



Families Against Narcotics

Your **connection** for information, resources, and support.

HARM:LESS
Harm Reduction Support Team



DETROIT RECOVERY PROJECT INC.
Doing It Together!

DISCLOSURE

**NONE OF THE PRESENTERS HAVE DECLARED A
RELEVANT FINANCIAL RELATIONSHIP WITH AN
INELIGIBLE COMPANY.**



WHAT IS 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.

Photo by Andy G.

1. National Harm Reduction Coalition. (2020). Principles of Harm Reduction. <https://harmreduction.org/about-us/principles-of-harm-reduction/>

8 PRINCIPLES OF HARM REDUCTION

1. DRUGS ARE A PART OF OUR COMMUNITIES, GOOD OR BAD, AND THAT WE SHOULD NOT JUDGE OR IGNORE IT BUT WORK TO ALLEVIATE POTENTIAL HARM

2 MEETING PEOPLE WHERE THEY ARE AT, AND IF THEY ARE NOT READY TO STOP USING, EDUCATING THEM ON THE SAFEST WAYS TO USE

3. BELIEVES IN MULTIPLE PATHWAYS AND IMPROVING QUALITY OF LIFE FOR PEOPLE NO MATTER WHERE THEY ARE ON THEIR JOURNEY

4. NO JUDGEMENT AND NO REQUIREMENTS TO ACCESS SERVICES



8 PRINCIPLES OF HARM REDUCTION

5. VALUE, ENCOURAGE AND UTILIZE THE OPINIONS AND INPUT OF INDIVIDUALS THAT ARE OR HAVE BEEN A DRUG USER

6. EMPOWERS THOSE ACTIVELY USING TO OVERSEE THEIR HARM REDUCTION AND EDUCATE THEM TO HELP OTHERS IN THEIR NETWORKS

7. ACKNOWLEDGES THE SOCIAL DETERMINANTS OF HEALTH AND HOW THEY AFFECT DRUG USE, SERVICE ACCESS AND OTHER NEEDS

8. RECOGNIZES POTENTIAL HARM AND TRAUMA IN THE LIFE OF THE USER





ORIGINS OF HARM REDUCTION IN THE US

- First Government funded SSE Pilot in NYC
- Private funded SSE's running in CT and WA
- Bill restricting federal dollars from being used for SSE's

Enough research has been done to deem SSE's as 'safe and effective'

Naloxone is accessible to first responders and HR Providers

Early 70's

Late 80's

Mid 90's

1998

2000

2010

2017

2022

- Methadone Maintenance
- Suboxone is developed
- Naloxone is an FDA approved drug and in use

- Private funded SSE's running in CT and WA
- The NIDA begins SSE research

Suboxone is approved for use

First federally funded Harm Reduction NOFO is released

Opioid Epidemic

2. Institute of Medicine (US) Committee on Federal Regulation of Methadone Treatment: Rettig RA, Yarmolinsky A, editors. Federal Regulation of Methadone Treatment. Washington (DC): National Academies Press (US); 1995. 5, Federal Regulation of Methadone Treatment. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK232105/>

3. Just Say Know: A Social History of How Naloxone Came to Matter Nancy D. Campbell The Social History of Alcohol and Drugs 2020 34:2, 196-214

4. Velandar J. R. (2018). Suboxone: Rationale, Science, Misconceptions. The Ochsner journal, 18(1), 23-29. Late 80's



MYTH BUSTERS

TRUE OR FALSE:

HARM REDUCTION IS ENABLING PEOPLE WHO
USE DRUGS.

TRUE OR FALSE

HARM REDUCTION IS ONLY FOR PEOPLE WHO USE
DRUGS.

TRUE OR FALSE

TOUCHING FENTANYL WILL KILL YOU.

TRUE OR FALSE

HARM REDUCTION INCREASES PARAPHERNALIA LITER.

TRUE OR FALSE

HARM REDUCTION DECREASES NEIGHBORHOOD
SAFETY.



HARM REDUCTION SUPPORTING EVIDENCE

Prevents new injectors

Increased access to condoms, lube and PrEP or PEP

Increased early HIV detection

Reduces financial burden of community

7. National Research Council (US) and Institute of Medicine (US) Panel on Needle Exchange and Bleach Distribution Programs; Normand J, Vlahov D, Moses LE, editors. Preventing HIV Transmission: The Role of Sterile Needles and Bleach. Washington (DC): National Academies Press (US); 1995. 7, The Effects of Needle Exchange Programs. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK232343/>

8. Uusküla, A., Des Jarlais, D.C., Kals, M. et al. Expanded syringe exchange programs and reduced HIV infection among new injection drug users in Tallinn, Estonia. BMC Public Health 11, 517 (2011). <https://doi.org/10.1186/1471-2458-11-517>

9. Ruiz, M. S., O'Rourke, A., & Allen, S. T. (2016). Impact Evaluation of a Policy Intervention for HIV Prevention in Washington, DC. AIDS and behavior, 20(1), 22–28. <https://doi.org/10.1007/s10461-015-1143-6>

10. Mary Hawk & Dana Davis (2012) The effects of a harm reduction housing program on the viral loads of homeless individuals living with HIV/AIDS, AIDS Care, 24:5, 577-582, DOI: 10.1080/09540121.2011.630352

11. Abdala N, Reyes R, Carney JM, Heimer R. Survival of HIV-1 in syringes: effects of temperature during storageexternal icon. Subst Use Misuse 2000;35(10):1369--83.

