

The Intersection of HIV and Substance Use:

Enhancing the Care Continuum with Evidence-Based Practices

Training Series: Session 1
January 10, 2024


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
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ON MUTE




Microphone ON



Camera OFF



Camera ON
- » Your participation throughout today via chat is appreciated!
 - » Locate the chat box. On the bottom middle of your screen, click on the chat icon. This will open the "Zoom Group Chat" pane on the right side of your screen. You will see messages throughout the webinar on there. When prompted by the presenters, type in your answers or questions there.






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HOUSEKEEPING

Today is Session 1.

Please complete the evaluation and post-test for the webinar that will be sent out via email after each session.

You will be receiving a PDF of today's presentation.

This session is being recorded.

Follow-up questions?

Contact Carlos Mena:
cmena@healthmanagement.com

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CEUS AND CMES ELIGIBILITY AND DISTRIBUTION

- » This series is eligible for both CEUs and CMEs
 - » These activities have been approved for CEUs by the Minnesota Board of Behavioral Health and Therapy for 3 hours of credit for LADCs and LPC/LPCCs (total of 12 hours if all four sessions are fully attended)
 - » These activities have been approved for CMEs by the American Academy of Family Physicians for 3 hours of credit (total of 12 hours if all four sessions are fully attended)
- » To qualify for CEUs or CMEs, you are required to
 1. Complete the pre-training quiz
 2. Be in attendance for the entire session
 3. Complete the accompanying evaluation survey for each session attended
 4. Complete the post-training quiz
- » CEU/CME certificates will be issued approximately 1-2 weeks AFTER the completion of the series.

Follow-up questions?

Contact Carlos Mena: cmena@healthmanagement.com

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WELCOME



Shea Grutemaro
(they/them)

Program Officer | HIV Community Services Unit
Minnesota Department of Human Services

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ACKNOWLEDGMENTS

We would also like to thank our community partners for their support in developing this curriculum.



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LAND ACKNOWLEDGMENT



Every community owes its existence and vitality to generations from around the world who have contributed their hopes, dreams, and energy to making the history that led to this moment. Some were brought here against their will, some were drawn to leave their distant homes in hope of a better life, and some have lived on this land for more generations than can be counted. Truth and acknowledgment are critical to building mutual respect and connection across all barriers of heritage and difference.


We begin this effort to acknowledge what is buried by honoring the truth. We are standing on the ancestral lands of the Dakota people. **We want to acknowledge the Dakota, the Ojibwe (pronounced ow-jeeb-way), the Ho Chunk, and the other nations of people who also call this place home.** We pay respects to their elders past and present.

Please take a moment to consider the treaties made by the Tribal nations that entitle non-Native people to live and work on traditional Native lands. Consider the many legacies of violence, displacement, migration, and settlement that bring us together here today. Please join us in uncovering such truths at any and all public events.*


*This is the acknowledgment given in the USDAC Honor Native Land Guide – edited to reflect this space by Shannon Geshick, MTAG, Executive Director Minnesota Indian Affairs Council

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TODAY'S PRESENTERS



Charles Robbins, MBA
(he/him/his)
Principal
Health Management Associates



Akiba Daniels, MPH
(she/her/hers)
Senior Consultant
Health Management Associates



Helen DuPlessis, MD, MPH
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Principal
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DISCLOSURES

Faculty	Nature of Commercial Interest
Charles Robbins, MBA	Mr. Robbins discloses that he is an employee of Health Management Associates, a national research and consulting firm providing technical assistance to a diverse group of health care clients.
Akiba Drew, MPH	Ms. Drew discloses that she is an employee of Health Management Associates, a national research and consulting firm providing technical assistance to a diverse group of health care clients.
Helen DuPlessis, MD, MPH	Dr. DuPlessis discloses that she is an employee of Health Management Associates, a national research and consulting firm providing technical assistance to a diverse group of health care clients. She is also a Board Member of Blue Shield of California Health Plan.
Jeanene Smith, MD	Dr. Smith discloses that she is an employee of Health Management Associates, a national research and consulting firm providing technical assistance to a diverse group of health care clients.

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AGENDA FOR WEBINAR SERIES

Session	Topics
#1 WEDNESDAY, JAN 10 12:00 pm to 3:00 pm	<input type="checkbox"/> Understanding HIV <input type="checkbox"/> HIV Testing, Treatment and Prevention <input type="checkbox"/> The Science of Addiction <input type="checkbox"/> Screening, and Assessment
#2 WEDNESDAY, JAN 17 12:00 pm to 3:00 pm	<input type="checkbox"/> Working with Justice Involved Persons <input type="checkbox"/> Substance Use Disorder Treatment with Medications <input type="checkbox"/> Mental Health Treatment and Counseling <input type="checkbox"/> Stimulant Use <input type="checkbox"/> Chem Sex
#3 WEDNESDAY, JAN 24 12:00 pm to 3:00 pm	<input type="checkbox"/> Ethical and Legal Issues <input type="checkbox"/> Funding and Policy Considerations <input type="checkbox"/> HIV Risk Reduction <input type="checkbox"/> SUD Harm Reduction <input type="checkbox"/> HIV and Stigma <input type="checkbox"/> Motivational Interviewing
#4 WEDNESDAY, JAN 31 12:00 pm to 3:00 pm	<input type="checkbox"/> Cultural, Racial and Sexual Identities <input type="checkbox"/> Pregnancy and HIV, SUD/ODU <input type="checkbox"/> Accessing, Obtaining, and Integrating Services for Individuals with HIV and SUD in Minnesota

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CHATTER FALL

Please respond to following prompt by typing into the chat box

Please share a curiosity you bring with you today regarding today's topics

- » Understanding HIV
- » HIV Testing and Treatment
- » The Science of Addiction
- » Screening, and Assessment

Type your response and don't click enter.

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SMALL BREAKOUT GROUPS

GET TO KNOW YOUR TRAINING COLLEAGUES

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BREAKOUT ACTIVITY

“GET TO KNOW YOUR COLLEAGUES”

INSTRUCTIONS

- » Step 1: Review How Breakouts Work
- » Step 2: Group Breakout 5 min
 - » Share the following with the other participants in the room:
 - » Name
 - » Your pronouns
 - » Share one thing that you want people to know about you that relates to this training
- » Step 3: Return to Main Room

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BREAKOUT ACTIVITY

“GET TO KNOW YOUR COLLEAGUES”

HOW BREAKOUTS WORK

1. Click ‘Join’ when you see this prompt:



2. This message will appear.



3. You’ll enter a “room” with 3-4 colleagues, please ensure to unmute your microphone.



Microphone On

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» Name

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» Share one thing that you want people to know about you that relates to this training

» Step 3: Return to Main Room

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BREAKOUT ACTIVITY

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THE INTERSECTION OF HIV AND SUD

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CONTEXT FOR THE INTERSECTION OF HIV & SUD

Substance use disorder (SUD) is frequently diagnosed among people with HIV.

SUD also increases risk for acquiring HIV infection.

The federal Health Resources and Service Administration (HRSA) recognizes the benefit of substance abuse treatment service for people with HIV and classifies outpatient treatment as a core medical service.

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CONTEXT FOR THE INTERSECTION OF HIV & SUD

Tremendous biomedical advancements in HIV prevention and treatment have led to aspirational efforts to end the HIV epidemic.

However, this goal will not be achieved without addressing the significant mental health and substance use problems among people living with HIV (PLWH) and people vulnerable to acquiring HIV.

These problems exacerbate the many social and economic barriers to accessing adequate and sustained healthcare.

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GLOSSARY OF TERMS

- » Sexual orientation – a person’s identity in relation to the gender or genders to which they are sexually attracted (straight, gay, lesbian, asexual, bisexual, pansexual)
- » Gender identity and/or expression - internal perception of one’s gender; how one identifies or expresses oneself.
 - » Cisgender – a term used to describe a person whose gender identity aligns with those typically associated with the sex assigned to them at birth
 - » Transgender – refers to an individual whose current gender identity and/or expression differs from the sex they were assigned at birth (may have transitioned or be transitioning in how they are living)
 - » Gender Expansive - refers to an individual who expresses identity along the gender spectrum (genderqueer, gender nonconforming, nonbinary, agender, two spirit)
- » Sexual Minority – refers to a group whose sexual identity orientation or practices differ from the majority of and are marginalized by the surrounding society.

SOURCE: Centers for Educational Justice and Community Engagement, UC Berkeley

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GLOSSARY OF TERMS

- » Race - is usually associated with inherited physical, social and biological characteristics. In this context that means race is associated with biology. Institutionalized in a way that has profound consequences (White, African American, American Indian Alaskan Native, Native Hawaiian or Pacific Islander)”
- » Ethnicity - a term used to categorize a group of people with whom you share learned characteristics and identify according to common racial, national tribal, religious, linguistic, or cultural origin or background. (Hispanic, Non-Hispanic Black, etc.)

SOURCE: US Office of Management and Budget: Federal Register Vol. 62(210): 58782

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GLOSSARY OF TERMS

- » Health Insurance Portability and Accountability Act (HIPAA) - required the creation of national standards to protect sensitive patient health information (PHI) from being disclosed without the patient's consent and includes a Privacy Rule addressing disclosure of and access to PHI; the Security Rule protects disclosure of and access to electronic PHI (e-PHI) a subset of information covered by the Privacy Rule
- » Code of Federal Regulations, Title 42, Part 2 (42 CFR Part 2) – a complicated set of regulations that strengthen the privacy protections afforded to persons receiving alcohol and substance use treatment (in addition to the more general privacy protections afforded in HIPAA). The regulations restrict the disclosure and use of alcohol and drug patient records which are maintained in connection with any individual or entity that is federally assisted and holds itself out as providing, and provides, alcohol or drug abuse diagnosis, treatment or referral for treatment (42 CFR § 2.11)
- » Family Education Rights Protection Act (FERPA) - protects the privacy of student education records in public or private elementary, secondary, or post-secondary school and any state or local education agency that receives funds under an applicable program of the US Department of Education.

SOURCE: Centers for Disease Control and Prevention; and the Substance Abuse and Mental Health Services Administration

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COMMON ACRONYMS

ART – Antiretroviral therapy	PEP – Post-exposure prophylaxis
AUD – Alcohol use disorder	PrEP – Pre-exposure prophylaxis
IDU – Injection or intravenous drug use	PLWH – Person(s) living with HIV
MSM – Men who have sex with men	PWID – Person(s) who injects drugs
ODU – Opioid use disorder	SUD – Substance use disorder
PEH – Person(s) experiencing homelessness	

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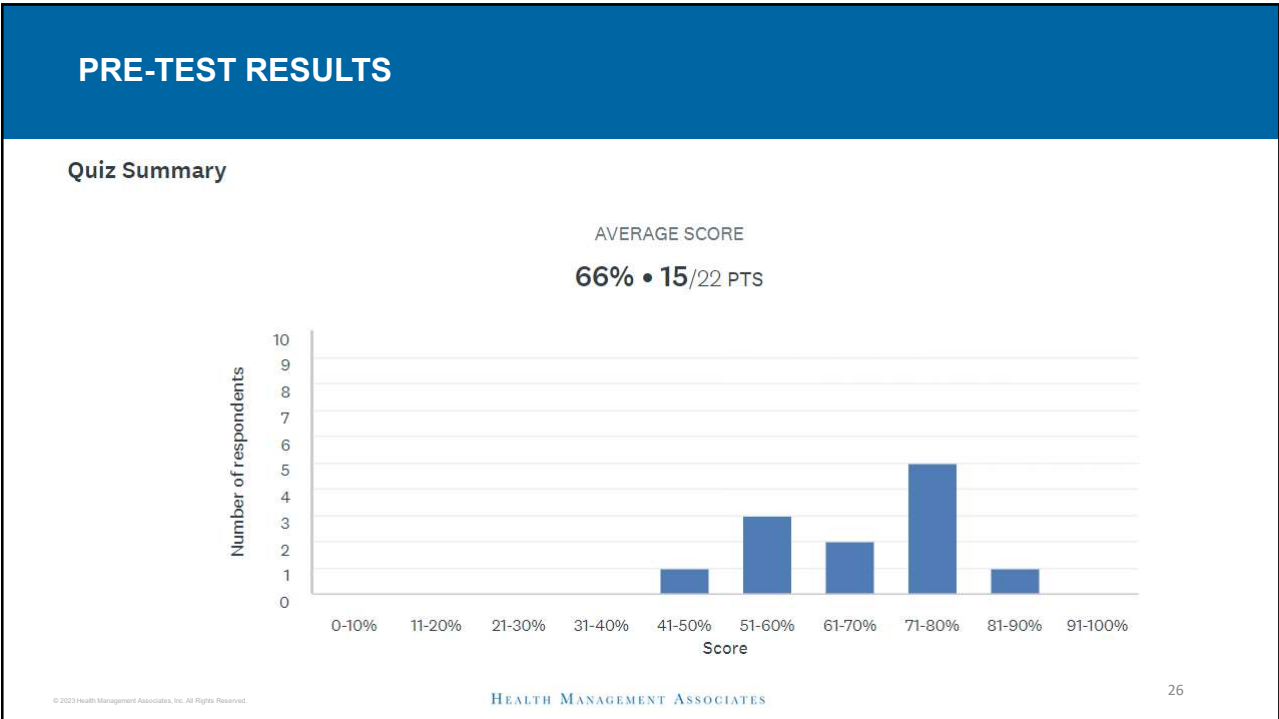
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UNDERSTANDING HIV; HIV TESTING AND TREATMENT; THE SCIENCE OF ADDICTION, SCREENING AND ASSESSMENT

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TIME FOR A POLL

What is the role that best describes your work?

