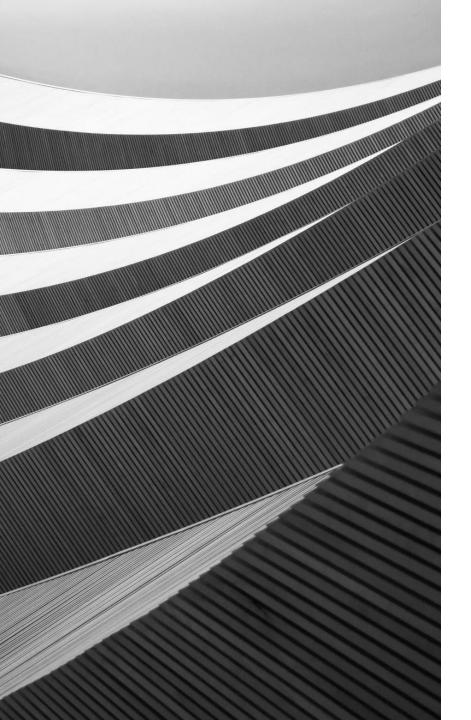
Communications Interventions for Evidence-Based Practice and Research: Graphic Novel Approach

Sarah Febres-Cordero, PhD, RN

This work represents the views of the author, not Emory University School of Nursing



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DISCLAIMER!

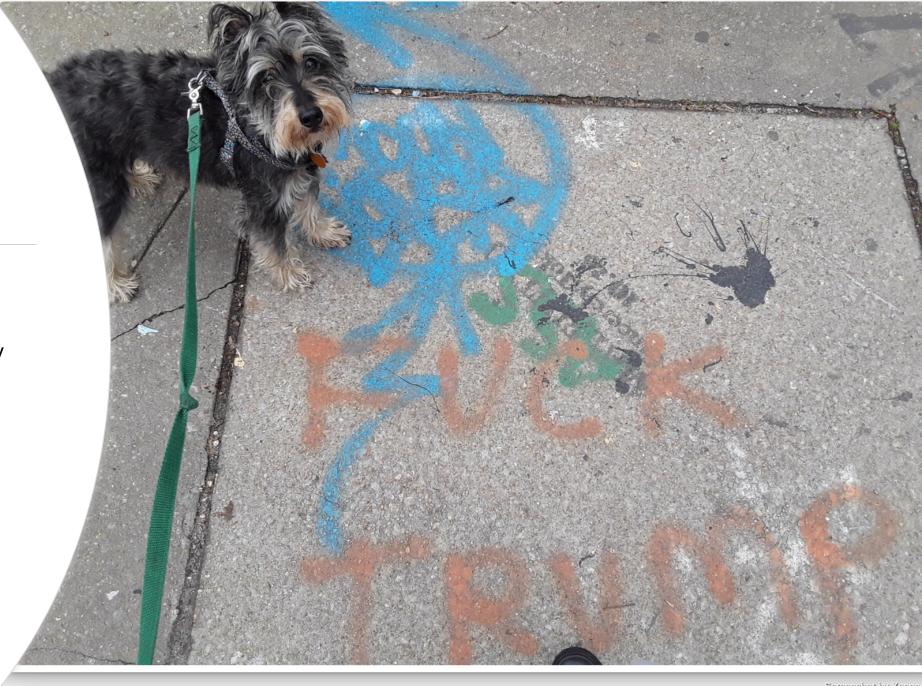
Language surrounding drug use, drug use dependency, people who use drugs, and those with lived living experiences is quickly evolving.

Over the past eight years, I have seen the language change, and some of the materials I will be showing were created before language evolution.

I no longer use some of the language seen in these videos; this is a limitation of media that lives forever on the internet!

Objectives

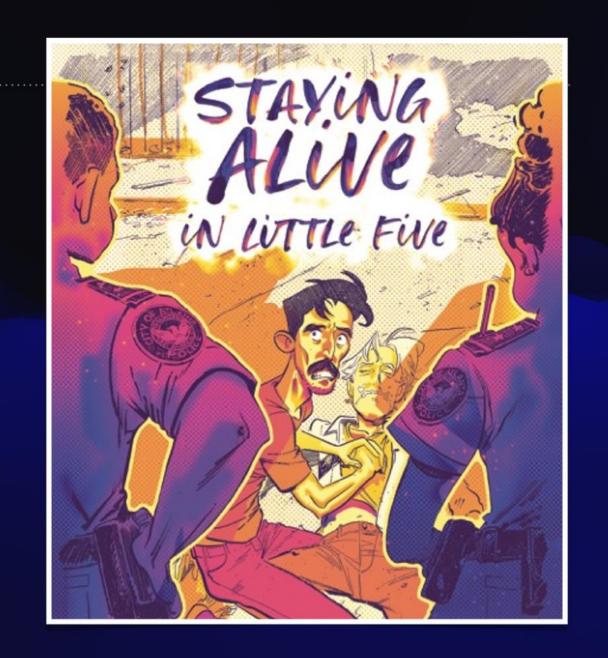
- Positionality
- Communications integrating EBP and engaging community
- Communications integrating research and engaging community
- Future directions
- Graphic Novel





FROM PIZZA WAITRESS TO PHD

- L5P is a commercial district surrounded by in-town residential neighborhoods
- * L5P provides a place where people can escape the dominant culture
- 20 years, the best of times, the worst of times.
- Call to Nursing
- Service industry workers become first responders while working by default when someone overdoses in the community lived experience.





Identification of occupations associated with drug overdose deaths further characterizes the opioid epidemic. Incorporating workplace research and targeted interventions might benefit the opioid epidemic response -CDC, 2018

- *The rate of overdose death in the food industry is higher than the general workforce: 39.5 deaths per 100,000 workers, compared to 25 per 100,000 workers. (Harduar, Steege, & Luckhaupt, 2018)
- *An analysis of drug overdose deaths from 2007-2013 by the CDC identified six occupations with elevated mortality ratios, including food service and preparation (Shaw & Punnett L, 2020).

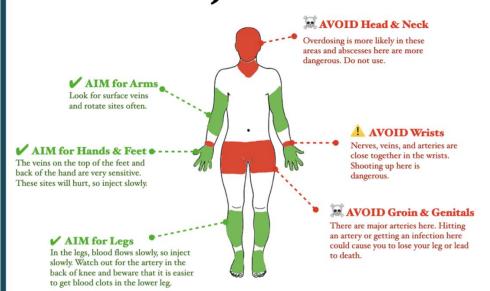
- *Among SIWs, 19% have used illicit substances in the past month (Bush, 2015).
- * Assuring optimal education of people in the food and service industries addresses a critical gap in preventing opioid-related overdose.