Users that respond to overdose are significantly more likely to note being trained or a person in their network being trained

Significant decrease in lending syringe to friends

Significant decrease in times syringe is used

Significant decrease in number of injections per day

Increased proper disposal of syringes

Decreased risk of needle stick for emergency responders

Increased access to STI testing

Increased access to STI treatment

5. Vlahov, David^{*}; Junge, Benjamin^{*}; Brookmeyer, Ronald[†]; Cohn, Sylvia^{*}; Riley, Elise^{*}; Armenian, Haroutune^{*}; Beilenson, Peter[†] Reductions in High-Risk Drug Use Behaviors Among Participants in the Baltimore Needle Exchange Program, *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*: December 15, 1997 - Volume 16 - Issue 5 - p 400-406
19. Jerel M. Ezell, Suzan Walters, Samuel R. Friedman, Rebecca Bolinski, Wiley D. Jenkins, John Schneider, Bruce Link, Mai T. Pho, (2021). *Stigmatize the use, not the user? Attitudes on opioid use, drug injection, treatment, and overdose prevention in rural communities*, *Social Science & Medicine*, Volume 268, 113470, ISSN 0277-9536, <https://doi.org/10.1016/j.socscimed.2020.113470>.
20. Karla D. Wagner, Ellen Iverson, Carolyn F. Wong, Jennifer Jackson Bloom, Miles McNeeley, Peter J. Davidson, Christopher McCarty, Alex H. Kral & Stephen E. Lankenau (2013) Personal Social Network Factors Associated with Overdose Prevention Training Participation, *Substance Use & Misuse*, 48:1-2, 21-31, DOI: [10.3109/10826084.2012.720335](https://doi.org/10.3109/10826084.2012.720335)

Significant increase in skin cleaning practices

Wound care on the street (pre serious infection) \$5

Early wound detection or prevention can:

Decrease cost for participant and community

Decrease time (in hospital)

Decrease severity of infection

Decrease chance of death or limb/appendage loss

16. SPhillips, K. T., Stein, M. D., Anderson, B. J., & Corsi, K. F. (2012). Skin and needle hygiene intervention for injection drug users: results from a randomized, controlled Stage I pilot trial. *Journal of substance abuse treatment*, 43(3), 313–321. <https://doi.org/10.1016/j.jsat.2012.01.003>

17. Grau, L. E., Arevalo, S., Catchpool, C., & Heimer, R. (2002). Expanding harm reduction services through a wound and abscess clinic. *American journal of public health*, 92(12), 1915–1917. <https://doi.org/10.2105/ajph.92.12.1915>

18. Robinowitz, N., Smith, M. E., Serio-Chapman, C., Chaulk, P., & Johnson, K. E. (2014). Wounds on wheels: implementing a specialized wound clinic within an established syringe exchange program in Baltimore, Maryland. *American journal of public health*, 104(11), 2057–2059. <https://doi.org/10.2105/AJPH.2014.302111>