- » Administration / Programs
- » Counselor / Therapist / LADC
- » Case Manager
- » Harm Reduction / Peer Recovery
- » Nurse / Physician
- » Probation Officer / Justice Involved
- » Sexual Health / Community Health Worker
- » Social Worker / Child Welfare / Housing
- » Workforce / Skills Development

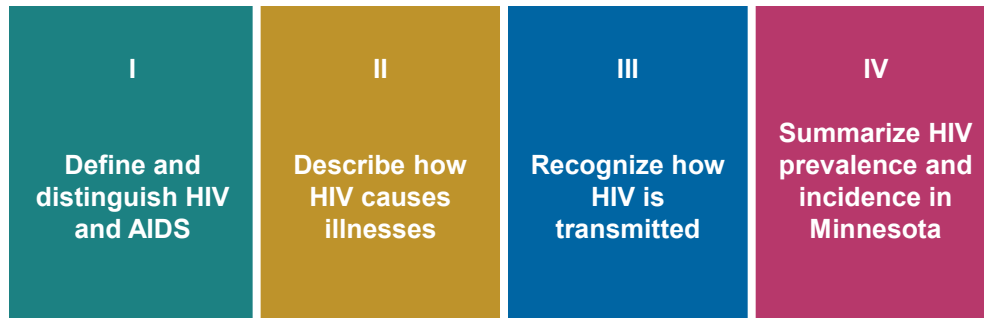


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UNDERSTANDING HIV

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LEARNING OBJECTIVES: UNDERSTANDING HIV



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WHAT IS HIV?

HIV is the virus

- » **H**uman: the virus can only infect human beings
- » **I**mmunodeficiency: the virus destroys T-helper cells, an essential component of our body's immune system, leading to a deficiency in our body's ability to fight infection.
- » **V**irus: the organism is a virus which is incapable of reproducing by itself; it must use a human cell to reproduce.

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WHAT IS HIV?

Characteristics

- » Ribonucleic acid (RNA) virus
- » Classified as retrovirus (the virus inserts a copy of its genetic material (RNA) into the DNA of a host human cell)
- » Spread from person-to-person contact by contact with certain body fluids
- » Weakens the immune system of a person by replicating inside T cells, a type of white cell also known as CD4 cells. The T cells are destroyed during this process.
- » Once established, infection with HIV is chronic.
- » HIV is the virus that causes AIDS.

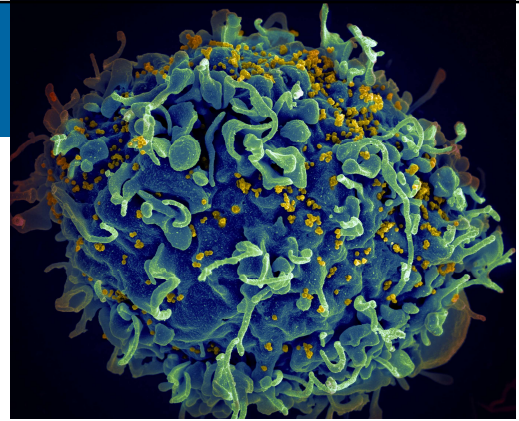


Photo Credit: National Cancer Institute on Unsplash

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TIME FOR A POLL

Approximately how many people in the United States are living with HIV?

- A. 275,000
- B. 500,000
- C. 1,100,000
- D. 2,300,000

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HIV QUICK FACTS

- » HIV is a **chronic manageable infection**
- » Approximately 1.1 million people are living with HIV in the United States
- » In 2021, an estimated **32,100 new HIV infections** occurred in the United States.
- » HIV continues to have a disproportionate impact on certain populations, particularly **racial and ethnic minorities and gay, bisexual, and other men who have sex with men.**

<https://www.hiv.gov/hiv-basics>
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WHAT IS AIDS?

- » AIDS is the disease:
 - » **Acquired:** HIV is not a condition passed on genetically; a person must become infected with it
 - » **Immune:** the immune system's ability to fight off viruses and bacteria becomes much less effective
 - » **Deficiency:** the immune system fails to work properly
 - » **Syndrome:** there are a wide range of diseases and opportunistic infections a person may experience once the immune system is depleted by HIV

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WHAT IS AIDS?

- » It is a complex illness with a wide range of symptoms
- » AIDS refers to individuals who have particular "AIDS-defining" disease such as:
 - » a very low CD4 white blood cell count
 - » specific illnesses acquired due to the weakened immune system (e.g., Burkitt's lymphoma, Kaposi sarcoma, pneumocystis pneumonia, toxoplasmosis, wasting syndrome)

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STAGES

1. Acute HIV infection

- » HIV establishes infection in the body via replication within 11 days of initial acquisition
- » During acute infection, virus levels in the blood are very high.
- » Very contagious
- » Flu-like symptoms
- » ~ 50% of individuals will feel ill during acute infection

2. Chronic HIV infection

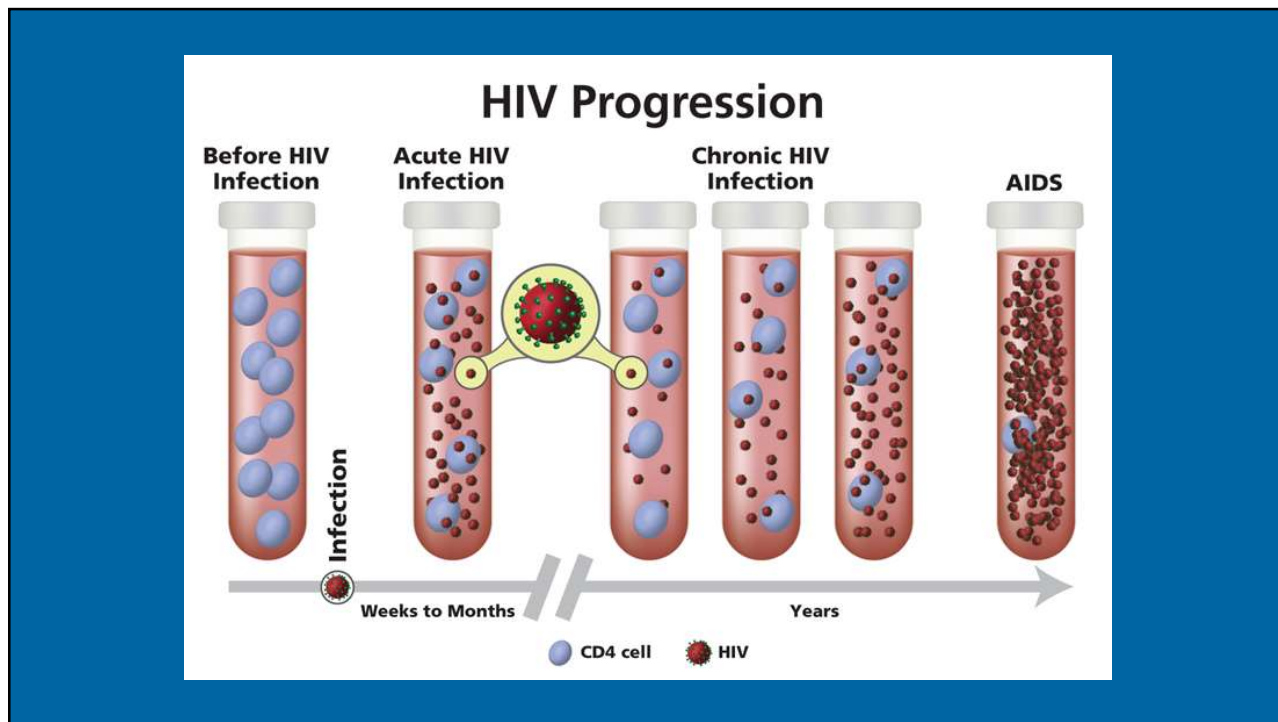
- » Asymptomatic or latent
- » Virus is active but is replicating at low levels
- » May last years
- » Viral load increases, CD4 count decreases

3. AIDS

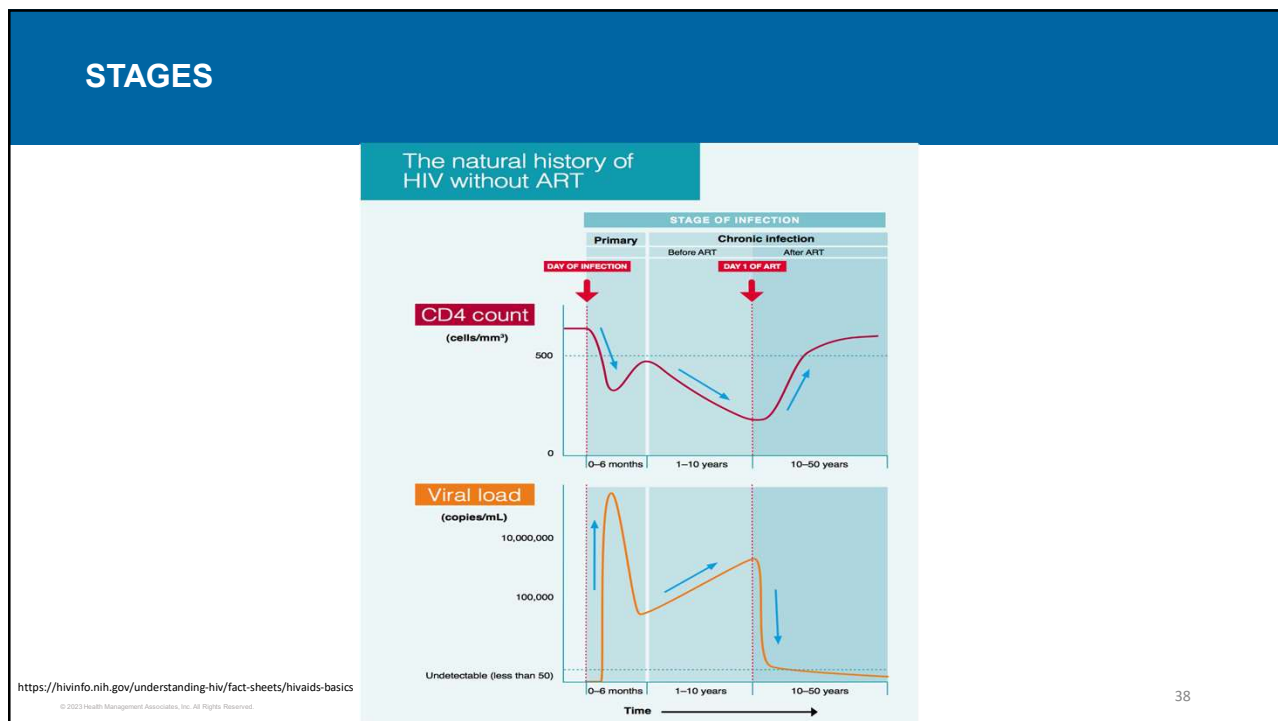
- » CD4 < 200 cells per cubic millimeter or opportunistic infections
- » Can have high viral load and be infectious

Source: <https://www.cdc.gov/hiv/basics/whatisshiv.html>

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SYMPTOMS OF HIV DURING ACUTE INFECTION

- » Fevers
- » Chills
- » Rash
- » Night sweats
- » Muscle aches
- » Sore throat
- » Fatigue
- » Swollen lymph nodes
- » Mouth ulcers

**HIV CAN NOT BE DIAGNOSED BY SYMPTOMS,
PARTICULARLY THOSE SIMILAR TO OTHER ILLNESSES**

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CHRONIC INFECTION

- » Once acquired, HIV is a lifelong infection
- » There is no cure for HIV, but the infection can be controlled with medications much like diabetes.
- » With treatment, the life expectancy of people with HIV is nearly the same as those who do not have HIV.
- » Without treatment, most people living with HIV infection will go on to develop AIDS.

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LATENT HIV RESERVOIR

- » Group of immune cells in the body that are infected with HIV but are not actively producing new HIV virus
- » HIV medications do not affect these cells
- » If a person stops taking their HIV medications, the infected cells in the reservoir can begin making new HIV virus

Source: <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/what-latent-hiv-reservoir>

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CHATTER FALL

Please respond to following prompt by typing into the chat box

What information do you need to better prepare you to work with or care for individuals who are living with HIV?

Type your response and
don't click enter.

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REFERENCES

UNDERSTANDING HIV

- » “About HIV/AIDS.” Centers for Disease Control and Prevention, <https://www.cdc.gov/hiv/basics/whatishiv.html>.
- » “The Stages of HIV Infection.” National Institutes of Health, U.S. Department of Health and Human Services, <https://hivinfo.nih.gov/understanding-hiv/fact-sheets/stages-hiv-infection>.