Volunteer Work and Nurse Precepting

- AHRC/GHRC: PhD to present 8 years
- Wound care nurse/Ambassador
- OEND training
- Built relationships
- Connected AHRC with Emory Nursing (Quyen Phan)
- Engaged students with harm reduction
- Mona Bennett: Harm Reduction and Community Outreach
- Dr. Morgjan Zare: Harm Reduction Policy

Safer Injection Sites



Safer Injection Kit Supplies



CITRIC ACID

➤ Breaks down crack for injection
➤ Avoid using lemon juice which can cause blindness





COOKERS (TOPS)

X Avoid reusing or sharing to prevent spreading bacteria, HIV, and Hep B and C



COTTON PELLETS

✓ Helps filter out large particles that can clog the syringe or damage veins



TOURNIQUET

 Creates easier access and visibility to veins

X Avoid sharing to prevent spreading blood, which can spread HIV, Hep B, and Hep C



ALCOHOL PADS

- ✓ Cleans skin before injection to prevent infection (abscesses)
- ✓Wipe in spiral motion from center then outwards
- X Avoid wiping area after injection





- **3** (404) 817-9994
- ahrcemail@ahrc-atl.org
- 1231 Joseph E. Boone Blvd NW, Atlanta, GA 30314

DO YOU NEED...



- Computer lab? Clothes? Food?
- Diabetes support? Foot checks or glucose monitoring?



 PrEP/PEP? (Medication to prevent HIV)



STI/STD, HIV, and/or Hep B and Hep C screenings and



- Pregnancy tests?
- Birth control/condoms?



- Vaccines? (COVID, Flu, Hep A, Hep B, Hep C, HPV, TDAP, Pneumonia?)
- Sterile syringes for more comfortable injections (single-use only)? Safer injection kits?



- Wound care?
- Medication to prevent/reverse an **overdose** (Narcan/ Naloxone)?



- Medication assisted substance use therapy with Suboxone?
- Referral to services for help with ID, birth certificates, dental, health care, medical care, substance use, and/or mental health?



All services are FREE, no questions asked, and we always have an open-door policy.

Come by or call today!

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Abstract

Engaging nursing students with individuals in recovery, community organizations, and policymakers during legislative sessions is a powerful tool to increase understanding of

recovery from drug use and addiction

Public Health Nursing Practicum strives to connect nursing students with underserved communities that would benefit from nursing care, including people who use and are addicted to drugs. Working with people who use drugs requires understanding harm reduction and recovery options for people seeking care. Drug use and recovery complexity require public health nurses to collaborate and engage with individuals, families, organizations, communities, and policymakers.

Emory University Public Health Nursing Practicum students placed at the Atlanta Harm Reduction Coalition participated in the Addiction Recovery Awareness Day at the Georgia Capitol in 2023 (in their second week of a six-week practicum) with Rise 2 Recovery (R2R), an arts-based recovery center to assist with a presentation. Students (n=7) completed reflection assignments as part of the curriculum. The students shared personal reflections and photos with R2R as a thank-you at the end

Student reflections showed deep and meaningful insight into recovery from harmful drug use. Student insights recorded in reflections included it is a privilege, with gratitude, change starts with systems. connection, recovery is a journey, filled with hope and non-judgmental support.

Engaging nursing students with individuals in recovery, community organizations, and policymakers during legislative sessions is a powerful tool to increase understanding of recovery from drug use and addiction. Sharing reflections with R2R was a way to "give back" to the community partner. R2R

Fatima Ali, Melissa Ambrose, Christina Bhatia, D'Amani Bryant, Risha Bhukhan, Kat Binau, Zakaria Gary Edited by Dr's Sarah Febres-Cordero & Rotrease Regan







09 ARAD 2023







Screenshot by Xnapper.com

It's the PreP for Me!

• It's the PreP for Me!



Scan me!



It's the PrEP for Me!



EMORY

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It's the PrEP for Me!

Prep (is a medication that) **Prevents**

HIV!

Did you know...

- 58% of women living with HIV are Black/African American
- Black/African American women who have sex with men accounted for 91% of new diagnosis' in 2019

https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-31/content/women.html

https://www.cdc.gov/nchhstp/newsroom/fact-sheets/hiv/black-african american-factsheet.html

Want to learn more?



Scan the QR code to watch a short video to learn more!

Scan the QR Code to learn more about the Atlanta Harm **Reduction Coalition**





How do I know if I have HIV?

 Atlanta Harm Reduction Coalition (AHRC) provides FREE HIV, STI, and HEP C testing.

How do I get PrEP?

• Use the QR code or call to make an appointment for **FREE** (no insurance needed).





NELL HODGSON WOODRUFF

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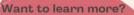
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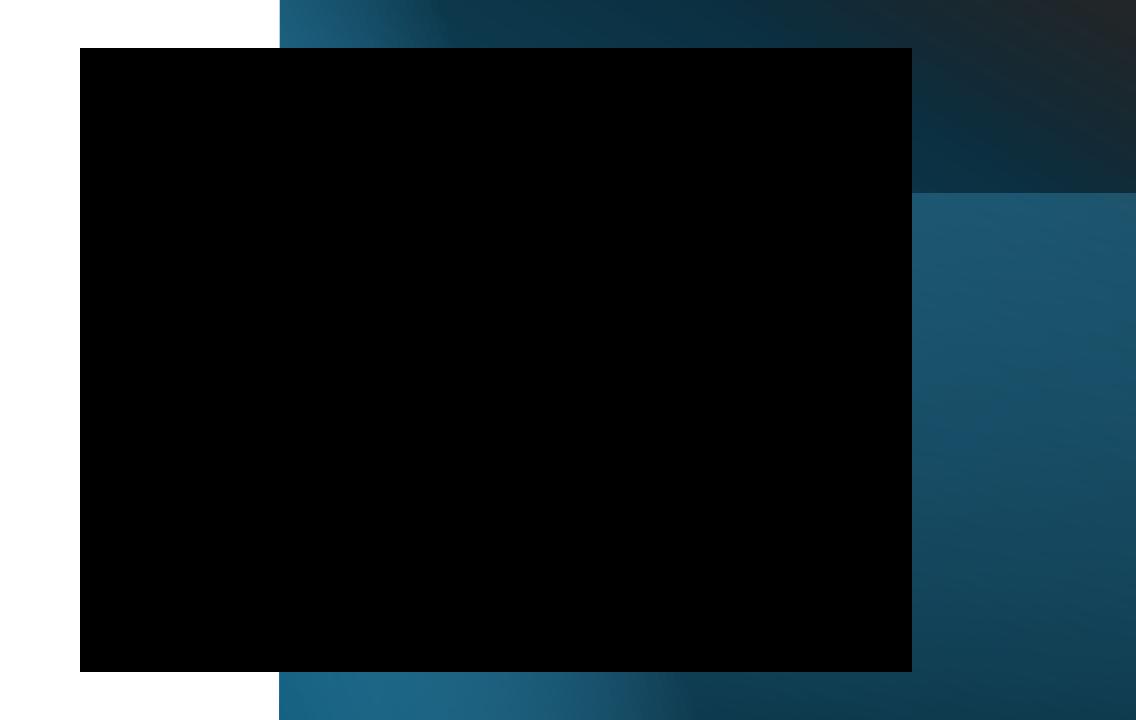
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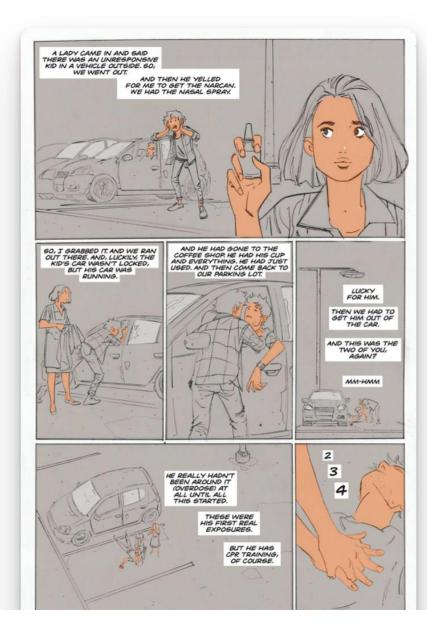
Scan the QR Code to learn more about the Atlanta Harm