Decrease in use frequency

Three times more likely to decrease injection frequency

5 times more likely to enter treatment

Decrease in days of use

Less likely to partake in illegal activities

Save \$700 million a year in hospital visits

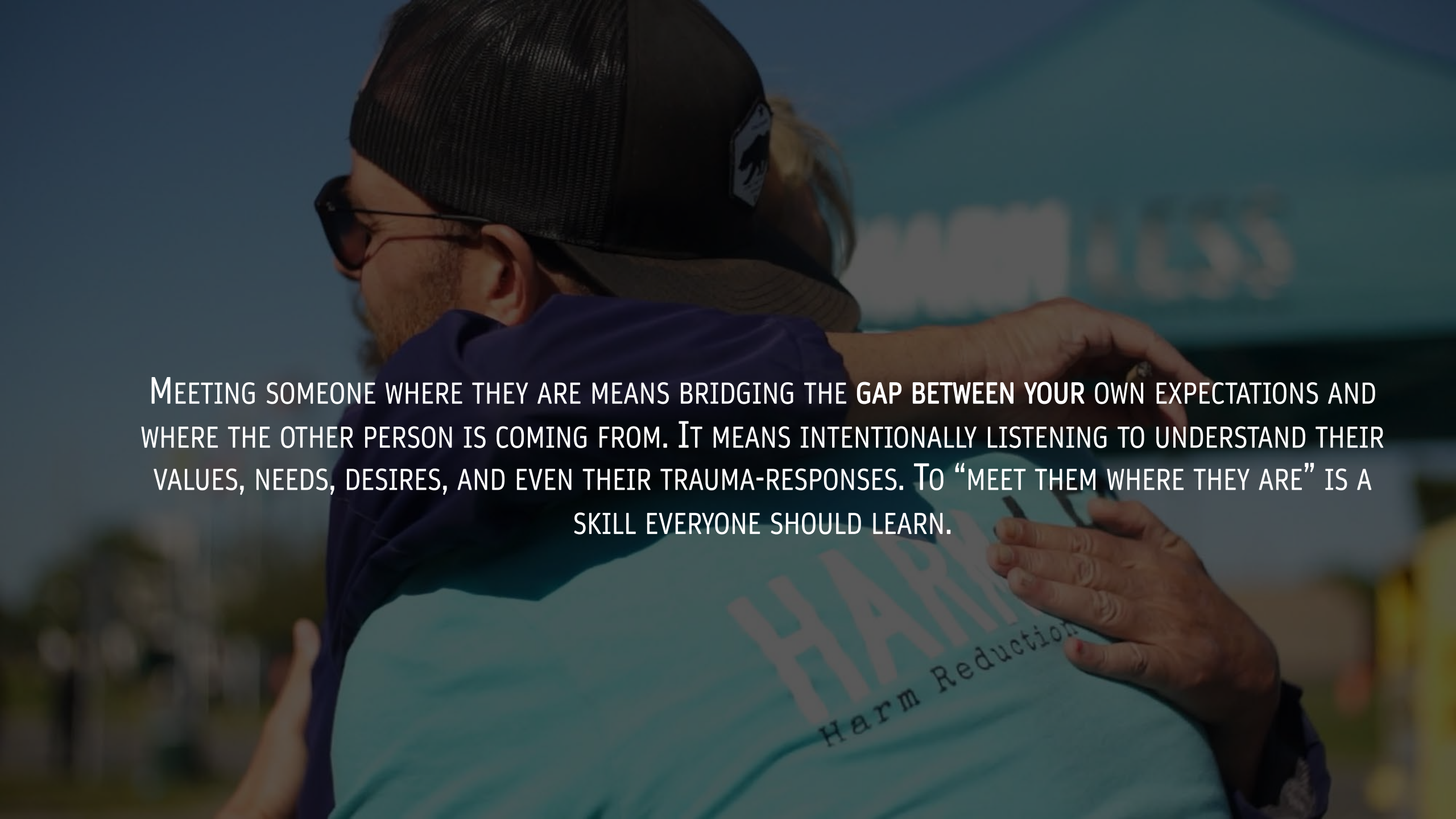
21. Ronan, M., & Herzig, S. (2016). Hospitalizations related to opioid abuse/dependence and associated serious infections increased sharply, 2002-12. *Health Affairs (Millwood)*. 2016;35(5):832-837. doi: 10.1377/hlthaff.2015.1424.

22. Des Jarlais, Don C^a; Perlis, Theresa^a; Arasteh, Kamyar^b; Torian, Lucia V^c; Hagan, Holly^b; Beatrice, Sara^c; Smith, Lou^d; Wethers, Judith^d; Milliken, Judith^a; Mildvan, Donna^a; Yancovitz, Stanley^a; Friedman, Samuel R^b Reductions in hepatitis C virus and HIV infections among injecting drug users in New York City, 1990-2001, *AIDS: October 2005 - Volume 19 - Issue - p S20-S25* doi: 10.1097/01.aids.0000192066.86410.8c

23. Des Jarlais, Don C^a; Perlis, Theresa^a; Arasteh, Kamyar^b; Torian, Lucia V^c; Hagan, Holly^b; Beatrice, Sara^c; Smith, Lou^d; Wethers, Judith^d; Milliken, Judith^a; Mildvan, Donna^a; Yancovitz, Stanley^a; Friedman, Samuel R^b Reductions in hepa



MEETING PEOPLE
WHERE THEY ARE



MEETING SOMEONE WHERE THEY ARE MEANS BRIDGING THE GAP BETWEEN YOUR OWN EXPECTATIONS AND WHERE THE OTHER PERSON IS COMING FROM. IT MEANS INTENTIONALLY LISTENING TO UNDERSTAND THEIR VALUES, NEEDS, DESIRES, AND EVEN THEIR TRAUMA-RESPONSES. TO “MEET THEM WHERE THEY ARE” IS A SKILL EVERYONE SHOULD LEARN.







GETTING STARTED

IDENTIFY NEEDS

Community Needs
assessment

Community
Engagement Group

Windshield Survey

Research

Discussion with
police (if possible)

Discussion with local
health providers (if
possible)

Meet with other local
providers such as
shelter, foodbanks
and mobile provider



Photo by Andy G.

ENGAGE RESOURCES

Other Harm
Reduction
Providers

National Harm
Reduction
Coalition

Other
outreach
teams

Getting off
Right

Local data



Photo by Andy G

The background image is a composite. The upper portion shows a close-up of a person's arm and hand holding a syringe, with a blurred outdoor setting in the background. The lower portion shows a red sharps container with a yellow biohazard label. The label includes the text 'BIOHAZARD WARNING PELIGRO', a biohazard symbol, and a circled number '2'. A dark blue semi-transparent box with a white dot pattern is overlaid in the center, containing the title text.

