

Primary Care Considerations for Patients Using Methamphetamines

How to communicate compassionately while struggling with patients struggling with meth

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January 8, 2021



Land Acknowledgement

The Oregon AETC would like to take a moment to recognize the unceded ancestral lands of the first people. We pay respects to their elders, past and present. Please take a moment to consider the many legacies of violence, displacement, migration, and settlement that bring us together here today.

Infectious diseases do not discriminate. As part of our response to the HIV epidemic, we must elevate those groups who have been historically marginalized in our communities. It is our responsibility to listen, recognize, and bring their experiences to the forefront.

Your Zoom Hosts

Send a private chat to these folks
for any technical issues

Abby Welter

Rachel Greim

Ashley Allison

Dayna Morrison



This presentation is being recorded

In order to have this presentation as a resource, we are recording this session and will provide the video following the event.

All chats (private or public) will be automatically downloaded.

You are encouraged to participate!

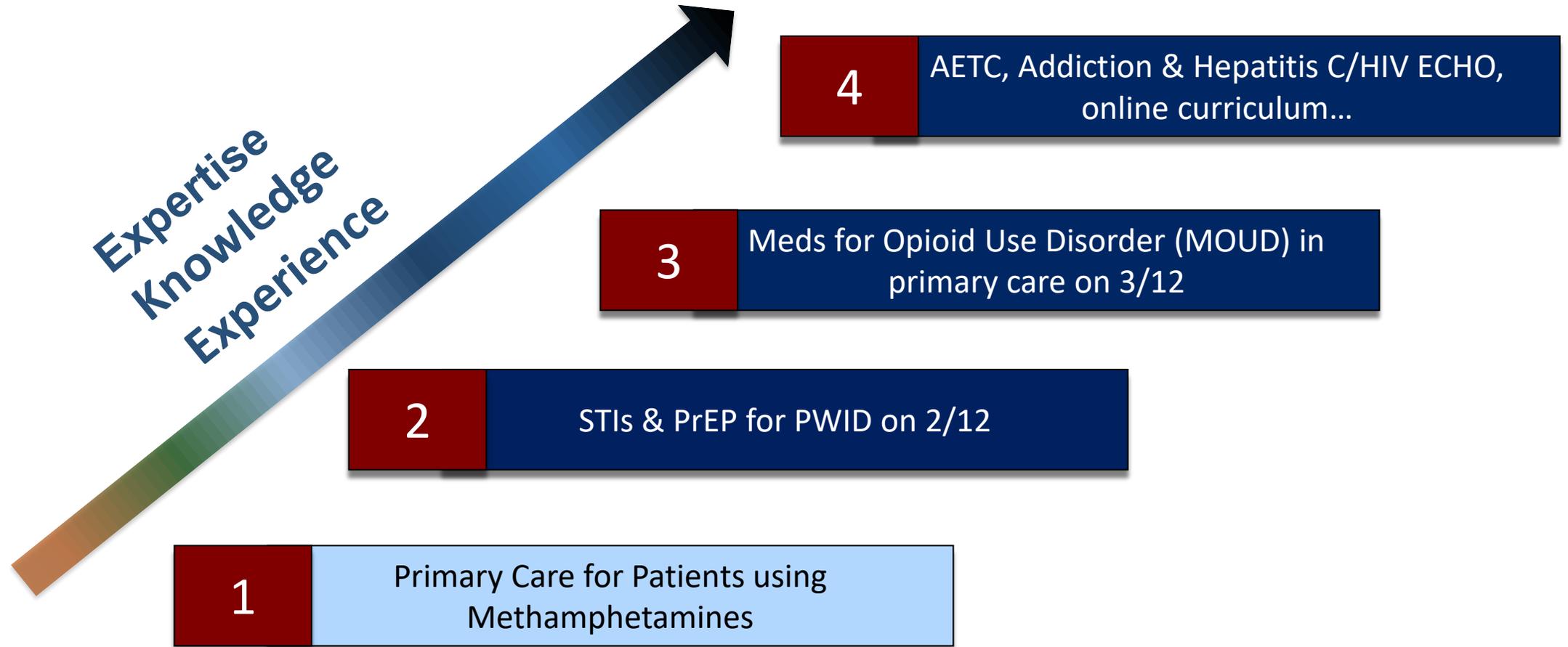
Acknowledgements

- My patients
- Toni Kempner, RN, Mult. Co. HIV Clinic
- Todd Korthuis, MD MPH, OHSU
- Steven Shoptaw, PhD, UCLA
- MW AETC
- Lincoln Place case managers



No conflicts of interest or relationships to disclose

Free Education Opportunities



Objectives

- Discuss challenges in communication with patients using meth.
- Recognize the impact of the meth epidemic in Oregon & review the pathophysiology & addiction of meth use.
- Review successful interventions, discuss what we are doing, and decide what we can do better.

Warning!

The gist of this talk will not be in the power-point slides.



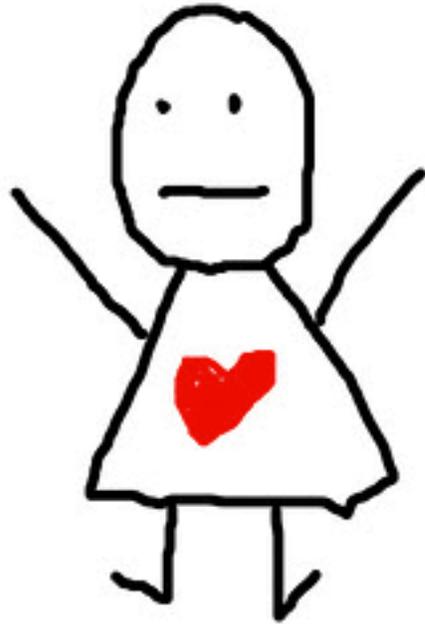
Priority Reset



Challenges in Compassion



Countering Stigma



i am **HIV+**
will you hug me?

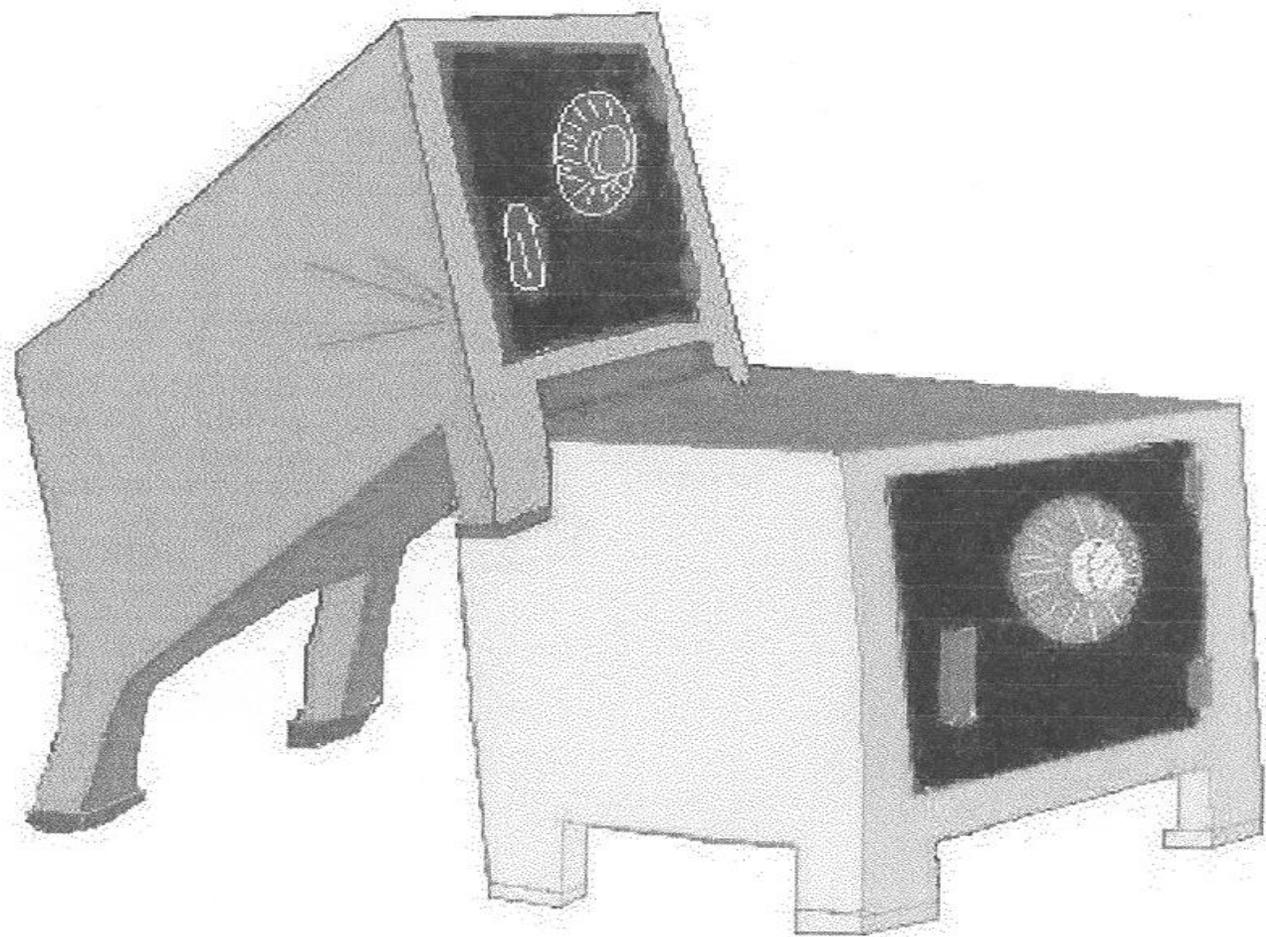
Cultural Humility

- “If you talk to a man in a language he understands that goes to his head. If you talk to him in his language, that goes to his heart.” – Nelson Mandela
- “When you make an effort to speak another language, even if it’s just basic phrases, you are saying to them... I see you as a human being.” – Trevor Noah



The Language of Harm Reduction





SAFE SEX

The Language of Harm Reduction

- **Safer injection supplies:**

- Clean syringes (rigs, points)
- Spoon, bottle cap, or cooker
- Cotton or celluloid filter
- Water for mixing and rinsing
- Tie or tourniquet
- Lighter or matches
- Alcohol pads



- **Safer inhalation supplies:**

- Pipe (preferably pyrex), or Foil
- Mouthpiece
- Alcohol pads
- Lighter or torch
- Straw (for snorting or foil smoking)
- Screen (for crack pipes only)



Supplies you use to smoke crystal meth safer:



• BOWL PIPE



• MOUTHPIECE



• ALCOHOL SWAB



• TORCH LIGHTER

This resource provides information about how to smoke crystal meth with this equipment. Talk to your local harm reduction site about which safer drug use supplies are available and how they are meant to be used.

Photos retrieved from www.rcinet.ca, www.filtermag.org, and www.catie.ca

The Language of Harm Reduction

Getting Ready Checklist

- ✓ Environmental safety
- ✓ State of mind
- ✓ Clean equipment
- ✓ Clean dope (fentanyl test)
- ✓ Don't use alone!
- ✓ Never share equipment
- ✓ Always carry naloxone (yes, even for meth use!)

- Needle gauge, length and barrel size:
 - IM use 21, 22, or 23 gauge
 - IV use 27, 28, 29, 30, 31 gauge
 - Smaller gauges are better for smaller veins. They also encourage a slower push, which is better for some sites, like hands and feet.
 - Barrels should be 1cc or less
 - IM use 1/2-5/8 inch needle
 - IV use 5/16, 1/2, or 5/8 inch needle (TB or insulin syringe)
- Goal: Use a new needle/syringe every time

Harm Reduction Strategies

- **Preparation** -Site prep and cleanliness- Know your body, know your drug
- **Sharing techniques** – Sharing drugs without sharing equipment or pathogens
- **Safer injection techniques** –Site rotation, avoiding arteries and nerves, angle of injection, applying heat when needed
- **Hierarchy of safe injection sites** –Knowing where to hit
- **Safer methods** –Doing test shots, smoking or snorting over injecting, abscess prevention/care, knowing the signs of OD/overamp
- **Lifestyle** -Are you eating? Hydrating? Sleeping? Having safe sex? If smoking, how is your oral health?

