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# HARM REDUCTION

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## OBJECTIVES



Define harm reduction and give examples of this strategy



Describe the mission of syringe service programs (SSPs)



Describe how healthcare professionals can use harm reduction principles



# HARM REDUCTION BASICS





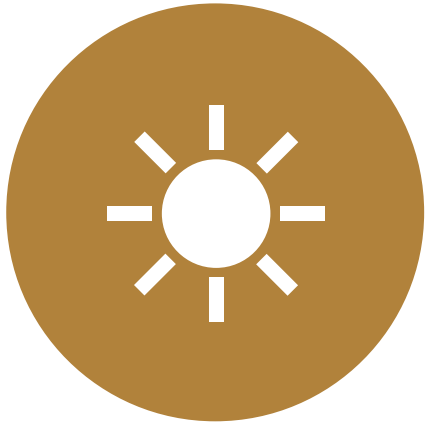
# HARM REDUCTION

**“Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. Harm reduction is also a movement for social justice built on a belief in, and respect for, the rights of people who use drugs.”**



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## RISKY BEHAVIORS – HOW DO WE REDUCE HARMS?



ENJOYING THE SUN



DRIVING CARS



USING ILLICIT DRUGS

# POTENTIAL HARMS OF SUBSTANCE USE



Substance Use  
Disorders



Skin and Soft Tissue  
Infections



Bacteremia and  
Endocarditis



Bloodborne  
Disease: HIV &  
Hepatitis C



STIs: HIV



Overdose

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OUD HARM  
REDUCTION  
MODALITIES

Medication for Opioid Use Disorder  
(MOUD)

Naloxone

Syringe Service Programs

Safe Injection/Consumption Sites



# SYRINGE SERVICE PROGRAMS





# SYRINGE SERVICE PROGRAMS



Community  
based programs  
that provide  
access to sterile  
needles and  
syringes free of  
cost

Also provide:  
Sterile water  
Alcohol Swabs  
Condoms  
Education

## SYRINGE SERVICES PROGRAM GOALS



Goal #1: Prevent the spread of HIV, hepatitis C, and other bloodborne pathogens.



Goal #2: Support participants in the pursuit of recovery through linkage to community and medical resources.



SSPs do not try to “**save**” or “**rescue**” anyone. They support participants wherever they are without judgement or assumption.

# GATEWAY TO HOPE (TIPPECANOE COUNTY) - SERVICES OFFERED



**Syringe Services**



**Hepatitis C, HIV, & STD Testing**



**Recovery Coaching**



**Harm Reduction Kits**



**Naloxone Rescue Kits**



**Linkages to Care**



**Wound Care**



**Immunizations**



**Insurance Navigation**

- Handwashing
- Clean surface
- Alcohol swabs
- Tourniquet
- "Cooker"
- Sterile water
- Syringes
- Antibacterial ointment
- Band-Aids







# MISCONCEPTIONS ABOUT SYRINGE SERVICES PROGRAMS

## Myths

- Promote illicit drug use
- Increase danger to public and law enforcement
- Prevent people from getting into recovery

## Facts

- Encourage safer use; do not increase drug use
- Decrease improperly discarded syringes
- Increase access to and retention in treatment services



# Needle Exchange and HIV

Are needle and syringe programs associated with a reduction in HIV<sup>a</sup> transmission among people who inject drugs: a systematic review and meta-analysis.

Aspinall, et al. International Journal of Epidemiology 2014; 235-48

Objective	To assess the association between needle exchange and HIV <sup>a</sup> transmission.
Study Design	Meta-analysis
Methods	12 studies were gathered and reviewed for analysis. A total of 12,000 person-years of follow up were evaluated.
Results	<ul style="list-style-type: none"><li>Exposure to NSP was associated with a reduction in HIV<sup>a</sup> transmission- 0.42 (0.22-0.81)</li></ul>

<sup>a</sup>HIV-human immunodeficiency virus

# Needle Exchange and HCV

## A Systematic Review and Meta-Analysis of Interventions to Prevent Hepatitis C Virus Infection in People Who Inject Drugs