IDENTIFY BARRIERS TO SYRINGE SERVICES IN AMERICA TODAY

Federal ban on the purchase of syringes

```
graph TD; A[Federal ban on the purchase of syringes] --> B[Lack of federal legality for operation of syringe service programs]; B --> C[Every city in Michigan has a different ordinances allowing or not allowing Harm Reduction]; C --> D[Participants can still be arrested and charged with paraphernalia from syringes provided by an SSP]; D --> E[Cultural stigma of syringe service programs];
```

The diagram is a vertical flowchart with five rectangular boxes, each containing a text block. The boxes are arranged in a descending staircase pattern from top-left to bottom-right. Each box is a different shade of purple, with the color becoming darker from top to bottom. White arrows point downwards from the right side of each box to the right side of the box immediately below it.

Lack of federal legality for operation of syringe service programs

Every city in Michigan has a different ordinances allowing or not allowing Harm Reduction

Participants can still be arrested and charged with paraphernalia from syringes provided by an SSP

Cultural stigma of syringe service programs



OUR STORY



Photo by Andy G.



Photo by Andy G.



Photo by Andy G.



	FY19-20	FY20-21	FY21-22	FY22-23 (to date)
# of individuals enrolled	129	854	855	243
# of encounters	428	4795	4882	2474
Narcan Distributed	456	5070	5120	1199
OD's Reversed	58	1124	796	403
Linked to Treatment	5	27	200	65
HIV Tests	150	476	676	548
HCV Tests	150	476	831	228
HIV +	0	5	4	8
HCV +	6	61	119	30



OTHER OUTCOMES

HARM:LESS

Harm Reduction Support Team











MACOMB STREET MEDICINE IS COMPOSED OF BEAUMONT INTERNAL MEDICINE DR. BRET BIELAWSKI, MCLAREN MACOMB ATTENDING ER DR. JOSEPH CARLIER AND 1ST AND 2ND YEAR MEDICAL STUDENTS. THE TEAM WILL CLEAN AND TREAT ALL WOUNDS IF NECESSARY AND WITH PHYSICIAN RECOMMENDATION, ANTIBIOTICS MAY BE PRESCRIBED AND DISPENSED ON SITE.



TWO SEPARATE INDIVIDUALS INJECTING THE SAME DRUG SUPPLY, CAUSING FLESH-EATING WOUNDS. THESE INDIVIDUALS NEEDED FURTHER MEDICAL CARE THAN WHAT COULD BE PROVIDED ON SITE, BUT THIS IS AN EXAMPLE OF THE CURRENT TAINTED **DRUG** SUPPLY ALONG WITH LACK OF MEDICAL CARE AND RESOURCES.

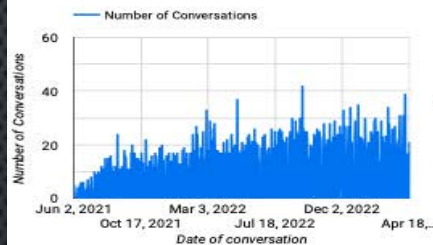
Why
street
medicine
is so
important



Information about the conversation

of Conversations
5,218

of Unique Individuals
994



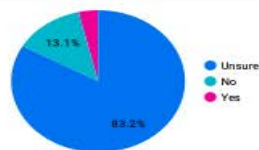
Team member(s)	Convo #s
1. Ariel Leavitt, Chelsea Geddes, Brandon Barash	1,847
2. Tracy Gehlert, Ariel Leavitt, Chelsea Geddes	593
3. David Clayton, Tracy Gehlert	322
4. David Clayton, Ariel Leavitt	277

Number of previous conversations

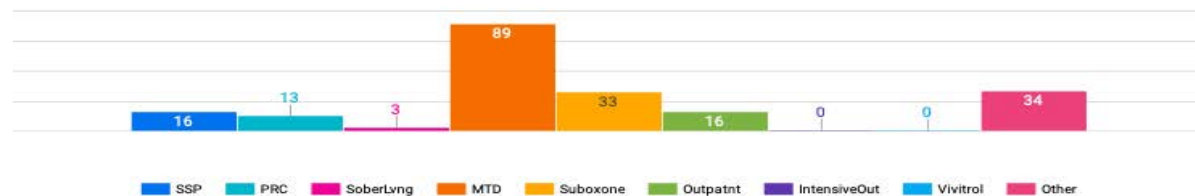


Participant Recovery Services Information

Currently receiving services?