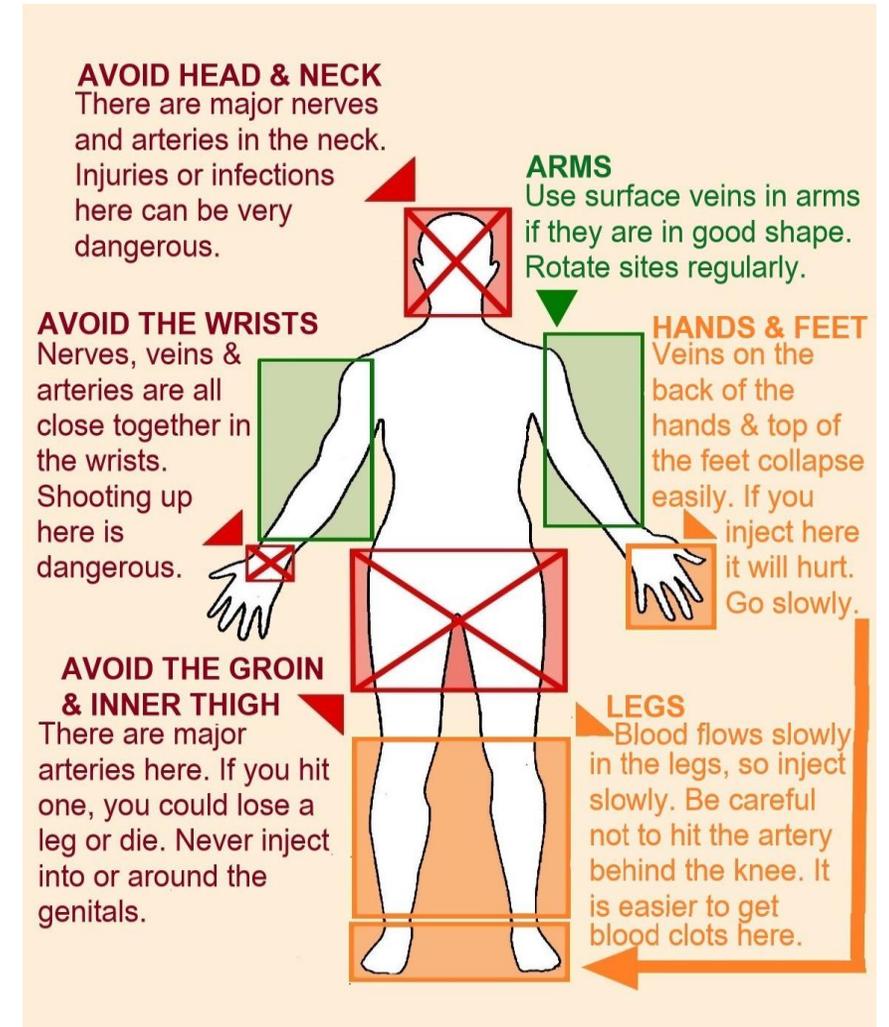


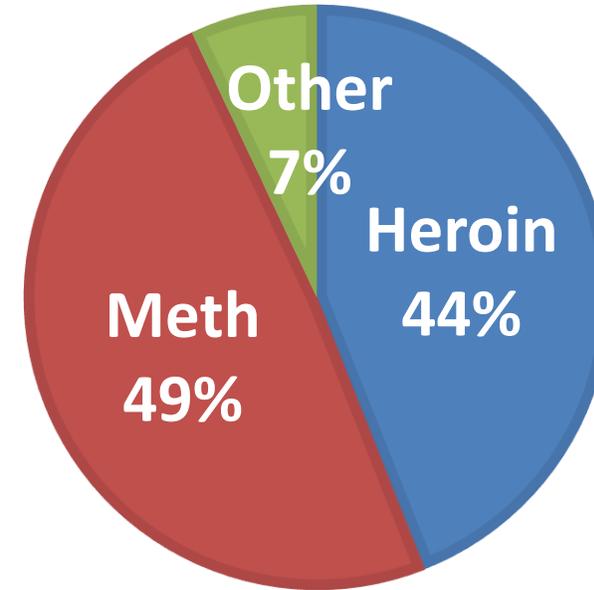
Photo retrieved from PBHRWA

Drug preference
split between
heroin and meth.
**Heroin users also
use meth.**

(N = 144)



Drug of choice



Past 30-day injection

50% injected heroin

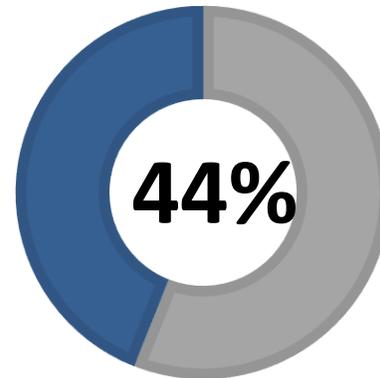
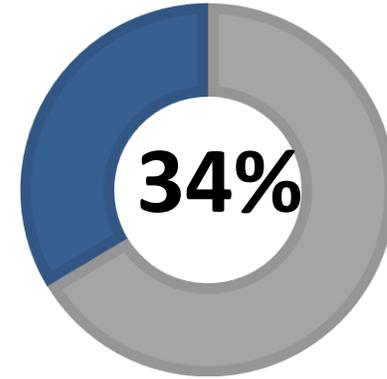
78% injected meth

Almost half
have shared in
past 30 days
(N = 125)



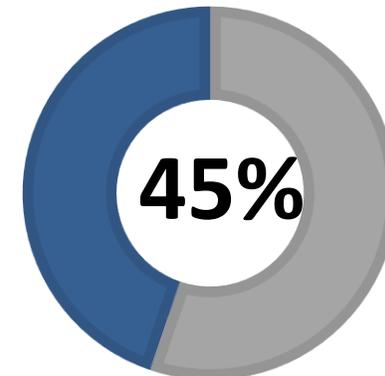
Past 30 days...

Used **needle** after
someone else



Used **cooker/cotton/water**
after someone else

Let someone else use
cooker/cotton/water
after using



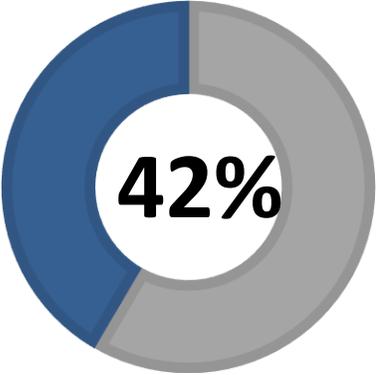
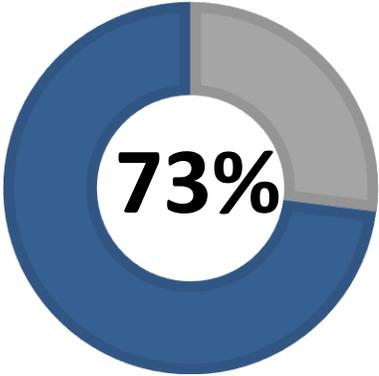
Most have witnessed
an overdose.

Less than a third have
naloxone.

(N=144)

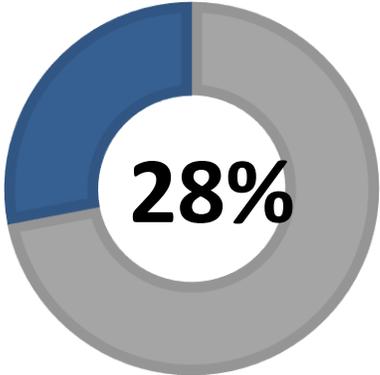


Ever witnessed an overdose



Ever overdosed

Currently have naloxone



Case Study #1

- Joe: 34 Year Old Male
- 7 ED visits in last year for abscesses
- IVDU: Meth, tx for substance use x 3.
- Hx: HIV, Cellulitis, Depression
- HIV: CD4 650, VL< 20 (undetectable)
- Homeless, Unemployed, hx incarceration.
- Used to play in heavy metal band
- Not interested in quitting meth
- CC: arm pain and redness

How would you approach a visit with Joe?

Break-out session: 3 min. patient & provider roleplay



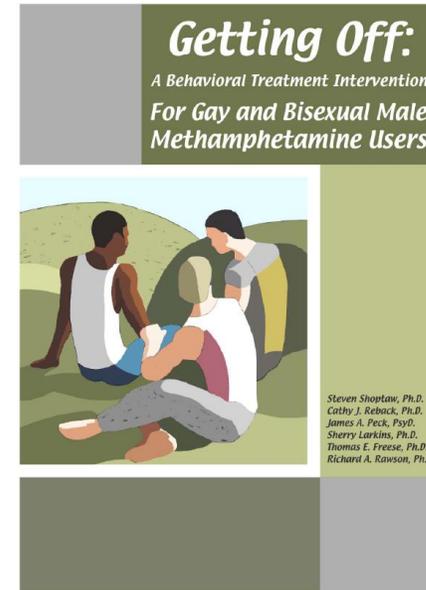
Photo from [www.dedda](http://www.dedda.org)
(drug-addict-homeless-victoria.bc.canada)

Moving on...Fun Websites

Tweaker.org



Harmreduction.org



Other resources

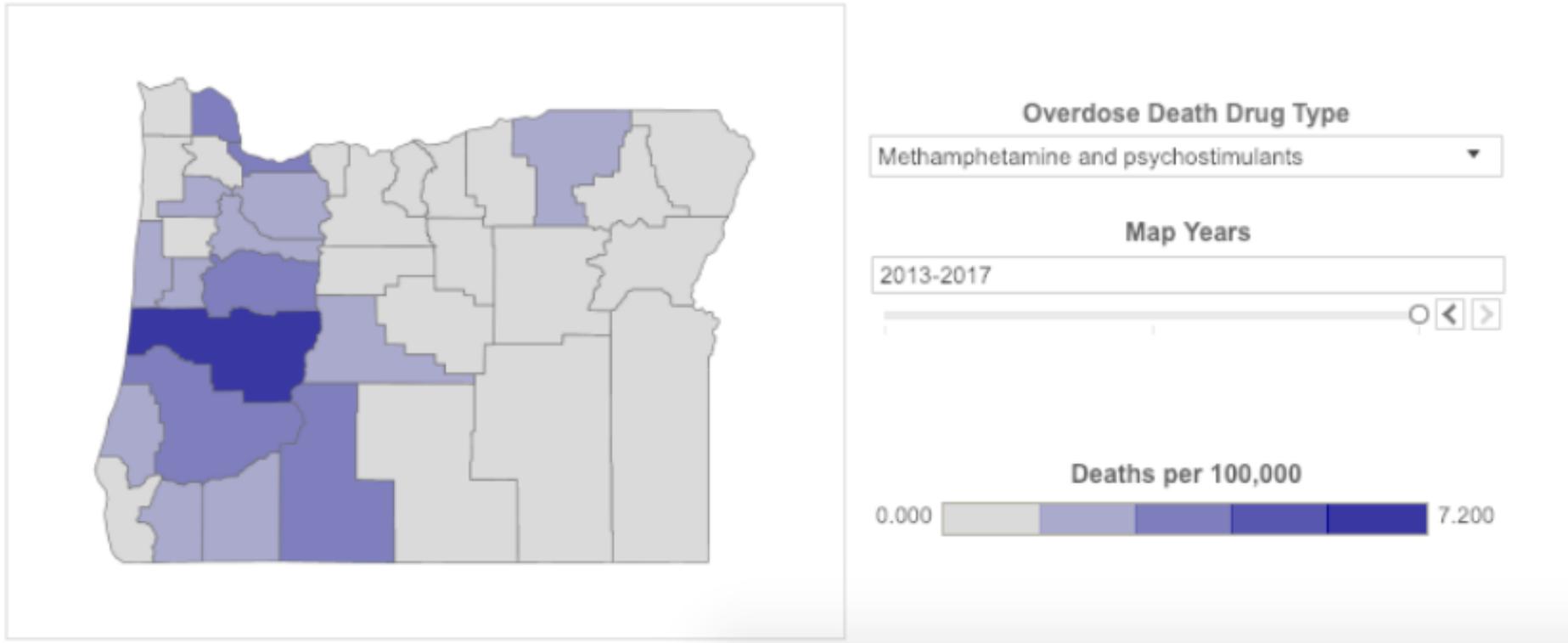
- <http://www.talktofrank.com/drug/speed>
- www.friendscommunitycenter.org/resources

Getting Off Right - a safety manual for IDU by the Harm Reduction Coalition

METH: **EPIDEMIC**, ADDICTION, AND PHYSIOLOGY

Where are people dying from meth?