Research Article

Designing a Graphic Novel: Engaging Community, Arts, and Culture Into Public Health Initiatives

Sarah Febres-Cordero, MS, RN¹
Athena D. F. Sherman, PhD, PHN, RN, CNE¹
Joseph Karg, MFA²
Ursula Kelly, PhD, APRN, ANP-BC, PMHNP-BC, FAANP¹
Lisa M. Thompson, RN, FNP-BC, MS, PhD, FAAN¹
Kylie Smith, BA(Hons), PhD¹

Screenshot by Xnapper.com



FIGURE 1 Improper Positioning During Cardiopulmonary Resuscitation (Left Panel, Straddling of a Person Overdosing) Reveals the Need for Artist Education in Life-Saving Procedures

Note. Graphic novel pages by Joseph Karg and Sarah Febres-Cordero.



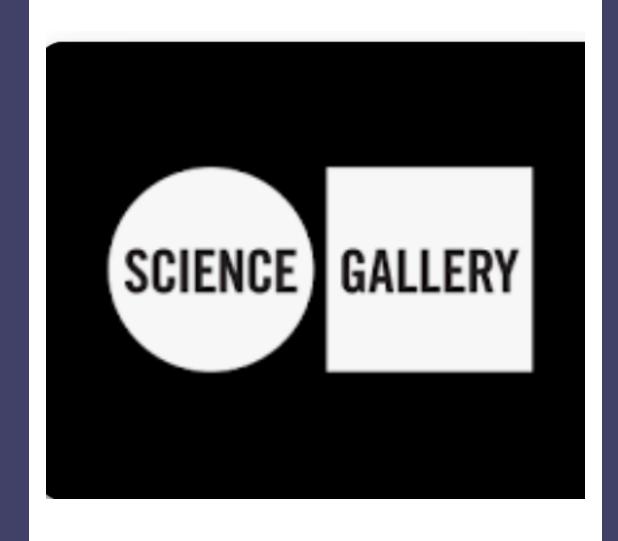


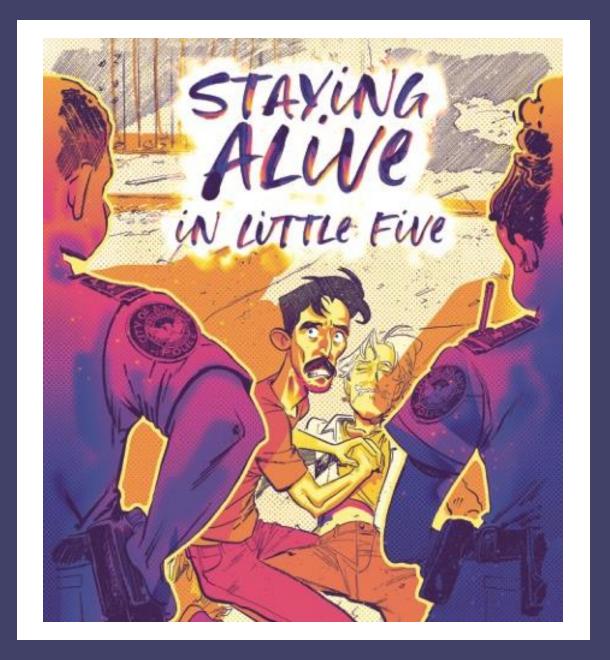












Versatile Medium



Introduction

The opioid epidemic is a leading cause of unintentional death in the United States1 and laypeople are often the first responders to an overdose in community settings including parked cars, the street, business parking lots, and inside businesses themselves.2

Within the commercial district of Little Five Points (L5P), Atlanta, GA, service industry workers respond to opioid overdoses by providing lifesaving interventions while on the clock.3

- Little is known about how communities cope with opioid overdose exposure.
- · We explore how servers cope with exposure to opioid overdose in a community setting.



Artwork by Joseph Karg

Methods

We assessed perceptions of coping in response to overdose rescue among laypeople in L5P (N=15) using qualitative descriptive, grounded theory, phenomenology and ethnographic observation4.

Methods to ensure rigor in this study include: oversight by a community advisory board, member checking of findings, triangulation of methods, and periodic reflexive journaling 5.

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Coping with Exposure to Community-based Opioid Overdose among Service Industry Workers

Sarah Febres-Cordero, PhD, RN; Athena D.F. Sherman, PhD, PHN, RN, CNE; Ursula Kelly, PhD, APRN, ANP-BC, PMHNP; Lisa Thompson, PhD, MS, FNP-C, RN, FAAN; Kylie Smith, BA (Hons), PhD.

Fight Reaction:

That's a tough thing. Having been a first aider, first aid instructor scouting, and even in the military, when it's happening, my adrenaline is up. I'll do whatever it takes to help that person.

Flight Reaction:

I was devastated, I called the manager, and I was like, I need someone to come in. I can't finish this job today.

Freeze Reaction:

But I'll tell you, I went into shock. And I'm very thankful a doctor was there. Because you know, in my head, it's so much, you know? I couldn't respond. I don't know why. Like, I normally am quick to action. But something about this incident, like, I don't know. I think it scared me really bad.



LET ME DO CPR ON



Avoidant Coping:

To begin with, I'm fine. It's afterwards that I just am freaking out and taking my son's Ativan. It just calms me down. Because I have to continue to work and I'm shaking.

Approach Coping (meditation):

I remember doing the emotional take care of myself thing that, you know, Just, you're OK. I do some deep breathes, some slow breathing.



Findings

Preliminary findings revealed high prevalence of trauma exposure during response to overdose. During and following rescue, participants had a two-phase reaction:

- (1) involuntary fight, freeze, or flight responses when presented with an overdose
- (2) Use of post-event coping behaviors. Avoidant coping⁶ behaviors included:
- Minimizing feelings
- Dissociation
- Use of alcohol or drugs

Approach coping⁶ behaviors included:

- Camaraderie
- Processing with friends and family
- Meditation

Discussion

Findings demonstrate the resilience of participants and a need for community-based overdose intervention programs. To respond to an overdose shows incredible resilience and strength.

Implications

- Training people who are in occupations that are more likely to encounter a public overdose is needed
- Acknowledging rescue efforts and supporting people post-exposure is key to healthy communities.

Next Steps Dissemination

The results of this study will be disseminated to the community in a culturally appropriate form, a graphic novel 7. Images and stories derived from participant interviews will be used to educate on:

- Opioid overdose identification
- Opioid overdose response
- Coping with overdose
- Ways to decrease stigma surrounding drug use 7.

A chapter of the graphic novel, Staying Alive in Little Five, will be presented in early 2022 at Science Gallery, in Atlanta GA.



People who carry naloxone save lives!