Current services

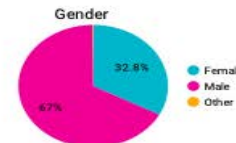
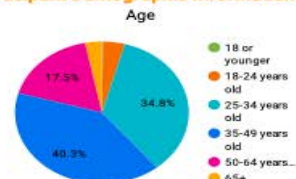


Other current services

Other current services	Count
Medication-Assisted Treatment	21
Re-Direct	2
Case management	2

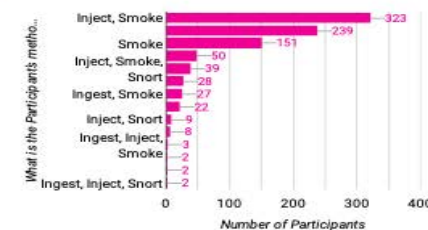
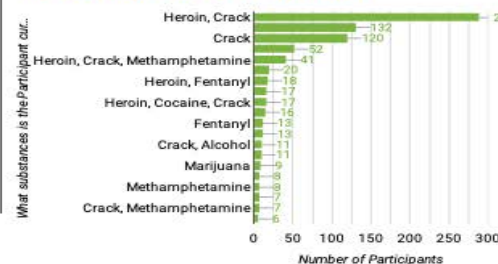
1 - 11 / 11

Participant Demographic Information

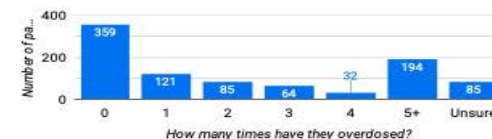
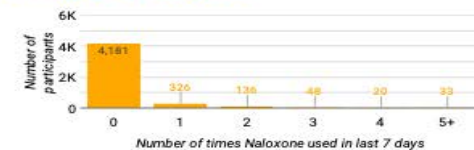


Percentage of Individuals Homeless in the Last 7 Days
50.28%

Participant Substance Use Information

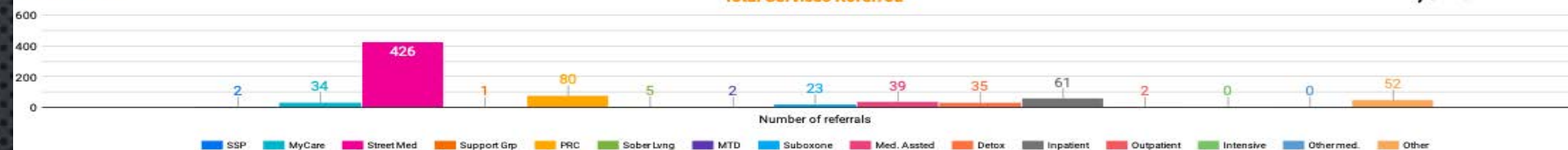


Information on Past Overdoses

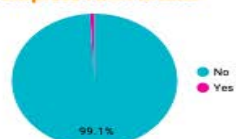


No services referred

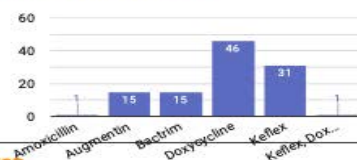
4,590

Total Services Referred

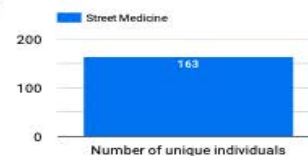
Complete HNH Intake



Prescribed Medications



Unique Individuals Referred

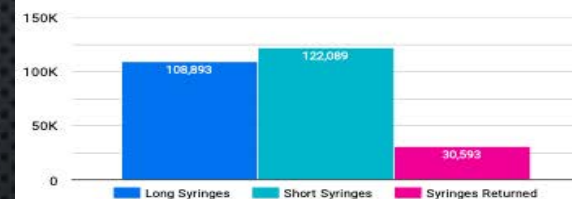


Other referred services

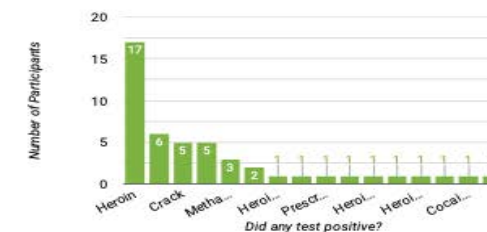
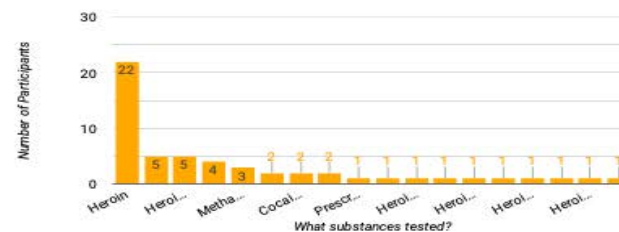
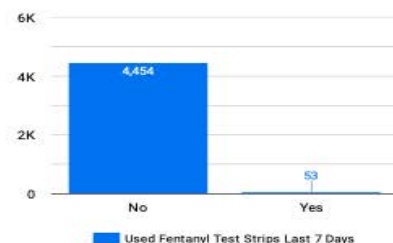
Community Housing Network	2
Housing-PATH	1
Hope Not Handcuffs	

1 - 12 / 12 < >

Number of Harm Reduction Supplies Given



Fentanyl Test Strip Usage



HARM REDUCTION

Since June 2021:

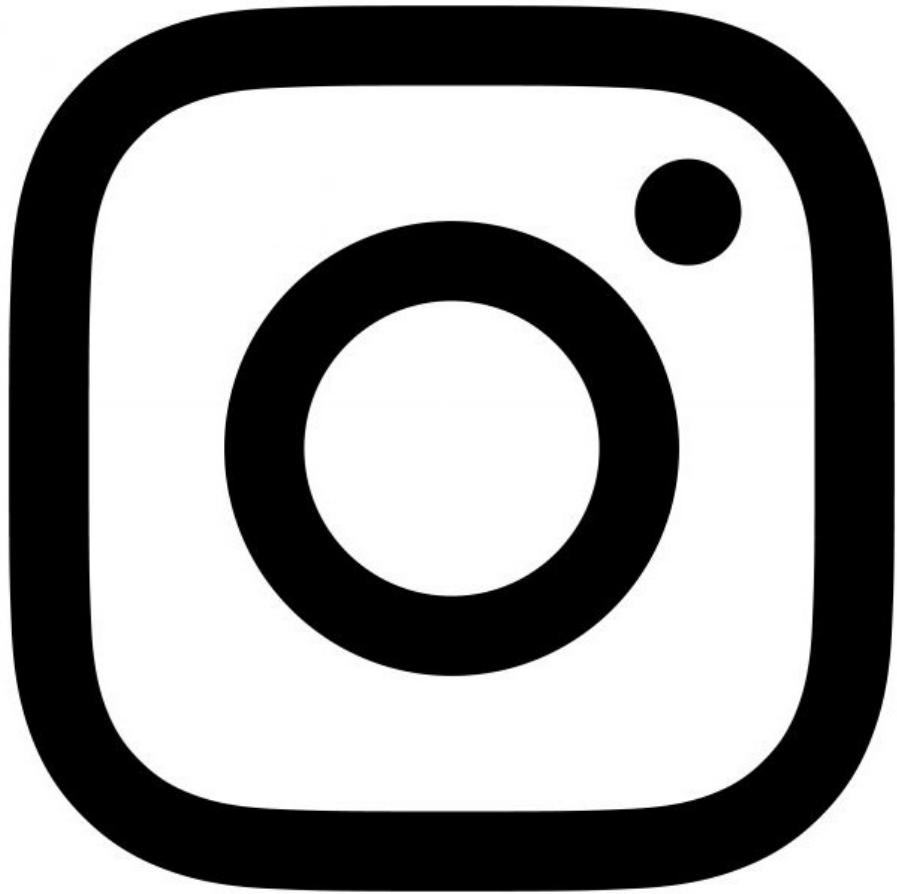
- Over 5,218 engagements
- 994 unique individuals serviced
- 60.1% of individuals serviced regularly
- 426 encounters with Street Medicine Team
- 163 unique individuals for MCSM
- Over 3,700 naloxone kits distributed
- 532 reported overdoses reversed with our naloxone
- Over 15,000 sharps containers distributed
- Over 12,000 condoms distributed
- 230,982 syringes distributed
- 30,533 syringes properly disposed of

PEOPLE ARE
5X MORE
LIKELY
TO ENTER
TREATMENT
IF PART OF A
HARM REDUCTION
PROGRAM

Source: Centers for Disease Control (CDC)

A black and white photograph showing a person's hand placing a used syringe into a clear plastic sharps container. The container has a biohazard warning label and a barcode. The background is blurred, showing what appears to be a medical or clinical setting.

HARM:LESS
Harm Reduction Support Team



FOLLOW ON
INSTAGRAM!