Oregon Drug Overdose Deaths - Death Certificates

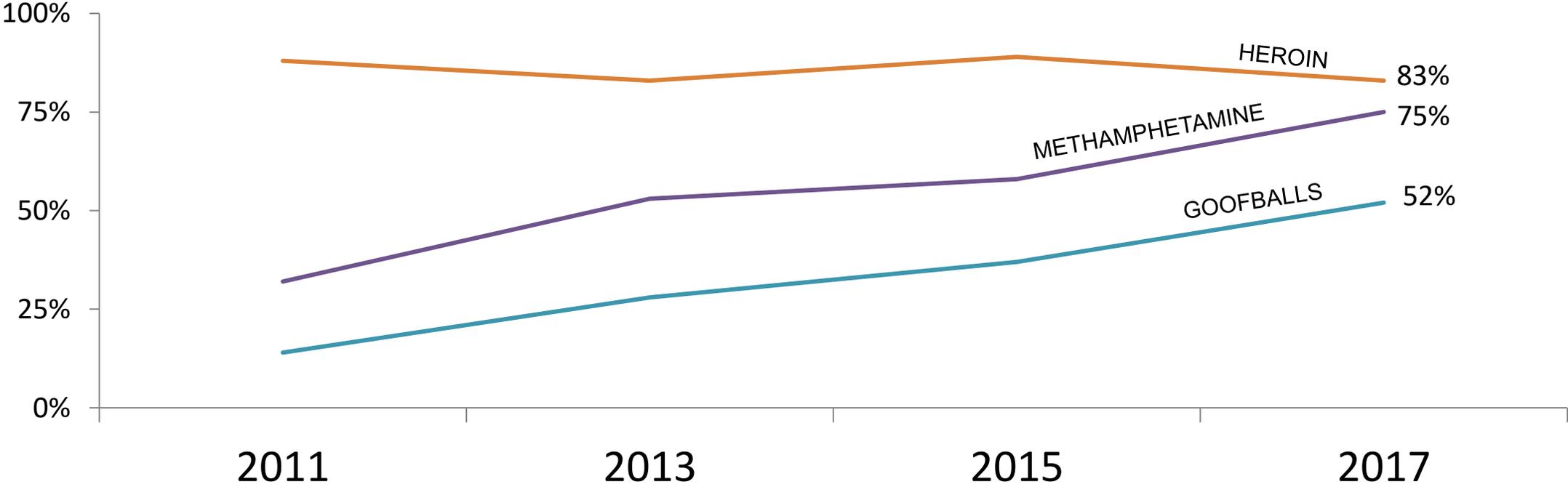


Oregon deaths from meth up 400%



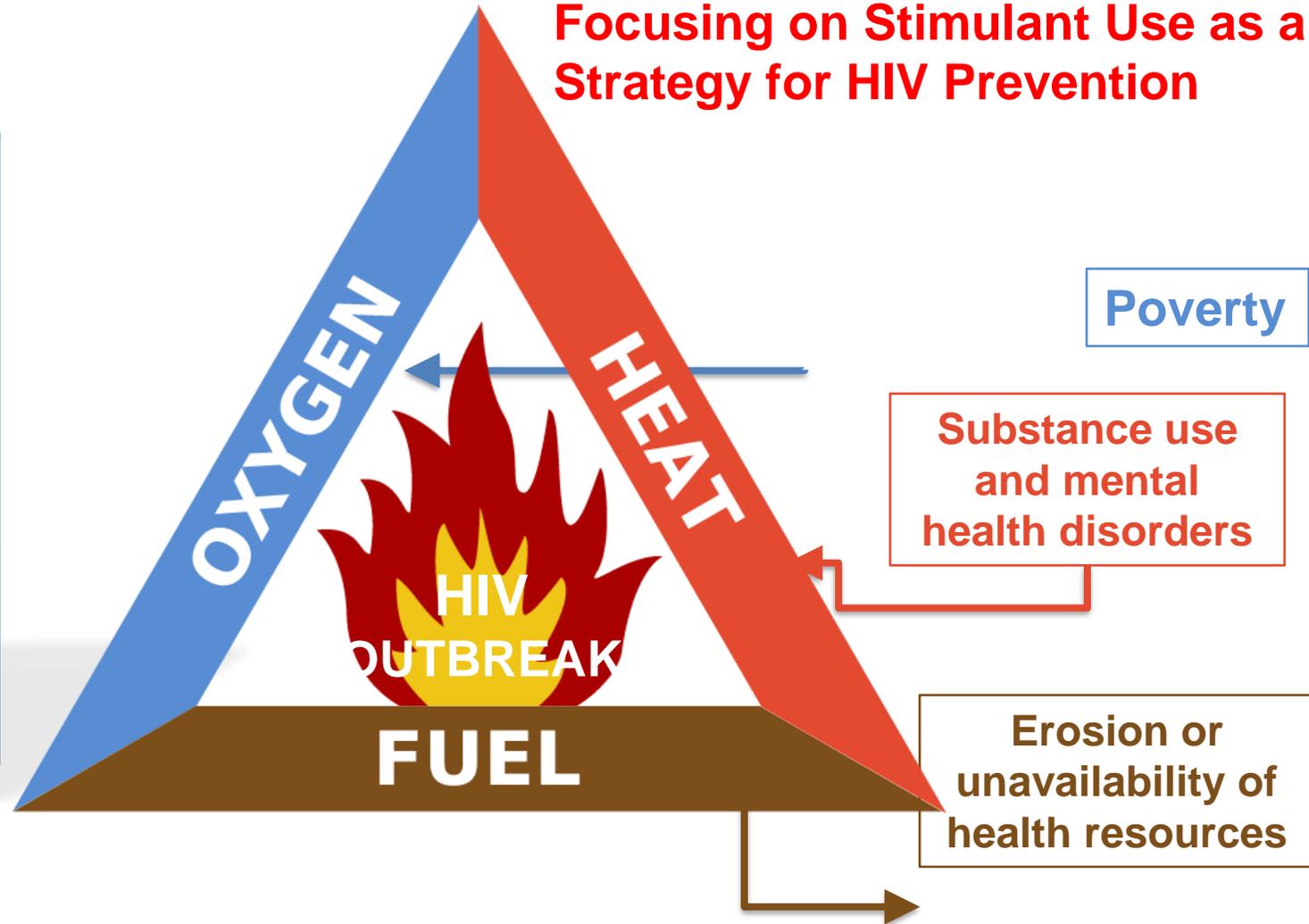
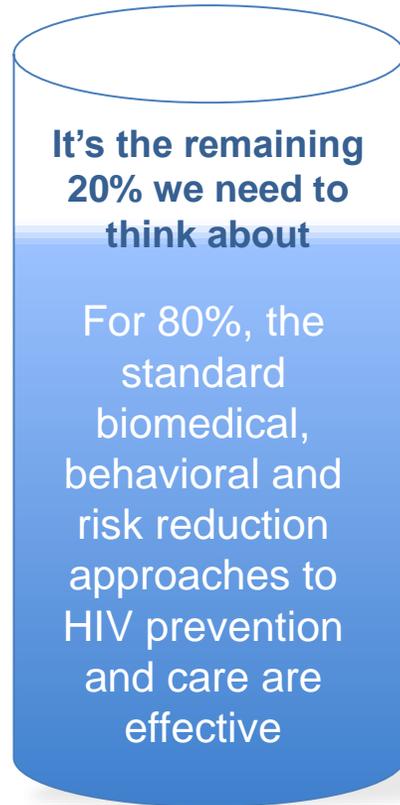
Increasing Methamphetamine Use?

Drugs Injected by PWID in the Past 3 Months, SSP Surveys

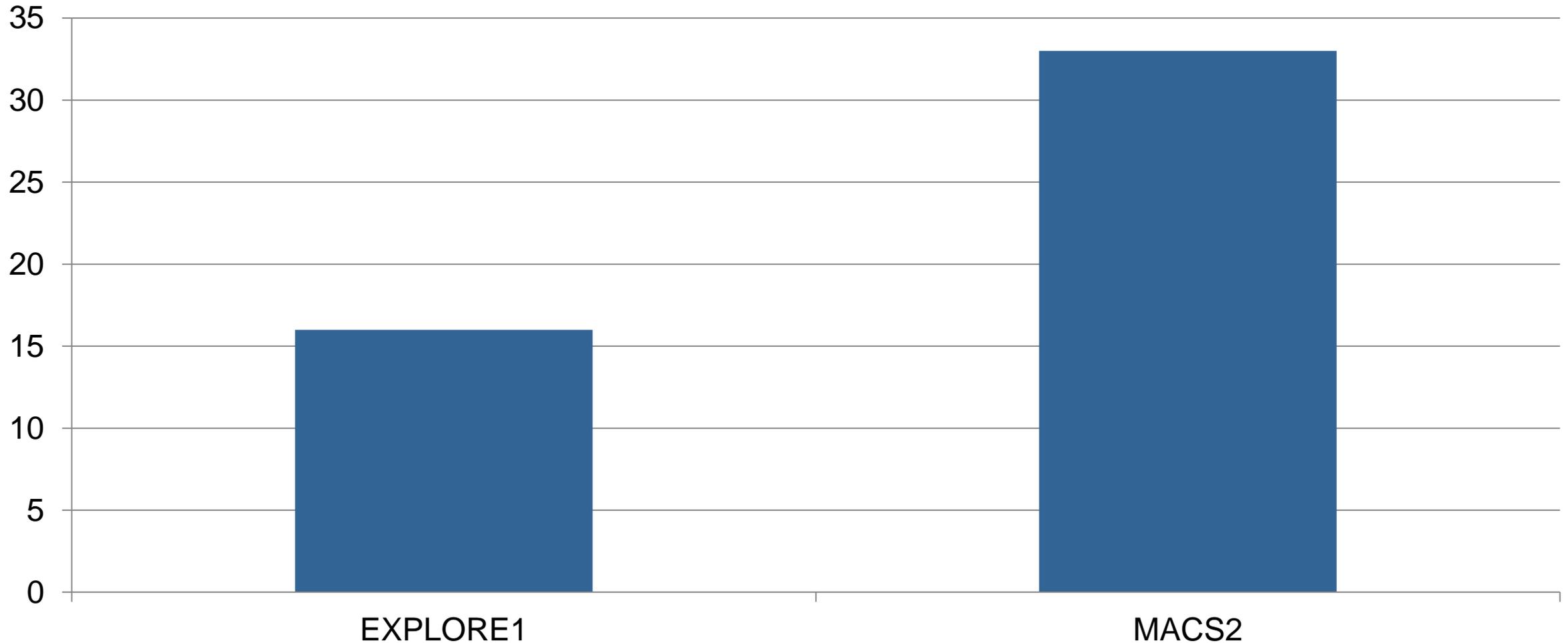


Slide courtesy of Sara Glick, PhD, MPH
Ref: King County HIV Epidemiology Report, <https://tinyurl.com/KCHIVReport>

Focusing on Stimulant Use as a Strategy for HIV Prevention



Methamphetamine Use, HIV Incidence in MSM: Attributable Fraction



¹ Koblin et al., 2006, AIDS, 20: 731-739

² Ostrow et al., 2009, JAIDS, 51: 349-355

Men who
have sex with
men & use
meth think:

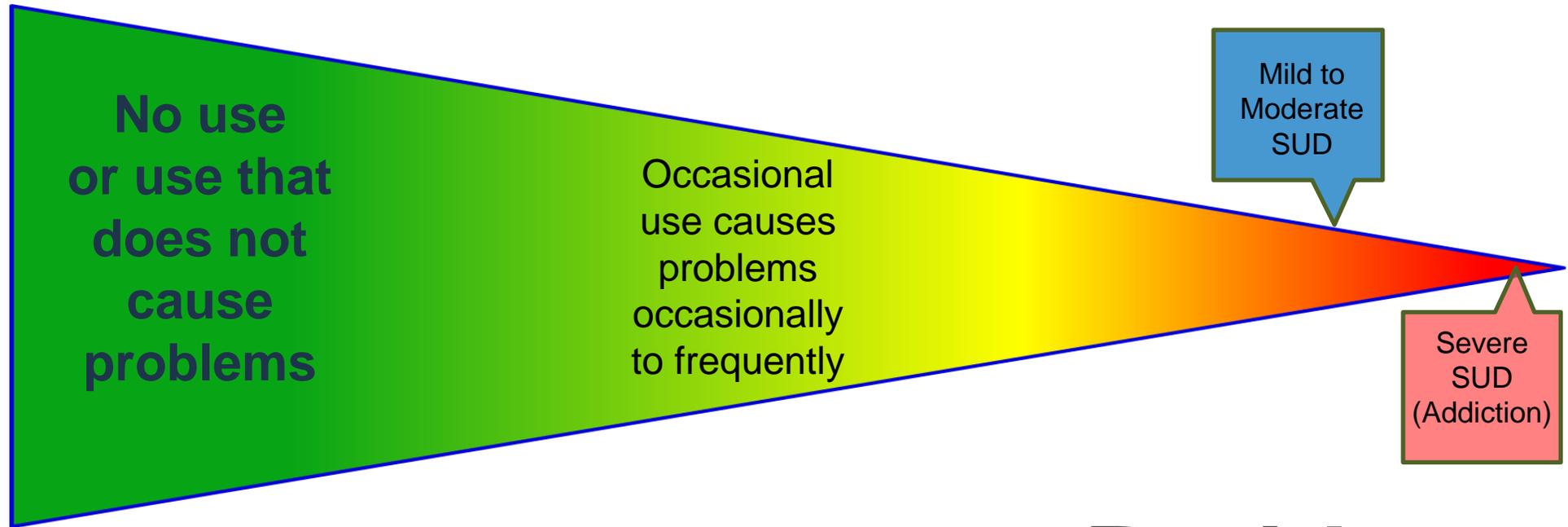


Increase rates of HIV, etc. w/ meth use or IV drugs

- Hep A, B and C, syphilis, HIV: all more common w/ IV use
- IVDU & infectious disease “syndemic” synergistic epidemic
- Yet, only 5% of PrEP patients take PrEP due to IV drug use in Oregon.

METH: EPIDEMIC, **ADDICTION**, AND PHYSIOLOGY

Definitions of a Spectrum: Drug Use to Drug Use Disorder, Mild to Moderate to Severe



Fun → Fun with Problems → Problems

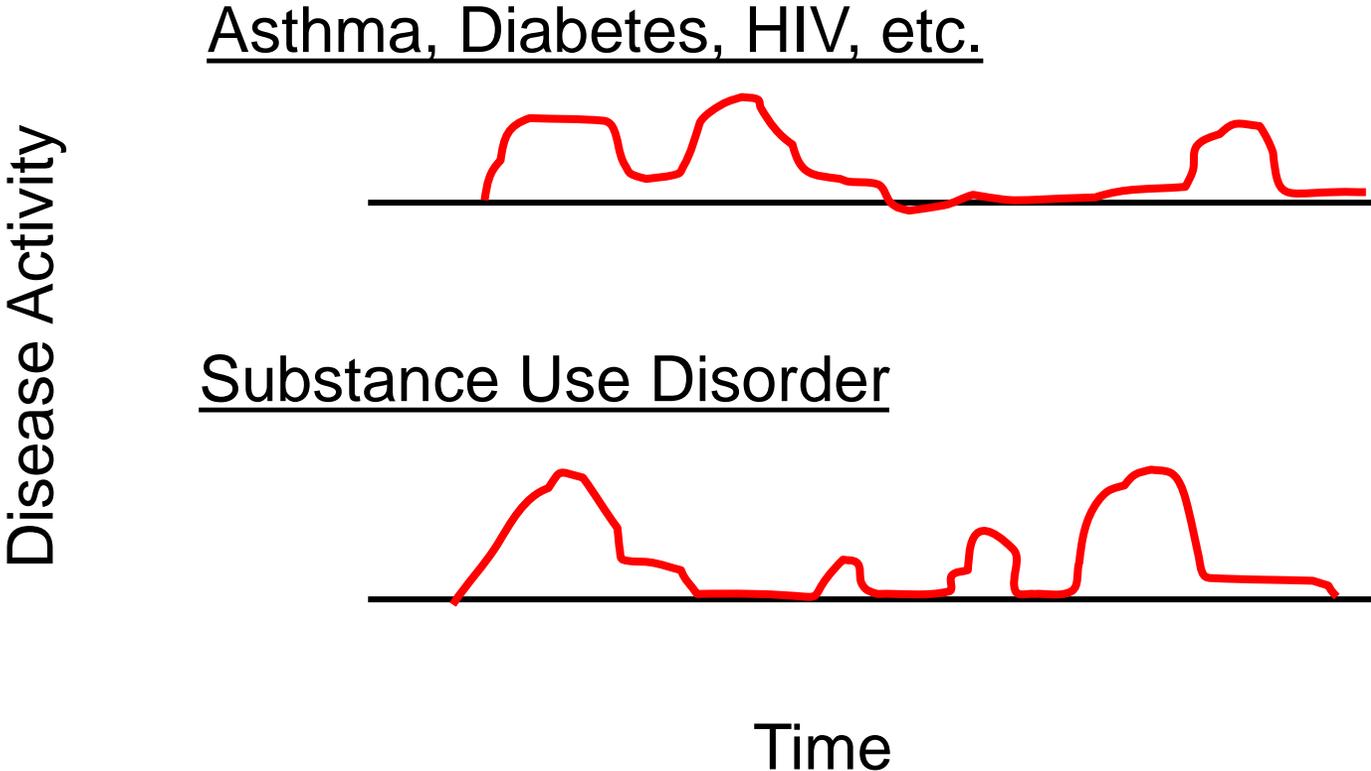
DSM-5 Definition: Substance Use Disorder

Maladaptive pattern of use, *clinically significant impairment or distress* and 2+ of the following in the same 12-month period:

1. Tolerance
2. Withdrawal
3. Used for longer periods than intended
4. Can't cut down or quit
5. Time spent getting, using or recovering
6. Give up social, work or fun activities
7. Craving or a strong desire or urge to use a substance
8. Continued use despite knowledge of negative consequences
9. Failure to fulfill major role obligations
10. Use in physically hazardous situations
11. Continued use despite social and interpersonal problems

Mild = 2-3 criteria; Moderate = 4-5 criteria; Severe = 6+ criteria

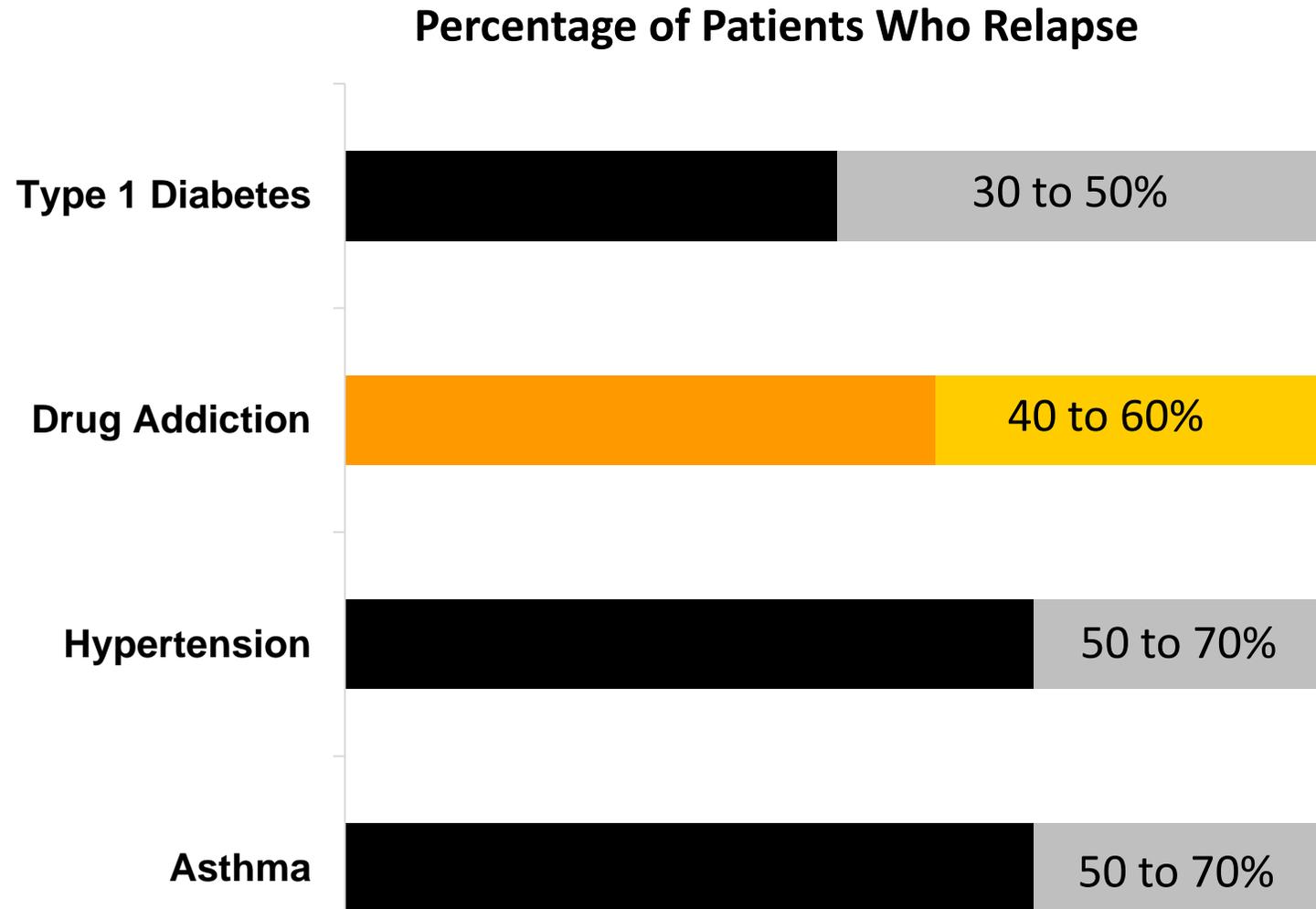
Substance Use Disorder: A Chronic Illness



O'Connor, JAMA 1998; Lucas, JAIDS 2005



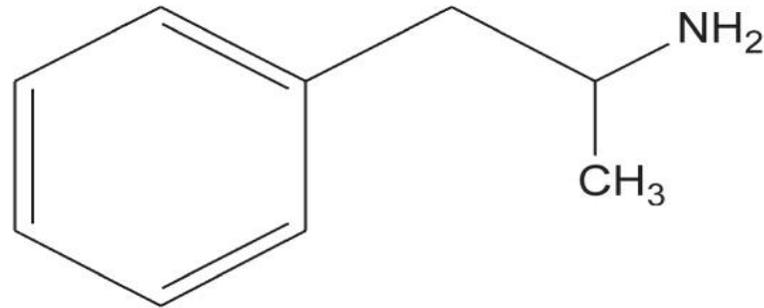
Addiction: Another chronic, relapsing disease to manage