STAYING ALIVE IN LITTLE FIVE: CONFRONTING STIGMA AND PROMOTING HARM REDUCTION THROUGH A GRAPHIC NOVEL INTERVENTION

SARAH FEBRES-CORDERO, PHD, RN; OLIVER CHALFANT, AHRC; KYLIE SMITH BA (HONS) PHD; ILLUSTRATORS: JOSEPH KARG AND CHRIS BIVINS (COMBO-BREAK.COM)

INTRODUCTIONS

CROSS COLLABORATION

Nurse Scientists

Historian

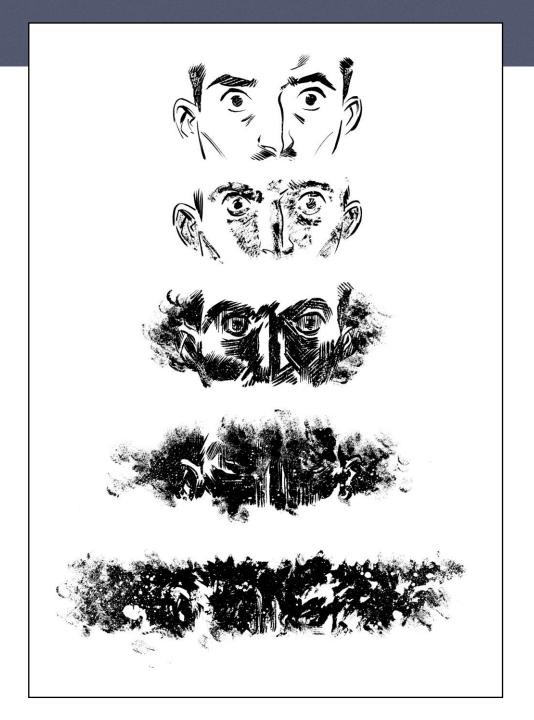
Public Health Scientist

Harm Reductionists

People Who Use Drugs

Food Service Industry Workers

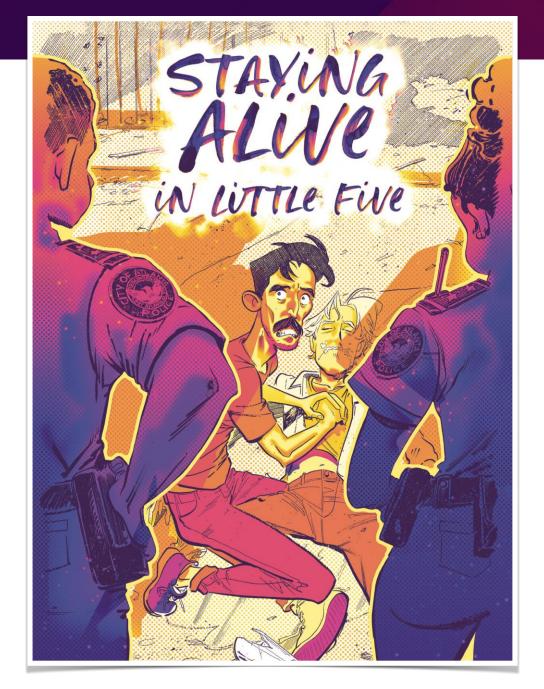
Sequential Artists



RESEARCH WITH SERVICE INDUSTRY WORKERS IN LITTLE FIVE POINTS, ATLANTA

A PLACE OF REFUGE: HOME OF SUB AND COUNTERCULTURE

- Place of tolerance and acceptance of others
- Underground syringe exchange since the late '80s
- People go to drink and party
- Food service workers have intimate knowledge of drug use and overdose deaths
- 16.7 million food service workers in the US
- Servers in the area are being called upon to rescue from OD
- Potential to train an entire workforce in opioid education and naloxone distribution



SERVICE INDUSTRY WORKERS

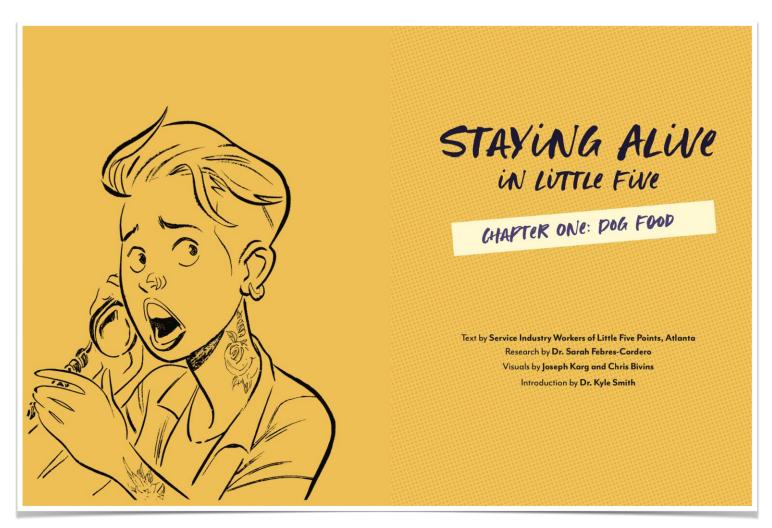
CHAPTER ONE: DOG FOOD

- Findings from qualitative study N=15
- Chapter one: Experience of two food service workers and an encountered overdose
- Prototype there is much to learn from their experiences

End goal:

- Graphic novel intervention to train in overdose education and naloxone distribution
- Decrease stigma surrounding drug use

ALL PARTICIPANTS WERE PWLLE!!!!!!



Places of alcohol consumption

No stereotype of a person who uses drugs

Language of the streets

Identifying an overdose

TEXT BY L5P SERVICE WORKERS





Calling EMS

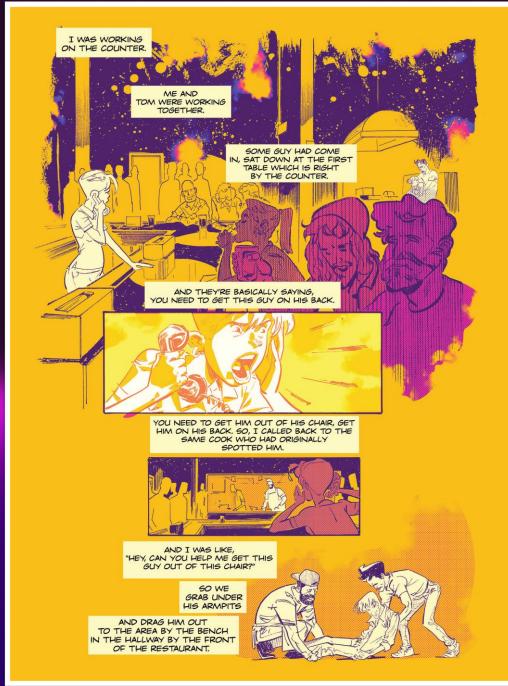
Checking for responsiveness

Working as a team

Preparing for life-saving intervention

TEXT BY L5P SERVICE WORKERS





Responsiveness

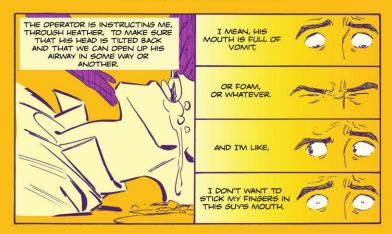
Airway

Hands-only CPR

AND WE WERE LIKE, "IS THIS DUDE ALL RIGHT"? THEN THE GUY-I MEAN, THE GUY JUST WE TRY TO WAKE HIM STARTS TURNING PALE UP THE GUY JUST BECOMES TOTALLY UNRESPONSIVE, AND SO THEN WE GET ON THE PHONE WITH LOSING

AND THAT'S WHEN WE ARE LIKE, "OK, THIS DUDES NOT ASLEEP. HE'S NOT OK."