Hagan, et al. JID 2011; 75-83

Objective	To meta-analyze the effects of risk-reduction interventions on HCV <sup>a</sup> seroconversion and identify the most effective intervention types.
Study Design	Meta-analysis
Methods	Eligible studies reported on the association between participation in interventions intended to reduce unsafe drug injection and HCV <sup>a</sup> seroconversion in samples of PWID.
Results	<ul style="list-style-type: none"><li>• Included interventions: behavioral, substance use treatment, needle exchange</li><li>• Using multiple combined strategies reduced the risk of HCV<sup>a</sup> by 75% (RR 0.25 (0.07-0.83))</li></ul>

<sup>a</sup>HCV-hepatitis C virus



# Re-using Needles

The Role of Needle Exchange Programs in HIV Prevention. Vlahov, et al. Public Health Reports 1998; 75-80	
Objective	To review the effectiveness of the 110 needle exchange programs across the US.
Study Design	Prospective cohort study.
Methods	221 clients were surveyed pre-NSP, 2 weeks, and 6 months on injection frequency and sharing of needles.
Results	<ul style="list-style-type: none"><li>• Declines in syringe borrowing (22% to 8%)</li><li>• Declines in syringe lending (27% to 12%)</li></ul>





# Syringe Disposal

A comparison of syringe disposal practices among injection drug users in a city with versus a city without needle and syringe programs.

Tookes, et al. Drug Alcohol Depend. 2012; 123:255-59

Objective	To compare syringe disposal practices in a US city with needle exchange to a city without needle exchange by examining the prevalence of improperly discarded syringes.
Study Design	Observational study.
Methods	Conducted visual inspection walkthroughs in a random sample of the top-quartile of drug affected neighborhoods in San Francisco and Miami. Additional surveys were collected from injection drug users in both cities.
Results	<ul style="list-style-type: none"><li>• San Francisco-44 syringes/ 1000 census blocks</li><li>• Miami- 371 syringes/1000 census blocks</li><li>• Survey- San Francisco (13%) vs Miami (95%)</li><li>• 34.2 times the adjusted odds ratio of improper disposal (21.92-53.47)</li></ul>

# Opening the Door to Treatment

Facilitating entry into drug treatment among injection drug users referred from a needle exchange program: Results from a community-based behavioral intervention trial

Strathdee, et al. Drug Alcohol Depend. 2006; 83:225-32

Objective	To evaluate case management intervention to increase treatment entry among injection drug users referred from a needle exchange program.
Study Design	Prospective cohort study.
Methods	245 clients from a Baltimore needle exchange between 2002 and 2004 were analyzed. Treatment arm was given case management to help facilitate their access to treatment. Control arm was given an appointment card.
Results	<ul style="list-style-type: none"><li>• 34% entered treatment within 7 days of referral to NEP</li><li>• 40% in treatment arm and 26% in control (p=0.03)</li></ul>

# Decreasing Injection Frequency

Reduced injection frequency and increased entry and retention in drug treatment associated with needle-exchange participation in Seattle drug injectors.

Hagan, et al. Journal of Substance Abuse Treatment 2000; 247-52

Objective	To evaluate the association between needle exchange, change in drug use frequency, and enrollment and retention in methadone drug treatment in a cohort of Seattle injection drug users.
Study Design	Prospective cohort study.
Methods	2,208 clients enrolled in the study and completed a follow-up interview: <ul style="list-style-type: none"><li>• 1,079 included in the analysis of injection frequency</li><li>• 441 clients included in the analysis of no longer injecting</li><li>• 1,345 heroin injectors included in the analysis of methadone treatment</li></ul>
Results	<ul style="list-style-type: none"><li>• Exchangers were 2.5 times more likely to report significant (&gt;75%) reduction than never-exchangers (1.46-8.09)</li><li>• Exchangers were 3.5 times more likely to report no injection use after follow-up than never exchangers (2.07-5.89)</li><li>• New exchangers were 5 times more likely to enter methadone treatment than never exchangers (ARR-5.05 CI 1.44-17.)</li></ul>

# Harm Reduction and Life Outcomes

Does harm reduction programming make a difference in the lives of highly marginalized, at-risk drug users?

Rogers, et al. Harm Reduction Journal 2004; 1:1-7

Objective	To evaluate outcomes of ten life areas that are important to drug users.
Study Design	Three-phase observational study.
Methods	1 <sup>st</sup> : Conducted survey with 120 clients to develop culturally relevant outcomes. 2 <sup>nd</sup> : Conducted focus group interviews to help validate the outcomes. 3 <sup>rd</sup> : Used the outcomes to evaluate a large harm reduction program in New York City, which involved a sample of 261 clients with baseline, post, and six follow up assessments.