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HIV IN MINNESOTA

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HIV INCIDENCE AND PREVALENCE IN MINNESOTA

- » Overall, the number of newly diagnosed HIV infections reported increased 8%, with 262 cases reported in 2022, compared to 298 in 2021. Of those, 57% are living with HIV and 43% living with AIDS
- » The number of reported people living with HIV/AIDS in Minnesota is **9,805**.
- » Disparity
 - » Two thirds (65%) of new cases are among communities of color despite these communities representing 17% of the population



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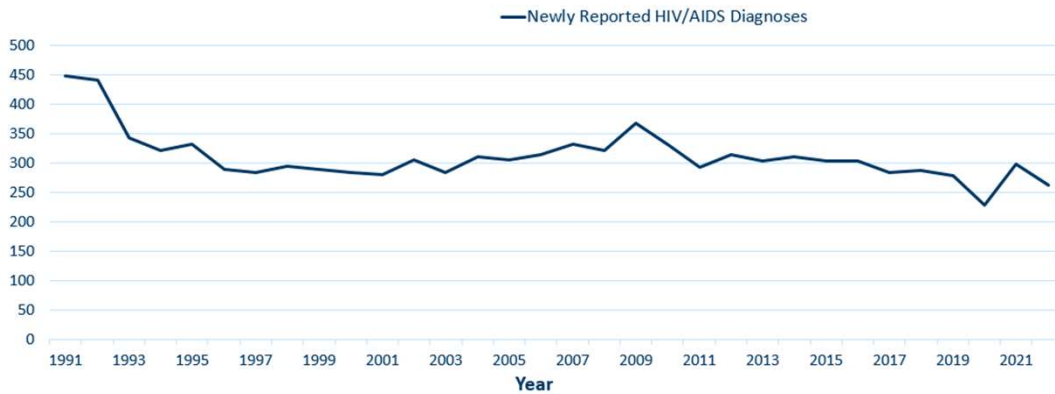
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HIV INCIDENCE IN MINNESOTA

New HIV Disease diagnosis, 1991-2022



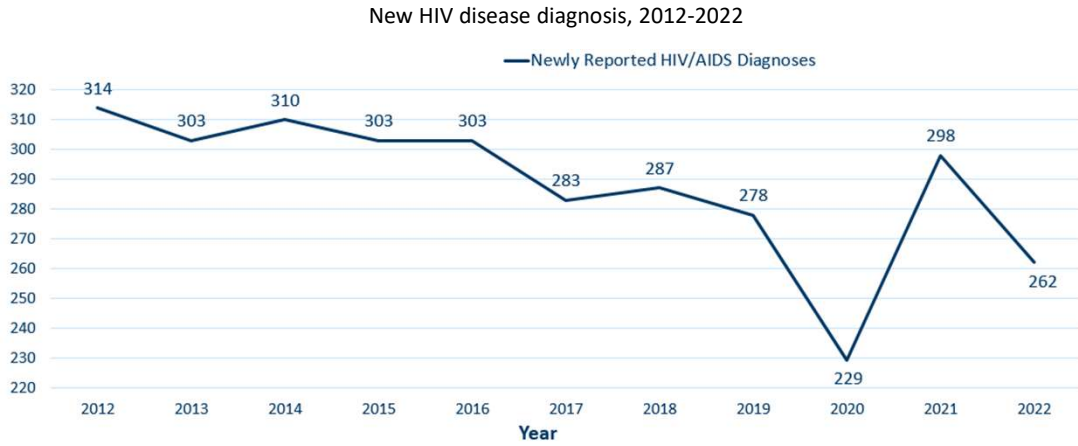
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HIV INCIDENCE IN MINNESOTA



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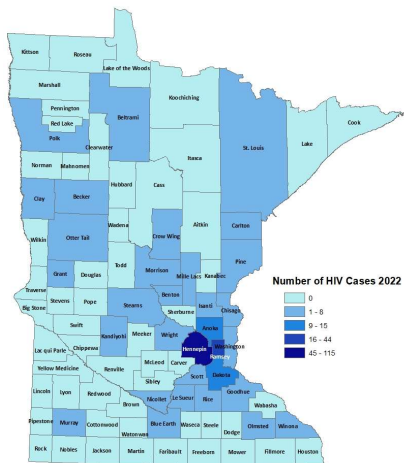
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HIV INCIDENCE IN MINNESOTA

HIV Diagnoses # by County of Residence at Diagnosis, 2022



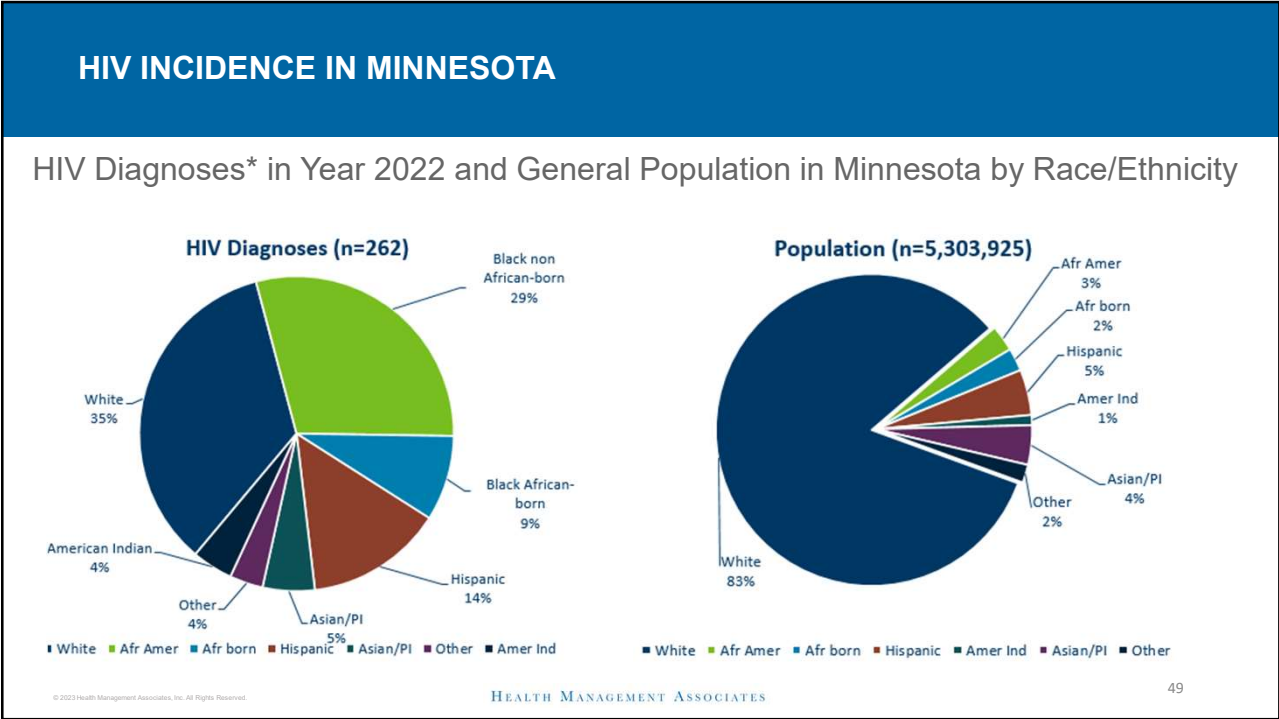
City of Minneapolis	70 cases (27%)
City of St. Paul	37 cases (14%)
Suburban*	86 cases (33%)
Greater Minnesota	69 cases (26%)
Total	262 cases

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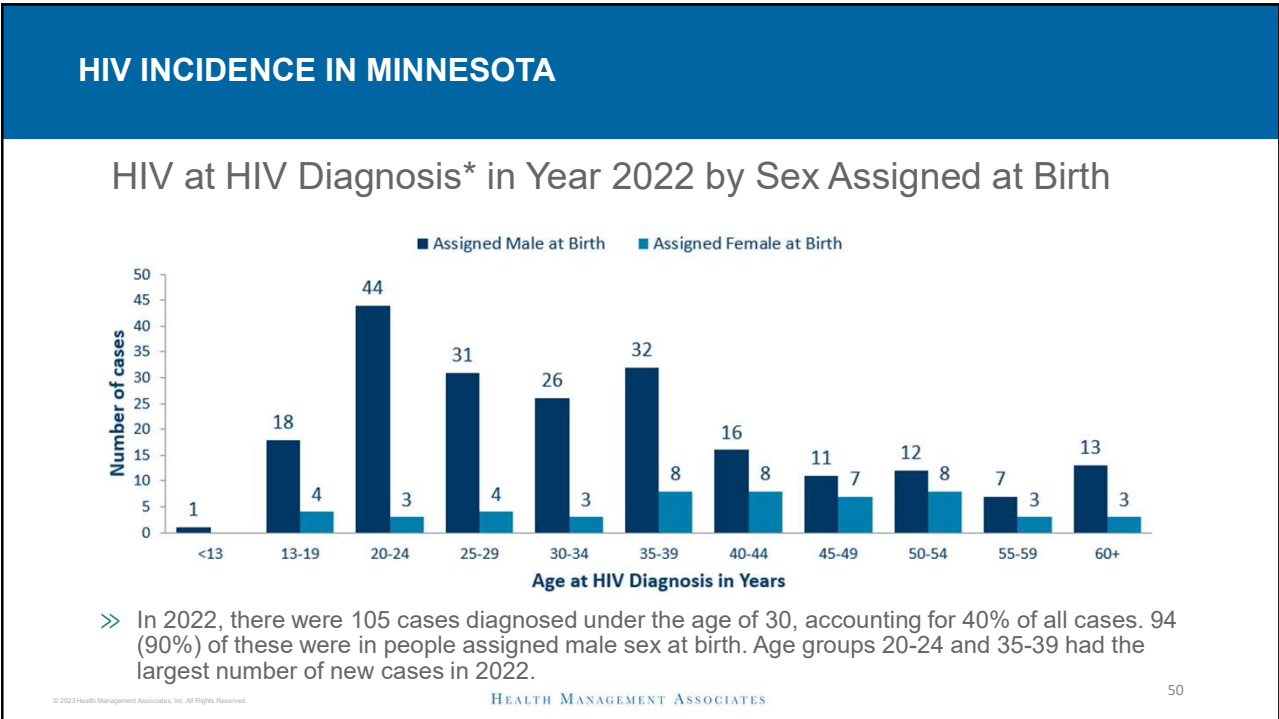
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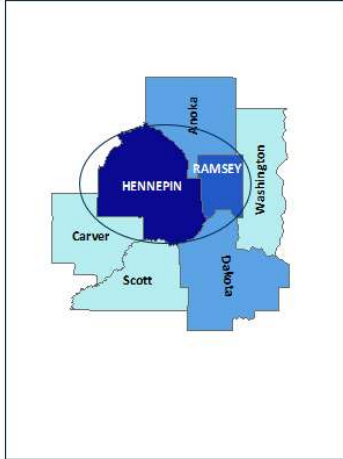
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HIV OUTBREAK IN MINNESOTA

HIV Outbreak in Hennepin/Ramsey Counties



Hennepin/Ramsey Counties HIV Outbreak

- » In February 2020, MDH Health Alert Network declared an outbreak among persons who inject drugs (PWID)
- » Current Case Count: 101 cases
- » Inclusion Criteria:
 - » 51 encampment-related
 - » 40 MSM/IDU
 - » 10 IDU

People at high-risk in the current outbreaks:

- » People who inject drugs (PWID) or share needles/works
- » People experiencing homelessness (PEH) or unstable housing
- » People who exchange sex for income or other items they need

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HIV OUTBREAK IN MINNESOTA

Duluth Region HIV Outbreak



- » In March 2021, MDH Health Alert Network declared an outbreak in the Duluth Region (30-mile area) among newly diagnosed HIV cases
- » Current Case Count: 23 cases

People at high-risk in the current outbreak:

- » People who inject drugs (PWID) or share needles/works
- » People experiencing homelessness (PEH) or unstable housing
- » People who exchange sex for income or other items they need
- » Men who have sex with men

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HIV OUTBREAK IN MINNESOTA

- » Synergistic with opioid epidemic
- » Injection drug use is often a secondary effect of the over-prescription of opioids for pain as a core feature of the opioid epidemic

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REFERENCES - HIV IN MINNESOTA

- » Minnesota Department of Human Services: HIV Resources
<https://mn.gov/dhs/people-we-serve/adults/health-care/hiv-aids/resources/>
- » “How the largest known homeless encampment in Minneapolis history came to be,” *The Appeal*. July 15, 2020. <https://theappeal.org/minneapolis-homelessness-crisis-powderhorn-park-encampment/>
- » “HIV Outbreak Response and Case Counts,” Minnesota Department of Health. <https://www.health.state.mn.us/diseases/hiv/stats/hiv.html>
- » “ACLU Minnesota, Mid-Minnesota Legal Aid file lawsuit to stop sweeps of homeless encampments,” KARE 11. October 19, 2020. <https://www.kare11.com/article/news/local/aclu-mn-files-suit-over-homeless-encampment-sweeps/89-8d5f49b5-43bd-4602-899b-4fcbe6b7d65a>
- » “HIV/AIDS Statistics,” Minnesota Department of Health. <https://www.health.state.mn.us/diseases/hiv/stats/index.html>
- » “Health Advisory: HIV Outbreak and Syphilis Concern in Duluth Area,” Minnesota Department of Health. March 4, 2021. <https://www.health.state.mn.us/communities/ep/han/2021/mar4hiv.pdf>
- » “Health Advisory: HIV Outbreak in Persons Who Inject Drugs (PWID),” Minnesota Department of Health. February 6, 2020. <https://www.health.state.mn.us/communities/ep/han/2020/feb3hiv.pdf>
- » “Quick Facts: Minnesota,” U.S. Census. <https://www.census.gov/quickfacts/MN>

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HIV TRANSMISSION

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HIV TRANSMISSION

HIV is in:

- » Blood
- » Semen
- » Vaginal fluids
- » Anal fluids
- » Breast milk

HIV is **not** in:

- » Tears
- » Sweat
- » Insect bites
- » Utensils and dishes
- » Furniture, toilets, clothes

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HIV TRANSMISSION

1. HIV must be present

- a. One person **must** be currently infected with HIV

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HIV TRANSMISSION CONT.

