

# Naloxone Training and Distribution Evaluation

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## Background:

AIDS Connecticut (ACT) is a statewide coalition of organizations that provide services to people living with HIV/AIDS in Connecticut. The mission of ACT is to improve the lives of people impacted by HIV through care and supportive services, housing, advocacy, and prevention. Between 2009 and 2014, there were nearly 2,000 accidental and unintentional opioid-involved deaths that occurred in Connecticut, spread across 152 of the 169 cities and towns. In 2014, ACT began distributing Naloxone kits to clients of their syringe service program (SSP)\* van. In 2016 ACT distributed 659 kits to clients. When a kit is given to a client, staff also provide training on overdose recognition and naloxone administration. The SSP has increased the distribution and access of Naloxone from primarily active users to secondary users and community organizations.



## Objectives:

<div style="font-size: 2em; margin: 0;">1</div> <p><b>ASSESS SCOPE:</b></p> <p>Investigate the burden of opioid-related deaths in Connecticut. Assess the death reversal rate from Naloxone use.</p>	<div style="font-size: 2em; margin: 0;">2</div> <p><b>SERVICE DELIVERY EVALUATION:</b></p> <p>Interview SSP clients and staff to evaluate experiences with Naloxone program.</p>	<div style="font-size: 2em; margin: 0;">3</div> <p><b>TOOL DEVELOPMENT</b></p> <p>Develop train-back tool to strengthen Naloxone training efficacy among SSP clients.</p>
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*\*Syringe service programs provide free sterile syringes and collect used syringes from injection-drug users (IDUs) to reduce the transmission of blood-borne pathogens including HIV, hepatitis B, and hepatitis C (Centers for Disease Control and Prevention, 2017)*

## Methods

### Frequency Analysis

A descriptive quantitative analysis of reversal report data, SSP client needs, and SSP client satisfaction was conducted using previously collected ACT SSP data. Analysis of opioid-related accidental deaths in CT was conducted using the public dataset 'Accidental Drug Related Deaths 2012-2016' from Connecticut Open Data.



### Geographic Information System

A geospatial method for mapping (ArcGIS) was used to show the distribution of opioid-related deaths across CT using the public dataset 'Accidental Drug Related Deaths 2012-2016' from Connecticut Open Data, and the Connecticut Department of Public Health town population dataset publicly available from Connecticut Department of Energy and Environmental Protection GIS database.



### Qualitative Interviews

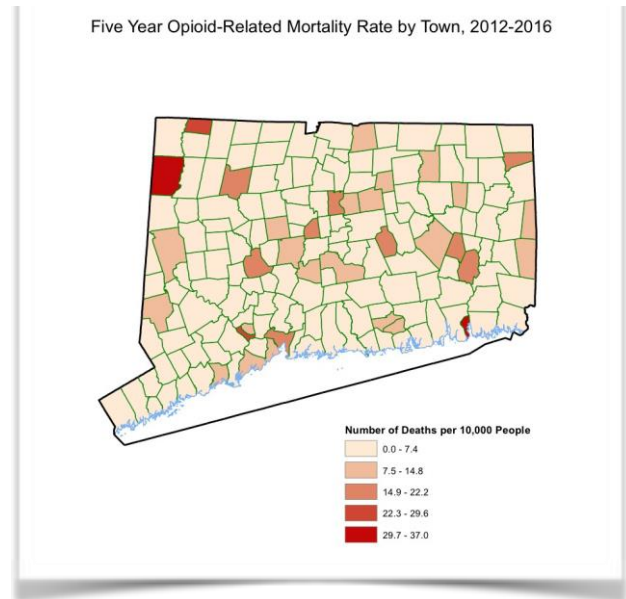
An iterative, qualitative analysis method (Corbin & Strauss, 2008) was used to conduct semi-structured interviews with ACT staff and clients to evaluate the goals and operations of the training and distribution program. Collected data was analyzed by research team for evaluation.

## Results:

### Burden of Opioid-Related Deaths in Connecticut:

- Opioid-related mortality rates for 2012-2016 range from **0 deaths to 37 deaths** per 10,000 people across Connecticut towns. The highest opioid-related mortality rates are found in Sharon, Derby, New London, and North Canaan (Figure 1). Hartford, Waterbury, New Haven, Bridgeport had the highest number of opioid-related deaths.
- In 2016, clients of ACT reported a **99.3%** (149/150 attempts) success rate in OD reversal using Naloxone.