# Harm Reduction Improves Life Outcomes

**Table 3: Change Across Mean Scores of Outcomes from Baseline to Post to Follow-up**

Life Areas	Means Scores*			Level of Significance		
	Baseline	Post	Follow-up	Baseline vs. Follow-up	Baseline vs. Post	Post vs. Follow-up
Housing	4.10	3.28	3.17	≤.001	≤.001	NS
Income	5.61	4.05	3.36	≤.001	≤.001	NS
Family relations**	2.97	2.78	1.93	≤.001	NS	≤.001
Program services/benefits	5.97	5.08	5.94	NS	≤.001	NS
Food (nutrition)	4.04	3.82	3.57	≤.001	NS	NS
Health care	6.72	5.74	4.92	≤.001	≤.001	≤.01
Handling negative feelings	6.35	5.86	2.77	≤.001	NS	≤.001
Dealing with drug use problems	9.45	7.24	5.95	≤.001	≤.001	≤.01
Dealing with legal problems	5.11	4.50	3.71	≤.05	NS	NS

\*Progress across outcomes are demonstrated in the *lowering* of mean scores because outcome scales were quantified from the "best" measures receiving the lowest scores and the "worst" receiving the highest. \*\*While most outcome scales were constructed with scores from 1–10, the outcome scale for "family realtions" was constructed with scores from 1–6.



# Blood-Borne Infections Are Not Cheap

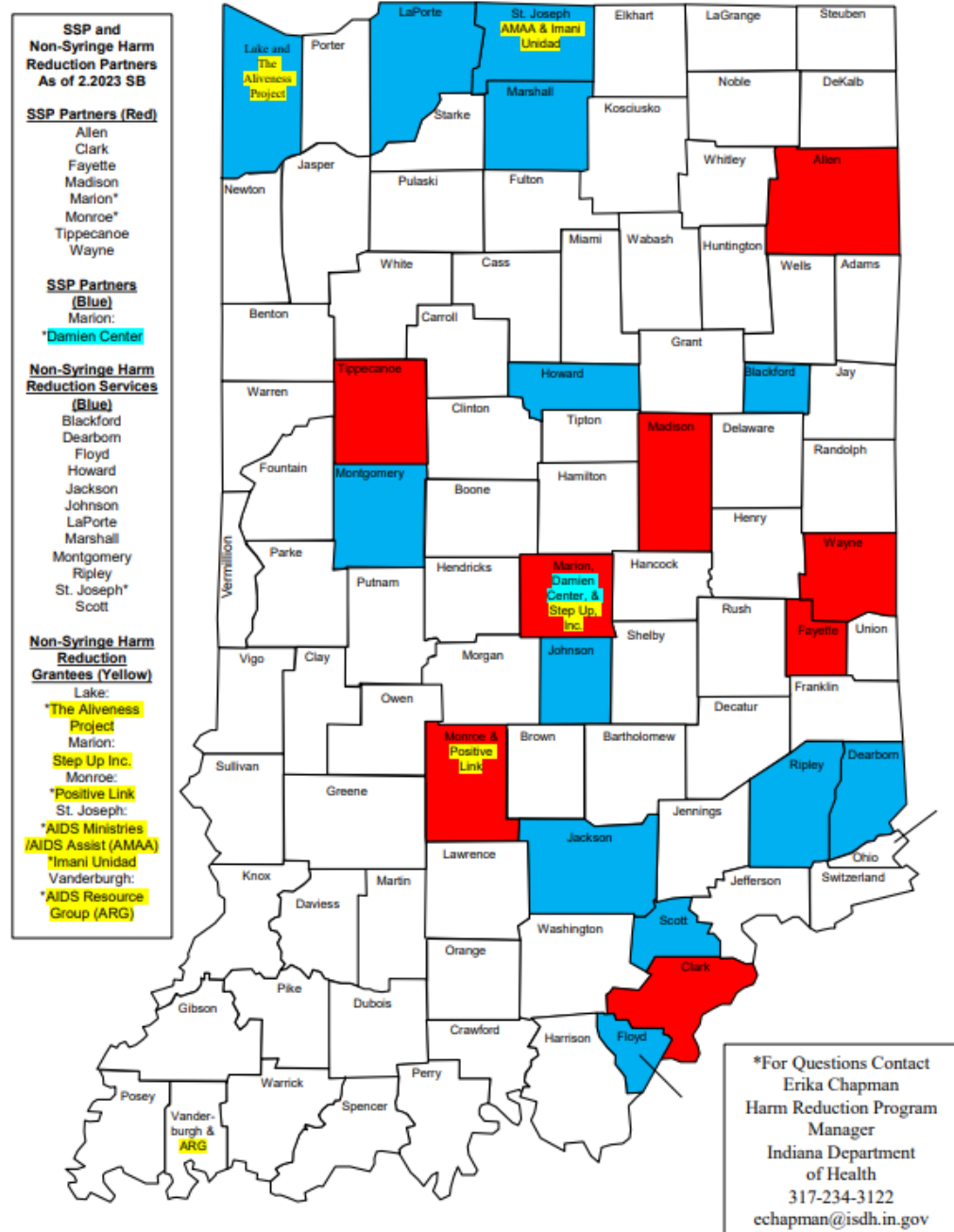
- Lifetime cost of HIV treatment- \$379,668
- HCV treatment initially ranged from \$84,000 to \$96,000
  - Costs have dropped in recent years to \$40,000 dollars for Medicaid programs
  - Hepatitis C treatment can save \$14.3 billion in health care costs while costing \$69.5 billion to implement