2. There needs to be enough virus

- a. Concentration of HIV determines whether infection will occur
- b. In the blood, the virus is very concentrated
 - i. Therefore, it can take a small amount of blood to infect someone
- c. In bodily fluids like semen, vaginal and anal fluids, or breastmilk, virus levels can change overtime
 - i. Therefore, the chances of transmitting HIV may be lower for those with lower viral loads

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HIV TRANSMISSION CONT.

3. HIV must get into the bloodstream

- a. Infectious fluids:
 - » Blood
 - » Semen
 - » Vaginal secretions
 - » Anal fluids
 - » Breast milk
- b. HIV can enter through:
 - » Open cut or sore
 - » Mucous membranes like the genitals, anus, and rectum
 - » Orally
 - » HIV cannot cross healthy, unbroken skin
- c. Main transmission routes for the HIV virus:
 - » Unprotected sexual intercourse
 - » Sharing needles for injection drug use
 - » Mother to child transmission

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SEXUAL TRANSMISSION

- » Most common HIV transmission route
- » Presence of other sexually transmitted infections can increase the risk of HIV transmission
- » Vaginal Sex
 - » The female is at the greatest risk because the lining of the vagina is a mucous membrane which can provide easy access to the bloodstream for HIV carried in semen
- » Anal Sex
 - » Without a condom, riskiest sexual activity for HIV
 - » Receptive partner is at greatest risk
 - » Cell wall of the rectum is very thin
 - » Anal tissue can be easily bruised or torn during sex which then provides easy access to the bloodstream for HIV carried in semen
 - » Insertive partner also at some risk because the membranes inside the urethra can provide entry for HIV into the bloodstream

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SEXUAL TRANSMISSION CONT.

- » Oral to Anal
 - » Poses minimal HIV risk
- » Oral sex
 - » Mouth is an unfriendly environment for HIV
 - » Saliva contains enzymes that break down the virus and the mucous membranes in the mouth are more protective than anal or vaginal tissue
 - » There are a few documented cases where it appears that HIV was transmitted orally, and those cases are attributed to ejaculation into the mouth
 - » Risk only for the person performing the oral sex
 - » With a female partner - performing oral sex on a woman who is menstruating increases the risk because blood has more HIV than vaginal fluid

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POLL

Approximately how many days can HIV survive in a syringe at room temperature?

- A. None
- B. 24 hours
- C. 5 days
- D. 10 days
- E. 21 days
- F. 42 days

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NON-SEXUAL TRANSMISSION

- » Typically involve medical settings or accident scenes where there is a very large volume of blood exposure or a needle stick
- » Injection drug use
 - » Very high risk for HIV transmission
 - » Sharing a syringe is the most efficient way as it passes blood directly from one person's blood stream to another's
 - » At **room temperature**, HIV can live as long as **21 days in a syringe**
 - » When the temperature is **cold** (near freezing), HIV can live up to **42 days in a syringe**
 - » An HIV-negative person has a **1 in 160** chance of getting HIV every time they use a needle that has been used by someone with HIV.
- » Tattoos and piercings
 - » No documented cases
 - » But theoretical risk of transmission
- » Mother to infant
 - » By exposure to blood and vaginal fluids
 - » During birth or through breast milk during feeding

Source: <https://news.yale.edu/2000/09/06/cooler-temperatures-enhance-survival-hiv-syringes>
 Source: <https://www.cdc.gov/hiv/basics/hiv-transmission/injection-drug-use.html>

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HOW DOES HIV CAUSE ILLNESS?

- » HIV reproduces continuously in the body from the first day of infection.
- » Initial Stage:
 - » Individuals can experience severe flu-like symptoms
 - » Initial stage can last 2-4 weeks
 - » Immune system attacks HIV and can clear large amounts of the virus every 24 hours
 - » For each virus particle cleared, a new one is created.
 - » Anti-HIV response temporarily created equilibrium between immune cells and HIV virus
 - » Equilibrium can last for months or years
- » After initial stage:
 - » No outward signs of illness that can last for years
 - » HIV viral load increases and CD4 T cell count declines
 - » Immune system starts working improperly
 - » HIV overwhelms immune system, leaving the body vulnerable to other illness-causing infections

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HIV AND HEPATITIS C (HCV) CO-INFECTIONS

- » HCV is a bloodborne virus transmitted through direct contact with the blood of an infected person.
- » Co-infection is common (50%-90%) among HIV-infected injection drug users (CDC, 2014).
- » In co-infected persons, age at time of HCV infection, immune cell (CD4) count and level of alcohol consumption are associated with a higher rate of liver fibrosis.
- » Risk of HCV similar to those of HIV:
 - » Transfusion prior to 1992
 - » Injecting drug use (most common)
 - » Long term hemodialysis
 - » High risk sexual contact
 - » Occupational exposures to blood or blood products
 - » Receiving an organ or tissue transplant from someone infected with HCV
 - » Transmission from HCV-infected mother to infant.

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HIV AND HEPATITIS C CO-INFECTIONS

- » As of Dec. 31, 2021, there were 32,810 persons who were reported to MDH and are assumed alive and living in Minnesota with chronic hepatitis C virus (HCV)
 - » Includes acute, chronic, and probable chronic cases
 - » 8,140 Co-infected for HIV and HCV
- » The U.S. Public Health Service/Infectious Diseases Society of America guidelines **recommend that all HIV-infected persons be screened for HCV infection** (CDC, 2014).

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REFERENCES - HIV TRANSMISSION

- » “HIV and Injection Drug Use”, Centers for Disease Control and Prevention (2021), <https://www.cdc.gov/hiv/basics/hiv-transmission/injection-drug-use.html>.
- » “How Is HIV Transmitted?”, HIV.govDate (2019), <https://www.hiv.gov/hiv-basics/overview/about-hiv-and-aids/how-is-hiv-transmitted>.

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HIV TESTING AND TREATMENT

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LEARNING OBJECTIVES: HIV TESTING AND TREATMENT

I

Explain HIV testing and methods, including testing and treatment policies in MN; Describe ART, what does ART stand for, and how it is used

II

Describe the relationship between substance use practices and increased risk of acquiring HIV

III

Explain the relationships between HIV and Hepatitis C

IV

Describe the options and indications for pre- and post-exposure prophylaxis (PrEP and PEP) and treatment of HIV infection

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HIV QUICK FACTS

- » Approximately 60% of people in the United States have never been tested for HIV.
- » Nationally, less than 30% of people in the United States most at risk of acquiring HIV were tested in the past year (gay, bisexual and other MSM, transgender women, and IDU).
- » In the 50 local jurisdictions where more than half of HIV diagnoses occur, less than 35% of people recommended for annual HIV testing were tested in the past year.

<https://www.cdc.gov/media/releases/2019/p0627-americans-hiv-test.html>

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GROUP DISCUSSION

What myths or barriers exist that prevent more people from getting an HIV test?



Use the “raise your hand” feature in Zoom or simply come off mute.

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HIV TESTING

- » First step in HIV diagnosis and preventing the spread of HIV
- » Testing is a crucial step in engaging people living with HIV into care
- » CDC recommends everyone 13 to 64 years old get tested for HIV at least once as part of their routine care
- » Additionally, clients should be tested if the client:
 - » Has engaged in risky behaviors
 - » Has ever had a sexually transmitted infections (STI)
 - » Has a history of sharing drug injection equipment
 - » Is presenting with any of a number of symptoms that might indicate recent infection with HIV or early symptomatic infection

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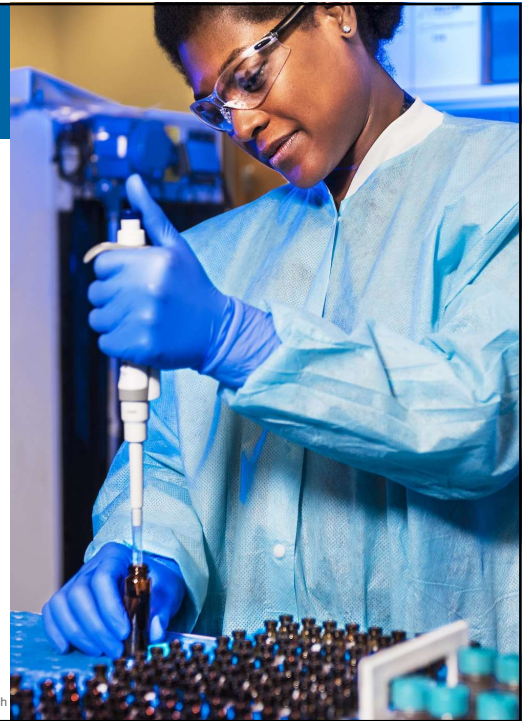
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TYPE OF TESTS

- » Testing has become more sophisticated over time – more sophisticated tests (i.e., 4th or 5th generation tests) look for both HIV antibodies and antigens
- » Antibody tests look for they body's antibodies to HIV in the blood or oral fluids
 - » Measure immune response to HIV
 - » Not useful in acute infections
 - » Rapid tests and FDA-approved HIV self tests
- » Antigen tests detect actual particles of the HIV virus that trigger the body to make antibodies
- » Antibody/Antigen tests detect both and most common test in the US
- » Nucleic acid test (NAT) looks for the actual virus in blood. Very expensive. Can detect HIV infection 10 to 33 days after an exposure.



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Photo Source : CDC on Unsplash

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RAPID HIV TESTS

- » Several FDA approved tests are available for use
- » Provides results in 10 to 40 minutes
- » Look for the presence of HIV antibodies
- » Either negative or reactive
 - » Negative means no HIV antibodies were detected
 - » If individual has had three or more months without an HIV risk exposure, the person can be considered negative
 - » If individual has had exposure, the person should be tested again after three full months
 - » Reactive means antibodies have been detected
 - » A confirmatory test is required before diagnosis is given
 - » A supplemental (4th generation) antibody immunoassay or NAT test is generally used as the confirmatory test
 - » This is done with a blood draw and processed at a medical lab
 - » Results given in one to two weeks
 - » Minnesota Department of Health (MDH) allows funded programs to do rapid to rapid confirmatory testing shortening this window
 - » Can also use a more recent antibody/antigen test to confirm



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MINNESOTA REPORTING

- » In Minnesota, anonymous testing is no longer offered due to reporting requirements.
 - » Confidential testing continues to be available.
- » Minnesota's reporting law requires testing sites to pass along all identifying information about the client to the Minnesota Department of Health (MDH).
- » This means a testing client's information is only used if a test is reactive, and then only to facilitate the process of linking clients to care.
- » Getting clients into care soon after they test HIV-positive will greatly improve their health and decrease their chance of spreading the virus.

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TREATMENT



- » There are now many medications a person living with HIV can take to slow the progression of the disease.
- » When taken as prescribed, these medications can keep a person's health stable for a very long time
- » When taken as prescribed these medications can also greatly reduce the ability to pass HIV to others.
- » Medications can be taken either daily by pill or every other month by injection

Photo Source (left to right): Naassom Azevedo, Joel Muniz, Jed Villejo, Dario Valenzuela, and Kaleidico. All on Unsplash

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WHAT HAPPENS IF DIAGNOSED HIV POSITIVE?

- » A thorough medical history is an important step to help the clinician proceed to clinical evaluation and formulate a treatment plan.
- » Before starting antiretroviral therapy (ART) in any patient, laboratory studies should be done and may include HIV ribonucleic acid (RNA) (or viral load), CD4+ T cell counts, blood counts, screening chemistries, syphilis, toxoplasmosis, purified protein derivative (PPD), hepatitis A, B, and C viruses, and chest x-ray.
- » **All patients with HIV should be tested and begin treatment with antiretrovirals as soon as possible, regardless of disease status.**
- » Adherence should be maintained because non-adherence can lead to the rapid development of drug resistance and disease progression.
- » One means to encourage adherence is to educate clients and their significant others about HIV/AIDS treatment (TIP 37; SAMHSA, 2008).
- » It is difficult for unhoused individuals to maintain adherence

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WHAT IS ANTIRETROVIRAL THERAPY?

- » Antiretroviral therapy (ART)
 - » Medicines used to treat HIV
 - » Do not cure or remove virus from the body
 - » Stops the virus from replicating
 - » Combination of HIV medications taken daily
 - » From different drug classes
 - » Blocks HIV at different stages of HIV life cycle
 - » **Goal: undetectable viral loads**

"Viral load suppression" is usually defined as having fewer than **200** copies of HIV per milliliter of blood (copies/mL).

"Undetectable" is now commonly defined as having fewer than **20** copies/mL because a lot of lab tests can now "detect" HIV at that level.