50, WE'RE ON THE PHONE TRYING TO GET PARAMEDIC AND AMBULANCE
HELP. TOM AND SOME OF THE KITCHEN GUYS HAD
COME OUT, AND GET HIM ON THE FLOOR.



50, HE'S ON THE FLOOR ON THE BENCH RIGHT BY THE FRONT DOOR, LIKE ADJACENT TO THE RIGHT ON THE FRONT DOOR WHEN YOU WALK IN. AND TOM STARTS DOING CPR ON THE DUDE. SO, I'M ON THE PHONE WITH POLICE KIND OF HELPING HIM COUNT THROUGH IT. TOM'S JUST DOING CPR. NO RESCUE BREATHING, JUST CHEST COMPRESSIONS. I WAS ON THE PHONE WITH THE POLICE, AND SO SHE WAS COUNTING. SHE WAS COUNTING TO ME AND SO I WAS HELPING TOM COUNT JUST THE SETS OF FOUR JUST GETTING HIM ON A RHYTHM. JUST KIND OF MATCHING WITH THE HEARTBEAT.



HE'S TURNING BLUE, HE'S NOT BREATHING. HE'S NOT CONSCIOUS ANYMORE. SO, I START WITH THE CHEST COMPRESSIONS AND HEATHER'S COUNTING OFF WITH THE OPERATOR A SPECIFIC TEMPO THAT I NEED TO BE KEEPING UP. AND IT'S FASTER THAN YOU THINK IT'S GOING TO BE. AND YOU HAVE TO PUSH HARDER THAN YOU THINK YOU HAVE TO PUSH. AND I DON'T EVEN KNOW IF I WAS STILL PUSHING HARD ENOUGH BECAUSE YOU JUST DON'T KNOW. AND IT FELT LIKE IT LASTED FOREVER. I MEAN, I'M SURE I WAS JUST A FEW MINUTES, BUT..



I THINK IN THE MOMENT, IT'S SO HARD TO TELL WHAT TO DO. THERE'S SO MUCH ADRENALINE, AND YOU ARE JUST KIND OF REACTING. I WASN'T THINKING. I HAD NEVER USED NARCAN BEFORE. I NEVER USED ANYTHING BEFORE SO I WASN'T THINKING THAT WAS EVEN A POSSIBILITY THAT WAS IN MY HEAD. I WAS JUST ON THE PHONE LIKE, SOMEONE ELSE, TELL ME WHAT TO DO, BECAUSE I CAN'T THINK.

TEXT BY L5P SERVICE WORKERS

Adrenaline

No formal training

Acted when needed

Role of the Police?

I GRABBED A PLASTIC TO-GO AND WAS TRYING TO STICK THE BACK AND PULL HIS AND IT REALLY TONGUE OPEN. DIDN'T SEEM LIKE END INTO HIS I WAS DOING ANYTHING. KNIFE MOUTH IT JUST DIDN'T SEEM LIKE AND I DON'T HAVE ANY MEDICAL I'VE NEVER IT'S LIKE SOMETHING HAD TO DEAL WITH IT WAS DOING TRAINING. SOMETHING LIKE YOU SEE IN THIS BEFORE IN REAL LIFE. ANYTHING IN MOVIES TERMS OF OPENING HIS AIRWAY. OR YOU BUT IT'S NOT BUT IN THE MOMENT, I HEAR ABOUT ... SOMETHING YOU REALLY THINK THAT JUST DIDN'T HESITATE, ACTED. YOU'RE GOING TO HAVE TO DO.

THEN EVENTUALLY THE POLICE SHOW UP, AND THE POLICE JUST KIND OF WALK IN VERY NONCHALANTLY AND ASK WHAT'S GOING ON? AS SO TOM YELLS AT THEM "CAN YOU HELP ME"? HE WAS LIKE, "CAN YOU GUYS HELP ME? AND I'M "I DON'T KNOW WHAT I'M DOING." SITTING HERE THINKING, THANK GOD MY RELIEF IS BUT NO ...

TEXT BY L5P SERVICE WORKERS

EMS7 minutes

Naloxone was on the premises

Shows need for training

Don't run call 911

Never Use Alone

Trauma

TEXT BY L5P SERVICE WORKERS

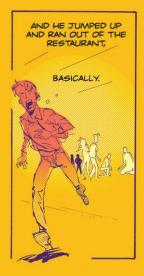
ILLUSTRATIONS BY JOSEPH KARG AND CHRIS BIVINS



A COUPLE SECONDS LATER PARAMEDICS COME IN. THEY RUSH IN, GET THE GUY ON THE BOARD. I THINK THEY GAVE HIM NARCAN. THE GUY JUMPS AWAKE ALMOST IMMEDIATELY AND GOES "WHAT'S GOING ON"? AND THEN THE REALIZATION OF IT HITS HIS FACE AND HE KIND OF REALIZED WHAT HAPPENED. THE PARAMEDICS ARE LIKE, YOU REALIZE WHAT HAPPENED, RIGHT? YOU OVERDOSED, AND YOU'RE ALIVE BUT JUST BECAUSE LIKE THIS DUDE. TOM. KEPT YOU ALIVE.







AND THEY GRABBED HIM AND TRIED TO GIVE HIM SORT OF AN EVALUATION.
BUT REALLY BEYOND THAT, THERE WAS NOTHING. THERE WAS NO CEREMONY, THERE
WAS NO, "HEY, KID, YOU DID A GOOD JOB". LIKE, NO REPRIMAND FOR THE GUY HIMSELF
WHO'S WAS OD'ING. JUST NOTHING.



AND LITERALLY THE RESPONDERS, THEY JUST KIND OF TOOK OFF THEIR GLOVES AND LEFT. I MEAN, ONE OF THE THINGS ABOUT THE WHOLE EXPERIENCE WAS IN THE BACK OF MY HEAD I KNEW THAT SOMEWHERE IN THE RESTAURANT WE HAD NARCAN. $^{\circ}$



BUT IN THE MOMENT, I DIDN'T FEEL LIKE I HAD TIME TO SEARCH FOR IT BECAUSE I DIDN'T KNOW EXACTLY WHERE IT WAS, AND I DIDN'T FEEL LIKE I HAD TIME TO EXPLAIN TO SOMEONE ELSE WHERE IT MIGHT BE FOR THEM TO LOOK FOR IT EITHER, BUT IT IN THE MOMENT IT'S HARD TO KNOW HOW MUCH TIME YOU HAVE OR WHAT THE RIGHT TURNS TO DO US.