# Harm Reduction Cost Savings

- New York City needle exchange-
  - Cost effectiveness analysis:
    - One year savings of \$1,000-\$3,000 per client
- Annual US investment of \$10 million would result in:
  - 194 HIV infections averted per year
  - \$75.8 million dollars savings in lifetime treatment costs
  - Return of investment \$7.58 for every US dollar spent

# SYRINGE SERVICE PROGRAMS IN INDIANA







# FENTANYL TEST STRIPS



# Fentanyl Overdoses

- Fentanyl is a synthetic opioid 50-100 times more powerful than morphine
- Responsible for 4% of drug overdose in 2011 but now one of the leading substances involved in drug overdose
- 2017- 57% of overdose deaths in New York City
- 2018- 89% of all drug overdoses in Massachusetts
- 2019- 51% of total overdose deaths in the US
- Between Oct 2019-2020- 46% increase in overall deaths from methamphetamine compared to last year





# Fentanyl Test Strips

- Simple, inexpensive method of averting drug overdoses
- Small strips of paper that can detect presence of fentanyl in a drug batch
- 96-100 percent accurate in detecting presence of fentanyl- can detect at least 10 fentanyl analogs
- If not sufficiently diluted a false positive can result
- A negative result does not necessarily indicate that an illicit substance does not contain fentanyl



# Evidence Base

- FORECAST study in 2018 found:
  - 85% desired to know about presence of fentanyl
  - 70% noted it would modify their behavior
- 2019 study with Brown University:
  - Training important to confidence of using the fentanyl strip
  - Enjoyed being able to test in private- less stigma
- 2019 study RTI international:
  - 125 people surveyed
  - 81% used fentanyl test strip prior to drug use
  - 43% reported change in behavior (using smaller dose of drug was most common)
  - 77% increase in safety



# Legal Barriers

- State Laws concerning the use of drugs paraphernalia
  - Defined as: “testing equipment used, intended for use, or fashioned specifically for use in identifying, or in analyzing the strength, effectiveness or purity of controlled substances”
  - These laws are not generally enforced with regard to use or possession of fentanyl test strips but could still be a deterrent for people
- April 7, 2021- federal funding can now be used for the purchase of fentanyl test strips

# How to Use

Cook County Department of Public Health

## How to use a fentanyl test strip

What do I need?

- ✓ 1 shot glass, half-filled with water



You can use any small container. Little ketchup cups work well!

Whatever container you use, only use about a half (1/2) a shot glass of water (15mL).

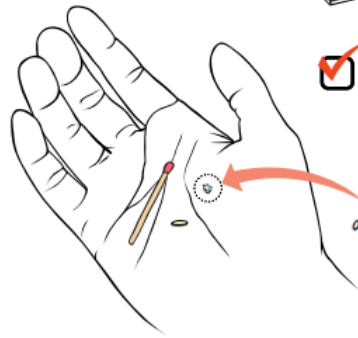
If you are testing a stimulant (like meth, cocaine, or MDMA) use a full shot glass of water instead.