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UNDETECTABLE = UNTRANSMITTABLE (U=U)

- » People cannot transmit the HIV through sexual contract when their viral load is undetectable
- » Undetectable means too low to be measured (<20 copies per mL)
- » This can take up to 6 months after initiating HIV medications
 - » Confirmed by a blood test given by your doctor
 - » Should be followed up with another blood test 6 months afterwards



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U = U FOR NON-SEXUAL TRANSMISSION

- » Undetectable viral loads also crucial to pregnancy, breastfeeding, and injection drug use
 - » The risk of transmitting HIV during pregnancy with an undetectable viral load is one in one thousand
 - » The risk is not eliminated during breastfeeding, but an undetectable viral load reduces the risk of passing HIV
 - » Unsure of how much the risk is reduced when sharing needles during injection drug use



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U = U AND SEXUAL PARTNERS

- » Involving partners in treatment plan can help patients adhere to treatment
- » Encourage HIV-positive patients to talk to current and potential partners about what undetectable means
- » Counsel patients and their partners to use strategies to maintain healthy sexual lives
 - » Condoms – to prevent pregnancy and sexually transmitted infections (STIs)
 - » HIV treatment adherence (ART) for an HIV-positive patient
 - » Pre-exposure Prophylaxis (PrEP) and Post-exposure Prophylaxis (PEP) for an HIV-negative partner

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MEDICATION RESISTANCE

- » Stopping and re-starting treatment can cause drug resistance to develop
- » People receiving intermittent ART have twice the rate of disease progression compared to those receiving continual treatment
- » Transient increases in viral load followed by a dip back to undetectable called 'blips'
 - » Blips are common and are not indicative of a treatment failure
- » U.S. HIV treatment guidelines recommends viral load be measured every 3 – 4 months until undetectable, then less frequent

Photo Source :Myriam Zilles on Unsplash

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REFERENCES - HIV TESTING AND TREATMENT

- » Centers for Disease Control and Prevention (2019), “CDC Press Release: Most Americans Have Never Had an HIV Test, New Data Show.” <https://www.cdc.gov/media/releases/2019/p0627-americans-hiv-test.html>.
- » Minnesota Dept. of Health, “Undetectable = Untransmittable (U=U).”, <https://www.health.state.mn.us/diseases/hiv/prevention/uu/index.html>.
- » NYC Health, “HIV: Undetectable Equals Untransmittable (U=U).” <https://www1.nyc.gov/site/doh/health/health-topics/hiv-u-u.page>.

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HIV PREVENTION

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HIV PREVENTION

- » Safer sex practices like condom use
- » Antiretroviral advances
 - » Can reduce HIV viral load to undetectable levels making it less likely to be transmitted
- » Post-exposure Prophylaxis (PEP)
 - » For individuals who have been exposed to HIV
- » Pre-exposure Prophylaxis (PrEP)
 - » For HIV-negative individuals
 - » Reduce the risk of being infected with HIV by 92%-99%

Photo Source : greaterthan.org and Reproductive Health Supplies Coalition on Unsplash

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PrEP

PrEP (pre-exposure prophylaxis) is medicine people at risk for HIV take to prevent getting HIV from sex or injection drug use. When taken as prescribed, PrEP is highly effective for preventing HIV.

- » CDC endorsed PrEP for HIV prevention in May 2014
- » Once-daily pill
- » Taken by individuals at high risk including, but not limited to:
 - » People who inject drugs
 - » People with HIV+ sexual partners
 - » Individuals who intermittently or never use condoms

Photo Source : Alexander Grey on Unsplash

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PrEP AND WOMEN

- » Woman-controlled option to prevent HIV
- » Does not require negotiation or disclosure such as with condom use
- » Especially important for women experiencing intimate partner violence
- » Yet, underutilized in women due to systemic barriers to access



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PEP

PEP (post-exposure prophylaxis) means taking medicine to prevent HIV after a possible exposure.

PEP should be used only in emergency situations and must be started within 72 hours after a recent possible exposure to HIV.

- » Taking medicine to prevent HIV after a possible exposure
 - » During sex
 - » Through needle sharing
 - » Occupational exposures such as needle sticks
 - » If sexually assaulted
- » Only used in emergency situations
 - » Two antiretroviral medications taken daily for 28 days
 - » Afterwards, you need to return to doctor for a HIV test
 - » If you have frequent exposures to HIV, then PEP is not right for you. You should take PrEP.

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HIV AND COVID-19

- » People with HIV may be more likely to get severely ill from COVID-19
- » However, evidence suggests those virally suppressed are at no greater risk - booster is still generally recommended but should be at the advice of their physician
- » Vaccines are safe for HIV-positive patient
 - » A third dose of mRNA COVID-19 vaccination is recommended after the initial two doses
 - » Booster shots are already available
- » However:
 - » It may not fully protect them
 - » They should follow all precautions of an unvaccinated person
 - » They should continue taking their ART (or PrEP for uninfected individuals)
 - » Make sure you have a 30- to 90-day supply of medicine, if possible

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IMPACT OF COVID-19 ON CARE

- » Some STIs and HIV rates decreased during the pandemic by approximately 2%
- » Disruptions to care and testing likely impacted the number of cases reported
 - » Disruptions to preventative care means fewer testing opportunities
- » Presents challenges when tracking the two outbreaks currently happening

Photo Source : Nathan Dumlao on Unsplash

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REFERENCES - HIV PREVENTION

- » CDC: Prevention Basics
<https://www.cdc.gov/hiv/basics/prevention.html>
- » NIH.GOV: The Basics of HIV Prevention:
<https://www.cdc.gov/hiv/basics/prevention.html>

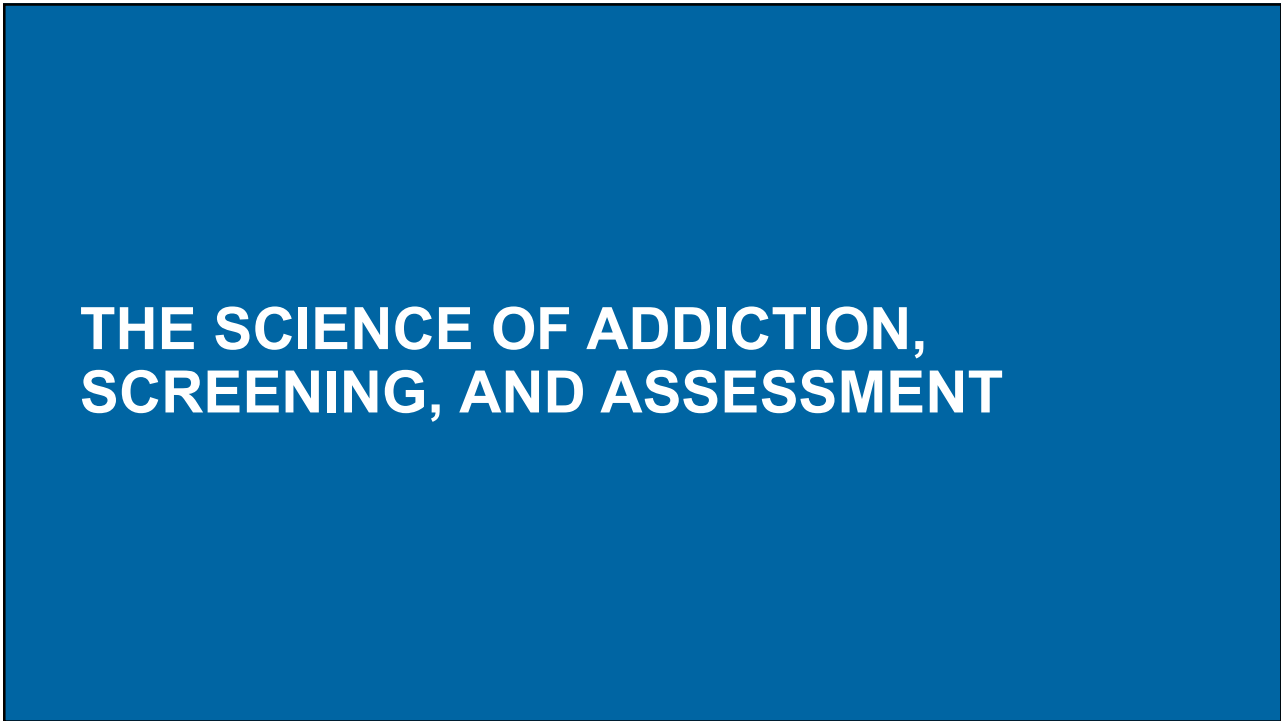
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QUESTIONS?


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CHATTER FALL

Please respond to following prompt by typing into the chat box

Please share a curiosity you bring with you today about the science, screening and/ or assessment of SUD

Type your response and **don't click enter.**

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LEARNING OBJECTIVES: THE SCIENCE OF ADDICTION, SCREENING, AND ASSESSMENT

<p data-bbox="391 1409 402 1430">I</p> <p data-bbox="277 1493 516 1629">Describe at least two ways in which dopamine influences OUD recovery and treatment</p>	<p data-bbox="662 1409 673 1430">II</p> <p data-bbox="553 1493 786 1629">Explain the neurobiological contributions to developing and sustaining addiction</p>	<p data-bbox="938 1409 950 1430">III</p> <p data-bbox="829 1493 1062 1713">Define and distinguish screening, assessment, and American Society of Addiction Medicine (ASAM) level of care determination</p>	<p data-bbox="1203 1409 1214 1430">IV</p> <p data-bbox="1097 1493 1333 1713">Identify and explain the complex interactions between HIV and SUD, such as viral load, treatment retention and compliance and retroviral resistance</p>
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POLL

Which of the following do you think is the *root* cause of substance use disorders?

- a) Personal choice and behaviors
- b) Impact of trauma and other adverse life events
- c) Abnormalities of neurochemicals in the brain
- d) I haven't decided yet

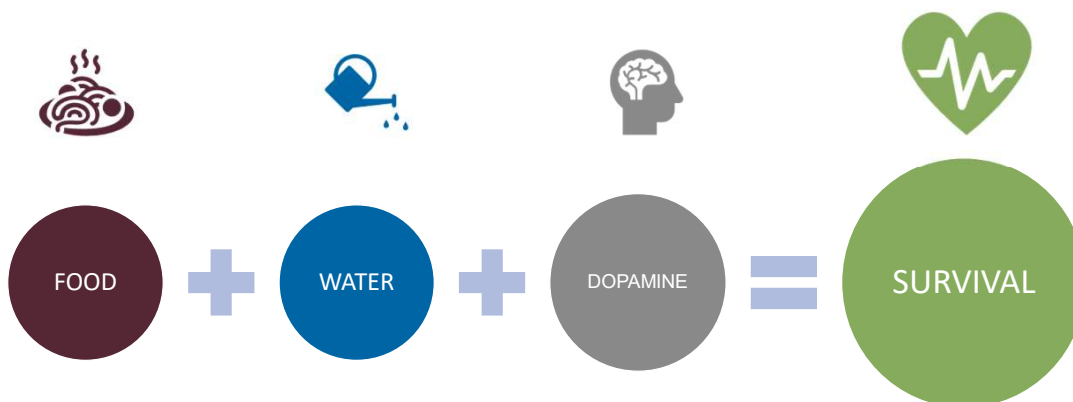
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SCIENCE OF ADDICTION



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SCIENCE OF ADDICTION

The diagram shows a sagittal cross-section of the human brain with several regions highlighted and labeled with blue boxes and arrows:

- Ant. Cingulate Gyrus:** A blue ring-like structure in the upper part of the brain.
- Nucleus Accumbens:** A small green structure located below the cingulate gyrus.
- Amygdala:** A red structure located below the nucleus accumbens.
- Ventral Tegmental Area:** A red structure located below the amygdala.
- Periaqueductal Grey:** A yellow structure located at the base of the brainstem.

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COMPARATIVE DOPAMINE PRODUCTION

The diagram illustrates the relative dopamine production levels for different substances compared to a baseline:

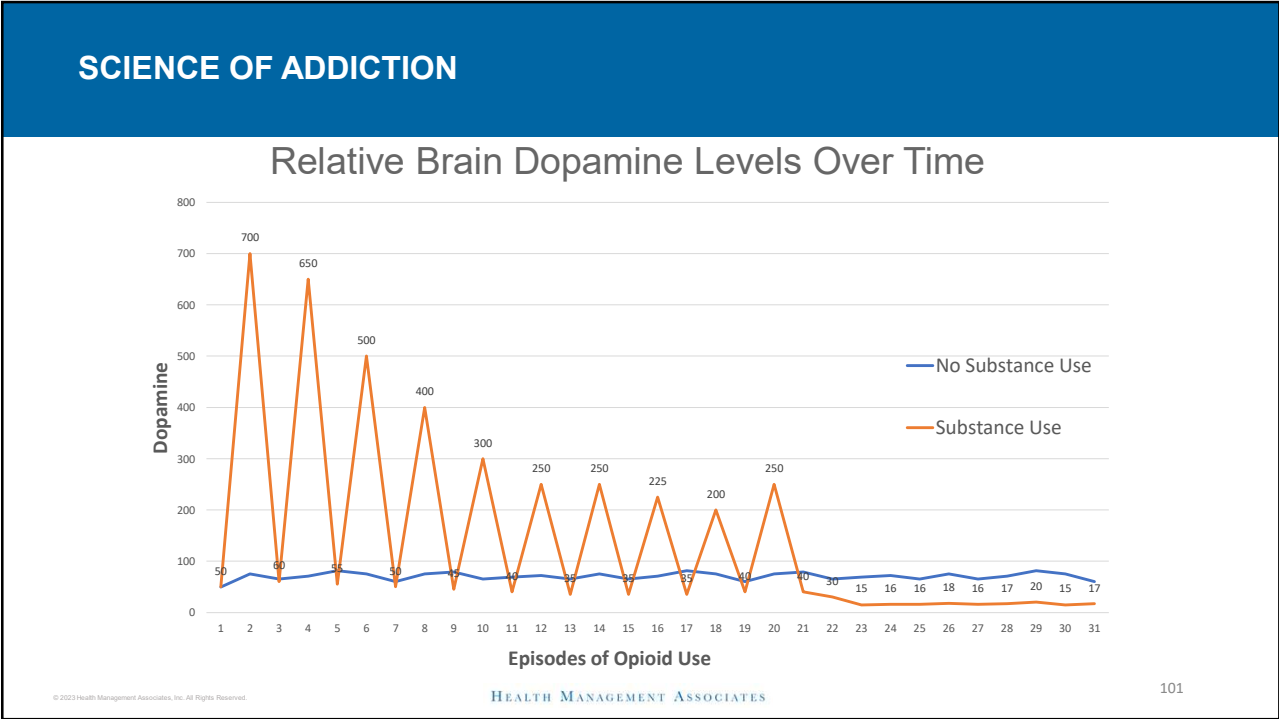
- BASELINE:** A central grey circle representing the normal level of dopamine production.
- METHAMPHETAMINES:** A large orange oval with an arrow pointing from the baseline to it, indicating a significant increase in dopamine production.
- HEROIN:** A large dark purple oval with an arrow pointing from the baseline to it, indicating a moderate increase in dopamine production.
- MARIJUANA:** A large blue oval with an arrow pointing from the baseline to it, indicating a slight increase in dopamine production.
- BEST DAY EVER:** A small green oval with an arrow pointing from the baseline to it, representing the highest possible dopamine production level.