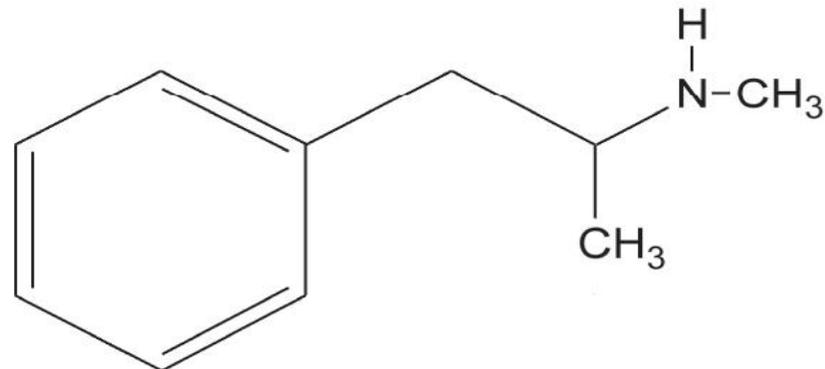
METH: EPIDEMIC, ADDICTION, AND **PHYSIOLOGY**

Methamphetamine Basics

Amphetamine



Methamphetamine



Methamphetamine Basics

- *What's it called?*

Meth, crystal, crank, ice, speed

- *What is it?*

Stimulant (upper)

- *Why do people do it?*

Increased confidence, alertness, euphoria, lowered inhibitions

- *How is it used?*

PO, PR (booty bumping), snorting, **smoking**, **IV** (slamming)

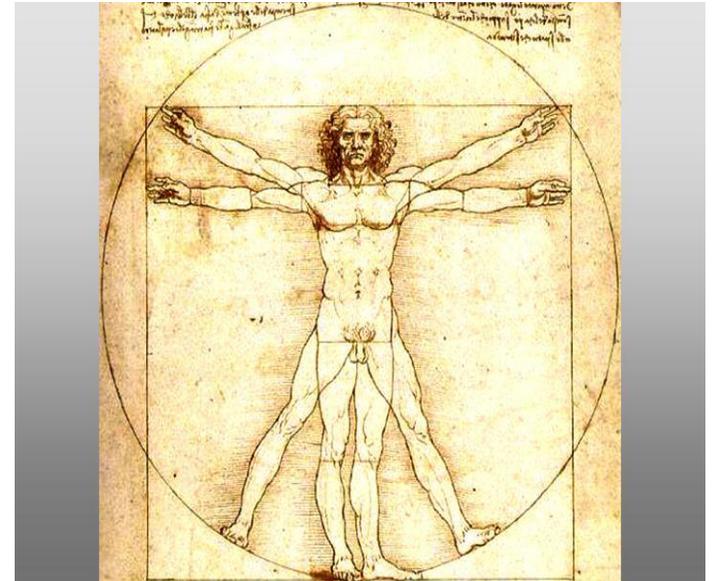
- *What's it look like?*

Think fight or flight



Acute Meth and the Body

- **Activates sympathetic nervous system.**
- **Releases vast dopamine, & serotonin, norepinephrine.**
- **Very neurotoxic to dopamine and serotonin neurons.**
- Brain: dec sleep, (psychosis)
- Teeth: decreased saliva (“meth mouth”)
- Heart: tachycardia, (MI/arrhythmia)
- GI: constipation, dec thirst & hunger
- GU: increased sex drive, delayed orgasm



<http://www.tweaker.org/body/index.html>

Case Study #2

- Sam: a 44-year-old man
- Drug of choice: Meth (smoking)
- Hx: depression, ?bipolar
- In clinic, he tells you the police are after him because of his meth-finding invention. He wants to go after the police “because they are all criminals.” You surmise he is aggressive and delusional.
- You note that you have a strong gut response. You’re concerned that this situation could become unsafe.

Discuss this case as a group.



Photo retrieved from stopalcoholism.com

Safety & Psychosis

- **Assess & maximize your safety**

- Call security, leave door open, have your back to the door, notify staff prior to going in room, consider going in with counselor or MA, etc.

- **Assess & maximize your patients' safety**

- Use resources such as counselors, staff, the crisis line.

Understand if your patient is: **Homicidal? Suicidal? A grave danger** to themselves or others?
How imminent is the risk?

Strongly consider further eval in the ER if answers unclear.

Withdrawal

- Withdrawal: irritability, depression, fatigue, hypersomnia
- Withdrawal symptoms can last 2 weeks.
- Cravings can persist for many months.
- Skin picking is common.
- Delayed depression is very common.

Chronic meth use and fear-based messaging

- People who use meth have an increase in risky behaviors and STIs.
- People who use meth are twice as likely to get HIV.
- People who use IV are at higher risk of abscess, endocarditis, etc.



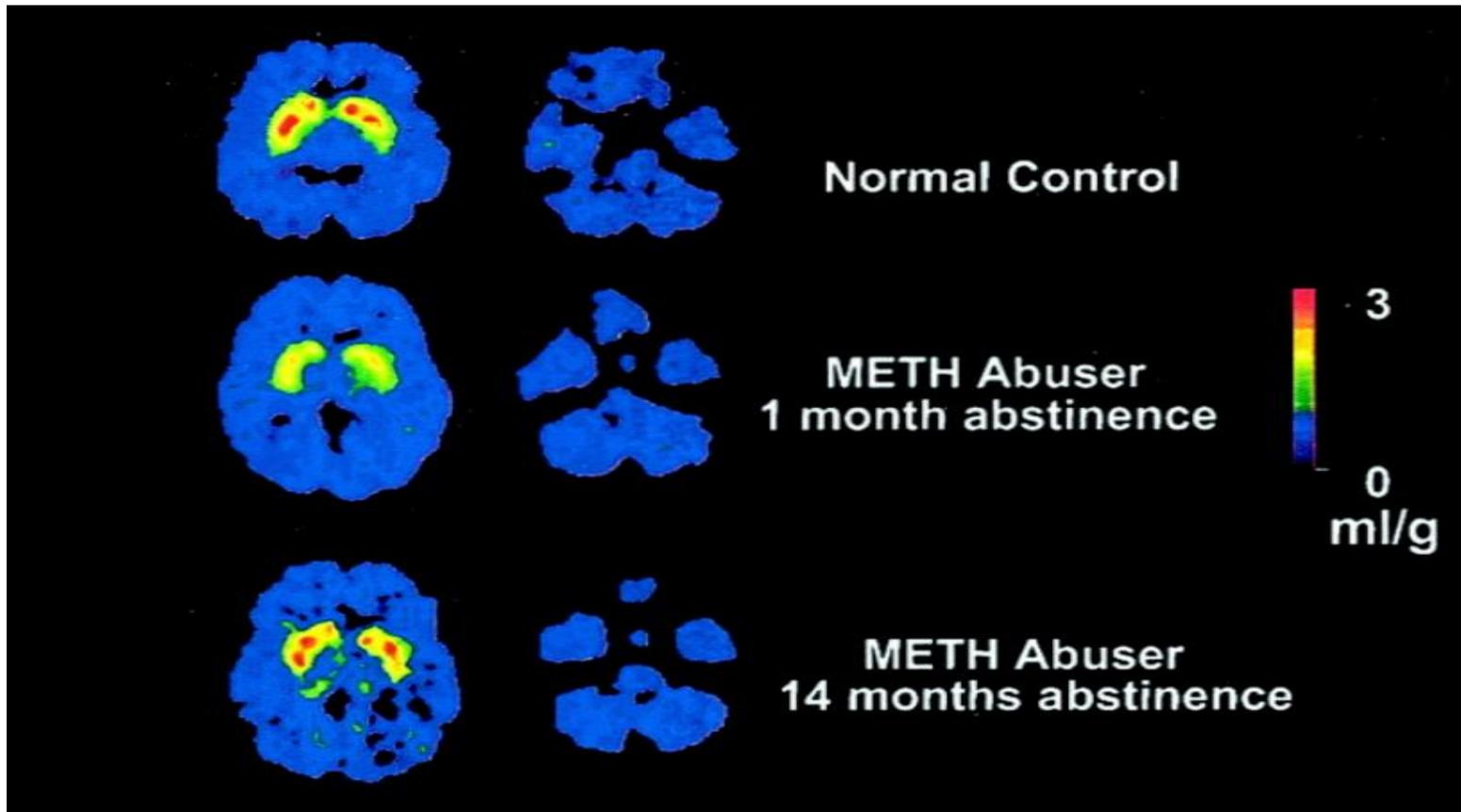
Chronic meth use, cognition & hope-based messaging

- Psychosis is not uncommon.
- Largest cognitive impairments due to meth are in episodic memory, executive function, and processing speed.
- Auditory memory is especially poor.
- Brain function can improve significantly with time away from meth.
- This takes time.



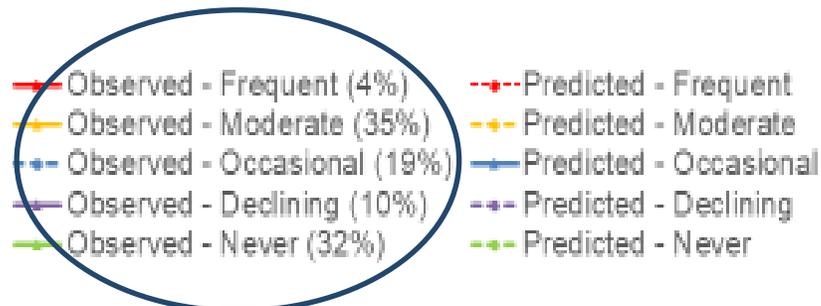
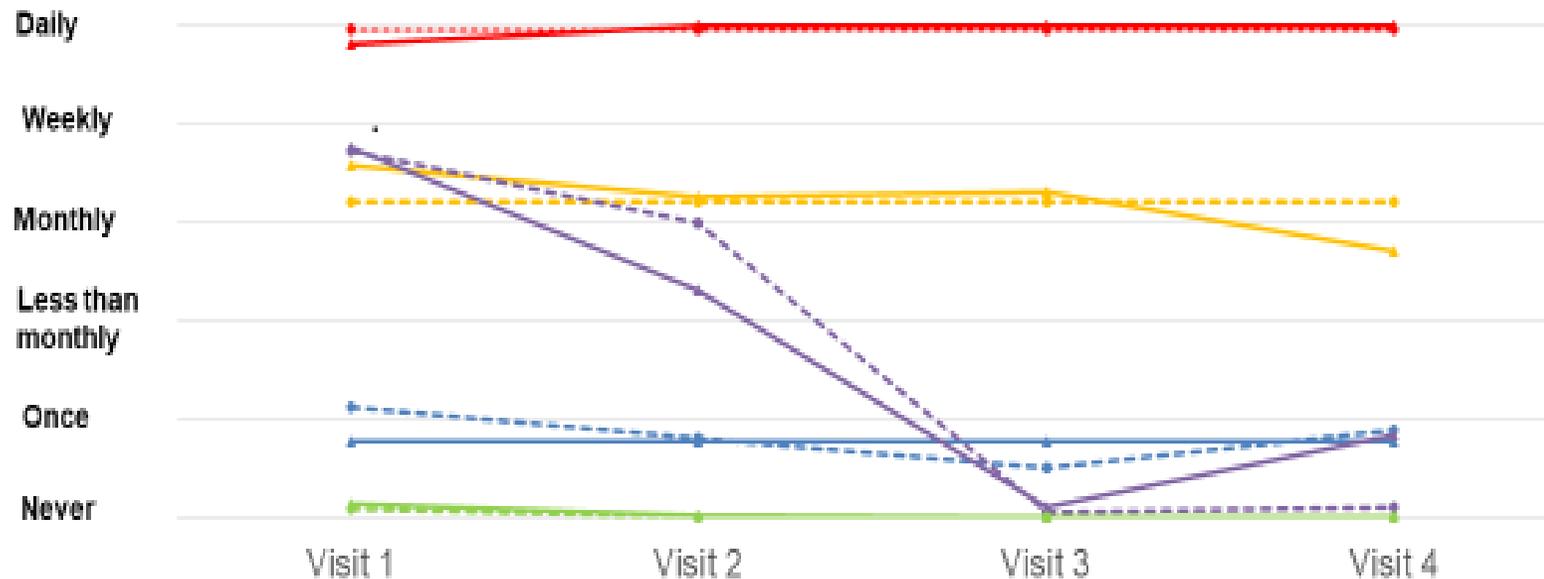
People Can Change

Recovery of Dopamine Transporters with Abstinent Methamphetamine User



People use meth differently. That use can change.