**“I was working at the YMCA one night... and we got a call on the walkie talkie- someone’s overdosing upstairs. So I ran upstairs, had a naloxone kit. I opened it up... clicked it three times, aspirator, shot it in his nose once and.. anyways before that I had checked to see if he was breathing and he wasn’t, shot it in his nose, he didn’t wake up, administered the second dose, he woke up, and then the ambulance was there and they took care of the rest.” - A Client of ACT**



### Syringe Service Program (SSP):

- In SSP satisfaction surveys analyzed, **95.7%** (22/23) of surveyed clients reported being highly satisfied or satisfied with the van services provided.
- Many SSP van clients have successfully intervened in an overdose episode due to ACT-provided naloxone and OD education trainings.
- ACT’s SSP van remained the preferred client access point. Clients were willing to access Naloxone from other sources such as pharmacies, although cost of medication was a primary concern.
- Clients reported in qualitative interviews that access to naloxone made them feel safer in their daily lives, and did not impact client drug-use behavior.
- The broadened reach of ACT’s naloxone distribution has increased community ability to reverse opioid overdoses and reduce mortality rates. A formal client train-back tool, in which clients are asked by staff to “train back” what they have learned by using words to explain what they need to know about opioid reversals, and standardized staff training procedure will further build this capacity.

**“They give us good advice on, you know, trying to get clean and stay clean. They’re always trying to tell us positive, influence us in positive ways.”**  
*- A Client of ACT*

### Naloxone Train-back Tool

Training Checklist		
Name (Alias):		
Date:		
Van Stop:		
Pre-assembled kit?: Yes/No		
Amount of time since last training:		
Critical Training Points	Yes	No
Sternum Rub		
Recovery Position		
Sweep mouth clear, no poking		
Rescue breathing if necessary, pinch nose and watch chest rise		
Call 911		
<b>If kit is pre-assembled, skip to Naloxone administration *</b>		
Pop purple and yellow caps off of vial and applicator		
3 half twists of Naloxone vial into applicator		
Half twist of nasal atomizer onto applicator		
*Squeeze half dose up 1 nostril and second half up other nostril		
Wait 3-5 minutes and continue rescue breathing if necessary		
Use second vial if individual remains unresponsive		
Critical training points mentioned	/12	
Comments:		

## Conclusions and Recommendations:

ACT has created a stigma-free space, successfully engaging with and serving a high-need community in Connecticut. With a naloxone distribution, ACT works to empower the people of Connecticut to combat deaths associated with opioid overdose, and encourages clients to actively participate in their communities. An expanded and formalized naloxone training and distribution program will strengthen these efforts.

The evaluation team encourages ACT to consider the following actions for improvements:

### Service Delivery

- 1) Add more SSP van stops or include a weekend stop
- 2) Consult with clients to identify innovative advertising opportunities
- 3) Revise SSP survey items to include an HIV knowledge section for future data collection and analysis

### Training

- 1) Develop and implement a standardized staff naloxone training procedure
- 2) Conduct periodic naloxone training refreshers for staff & clients
- 3) Implement a naloxone train-back tool for returning clients
- 4) Explore smart-phone application technology as an alternative training approach

## Limitations:

- The sample sizes for both the qualitative and quantitative analyses were small and did not include monolingual Spanish speakers.
- Due to limitations in existing datasets, the analysis for this evaluation was descriptive rather than inferential.

## Acknowledgments:

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## Reference & Helpful Resources:

1. Centers for Disease Control and Prevention. (2017). Syringe Services Programs.
2. Retrieved May 16, 2017, from <https://www.cdc.gov/hiv/risk/ssps.html>
3. Corbin, J., Strauss, A. (2008). Basics of qualitative research 3e.
4. OCME. (2017). Accidental Drug Related Deaths 2012-2016 | Open Data - State of Connecticut. Retrieved April 30, 2017, from <https://data.ct.gov/Health-and-Human-Services/Accidental-Drug-Related-Deaths-2012-2016/rybz-nyjw>