FTER THAT I EXPERIENCE I WAS DEVASTATED BY WHAT I HAD JUST GONE THROUGH. AND I COULD NOT GO BACK TO WORK AFTER THAT. I CALLED THE MANAGER AND I WAS LIKE, "I NEED SOMEONE TO COME IN. I CAN'T FINISH THIS JOB TODAY".

BY THE END OF IT, I WAS IN TEARS, JUST SITTING ON THE FLOOR.



IMMEDIATELY AFTER I QUESTIONED WHETHER I WANTED TO COME BACK TO WORK AT ALL AFTER THAT, IF I EVER WANTED TO COME BACK TO WORK AGAIN. IN MY HEAD IT'S LIKE, IF I EVER HAVE TO DEAL WITH SOMETHING LIKE THIS, I DON'T KNOW IF I'M GOING TO BE ABLE TO AGAIN. I DON'T KNOW IF I'M GOING TO WANT TO AGAIN. JUST FELT VERY, LIKE, ALMOST LIKE TAKEN ADVANTAGE OF OR SOMETHING IN THE SITUATION.



AFTERWARDS SOME NEGATIVE VIEWS ON THE SUBJECT. STUFF LIKE, "YOU KNOW, MAN, I DON'T KNOW IF I WOULD HAVE HELPED HIM". OR LIKE, OH, "YOU SHOULD HAVE JUST LEFT HIM OUTSIDE". OR, "HE DID THAT TO HIMSELF," THAT KIND OF THING. OR PEOPLE SAYING, OH, "I'M GLAD YOU DID THAT BECAUSE I DEFINITELY WOULDN'T HAVE BEEN ABLE TO DO THAT". I WAS KIND OF HARD TO DEAL WITH IT.

OPPORTUNITY FOR CRITICAL THINKING

QUESTIPNS and Topics of Discussion

The cook asks if they see the person on dog food on page two.

Is it necessary to know alternative local and regional names for drugs? Why or why not?

On page three, Tom begins to assess for an overdose.

Do you know the signs of an opioid overdose? What are they?
How would you know for sure that someone was overdosing on an opioid?

Many people jump in to help rescue, with Tom leading the way.

How might this scene have played out if the person who was overdosing was alone? What if there was only one rescuer there? How does that change how we should respond? How might the rescue attempt have been different if Tom had found the naloxone (the opioid antidote, more commonly known by the brand name, Narcan®) before beginning CPR?

Tom mentions that chest compressions are faster and harder than he thought.

How many beats per minute should we deliver chest compressions?

Which songs can help us to remember the appropriate rate?

Have you been trained in CPR, and if so, how long ago?

Do you know where to find the most up-to-date practices

for life-saving interventions?

Would you feel confident administering chest compressions?

When Heather is on the phone with 911, the operator instructs her to lead Tom in hands-only CPR. The best practice for an opioid overdose is to check for breathing and a pulse, as opioid-induced respiratory depression can lead to organ damage and failure.

The operator does not instruct them to perform rescue breathing, even though Tom says he is not breathing. Why?

What do you think are reasons people might be hesitant to perform rescue breathing for someone who is overdosing?

Would you perform rescue breathing on someone who has overdosed and is not breathing? Why or why not?

Do you know of any techniques to make people more comfortable/confident to administer rescue breathing?

On page eight, Tom is disappointed when the police do not take over in the rescue attempt.

What is the police's responsibility when arriving at an overdose rescue?

Tom mentions there was no recognition for his rescue and no reprimand for the overdosed person. He also says he felt taken advantage of.

Why might Tom feel that he deserved recognition? If so, how would he be recognized?

Do you think Tom was taken advantage of? Why or why not? How can we support people (particularly non-medical personnel) who have rescued someone from an overdose?

Should people who overdose "be reprimanded"? Why or why not?

Tom heard many negative comments after the event.

Why do you think people would be hesitant to try and save someone's life from overdosing?

Why do you think it was hard for Tom to hear these remarks?

Do you have negative feelings about people who use drugs?

If yes, what are the specific negative feelings you have?

If yes or no, what experiences have you had to make you feel this way?

Why do you think some drugs are considered more harmful than others?

Special thanks to the creator of INCOGNEGRO Matt Johnson

SCIENCE GALLERY, ATLANTA

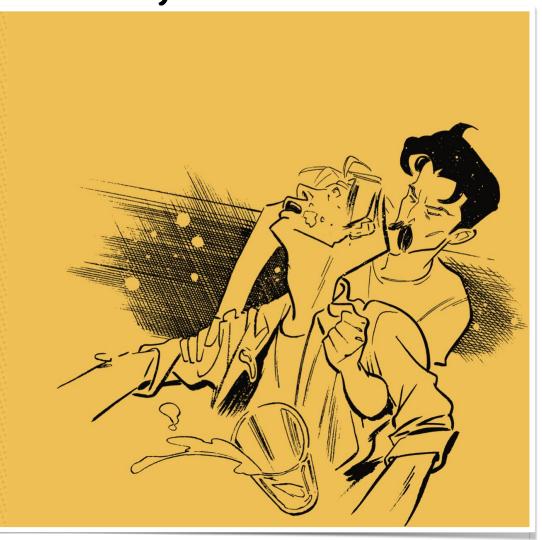
This work was presented as part of HOOKED: When Want Becomes Need, the inaugural exhibition at Science Gallery Atlanta.

Science Gallery Atlanta brings science, art, technology, and design together to deliver world-class educational and cultural experiences. Equal parts engaging and interactive, these events and exhibitions are designed to inspire a passion in young people for new ideas and areas of interest, equipping them with resilience, empathy, and ethical understanding.





Scan the QR code for a panel discussion on Hooked: When Want Becomes Need.



QUESTIONS??? THANKYOU!

SELECT REFERENCES

Adams, J. S. G. o. t. U. S. P. H. S. (2019). U.S. Surgeon General's Advisory on Nalaxone and Opioid Overdose. https://www.hhs.gov/surgeongeneral/priorities/ontoids-and-addiction/naloxone-advisory/index.html

Ahern, J., Stuber, J., & Galea, S. (2007). Stigma, discrimination and the health of illicit drug users. Drug Alcohol Depend, 88(2-3), 188-196. https://doi.org/10.1016/j.drugalcdep.2006.10.014

Allen, B., Sisson, L., Dolatshahi, J., Blachman-Forshay, J., Hurley, A., & Paone, D. (2020). Delivering Opioid Overdose Prevention in Bars and Nightclubs: A Public Awareness Pilot in New York City. J Public Health Manag Pract, 26(3), 232-235. https://doi.org/10.1097/PHH 0000000000001014

Atkins, D. N., Durrance, C. P., & Kim, V. (2019). Good Samaritan harm reduction policy and drug overdose deaths. Health Serv Res. 54(2), 407-416. https://doi.org/10.1111/1475-6773.13119

Ballreich, J., Mamsour, O., Hu, E., Chingcuanco, F., Pollack, H. A., Dowdy, D. W., & Alexander, G. C. (2020). Modeling Mitigation Strategies to Reduce Opioid-Related Morbidity and Mortality in the US. JAMA Netw Open, 3(11), e2023677. https://doi.org/10.1001/jamanetworkeen.2002.23677