Figure 1. Methamphetamine Use Trajectories based on Self-Reported Use in the Past 6 Months



INTERVENTIONS: DATA, PRESENT STATE & FUTURE IDEAS

Data for Meth Treatment

- Traditional
- Pharmacotherapy
- Contingency Management
- Motivational Interviewing

Traditional Stimulant Therapy

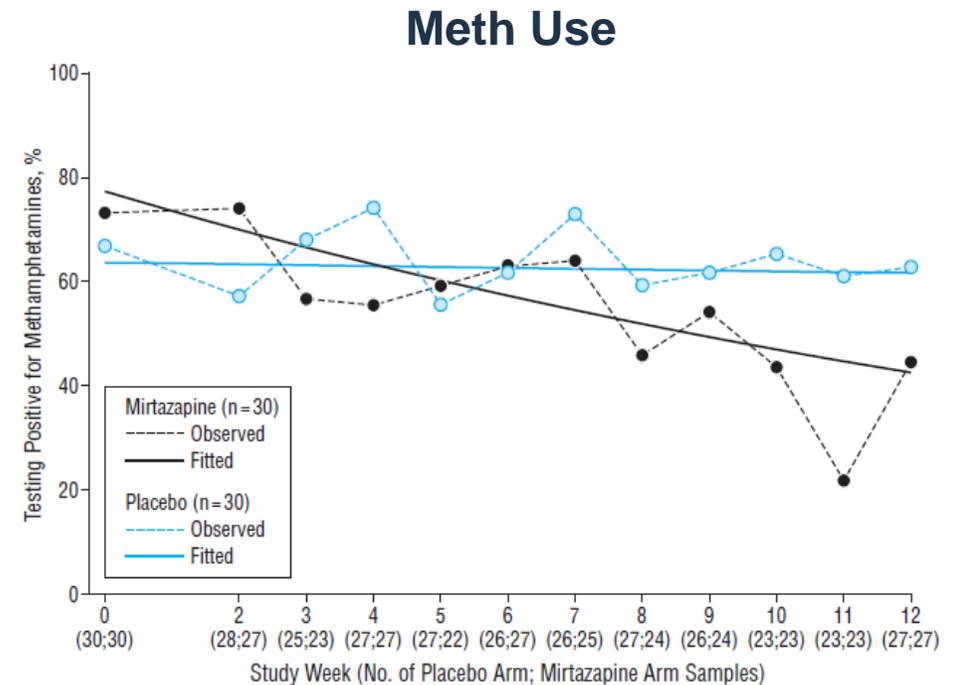
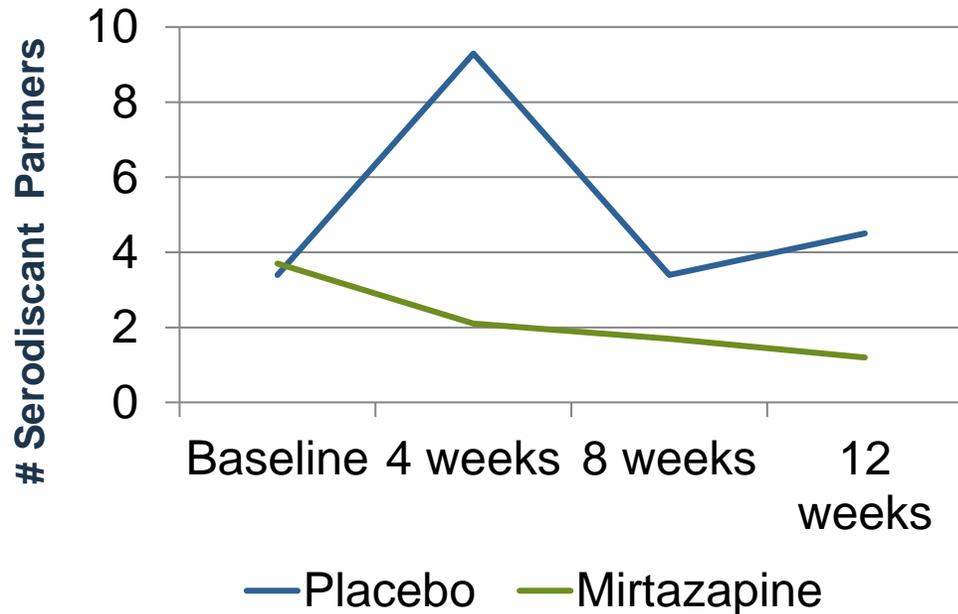
- Individual or group therapy (mild)
- Intensive outpatient therapy (mod-severe)
- Inpatient treatment/specialist (treatment-resistant)

Medication Treatment Trials for Stimulants

(None FDA-Approved) (Siefriend et al., 2020, CNS Drugs 34:337–365)

	Cocaine	Methamphetamines
Dextroamphetamine	+	+
Methylphenidate	-	-
Modafinil	+	+
Bupropion	-	++
Naltrexone	-	+/-
Mirtazapine	-	++
Topiramate	+	-
L-Dopa	-	-
Desipramine	-	
Imipramine	-	-
Sertraline	-	-
Aripiprazole		-
Buprenorphine		+

Pharmacotherapy for Stimulant Use in MSM: Mirtazapine 30 mg/day



Primary Care Treatment Pearls

- If no contra-indications, offer mirtazapine at 15-30mg with goal of 30mg qhs
- Consider bupropion (XL 150mg qday, with increase to 300 mg qday)
- If there are other indications for buprenorphine or naltrexone, these may be helpful.

- Don't forget to screen for STIs, esp Hep C and HIV
- Don't forget to vaccinate for Hep A and B
- **Don't forget naloxone & PrEP!**

- Peers, syringe exchanges, and mental health partners are incredibly helpful
- Be patient to be kind

Contingency Management and Substance Use Disorders

- Operant conditioning (Skinner, 1938)
- Initial concepts derived from work with delinquent boys (Yates, 1970)
- Early work in MMT clinics to encourage opioid abstinence (Stitzer et al, 1977)
- Application to cocaine dependence by Higgins' group (1993, 1994)
- Original voucher-based CM now has alternative “fishbowl method” (Petry 2000)



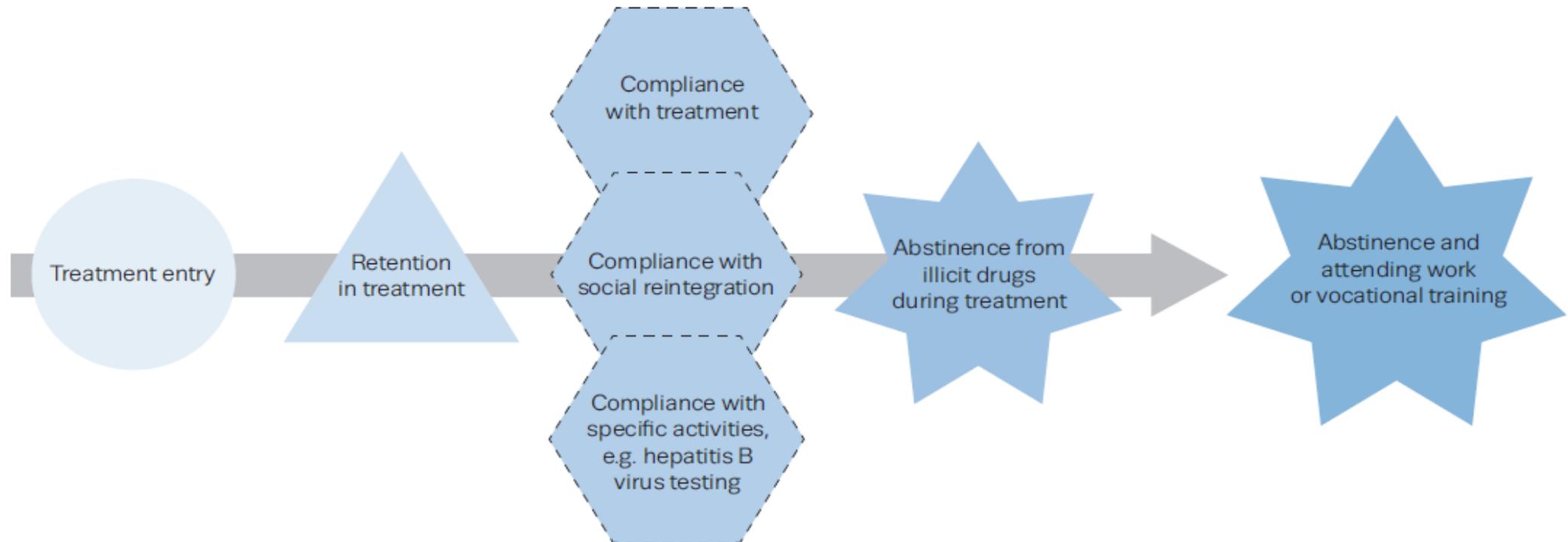
Meta Analyses of CM

- $d=0.46$ (Benishek et al., 2014, *109:1426-1436*) – Prize based only
- $d=0.58$ (Dutra et al., 2008, *Am J Psychiatry 165:179-187*)
- $d=0.52$ (Griffith et al., 2000, *Drug Alc Dep 58:55-66*)
- $d=0.40$ (Prendergast et al., 2006, *Addiction 101:1546-1560*)

The “Place” for Contingency Management

FIGURE 1

Targets and possible use of contingency management along the treatment journey



Methamphetamine treatment in MSM

Full trial: 162 methamphetamine dependent MSM in West Hollywood, CA

Cognitive Behavioral Therapy (n=40)	Gay/Bisexual Cognitive Behavioral Therapy (n=40)	Contingency Management (n=42)	Cognitive Behavioral Therapy Plus Contingency Management (n=40)
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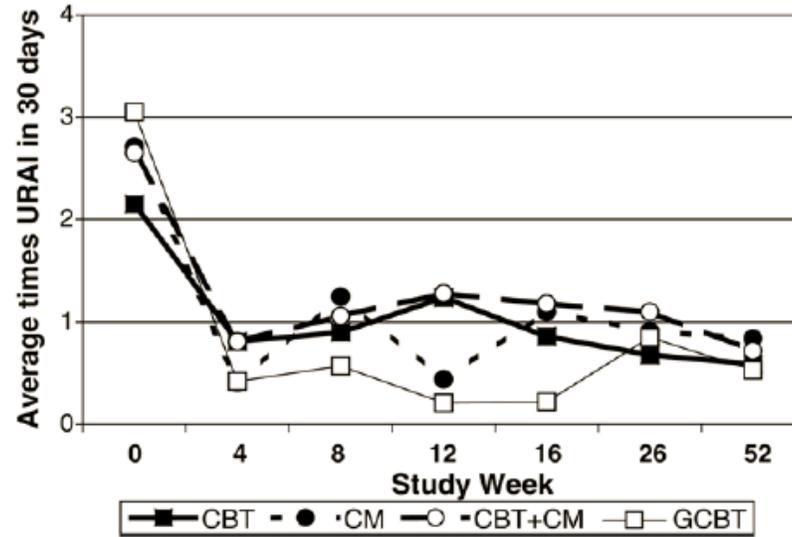
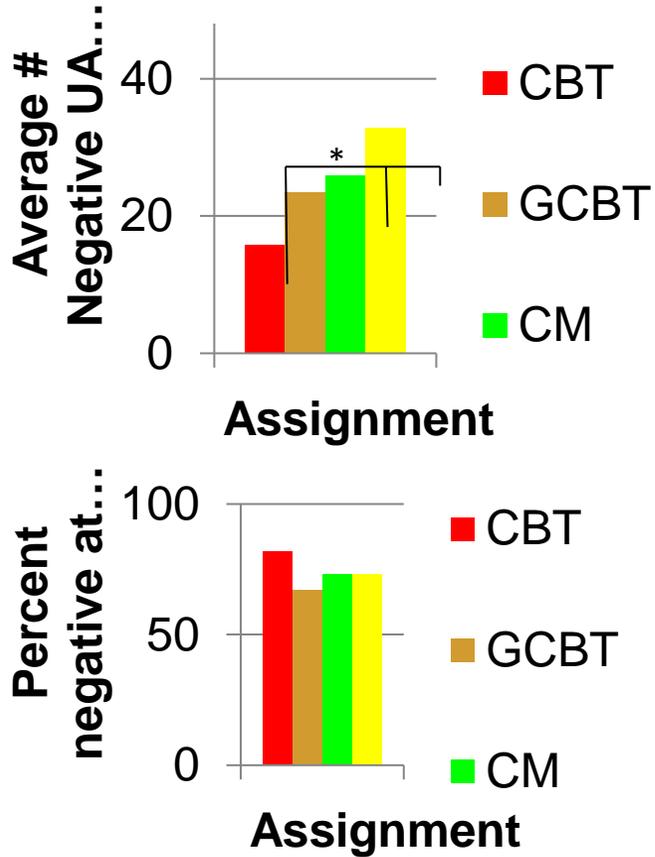
Duration: 16 weeks; 1 year follow-up evaluations