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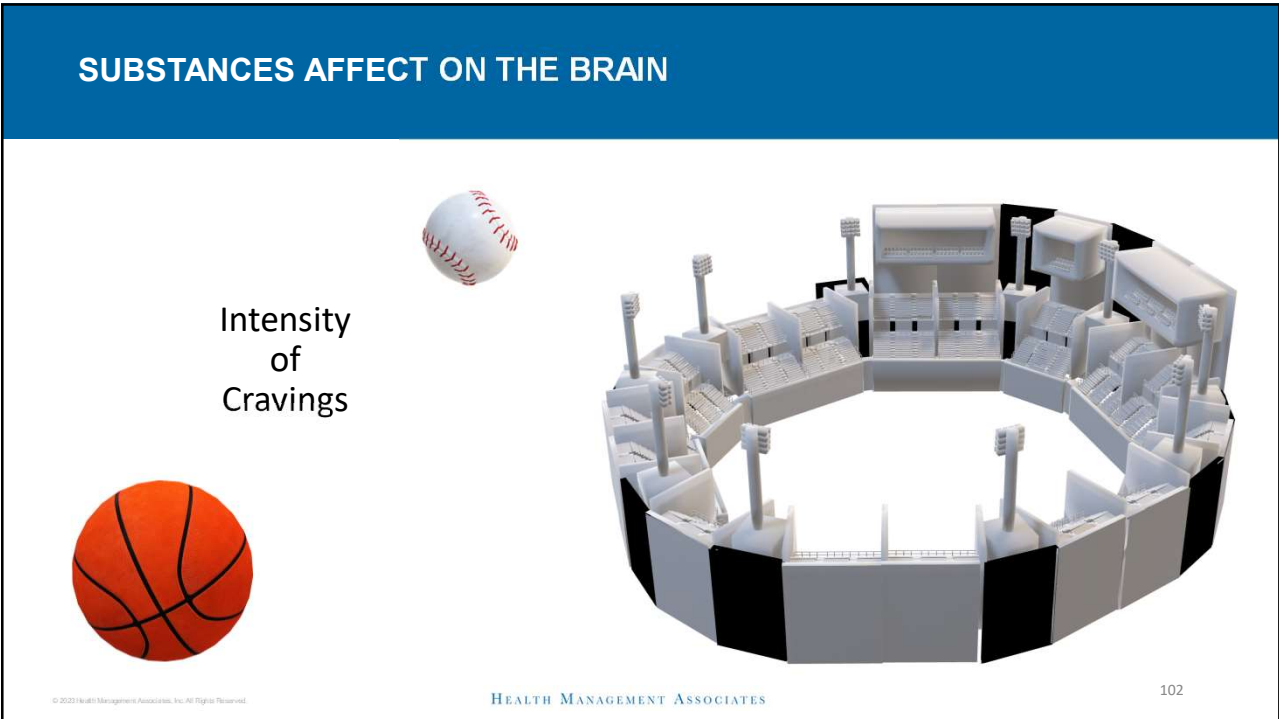
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DSM-5: DIAGNOSIS OF OPIOID USE DISORDER (OUD)

TABLE 1 Summarized DSM-5 diagnostic categories and criteria for opioid use disorder

Category	Criteria
Impaired control	<ul style="list-style-type: none"> • Opioids used in larger amounts or for longer than intended • Unsuccessful efforts or desire to cut back or control opioid use • Excessive amount of time spent obtaining, using, or recovering from opioids • Craving to use opioids
Social impairment	<ul style="list-style-type: none"> • Failure to fulfill major role obligations at work, school, or home as a result of recurrent opioid use • Persistent or recurrent social or interpersonal problems that are exacerbated by opioids or continued use of opioids despite these problems • Reduced or given up important social, occupational, or recreational activities because of opioid use
Risky use	<ul style="list-style-type: none"> • Opioid use in physically hazardous situations • Continued opioid use despite knowledge of persistent physical or psychological problem that is likely caused by opioid use
Pharmacological properties	<ul style="list-style-type: none"> • Tolerance as demonstrated by increased amounts of opioids needed to achieve desired effect; diminished effect with continued use of the same amount • Withdrawal as demonstrated by symptoms of opioid withdrawal syndrome; opioids taken to relieve or avoid withdrawal

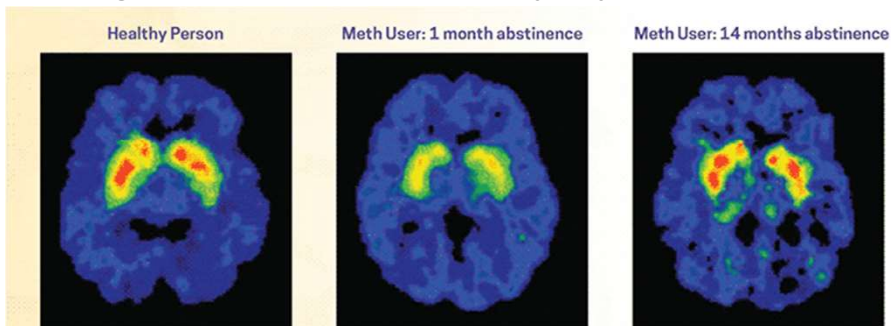
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DOPAMINE DEPLETION EFFECTS RECOVERY: IT TAKES TIME FOR YOUR BRAIN TO RECOVER

- » Prolonged drug use changes the brain in long lasting ways
- » Changes are both functional and structural
- » Return to normal dopamine production is under study (takes over 1 year)
- » Discontinuing treatment before brain recovery may affect outcomes



Source: Volkow (2001)

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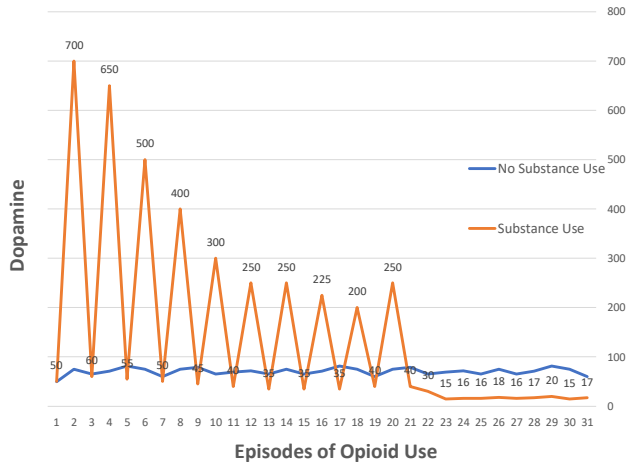
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DOPAMINE DEPLETION EFFECTS RECOVERY

Addressing Dopamine Depletion

- » Substance use disorder treatment with medications for opioid use disorder(OUD)/alcohol use disorder (AUD)
- » Contingency Management
- » Transitioning from external rewards to internal rewards



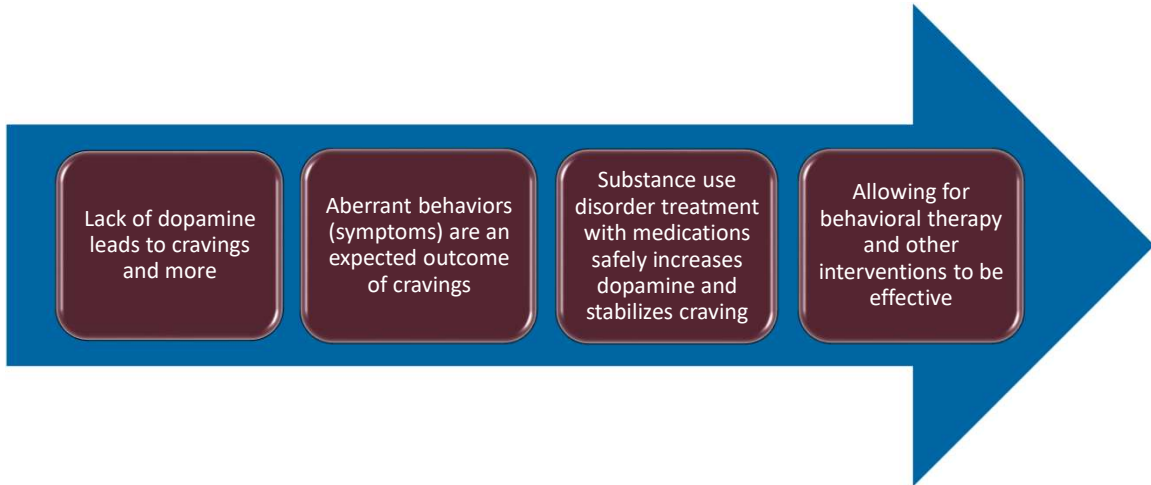
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SCIENCE OF ADDICTION: TREATMENTS



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ANSWER TO THE POLL

Which of the following do you think is the *root* cause of substance use disorders?

- a) Personal choice and behaviors
- b) Impact of trauma and other adverse life events
- c) Abnormalities of neurochemicals in the brain**
- d) I haven't decided yet

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POLL

Which statement about screening & testing for SUD is the most accurate?

- A. Universal toxicology testing is the most equitable way to identify substance use disorder (SUD) across Minnesota.
- B. For some populations, screening for SUD using an evidence-based verbal screening tools is about as sensitive as using toxicology testing in identifying SUD.
- C. Urine and serum toxicology tests are so sensitive, their results don't require a confirmatory test.
- D. Hospitals can obtain a toxicology sample without obtaining consent.
- E. Decisions about what screening tools to use are generally made based on data from research studies.

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SCREENING, ASSESSMENT, LEVEL OF CARE

Screening:

A rapid evaluation to determine the possible presence (risk) of a condition (high sensitivity, usually low specificity)

Assessment:

A more detailed evaluation meant to solidify the presence of a disease and sometimes assess disease severity (lower sensitivity, high specificity)

Level of Care Determination:

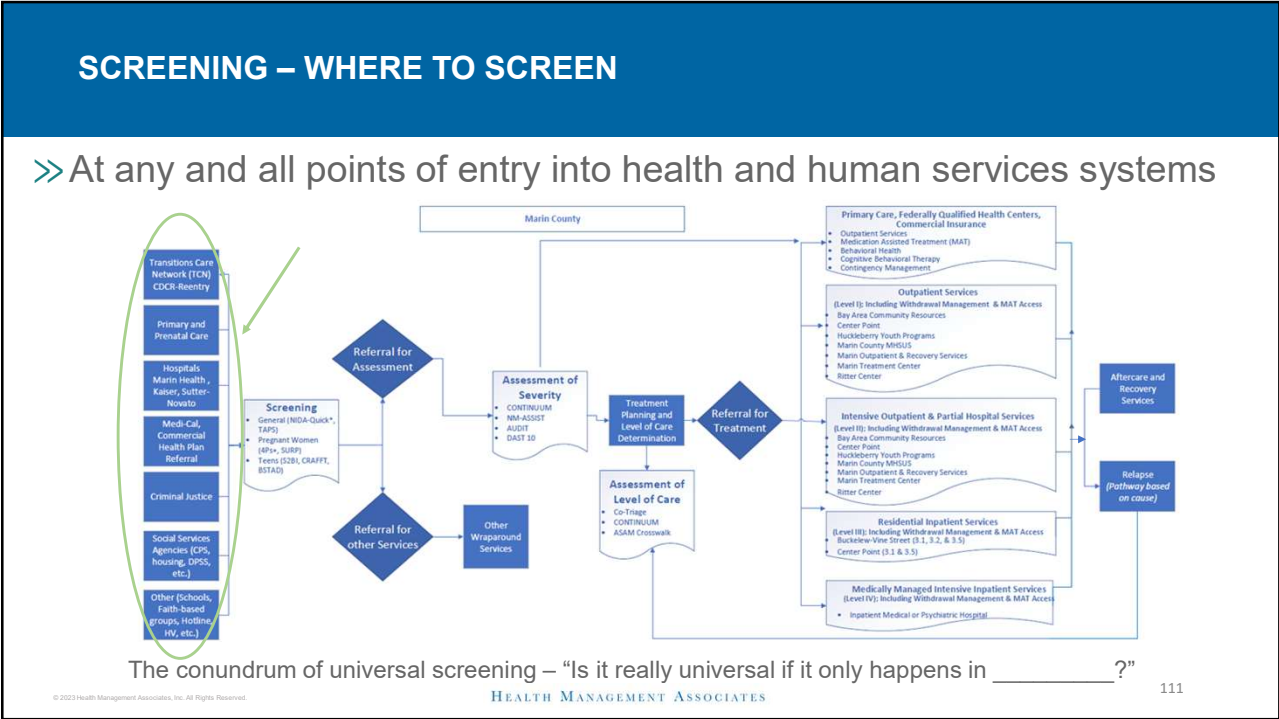
Evaluation of various biopsychosocial and other factors to determine/recommend the most appropriate level of care for the severity of the condition identified (outpatient vs inpatient).