HARM:LESS

@HARMLESS_MI

MACOMB STREET MEDICINE

@MACOMBCOUNTYSTREETMED

DETROIT RECOVERY PROJECT

@RECOVERY4DETROIT

ANDY GALBRAITH

@HARMREDUCTIONDETROIT



DAVID CLAYTON

PROGRAM DIRECTOR

DAVID@
FAMILIESAGAINSTNARCOTICS.ORG

AMANDA SCOTT MPH, CHES
PREVENTION PROGRAM DIRECTOR
ASCOTT@RECOVERY4DETROIT.COM



REFERENCES

1. NATIONAL HARM REDUCTION COALITION. (2020). PRINCIPLES OF HARM REDUCTION. <https://harmreduction.org/about-us/principles-of-harm-reduction/>
2. INSTITUTE OF MEDICINE (US) COMMITTEE ON FEDERAL REGULATION OF METHADONE TREATMENT; RETTIG RA, YARMOLINSKY A, EDITORS. FEDERAL REGULATION OF METHADONE TREATMENT. WASHINGTON (DC): NATIONAL ACADEMIES PRESS (US); 1995. 5, FEDERAL REGULATION OF METHADONE TREATMENT. AVAILABLE FROM: <https://www.ncbi.nlm.nih.gov/books/NBK232105/>
3. JUST SAY KNOW: A SOCIAL HISTORY OF HOW NALOXONE CAME TO MATTER NANCY D. CAMPBELL THE SOCIAL HISTORY OF ALCOHOL AND DRUGS 2020 34:2, 196-214
4. VELANDER J. R. (2018). SUBOXONE: RATIONALE, SCIENCE, MISCONCEPTIONS. THE OCHSNER JOURNAL, 18(1), 23–29. LATE 80'S
5. G.ALAN MARLATT, (1996). HARM REDUCTION: COME AS YOU ARE, ADDICTIVE BEHAVIORS, VOLUME 21, ISSUE 6, PAGES 779-788, ISSN 0306-4603, [https://doi.org/10.1016/0306-4603\(96\)00042-1](https://doi.org/10.1016/0306-4603(96)00042-1).
6. EDITH SPRINGER MSW (1992) EFFECTIVE AIDS PREVENTION WITH ACTIVE DRUG USERS, JOURNAL OF CHEMICAL DEPENDENCY TREATMENT, 4:2, 141-157, DOI: 10.1300/J034v04n02_13
7. NATIONAL RESEARCH COUNCIL (US) AND INSTITUTE OF MEDICINE (US) PANEL ON NEEDLE EXCHANGE AND BLEACH DISTRIBUTION PROGRAMS; NORMAND J, VLAHOV D, MOSES LE, EDITORS. PREVENTING HIV TRANSMISSION: THE ROLE OF STERILE NEEDLES AND BLEACH. WASHINGTON (DC): NATIONAL ACADEMIES PRESS (US); 1995. 7, THE EFFECTS OF NEEDLE EXCHANGE PROGRAMS. AVAILABLE FROM: <https://www.ncbi.nlm.nih.gov/books/NBK232343/>
8. UUSKÜLA, A., DES JARLAIS, D.C., KALS, M. ET AL. EXPANDED SYRINGE EXCHANGE PROGRAMS AND REDUCED HIV INFECTION AMONG NEW INJECTION DRUG USERS IN TALLINN, ESTONIA. BMC PUBLIC HEALTH 11, 517 (2011). <https://doi.org/10.1186/1471-2458-11-517>
9. RUIZ, M. S., O'ROURKE, A., & ALLEN, S. T. (2016). IMPACT EVALUATION OF A POLICY INTERVENTION FOR HIV PREVENTION IN WASHINGTON, DC. AIDS AND BEHAVIOR, 20(1), 22–28. <https://doi.org/10.1007/s10461-015-1143-6>
10. MARY HAWK & DANA DAVIS (2012) THE EFFECTS OF A HARM REDUCTION HOUSING PROGRAM ON THE VIRAL LOADS OF HOMELESS INDIVIDUALS LIVING WITH HIV/AIDS, AIDS CARE, 24:5, 577-582, DOI: [10.1080/09540121.2011.630352](https://doi.org/10.1080/09540121.2011.630352)
11. ABDALA N, REYES R, CARNEY JM, HEIMER R. [SURVIVAL OF HIV-1 IN SYRINGES: EFFECTS OF TEMPERATURE DURING STORAGE](https://doi.org/10.1097/01.aids.0000192066.86410.8c)EXTERNAL ICON. SUBST USE MISUSE 2000;35(10):1369--83. 10.1097/01.aids.0000192066.86410.8c

