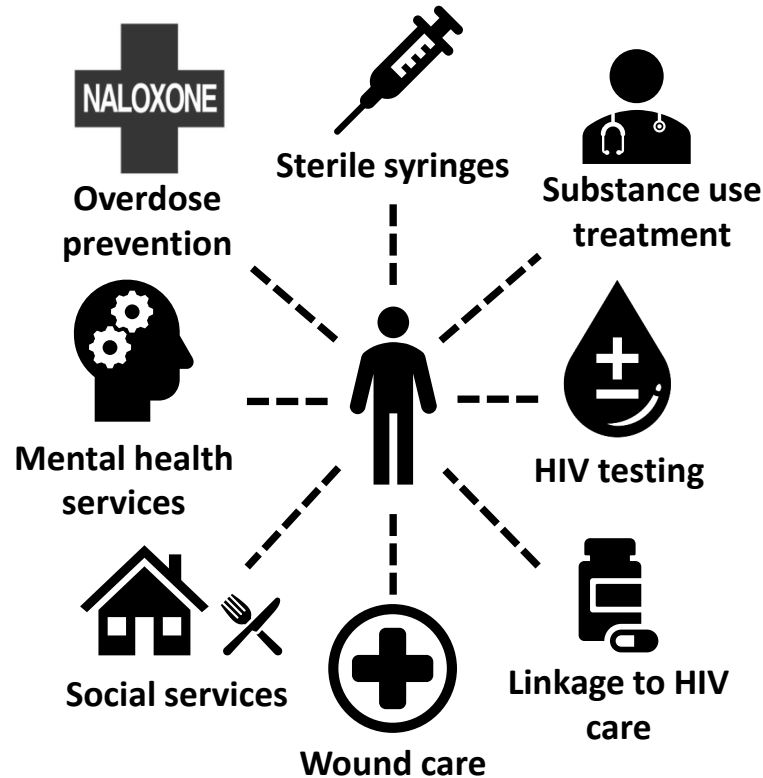
[Methadone is] **no different than getting a bag of dope...**it's just legal.
-- PWID, woman with HIV

I went with my oldest sister. Got clean. And then when I come back, it was... **How they say? You've got to change the people, places, and things? It's true.** Because as soon as I come back, it's the same situation. And I went right back to getting high.
-- PWID, man without HIV

Summary of key findings from interviews

- Multiple, co-occurring complex challenges
 - Low access to clean syringes and syringe services programs, leading many to reuse or share needles
 - Exchange sex is contributing to the HIV outbreak
 - Experiences of stigma and discrimination in hospitals, exacerbating medical mistrust
 - Structural and individual-level barriers to accessing HIV and substance use services
 - Individuals at highest risk are not accessing HIV testing regularly
- 

Participants provided suggestions for service integration, improved access, and stigma reduction



...It's going to take people rowing in the same direction.
-- Social service provider



Next Steps

Epi-Aid: Next Steps

- **Complete additional stakeholder interviews**
- **Continue data analysis**
 - Objective 3: Partner services data are still being updated and entered into the database. Findings will be shared with BPH and KCHD at a later date.
- **Share final report and recommendations in late July or early August**
- **Support BPH and KCHD with dissemination of findings, as needed**

Acknowledgements

■ WV Bureau for Public Health

- Ayne Amjad
- Shannon McBee
- Amy Atkins
- Suzanne Wilson
- Erica Thomasson
- Shawn Balleydier
- Trista Stewart
- Vicki Hogan
- Miracle Boltz
- Bridget Rose
- Will Cohen
- Misty Workman
- Alana Hudson
- Jessica Hoffman
- Lindsey Mason
- Melody Wilkinson
- Margret Watkins
- Carolyn Smith

■ Kanawha-Charleston Health Department

- Sherri Young

■ Interview participants

■ CAMC

- Ryan White Program

■ Health Right

■ Manna Meal

■ Covenant House/HOPWA

■ WV Bureau for Behavioral Health

■ WV Board of Pharmacy

CDC Epi-Aid Team

■ Field Support

- Danae Bixler
- Katie Curran
- Molly Deutsch-Feldman
- Randy Jefferson
- Steve Kowalewski
- Chang Lee
- Paul McClung
- Robert McDonald
- Pete Moore
- Anne Moorman
- Ken Myers
- Alexa Oster
- Melinda Salmon
- Nancy Worthington

■ Remote Support

- Monica Adams
- Alice Asher
- Sharoda Dasgupta
- Anne Marie France
- Senad Handanagic
- Brandon Hugueley
- Chris Jones
- Robyn Neblett Fanfair
- Stephen Perez
- Phil Salvatore

Disclaimer

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of Health and Human Services.

Questions?

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of HIV/AIDS Prevention