Contingency Management

- Intensive outpatient treatment, 3x/week
- Subjects compensated on an escalating scale for consecutive clean urine samples
- Subjects can redeem their earnings at any time for various prizes, rewards, gift cards – generally rewards promote drug free lifestyle
- CM is effective at reducing drug use, increasing study attendance and adherence



Early Trial: CBT, CM, CM+CBT, GCBT in MA-Dependent MSM at risk for HIV



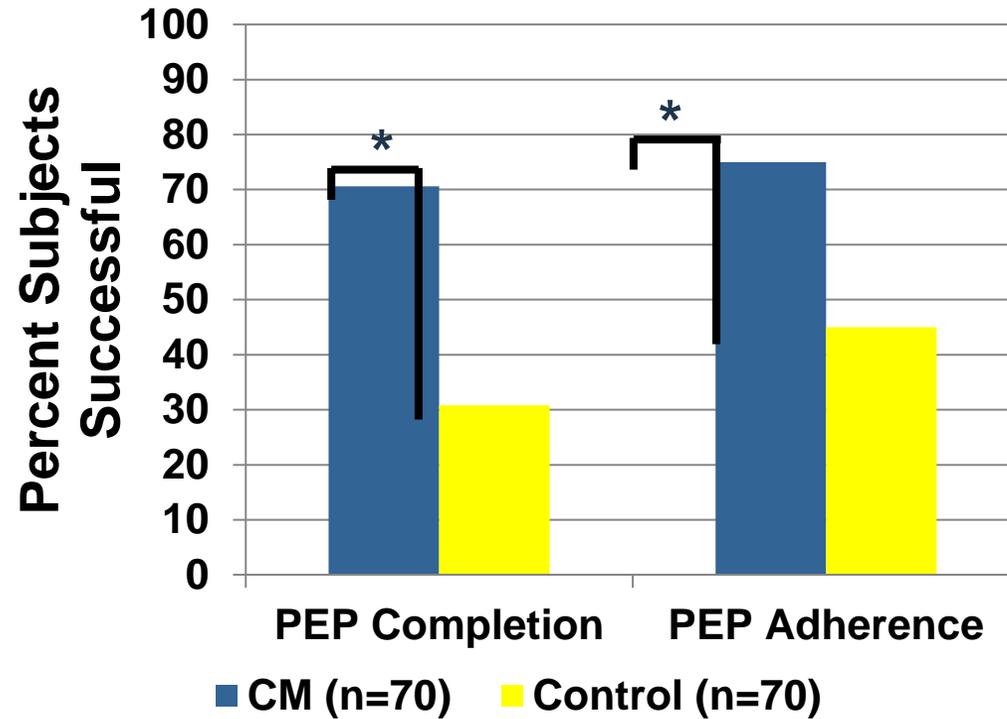
Contingency Management (CM) Boosts nPEP Outcomes in at-risk Stimulant Using MSM

Design:

- Escalating 8-week CM schedule with thrice-weekly visits based on drug-free urine samples
- \$430 maximum
- n=140

Methamphetamine Outcomes:

- CM = 8.9 (SD=9)
- Control = 6.1 (SD=6) *

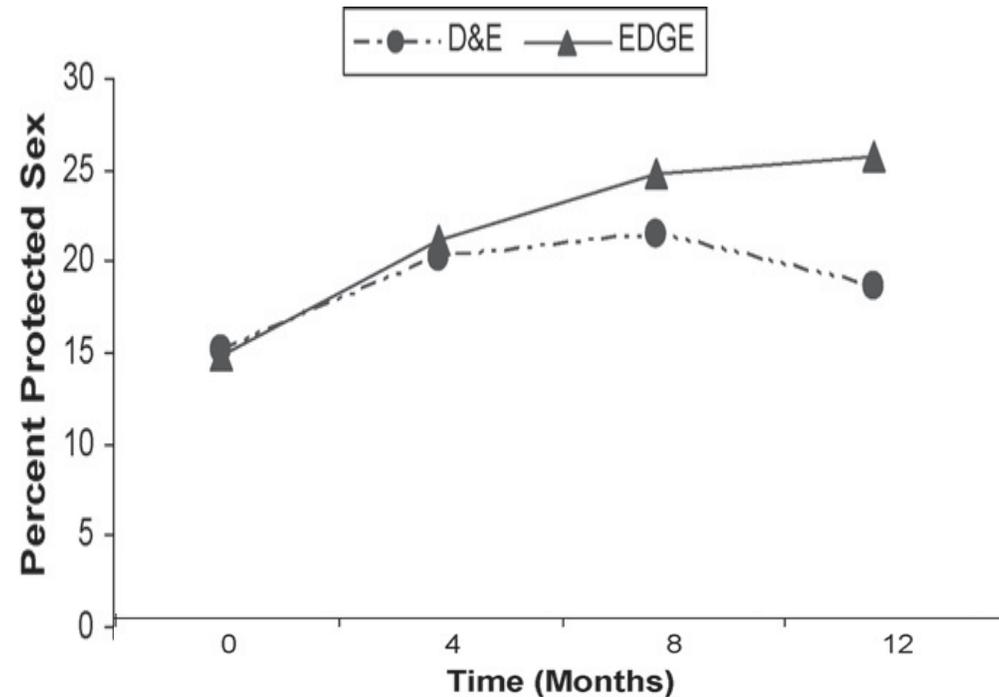


* P<0.05

Motivational Interviewing Reduces Risk Behaviors in Active MA-users

EDGE (HIV+ MSM)
Fast Lane (HIV- Hetero)

1. Context of Unsafe Sex
2. Condom Use
3. Negotiation of Safer Sex
4. Social Support
5. EDGE: Disclosure of HIV status to sex partners



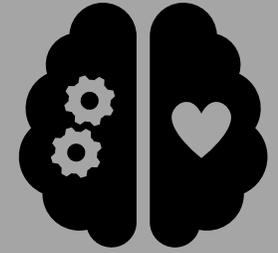
Mausbach, Strathdee, Patterson. *Drug Alc Dep.* 2007, 87:249-257
Mausbach, Strathdee, Patterson. *Ann Beh Med.* 2007, 34:263-274

Behavioral Pearls

- Contingency Management WORKS: THE most effective tool on the shelf for reducing meth use among MSM. Reduces HIV transmission & improves HIV PrEP uptake.
- Active meth users benefit from brief MI in reducing sex risk behaviors
- Meds, combined with counseling, is likely more effective than either along.



Harm Reduction and Motivational Interviewing



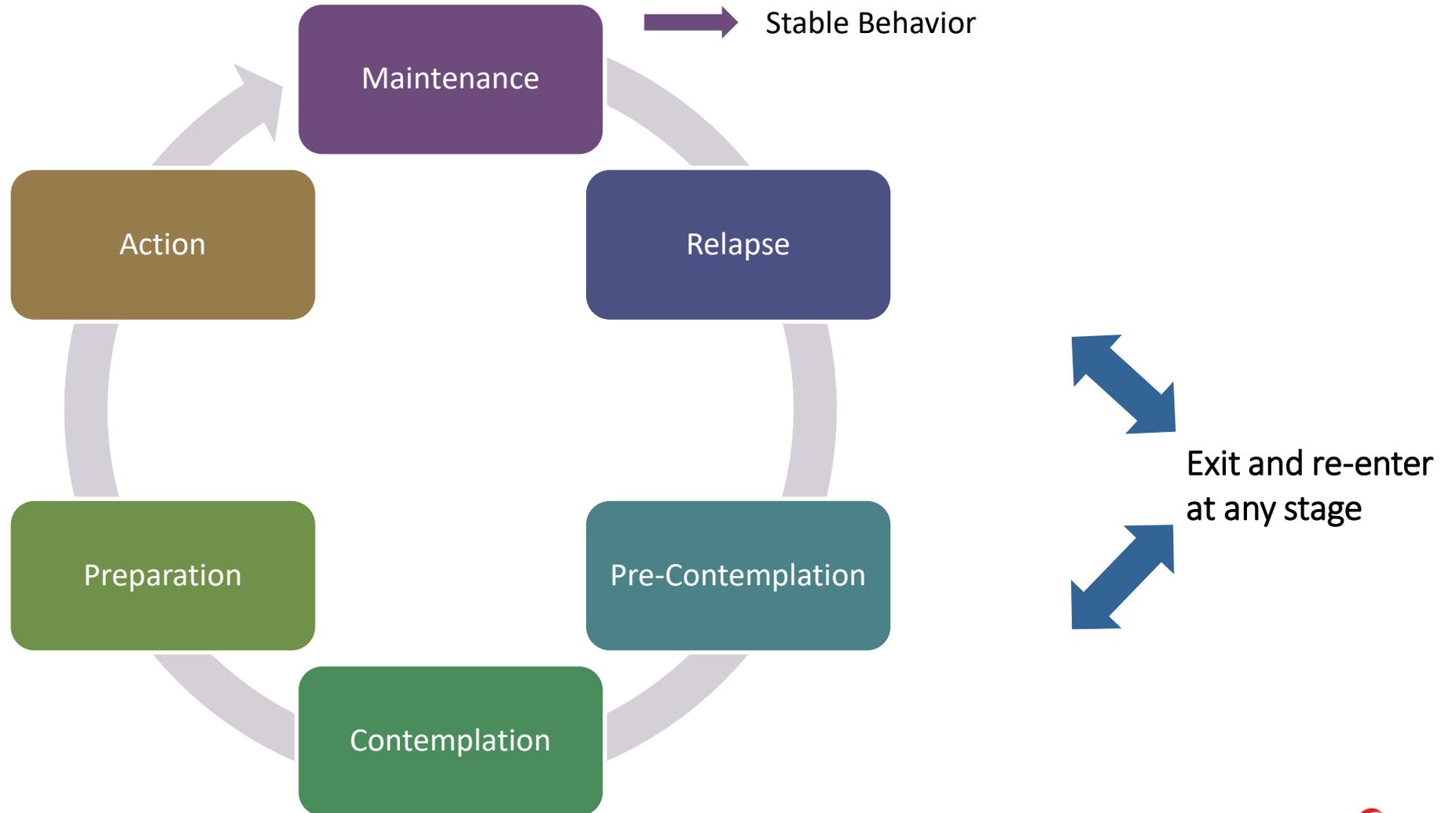
	Harm Reduction	Motivational Interviewing
TARGET	Patient-Driven	Patient-Centered
FOCUS	Quality of Life	(Often) Use Reduction/Abstinence
AIM	Reduce negative consequences of substance use	Help patients explore and resolve their ambivalence about addressing addiction
ESSENCE	Philosophy of Care	A Tool to Encourage Change

<https://blueskyrecovery.com/motivational-interviewing-harm-reduction/>

Susan Collins, PhD. Harm Reduction Research and Treatment Center, University of Washington:

<https://depts.washington.edu/harrtlab/about-us/>

Talking about Drugs & Sex: Stages of Behavior Change



Motivational Interviewing (MI)

Client-centered counseling style for eliciting behavior change by helping clients to explore and resolve ambivalence.