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SCREENING – WHEN TO SCREEN

- » Key is to screen patients to determine who should have further assessment
- » Times not to screen:
 - » Recent screen → Set interval for repeat screening
 - » Current/recent diagnosis of SUD
 - » Presumptive positive
 - » Legal involvement (substance related arrest, DUI)
 - » Toxicology results
 - » Patient report
- » Screening is also sometimes used as part of the recovery agreement / contractual relationship.

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VALIDATED SCREENING TOOLS

» Screening tools are validated for use in specific populations
» Screening for co-morbid conditions and suicide is also critical

General Population	Pregnant Persons	Youth
<ul style="list-style-type: none"> + National Institute for Drug Addiction (NIDA) – Quick Screen + Tobacco, Alcohol, Prescription, and other Substances (TAPS) + AUDIT (Alcohol only) + <i>Patient History Questionnaire (PHQ-9)</i> + <i>General Anxiety Disorder (GAD-7)</i> + <i>PTSD Checklist (PCL-5)</i> + <i>Columbia Suicide Severity Rating Scale (C-CCRS)</i> 	<ul style="list-style-type: none"> + NIDA – Quick Screen* + 4 P’s plus (license fee) + Substance Use Risk Profile – Pregnancy (SURP) + CRAFFT – for 12-26 yo women (Car, Relax, Alone, Forget, Friend/Family, Trouble) + <i>Perinatal Mood and Anxiety Disorder (PMAD) – Edinburgh, PHQ-9</i> 	<ul style="list-style-type: none"> + Brief Screener for Alcohol, Tobacco and other Drugs (BSTAD) (12-17yo) + Screening to Brief Intervention (S2BI) (12-17yo) + Problem oriented screening instrument for Teens (POSIT) + CRAFFT*

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SCREENING

A Brief Word About Toxicology Testing Terminology

- » Screen: a qualitative (detected/ not detected) test; usually designed to detect many drug classes; confidence in results may be poor but depends on the assay. Also called preliminary immunoassay point of care test (POC).
 - » *Make sure you know what is covered by your toxicology panel*
- » Confirmation: a test designed for very high confidence in identification of individual drugs/compounds; may be qualitative or quantitative (reports the amount of drug present).
- » Cutoff: the concentration above which the substances is indicated as detected & below which the result indicates the substance was not detected; defined by the “kit” manufacturer, or by the limit of quantification (LOQ).
 - » *Knowing your lab cutoff values can avoid action on false positives (e.g., poppy seeds, oxycodone and hydrocodone)*

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SCREENING, THE ROLE OF TOXICOLOGY TESTING, AND CAVEATS

- » Typically, does not test for alcohol or tobacco use
- » “Routine” toxicology screen (big 5) may miss key substances (e.g., methadone, fentanyl and other synthetics)
- » Potential for false positive and false negative results
- » Complicated relationship between toxicology, criminal justice and child welfare involvement
- » Test results do not assess social, parenting capabilities or other qualities
- » Often applied selectively
- » Lab cut-off points for sensitivity
- » Positive toxicology test does not establish the diagnosis of SUD



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SCREENING

BEST PRACTICES FOR SCREENING: USE MOTIVATIONAL INTERVIEWING TO START A CONVERSATION

- » “An important part of primary care/prenatal care [supporting you to stay with / reclaim custody of your baby] is screening for any risky conditions. Some of these conditions can be scary to talk about but are pretty common. Also, no matter the issue we have the ability to help work through it.”
- » Is it ok if I ask you some questions about those risks?
- » For someone in treatment... We’re doing a urine drug test today, will there be any findings on that test I’m not expecting?

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Which statement about screening & testing for SUD is the most accurate?

POLL ANSWER

- A. Universal toxicology testing is the most equitable way to identify substance use disorder (SUD) across Minnesota.
- B. For some populations, screening for SUD using an evidence-based verbal screening tools is about as sensitive as using toxicology testing in identifying SUD.
- C. Urine and serum toxicology tests are so sensitive, their results don’t require a confirmatory test.
- D. Hospitals can obtain a toxicology sample without obtaining consent.
- E. Decisions about what screening tools to use are generally made based on data from research studies.

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SCREENING BRIEF INTERVENTION AND REFERRAL TO TREATMENT (SBIRT/SABIRT)

- » Screening – universal screening for substance use and impact of that use
- » [Assessment – use of validated assessment tool to determine diagnosis and severity]
 - Alcohol Use Disorders Identification Test (AUDIT)
 - Drug Abuse Screening Test (DAST-10)
 - Alcohol, Smoking and Substance Involvement Screening Test (NM-ASSIST)
- » Brief intervention – use of motivational interviewing concepts to reduce problematic substance use
- » Referral to treatment – referral to specialty substance use treatment or, in some cases, simply referral to continued assessment and follow up with their primary provider


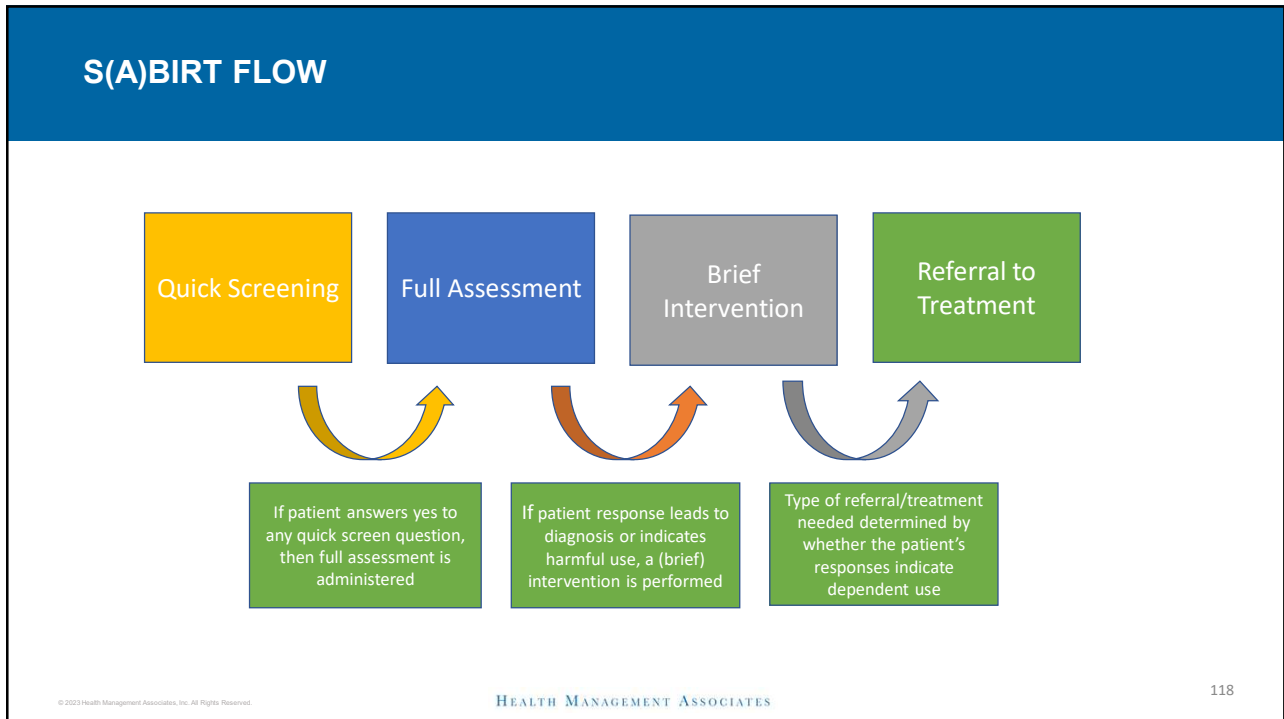



Photo Source : Mimi Thian on Unsplash

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CHATTER FALL

We will have two Chatter fall questions.
Please take a minute to type your response in the Zoom Group Chat, but **don't click enter.**

What have been the biggest challenges to implementation of screening in your setting?

What strategies have you used to overcome those challenges?

Type your response and **don't click enter.**

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OBJECTIVES OF A BIO-PSYCHO-SOCIAL ASSESSMENT (BPS)

- » A comprehensive biopsychosocial assessment provides:
 - » Insight into the patient's past and current life experience
 - » Provides data to make an accurate (preliminary) diagnosis
 - » An opportunity to build rapport with the patient
 - » Provides information needed to make an accurate level of care determination
 - » American Society of Addiction Medicine (ASAM) Level of Care criteria cover biopsychosocial

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BIOPSYCHOSOCIAL ASSESSMENT

- + A comprehensive biopsychosocial assessment includes:
 - + General information (housing status including who live with, religious affiliation, referral source, insurance)
 - + Medical information (past/present medical conditions, medications, surgeries, childbirths, hospitalizations)
 - + Education and Employment (highest grade, difficulty in school, past and current employment, income (legal and illegal), dependents, Social Security Benefits/Disability Benefits (SSI/SSDI), date of last employment, skill trade or technical education)
 - + Legal (past and current legal issues, arrests, charges, convictions, DUI, other driving offenses, incarceration time)

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BIOPSYCHOSOCIAL ASSESSMENT CONT.

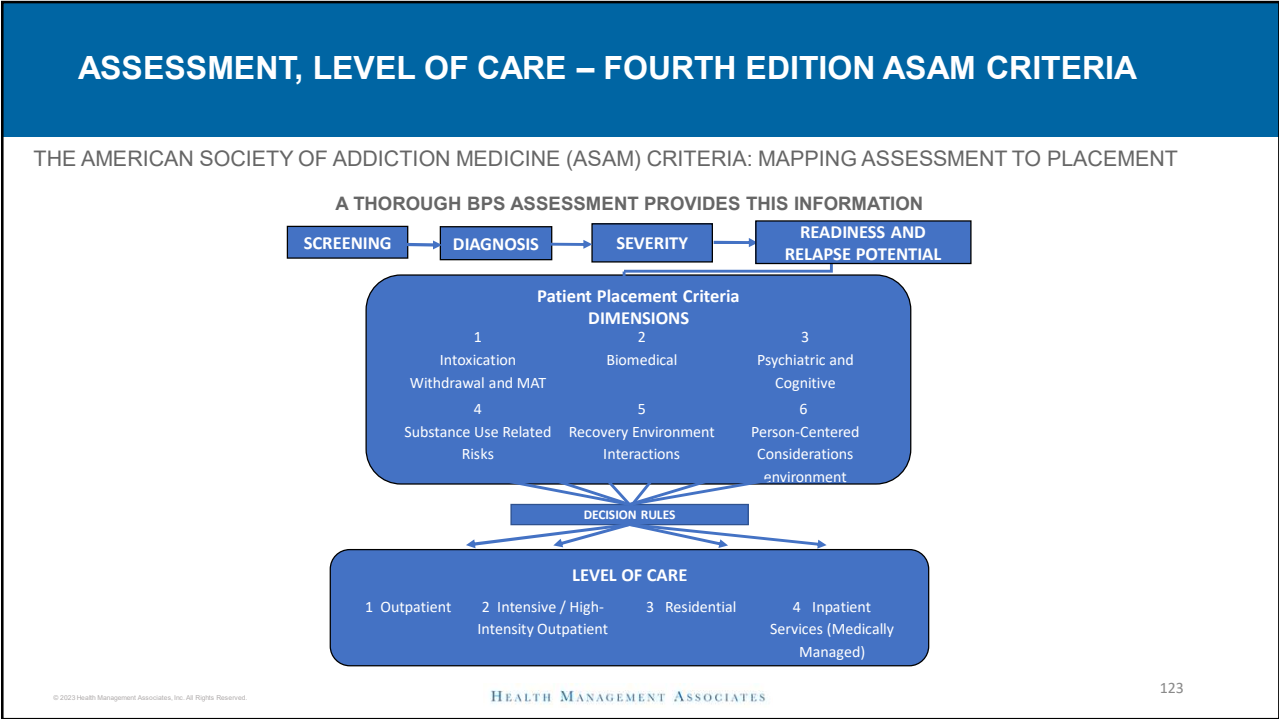
- » Psychological (Mini mental status exam; current and past medications, inpatient and outpatient treatment, anxiety, depression, hallucinations, suicidal or homicidal)
- » Family and Social (who raised, siblings, past and current relationship with family, family with past/current SUD and Department of Corrections (DOC), children, partner (with SUD?), friends and supports, hobbies, spirituality, marital status)
- » SUD (substance(s)) first used and date of first use, how many days used in past 30, lifetime use and route of administration of every substance
 - » Substance(s) of choice, date of last use, overdose, and/or delirium tremens (DTs)
 - » If yes, how many times
 - » Assess use of safe drug practices
 - » SUD treatment type and level of care (past, current, # of times, if currently on buprenorphine or methadone), \$\$ spent on substances in last 30 days
- » Examples of evidence-based assessment tools:
 - » NIDA Modified Assist –(not a BPS) –public domain
 - » Brief Addiction Monitor (BAM) – public domain
 - » Addiction Severity Index – public domain