Bennett, A. S., & Elliott, L. (2021). Naloxone's role in the national opioid crisis-past struggles, current efforts, and future opportunities. Transl Res, 234, 43-57. https://doi.org/10.1016/j.trsl.2021.03.001

Brandt, L., Yanagida, T., Campbell, A. N. C., Jones, J. D., Schultes, M. T., Martinez, S., & Comer, S. D. (2021). Multi-informant Implementation and Intervention Outcomes of Opioid Overdose Education and Naloncone Distribution in New York City. Glob Implement Res Appl, 1(3), 209-222. https://doi.org/10.1007/s43477.021.00021.4

Bush, D. M., Lipari, R.N. (2013). SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs) 2008 to 2010 (revised March 2012) and 2011 to 2012. Retrieved from <a href="https://www.samhun.gov/data/sistes/default/files/report_1959/ShortReport_19

Castillo, T. (2018). Harm Reduction Strategies for the Opiod Crisis. N C Med J, 79(3), 192-194. https://doi.org/10.18043/ncm.79.3.192

CDC. (2012). CDC grand rounds: prescription drug overdoses - a U.S. epidemic. MMWR Morb Mortal Wkly Rep, 61(1), 10-13.

CDC. (2020). CDC Health Advisory. CDC Health Alert Network Retrieved from https://emergency.cdc.gov/han/2020/pdf/CDC-HAN-00438.pdf

CDC, C. f. D. C. a. P. (2021). Drug overdose deaths in the U.S. top 100,000 annually. Retrieved from https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2021/20211117.htm

CDC, C. f. D. C. a. P. (2022). Provisional Drug Overdose Death Counts. Retrieved from https://www.cdc.gov/nchs/nvss/vstr/drug-overdose-data.htm

Chaudoir, S. R., Earnshaw, V. A., & Andel, S. (2013). "Discredited" Versus "Discreditable": Understanding How Shared and Unique Stigma Mechanisms Affect Psychological and Physical Health Disparities. Basic Appl Soc Psych, 35(1), 75-87. https://doi.org/10.1080/01/973533.2012.746612

Chimbar, L., & Moleta, Y. (2018). Naloxone Effectiveness: A Systematic Review. J Addict Nurs, 29(3), 167-171. https://doi.org/10.1097/ian.0000000000000230

Coalition, H. R. (2019). Principles of Harm Reduction. http:// harmreduction.org/about-us/principles-of-harm-reduction

Davis, C. (2020). Characteristics of Statewide Nalaxone Distribution Mechanisms https://www.networkforphl.org/resources/characteristics-of-statewide-naloxone-distribution-mechanisms/

Davis, C., & Carr, D. (2017). State legal innovations to encourage naloxone dispensing. J Am Pharm Assoc (2003), 57(2s), S180-s184. https://doi.org/10.1016/j.japh.2016.11.007

Des Jarlais, D. C. (2017). Harm reduction in the USA: the research perspective and an archive to David Purchase. Harm Reduct J, 14(1), 51. https://doi.org/10.1186/s17954-017-0178-6.

Dowell, D., Haegerich, T. M., & Chou, R. (2016). CDC Guideline for Prescribing Opioids for Chronic Pain-United States, 2016. JAMA, 315(15), 1624-1645. https://doi.org/10.1001/jmas.2016.1464

Eldridge, E. (2020). Fentanyl-Related Overdose Deaths Increase More Than 60% Since March https://www.gpb.org/news/2020/09/14/fentanyl-related-overdose-deaths-increase-more-60-march

Giglio, R. E., Li, G., & DiMaggio, C. J. (2015). Effectiveness of bystander naloxone administration and overdose education programs: a meta-analysis. Inj Epidemiol., 2(1), 10. https://doi.org/10.1186/s40621-015-0041-8

rigino, R., 14, 19, & Designo, C. 1, (2017). Intercretical systems inanome animal animal animal animal animal propriets a intercretianty in a planetimy, 111, 10. Impairments and the propriets a intercretianty in a planetimy, 111, 10. Impairments and the propriets are recommendated and the propriets and the propriets

trees, 1, 2, nowman, 5, 2, alter, N. D., ray, N., Lac, F. & Henner, K. (2015). Batter on meacar proviner appear for precipenous navieous east of the province as oversions entered by the province and province and province as oversions entered by the province and pro

Harduar Morano, L., Steese, A. L., & Luckhaust, S. E. (2018). Occurational Patterns in Unintentional and Undetermined Drus-Involved and Opioid-Involved Overdose Deaths - United States, 2007-2012. MMWR Morb Mortal Wkhr Rep. 67(33), 925-930. https://doi.org/10.1585/mmwr.mm6733a3

Harris, P.A., Taylor, R., Minor, B. L., Elliott, V., Fernandez, M., O'Neal, L., McLeod, L., Delacqua, F., Kirby, J., & Duda, S. N. (2019). The REDCap consortium: Building an international community of software platform partners. Journal of Biomedical Informatics, 95, 103208. https://doi.org/10.1016/j.ibj.2019.103208

Harris, P. A., Tsylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J. G. (2009). Research electronic data cupture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. J. Biomed. Inform., 42(2), 377-381. https://doi.org/10.1016/j.jkj.2008.08.010

Herbert, N., Axson, S., Siegel, L., Cassidy, K., Hoyt-Brennan, A. M., Whitney, C., Herens, A., & Gisedano, N. A. (2020). Leveraging immersive technology to expand access to opioid overdose reversal training in community settings: Results from a randomized controlled equivalence trial. Drug Alcohol Depond, 214, 108100. https://doi.org/10.1016/j.drugaledep.2020.10816

Humphreys, K. (2015). An Overdose Antidote Goes Mainstream. Health Aff Millwood), 34(10), 1624-1627. https://doi.org/10.1377/bbaff.2015.0934
Institute, R. R. (n.d.). Unprecedented increase in overdose deaths during the COVID-19 pandemic—with substantial regional-variation. Research Recovery Institute. <a href="https://www.necoverymoures.org/instants-post/insprecedented-increase-overdose-clearls-covid-19-substantial-regional-variation-its-test-post/instants-post/

Kariisa, M., Seth. P., Scholl, L., Wilson, N., & Davis, N. L. (2021). Drug overdose deaths involving cocaine and novehostimulants with abuse notential among racial and ethnic groups - United States, 2004-2019. Drug Alcohol Depend, 227, 109001. https://doi.org/10.1016/i.drugaleden.2021.109001

Kuczyńska, K., Grzonkowski, P., Kacprzak, Ł., & Zawilska, J. B. (2018). Abuse of fentunyl: An emerging problem to face. Forensic Sci Int., 289, 207-214. https://doi.org/10.1016/j.forsciint.2018.05.042

Lai, D., Pham, A. T., Nekkar Rao, P. P., & Beazely, M. A. (2019). The effects of heat and freeze-thaw cycling on naloxone stability. Harm Reduct J, 16(1), 17. https://doi.org/10.1186/s/12954-019-0288-4

LaSane, K., Ko, C., Dolatshahi, J., Nolan, M. L., Libou, M., Barrasse, D., Paone, D. (2022). Management and staff reception to overdose prevention in NYC nightlife venues. . Health Education Journal. https://doi.org/100178969221083081