OARS

- Open questions that encourage further elaboration
- Affirmations that foster positive feelings
- Reflections to indicate the clinician has heard the patient
- Summaries that extend the reflections to build interest in changing direction

Change talk (MI)

- Principles — expressing empathy, developing discrepancy, rolling with resistance, and supporting self-efficacy.

Examples of common questions used:

- On a scale of 1 to 5, how interested are you in doing X?
- On a scale of 1 to 5, how likely is it that you will do X?

What do you do? What could be better?



If you did one thing differently tomorrow,
what would it be?



Case Study #3

- 47-year-old female, heterosexual
- Drug of choice: Meth (smoking)
- Hx: Cellulitis, hepatitis C, smoker, psychosis from meth, separated from husband, no children,
- Interested in getting clean

- Discuss what you would offer.
- Discuss what you do well & what you'd like to be better at
- Discuss if you did one thing differently tomorrow, what would it be?



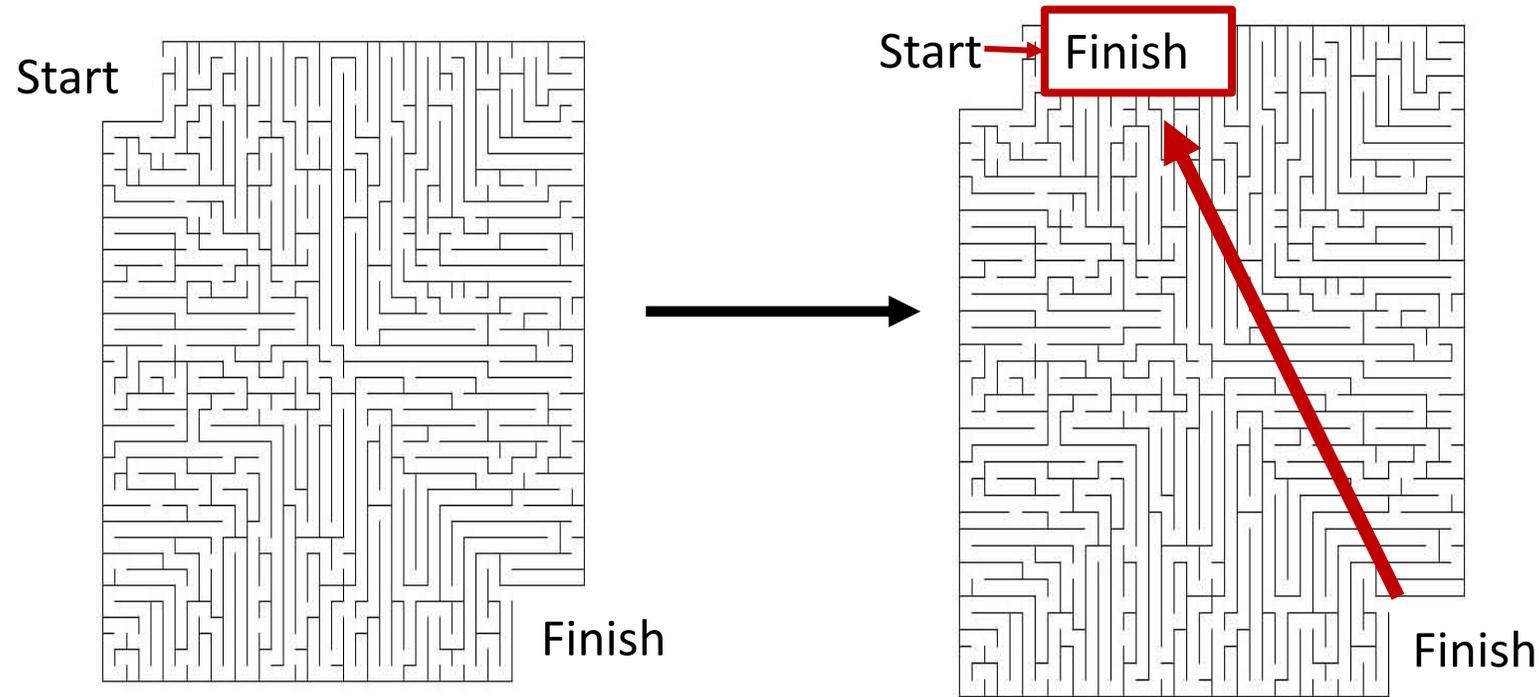
Photo retrieved from www.a1social.com

How would you approach a visit with this patient?

Break-out session: 3 min. patient & provider roleplay

INTERVENTIONS:
HOW CAN THE SYSTEM BE LESS OF A BARRIER?

For the highest need patients, can we change the structure of care available?

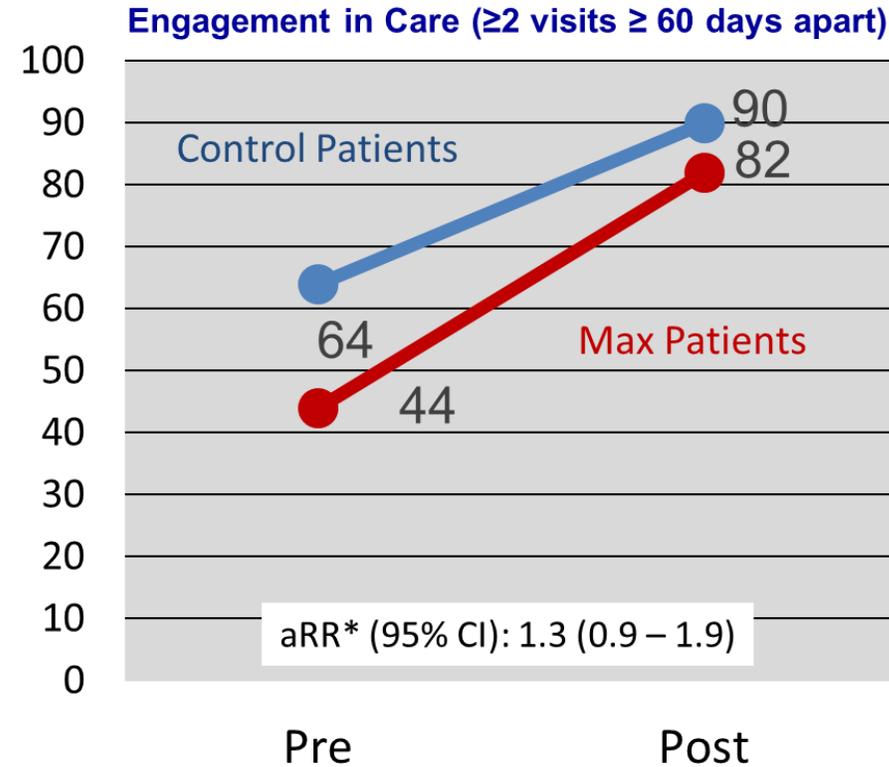
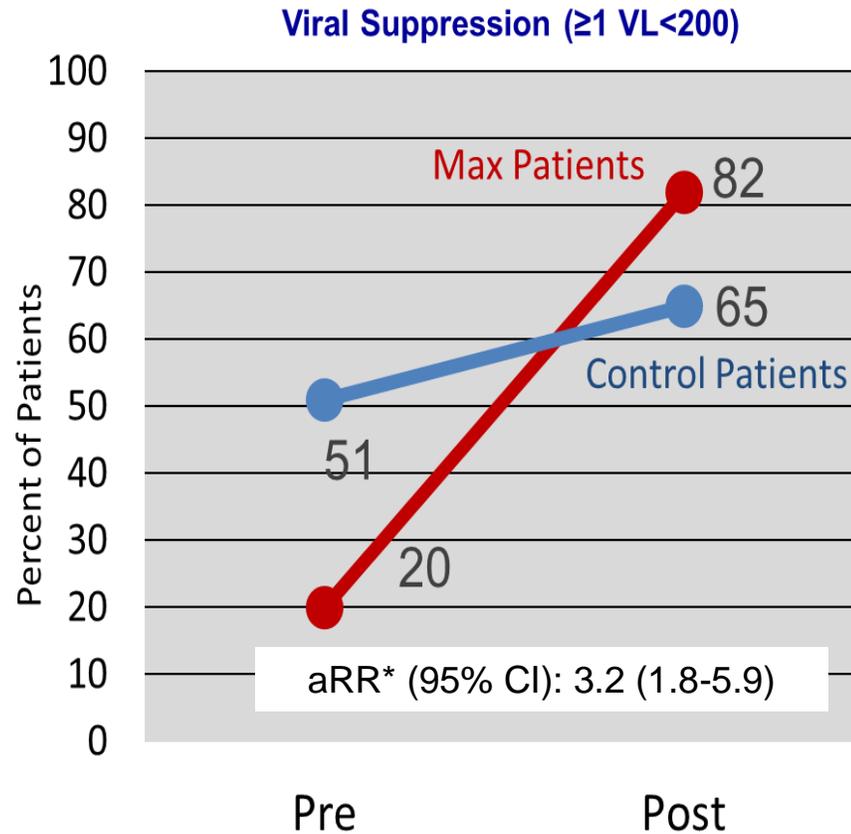


Shift in focus from “patient factors” to “program factors” to improve engagement

The Max (“Maximum Assistance”) Clinic

Low Barrier Care	Incentives	High Intensity Outreach Support	Coordinated Care & Case Management
<p>Walk-in access to</p> <ul style="list-style-type: none"> - medical care 5 afternoons/wk - case managers 5 days/wk 	<p>Snacks each visit, \$10 meal vouchers 1x/wk</p>	<p>Non-medical case managers (Public Health)</p>	<p>Jails</p>
<p>Direct phone line to MAX case managers (no phone tree)</p>	<p>Cell phone</p>	<p>Medical case managers (Madison)</p>	<p>Housing & mental health case management</p>
<p>Text message communication</p>	<p>Bus pass</p>		<p>Adherence support day program</p>
<p>Harm reduction approach</p>	<p>\$25 - visit + blood draw q 2 months</p> <p>\$50 – VL<200 q 2 months (previously \$100)</p>		

Outcomes of Patients Enrolled in the Max Clinic (first 50) vs. Standard-of-Care Control (N=100) in the 12 months Pre- and Post-Baseline



*Relative Risk Ratio (RRR) Adjusted for substance use, psychiatric dx, housing status (aRRR)

What are the Essential Elements?

- Walk-in visits
- Incentive to draw people in
 - (doesn't have to be \$)
- Intensive case management support

Max Clinic Conclusions

- The Max Clinic successfully engaged “hard-to-reach” people with HIV
- Elements of the low-barrier clinic approach can be adapted to different settings
- Need to expand alternative approaches to meet the goals of *Ending the HIV Epidemic*

HOW IS YOUR SYSTEM A BARRIER?

WHAT ARE WAYS TO MAKE IT EASIER TO ACCESS CARE?

Acknowledgement

The Mountain West AIDS Education and Training (MWAETC) program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$2,803,298 with 0% financed with non-governmental sources.

The content in this presentation are those of the author(s) and do not necessarily represent the official views of, or an endorsement, by HRSA, HHS, of the U.S. Government.

Let's end HIV in Oregon.

We can make it happen.
The time is now.



Resources from Today's Event

- [HaRRT Center](#) Resources for Safer Drug Use:
 - [Stimulants/Uppers](#)
- Prime+ Peer Program: [Site Locations in Oregon](#)
- Harm Reduction Coalition: [Getting Off Right – A Safety Manual for Injection Drug Users](#)
- [Winter Webinar Series](#) - second session on 2/12/21
- Oregon AETC website for additional resources and information: <https://www.oraetc.org/pwid-resources>
- For more information about engaging people who inject drugs in healthcare:
 - Email jnusser@peacehealth.org (Dr. John Nusser at PeaceHealth)
 - Email hbeckett@allianceor.org (Harmony Beckett, CHW) or dzahner@allianceor.org (Dane Zahner) at HIV Alliance