- ✓ fentanyl test strip



- ✓ very small amount of powder to test

about the size of a match head or half a grain of rice



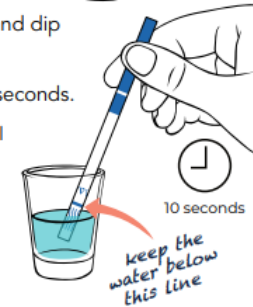
about this much!



Cook County  
Public Health

How do I use the strip?

- 1 Put the powder in the glass of water and swirl it until it is completely dissolved.  
(If you want to test something that isn't a powder, crush it first.)
- 2 Hold the solid blue end of the test strip and dip the other end in the water.
- 3 Hold the strip in the water for about ten seconds.  
You will know it's ready because the water will be sucked up into the white part of the strip.
- 4 Take the strip out of the water and wait sixty (60) seconds.
- 5 Use a bright light to look at the strip and count how many red lines there are. Even very light red lines count!



TWO (2) red lines means... **NO**, there is no fentanyl



ONE (1) red line means... **YES**, there is fentanyl

No drug is completely safe. Make sure someone is with you who can give naloxone (Narcan) or call for help if you need it.

- 6 Make sure you check the strip within ten minutes of doing the test. Throw the strip away when you are done.



If you want to know more about what's in your drugs, Chicago Recovery Alliance can help. Email [drugchecking@anypositivechange.org](mailto:drugchecking@anypositivechange.org) or call 312-953-3797 for more information.



# INTEGRATING HARM REDUCTION INTO PRACTICE



# INTEGRATING HARM REDUCTION INTO **YOUR** PRACTICE



Know your community's resources



Know laws regarding purchasing syringes



Recommend naloxone to at-risk groups (or everyone!)



Avoid stigmatizing language



Counsel patients who use illicit drugs on how to do so safely



Advocacy





Allows any Hoosier to  
obtain naloxone  
through a standing  
order

AARON'S LAW

# NaloxBox

- Overdose Lifeline working with distribution centers to allow access to naloxone 24 hours a day with no personal interaction needed for pick up
- <https://www.overdoselifeline.org/naloxone-boxes-and-distribution-centers/>





## AVOID STIGMATIZING LANGUAGE: KNOW THE O FACTS

SAY THIS	NOT THIS
Person with opioid use disorder	Addict, user, druggie, junkie, abuser
Disease	Drug habit
Person living in recovery	Ex-addict
Person arrested for a drug violation	Drug offender
Substance dependent	Hooked
Medication is a treatment tool	Medication is a crutch
Had a setback	Relapsed
Maintained recovery; substance-free	Stayed clean
Negative drug screen	Clean drug screen
Positive drug screen	Dirty drug screen



## FURTHER RESOURCES

- Naloxone Access:
  - <https://optin.in.gov/>
- Naloxone Training:
  - Overdose Lifeline at <https://www.overdoselifeline.org/online-self-paced-courses.html>
  - American Red Cross at <https://www.redcross.org/take-a-class/opioidoverdose>
- Safer Injection Education:
  - <https://harmreduction.org/issues/drugs-drug-users/drug-information/safer-injection-materials/>
- Know the O Facts
  - <https://www.in.gov/recovery/know-the-facts/stigma.html>



## ADDITIONAL REFERENCES

- Centers for Disease Control. Syringe Services Programs (SSPs). Available at: <https://www.cdc.gov/ssp/index.html>. Accessed November 2, 2020.
- NextLevel Recovery Indiana. Know the O Facts. Available at: <https://www.in.gov/recovery/know-the-facts/stigma.html>. Accessed November 2, 2020.
- IUPUI School of Public Health. What is Indiana's Aaron's Law? Available at: <https://fsph.iupui.edu/doc/research-centers/aarons-law-rv.pdf>. Accessed November 2, 2020.

**I DON'T PROMOTE DRUG USE.  
I DON'T PROMOTE CAR  
ACCIDENTS EITHER, BUT I STILL  
THINK SEATBELTS ARE A GOOD IDEA.**

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**Harm Reduction - practicing common sense since the 1980's.**

QUESTIONS?