HB 965, (2014). http://www.legis.ga.gov/legislation/en-us/display/20132014/hb/965

Lieberman, A., Davis, C. (2020). Legality of Dispensing and Administering Expired Nalaxone in Georgia. https://www.networkforphl.org/resources/legality-of-dispensing-and-administering-expired-nalexone-in-georgia/

Lockwood, T. E., Vervoordt, A., & Lieberman, M. (2021). High concentrations of illicit stimulants and cutting agents cause false positives on fentanyl test strips. Harm Reduct J, 18(1), 30. https://doi.org/10.1186/s12954-021-00478-4

Network, O. H. T. (2018). NARCAN® Nasal Spray efficacy for emergency

atment of opioid overdose. Rapid Response Service(125). https://www.ohtn.on.ca/wp-content/uploads/2018/05/RR125_Narcan-Nasal-Spray.pdf

Nugent, K., Matthews, P., Gissendaner, J., Papas, M., Occident, D., Patel, A., Johnson, M., Megargel, R. E., & Nomura, J. T. (2019). A Comparison of Efficacy of Treatment and Time to Administration of Naloxone by BLS and ALS Providers. Prehorp Disaster Med, 34(4), 350-355. https://doi.org/10.1017/s/10490/23xj.9004527

O'Donnell, J., Gladden, R. M., Mattson, C. L., Hunter, C. T., & Davis, N. L. (2020). Vital Signs: Characteristics of Drug Overdose Deaths Involving Opioids and Stimulants - 24 States and the District of Columbia, January-June 2019. MMWR Morb Mortal Whly Rep. 69(35), 1189-1197. https://doi.org/10.15585/mmww.mm6925a1

Pickens, C. M., Hoots, B. E., Casillas, S. M., & Scholl, L. (2022). Prevalences of and characteristics associated with single- and polydrug-involved U.S. Emergency Department Visits in 2018. Addict Bohav. 125, 107158. https://doi.org/10.1016/j.ed/sch.2021.107158

Pruyn, S., Frey, J., Baker, B., Brodeur, M., Graichen, C., Long, H., Zheng, H., & Dailey, M. W. (2019). Quality Assessment of Expired Naloxone Products from First-Responders' Supplies. Prehosp Emerg Care, 23(5), 647-653. https://doi.org/10.1080/10903127.2018.1553257

R Statistical Computing, Vienna, Austria. URL https://www.R-project.org/. Statistical Computing, Vienna, Austria. URL https://www.R-project.org/.

Ray, B., Lowder, E., Bailey, K., Huyuh, P., Benton, R., & Watson, D. (2020). Racial differences in overdose events and polydrug detection in Indianapolis, Indiana. Drug Alcohol Depend, 206, 107658. https://doi.org/10.1016/j.deugalcolep.2019.107658

Ray, B., O'Donnell, D., & Kahre, K. (2015). Police officer attitudes towards intranasal naloxone training. Drug Alcohol Depend, 146, 107-110. https://doi.org/10.1016/j.drugalcdep.2014.10.026

Razaghizad, A., Windle, S. B., Filion, K. B., Gore, G., Kudrina, I., Paraskevopoulos, E., Kimmelman, J., Martel, M. O., & Eisenberg, M. J. (2021). The Effect of Overdone Education and Naloxone Distribution: An Umbrella Review of Systematic Reviews. Am J Public Health, 111(8), 1516-1517. https://doi.org/10.2105/AJPH.2021.3053064

Reed, M. K., Roth, A. M., Tabb, L. P., Groves, A. K., & Lankenau, S. E. (2021). *I probably got a minute*: Perceptions of fentanyl test strip use among people who use stimulants. Int J Drug Policy, 92, 103147. https://doi.org/10.1016/j.druppo.2021.103147.

Rudd, R. A., Aleshire, N., Zibbell, J. E., & Gladden, R. M. (2016). Increases in Drug and Opioid Overdose Deaths--United States, 2000-2014. MMWR Morb Mortal Wkly Rep, 64(50-51), 1378-1382. https://doi.org/10.15585/mmwx.mm6450s1

SAMSHA (n.d.). Opioid Overdose Prevention TOOLKIT. In.

Santa, H. M., Amirova, S. G., Ventricelli, D. J., Downs, G. E., Nowalk, A. A., Pringle, J. L., & Aruru, M. (2021). Preparing pharmacists to increase naloxone dispensing within community pharmacies under the Pennsylvania standing order. Am J Health Syst Pharm. 78(4), 227-335. https://doi.org/10.1003/

Scheuermever, F. X., DeWitt, C., Christenson, J., Grunau, B., Kestler, A., Grafstein, E., Buxton, J., Barbic, D., Milanovic, S., Totkiari, R., Salota, L. & Innes, G. (2018). Safety of a Brief Emercency Department Observation Protocol for Patients With Presumed Fentanyl Overdose. Am Emery Med. 72(1), 1-8c.1. https://doi.org/10.1016/j.annemerymed.2018.01.054

Shaw, W. S., Roelofs, C., & Punnett, L. (2020). Work Environment Factors and Prevention of Opioid-Related Deaths. Am J Public Health, 110(8), 1235-1241. https://doi.org/10.2105/ajaph.2020.305716

Smart, R., Pardo, B., & Davis, C. S. (2021). Systematic review of the emerging literature on the effectiveness of naloxone access laws in the United States. Addiction, 116(1), 6-17. https://doi.org/10.1111/add.15163.

Townsend, T., Kline, D., Rivera-Aguirre, A., Bunting, A. M., Mauro, P. M., Marshall, B. D. L., Martins, S. S., & Cerdi, M. (2022). Racial/Ethnic and Geographic Trends in Combined Stimulant/Opioid Overdoses, 2007-2019. Am J Epidemiol. https://doi.org/10.1093/ajckwab290

Tracy, M., Piper, T. M., Ompad, D., Bucciarelli, A., Coffin, P. O., Vlahov, D., & Galea, S. (2005). Circumstances of witnessed drug overdose in New York City: implications for intervention. Drug Alcohol Depend, 79(2), 181-190. https://doi.org/10.1016/j.drugalcdep.2005.01.010

USDL. (2021). Labor Force Statistics from the Current Population Survey. Retrieved from https://www.bls.gov/cps/cpsaut18.htm

USDL. (2022). Employees on nonfarm payrolls by industry sector and selected industry detail. https://www.bls.gov/news.release/empsit.t17.htm

Wheeler, E., Jones, T. S., Gilbert, M. K., & Davidson, P. J. (2015). Opioid Overdose Prevention Programs Providing Naloxone to Laypersons - United States, 2014. MMWR Marb Martal Whly Rep. 64(23), 631-635.

Williams, A. V., Strang, J., & Marsdon, J. (2013). Development of Opioid Overdose Knowledge (OOKS) and Attitudes (OOAS) Scales for take-home naloxone training evaluation. Drug Alcohol Depend, 132(1-2), 383-386. https://doi.org/10.1016/j.drugalcelep.2013.02.007

Willman, M. W., Liss, D. B., Schwarz, E. S., & Mullins, M. E. (2017). Do heroin overdose natients require observation after receiving naloxone? Clin Toxicol (Phila), 55(2), 81-87, https://doi.org/10.1080/15563659.2016.1253846