REFERENCES

1. ABDUL-QUADER, A. S., FEELEMYER, J., MODI, S., STEIN, E. S., BRICENO, A., SEMAAN, S., HORVATH, T., KENNEDY, G. E., & DES JARLAIS, D. C. (2013). EFFECTIVENESS OF STRUCTURAL-LEVEL NEEDLE/SYRINGE PROGRAMS TO REDUCE HCV AND HIV INFECTION AMONG PEOPLE WHO INJECT DRUGS: A SYSTEMATIC REVIEW. *AIDS AND BEHAVIOR*, 17(9), 2878–2892. <https://doi.org/10.1007/s10461-013-0593-y>
2. ROTH AM, GOLDSHEAR JL, MARTINEZ-DONATE AP, WELLES S, CHAVIS M, VAN DER POL B. REDUCING MISSED OPPORTUNITIES: PAIRING SEXUALLY TRANSMITTED INFECTION SCREENING WITH SYRINGE EXCHANGE SERVICES. *SEX TRANSM DIS*. 2016 Nov;43(11):706-708. doi: 10.1097/OLQ.0000000000000516. PMID: 27893601.
3. FELSHER M, ZIEGLER E, AMICO KR, CARRICO A, COLEMAN J, ROTH AM. "PrEP JUST ISN'T MY PRIORITY": ADHERENCE CHALLENGES AMONG WOMEN WHO INJECT DRUGS PARTICIPATING IN A PRE-EXPOSURE PROPHYLAXIS (PrEP) DEMONSTRATION PROJECT IN PHILADELPHIA, PA USA. *SOC SCI MED*. 2021 Apr;275:113809. doi: 10.1016/j.socscimed.2021.113809. Epub 2021 Mar 4. PMID: 33735778; PMCID: PMC8009846.
4. SPHILLIPS, K. T., STEIN, M. D., ANDERSON, B. J., & CORSI, K. F. (2012). SKIN AND NEEDLE HYGIENE INTERVENTION FOR INJECTION DRUG USERS: RESULTS FROM A RANDOMIZED, CONTROLLED STAGE I PILOT TRIAL. *JOURNAL OF SUBSTANCE ABUSE TREATMENT*, 43(3), 313–321. <https://doi.org/10.1016/j.jsat.2012.01.003>
5. GRAU, L. E., AREVALO, S., CATCHPOOL, C., & HEIMER, R. (2002). EXPANDING HARM REDUCTION SERVICES THROUGH A WOUND AND ABSCESS CLINIC. *AMERICAN JOURNAL OF PUBLIC HEALTH*, 92(12), 1915–1917. <https://doi.org/10.2105/AJPH.92.12.1915>
6. ROBINOWITZ, N., SMITH, M. E., SERIO-CHAPMAN, C., CHAULK, P., & JOHNSON, K. E. (2014). WOUNDS ON WHEELS: IMPLEMENTING A SPECIALIZED WOUND CLINIC WITHIN AN ESTABLISHED SYRINGE EXCHANGE PROGRAM IN BALTIMORE, MARYLAND. *AMERICAN JOURNAL OF PUBLIC HEALTH*, 104(11), 2057–2059. <https://doi.org/10.2105/AJPH.2014.302111>
7. JEREL M. EZELL, SUZAN WALTERS, SAMUEL R. FRIEDMAN, REBECCA BOLINSKI, WILEY D. JENKINS, JOHN SCHNEIDER, BRUCE LINK, MAI T. PHO, (2021). STIGMATIZE THE USE, NOT THE USER? ATTITUDES ON OPIOID USE, DRUG INJECTION, TREATMENT, AND OVERDOSE PREVENTION IN RURAL COMMUNITIES, *SOCIAL SCIENCE & MEDICINE*, VOLUME 268, 113470, ISSN 0277-9536, <https://doi.org/10.1016/j.socscimed.2020.113470>.
8. KARLA D. WAGNER, ELLEN IVERSON, CAROLYN F. WONG, JENNIFER JACKSON BLOOM, MILES MCNEELEY, PETER J. DAVIDSON, CHRISTOPHER MCCARTY, ALEX H. KRAL & STEPHEN E. LANKENAU (2013) PERSONAL SOCIAL NETWORK FACTORS ASSOCIATED WITH OVERDOSE PREVENTION TRAINING PARTICIPATION, *SUBSTANCE USE & MISUSE*, 48:1-2, 21-31, DOI: [10.3109/10826084.2012.720335](https://doi.org/10.3109/10826084.2012.720335)
9. , RONAN, M., & HERZIG, S. (2016). HOSPITALIZATIONS RELATED TO OPIOID ABUSE/DEPENDENCE AND ASSOCIATED SERIOUS INFECTIONS INCREASED SHARPLY, 2002-12. *HEALTH AFFAIRS (MILLWOOD)*. 2016;35(5):832-837. DOI: 10.1377/hlthaff.2015.1424.
10. DES JARLAIS, DON CA; PERLIS, THERESAA; ARASTEH, KAMYARB; TORIAN, LUCIA VC; HAGAN, HOLLYB; BEATRICE, SARAC; SMITH, LOUD; WETHERS, JUDITHD; MILLIKEN, JUDITHA; MILDVAN, DONNAA; YANCOVITZ, STANLEYA; FRIEDMAN, SAMUEL RB REDUCTIONS IN HEPATITIS C VIRUS AND HIV INFECTIONS AMONG INJECTING DRUG USERS IN NEW YORK CITY, 1990–2001, *AIDS: OCTOBER 2005 - VOLUME 19 - ISSUE - P S20-S25* doi: 10.1097/01.aids.0000192066.86410.8c
11. DES JARLAIS, DON CA; PERLIS, THERESAA; ARASTEH, KAMYARB; TORIAN, LUCIA VC; HAGAN, HOLLYB; BEATRICE, SARAC; SMITH, LOUD; WETHERS, JUDITHD; MILLIKEN, JUDITHA; MILDVAN, DONNAA; YANCOVITZ, STANLEYA; FRIEDMAN, SAMUEL RB REDUCTIONS IN HEPATITIS C VIRUS AND HIV INFECTIONS AMONG INJECTING DRUG USERS IN NEW YORK CITY, 1990–2001, *AIDS: OCTOBER 2005 - VOLUME 19 - ISSUE - P S20-S25* doi: 10.1097/01.aids.0000192066.86410.8c
12. OHIO DEPARTMENT OF HEALTH, BUREAU OF VITAL STATISTICS, U.S. CENSUS BUREAU. ANALYSIS: ODH VIOLENCE AND INJURY PREVENTION SECTION. INCLUDES OHIO RESIDENTS WHO DIED DUE TO UNINTENTIONAL DRUG POISONING (UNDERLYING CAUSE OF DEATH ICD-10 CODES X40-X44).