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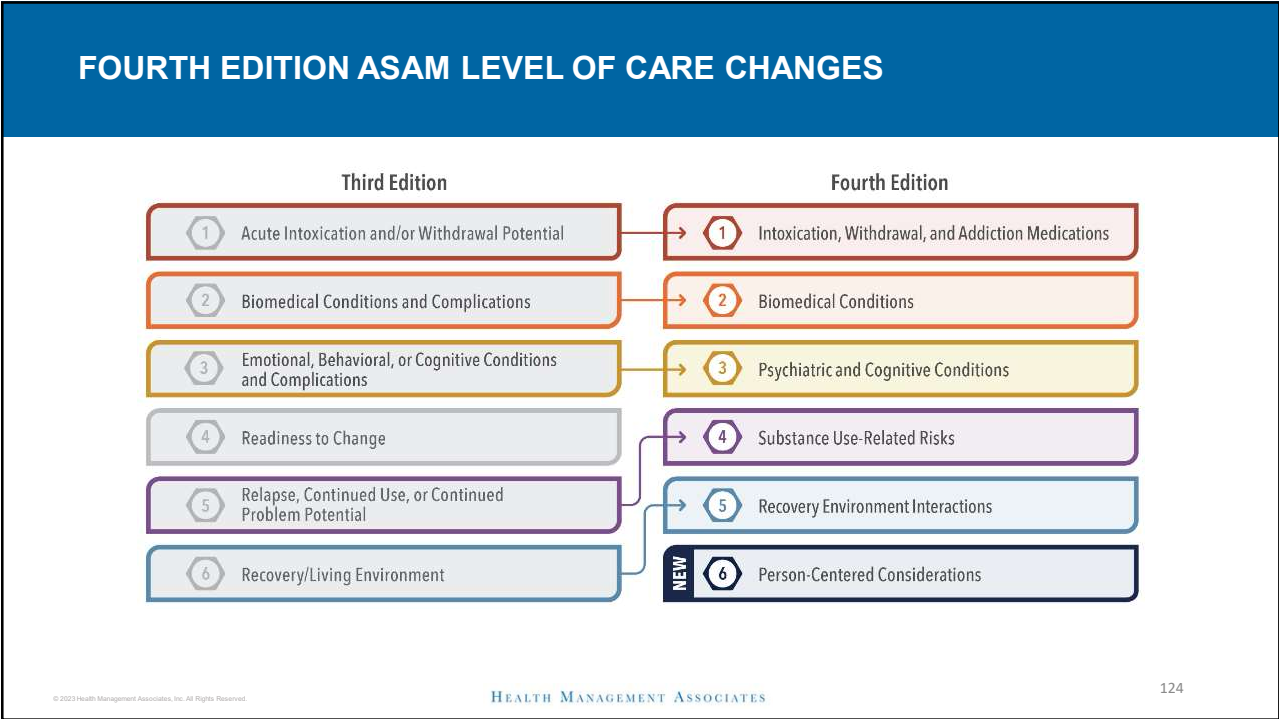
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LEVEL OF CARE (LOC) DETERMINATION

ABBREVIATED EXAMPLE OF ASAM ADULT LEVELS OF CARE

Levels of Care Dimension	1. OUTPT	2. INTENSIVE OUTPT	3. MED MON INPT	4. MED MGD INPT
Acute Intoxication and/or Withdrawal Potential	No Risk	Minimal	Some risk	Severe risk 24-hr acute
Biomedical Conditions and Complications	No Risk	Manageable	Medical monitoring required	Medical Care Required
Emotional, Behavioral, or Cognitive Conditions and Complications	No Risk	Mild severity	Moderate	24-hour psych. & addiction Tx required
Readiness to Change	Cooperative	Cooperative but requires structure	High resistance, needs 24-hour motivating	
Relapse, Continued Use, or Continued Problem Potential	Maintains abstinence or controls use	More symptoms, needs close monitoring	Unable to control use in outpatient care	
Recovery/Living Environment	Supportive	Less support with structure can cope	Danger to recovery. Logistical incapacity for outpatient	

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LEVEL OF CARE (LOC) DETERMINATION

» ASAM Criteria is Gold Standard

- » CONTINUUM® and Co-triage® tool
- » ASAM Criteria Navigator® for utilization review/management
- » Criteria are required in assessment tools used by providers
- » Complete for high/severe assessments
- » Available online
- » Done by RN, LCSW, PA/NP, or MD/DO
- » Part of SBIRT payment

The ASAM Criteria Continuum of Care for Adult Addiction Treatment

Source: The ASAM Criteria: Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions (2023). 126

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ASAM AND LEVEL OF CARE (LOC) DETERMINATION IN MN

MN Medicaid Section 1115 Waiver and related legislation requires that providers of SUD services use the ASAM Level of Care criteria

- » The legislation codifies required service standards for participating providers that are consistent with ASAM criteria
- » “All 87 Minnesota counties, 11 American Indian Tribes, and eight managed care organizations (MCOs) are required to conduct an assessment that incorporates the six dimensions of the ASAM placement criteria”
 - » Risk rating
 - » Narrative summary supporting the rating
 - » Determination of SUD diagnosis
 - » Info relevant to treatment service planning

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ASAM AND LEVEL OF CARE (LOC) DETERMINATION IN MN (CONT.)

- » Providers enrolled in the 1115 demonstration evaluating use of the criteria must be compliant with the ASAM-based Standards (by June 30, 2021)
- » Additional providers to enroll in 1115 pilot by January, 2024
 - » Residential treatment programs
 - » Withdrawal management programs
 - » Out of State residential SUD providers enrolled in Minnesota Health Care programs (MHCP)
- » Other requirements
 - » Comprehensive assessment (c/w with ASAM criteria)
 - » Assessment summary within 3 calendar days after service initiation (or same day if comprehensive assessment is used to authorize services)
 - » Initial Services Plan

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ASAM Criteria Level of Care – Other Treatment and Recovery Services																										
ASAM Criteria Level of Care	ASAM Level	Dimension 1 Substance Use, Acute Intoxication and/or Withdrawal Potential				Dimension 2 Biomedical Condition and Complications				Dimension 3 Emotional, Behavioral, or Cognitive Condition and Complications				Dimension 4* Readiness to Change				Dimension 5* Relapse, Continued Use, or Continued Problem Potential				Dimension 6* Recovery/Living Environment				
		0	1	2	3	4	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
Outpatient Services	1																									
Intensive Outpatient Services	2.1																									
Partial Hospitalization >= 20 hours	2.5	Service currently unavailable																								
Clinically Managed Low-Intensity Res. Services	3.1																									
Clinically Managed population specific, High-int Res. Ser.	3.3																									
Clinically Managed Med (youth & High Latent) – int. Res. Ser.	3.5																									

Recommend inpatient mental health services

Level of Care	Adults	Adolescents
1.0 Outpatient program	8 hours skilled treatment services	6 hours skilled treatment services
2.1 Intensive Outpatient Program	9-19 hours skilled treatment services	6-19 hours skilled treatment services
3.1 Clinically Managed Low-Intensity Residential	At least 5 hours of skilled treatment, peer recovery, and treatment coordination	
3.3 Clinically Managed Population-Specific High-Intensity Residential	At least 30 hours of skilled treatment services, peer recovery and treatment coordination provided to individuals with a TBI or cognitive impairment.	
3.5 Clinically Managed High-Intensity Residential	At least 30 hours of skilled treatment services, peer recovery and treatment coordination provided to individuals. 24-hour care with trained counselors to stabilize multidimensional imminent danger and prepare for outpatient treatment. Able to tolerate and use full therapeutic community.	

ASAM Criteria Level of Care – Withdrawal Management (See pages 147 – 173 for detailed recommendations)	ASAM Level	Dimension 1 Substance Use, Acute Intoxication and/or Withdrawal Potential				Dimension 2 Biomedical Condition and Complications				Dimension 3 Emotional, Behavioral, or Cognitive Conditions and Complications				Dimension 4 Readiness to Change				Dimension 5 Relapse, Continued Use, or Continued Problem Potential				Dimension 6 Recovery/Living Environment			
		0	1	2	3	4	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4	0	1	2	3
Ambulatory W/M with Extended On-Site Monitoring	2 – WM																								
Clinically Managed Residential W/M	3.2 – WM																								
Medically Monitored Inpatients W/M	3.7 – WM																								

1115 WAIVER ASSESSMENT AND PLACEMENT GRID



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LEVEL OF CARE (LOC) TRANSITIONS - CONTINUED SERVICE CRITERIA (ASAM CRITERIA)

Retain at the present level of care if:

1. Making progress, but not yet achieved goals articulated in individualized treatment plan. Continued treatment at present level of care necessary to permit patient to continue to work toward his or her treatment goal

Or

2. Not yet making progress but has capacity to resolve his or her problems. Actively working on goals articulated in individualized treatment plan. Continued treatment at present level of care necessary to permit patient to continue to work toward his or her treatment goals; and/or
3. New problems identified that appropriately treated at present level of care. This level is least intensive at which patient's new problems can be addressed effectively.

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LEVEL OF CARE (LOC) TRANSITIONS - TRANSFER/DISCHARGE SERVICE CRITERIA (ASAM CRITERIA)

Transfer or discharge from present level of care if s/he meets the following criteria:

1. Has achieved goals articulated in his or her individualized treatment plan, thus resolving problem(s) that justified admission to current level of care.
or
2. Has been unable to resolve problem(s) that justified admission to present level of care, despite amendments to treatment plan. Treatment at another level of care or type of service therefore is indicated.
or
3. Has demonstrated lack of capacity to resolve his or her problem(s). Treatment goals might be better achieved at another level of care or type of service.
or
4. Has experienced intensification of his or her problem(s), or has developed new problem(s), and can be treated effectively only at a more intensive level of care.

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LEVEL OF CARE (LOC) DETERMINATION: SUMMARY

- » Comprehensive assessment requires evaluation of all 6 Dimensions
- » Additional assessments better positions us to fully address a client's needs
- » Treatment planning can begin before LOC determination
- » The LOC might have to change based on availability, but it doesn't mean we can't get started
- » Where someone gets care really matters
- » Implementation of ASAM assessment criteria is evolving in MN

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REFERENCES - SCREENING, ASSESSMENT, AND LOC DETERMINATION

- » ASAM, (2020) National Practice Guidelines for the Treatment of OUD.
- » MINNESOTA Statutes Minnesota Statutes, Chapter 245A. 09, Subdivision 7, paragraph (e); chapter 245G
- » Center for Adolescent Substance Abuse Research, Children's Hospital of Boston. The CRAFFT screening interview. Boston (MA) CeASAR; 2009.
- » Chasnoff, I. J., McGourty, R. F., Bailey, G. W., Hutchins, E., Lightfoot, S. O., Pawson, L. L., ... & Campbell, J. (2005). The 4P's Plus© screen for substance use in pregnancy: clinical application and outcomes. *Journal of perinatology*, 25(6), 368.
- » JA Ewing "Detecting Alcoholism: The CAGE Questionnaire" *JAMA* 252: 1905-1907, 1984
- » Reisfield, G. et al., *The ASAM Essentials of Addiction Medicine* (2020), Practical Considerations in Drug Testing; p 659-66
- » Laskar, D., *Chemistry Toxicology General*, Editor Zynger, D., 4-2019
- » *The Clinical Toxicology Laboratory*, AACC Press, 2003, pp. 491-2
- » Broussard L, *Handbook of Drug Monitoring Methods*, Humana Press, 2007
- » Smith, H. Opioid Metabolism (July, 2009). *Mayo Clinic Proceedings*; 84(7): 613–624. www.ncbi.nlm.nih.gov/pmc/articles/PMC2704133

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GROUP DISCUSSION

What concepts from today's discussion about the science of SUD, screening, assessment and LOC determination will stick with you (any "ah ha" moments?) and how can you put that to use in your work?



Use the "raise your hand" feature in Zoom or simply come off mute.

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QUESTIONS?

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NEXT STEPS

- » Join us for Session 2 next Wednesday!
- » Your registration should have included a reoccurring calendar invite for all four sessions
- » Please complete the evaluation and post-test for this session that will be sent out after via email (those requests CEU/CME must complete the evaluations).

Follow-up questions?

Contact Carlos Mena at cmena@healthmanagement.com

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AGENDA FOR WEBINAR SERIES

Session	Topics
#1 WEDNESDAY, JAN 10 12:00 pm to 3:00 pm	<input type="checkbox"/> Understanding HIV <input type="checkbox"/> HIV Testing, Treatment and Prevention <input type="checkbox"/> The Science of Addiction <input type="checkbox"/> Screening, and Assessment
#2 WEDNESDAY, JAN 17 12:00 pm to 3:00 pm	<input type="checkbox"/> Working with Justice Involved Persons <input type="checkbox"/> Substance Use Disorder Treatment with Medications <input type="checkbox"/> Mental Health Treatment and Counseling <input type="checkbox"/> Stimulant Use <input type="checkbox"/> Chem Sex
#3 WEDNESDAY, JAN 24 12:00 pm to 3:00 pm	<input type="checkbox"/> Ethical and Legal Issues <input type="checkbox"/> Funding and Policy Considerations <input type="checkbox"/> HIV Risk Reduction <input type="checkbox"/> SUD Harm Reduction <input type="checkbox"/> HIV and Stigma <input type="checkbox"/> Motivational Interviewing
#4 WEDNESDAY, JAN 31 12:00 pm to 3:00 pm	<input type="checkbox"/> Cultural, Racial and Sexual Identities <input type="checkbox"/> Pregnancy and HIV, SUD/ODU <input type="checkbox"/> Accessing, Obtaining, and Integrating Services for Individuals with HIV and SUD in Minnesota