

# Violence is a Health Issue

**Karen Volker**

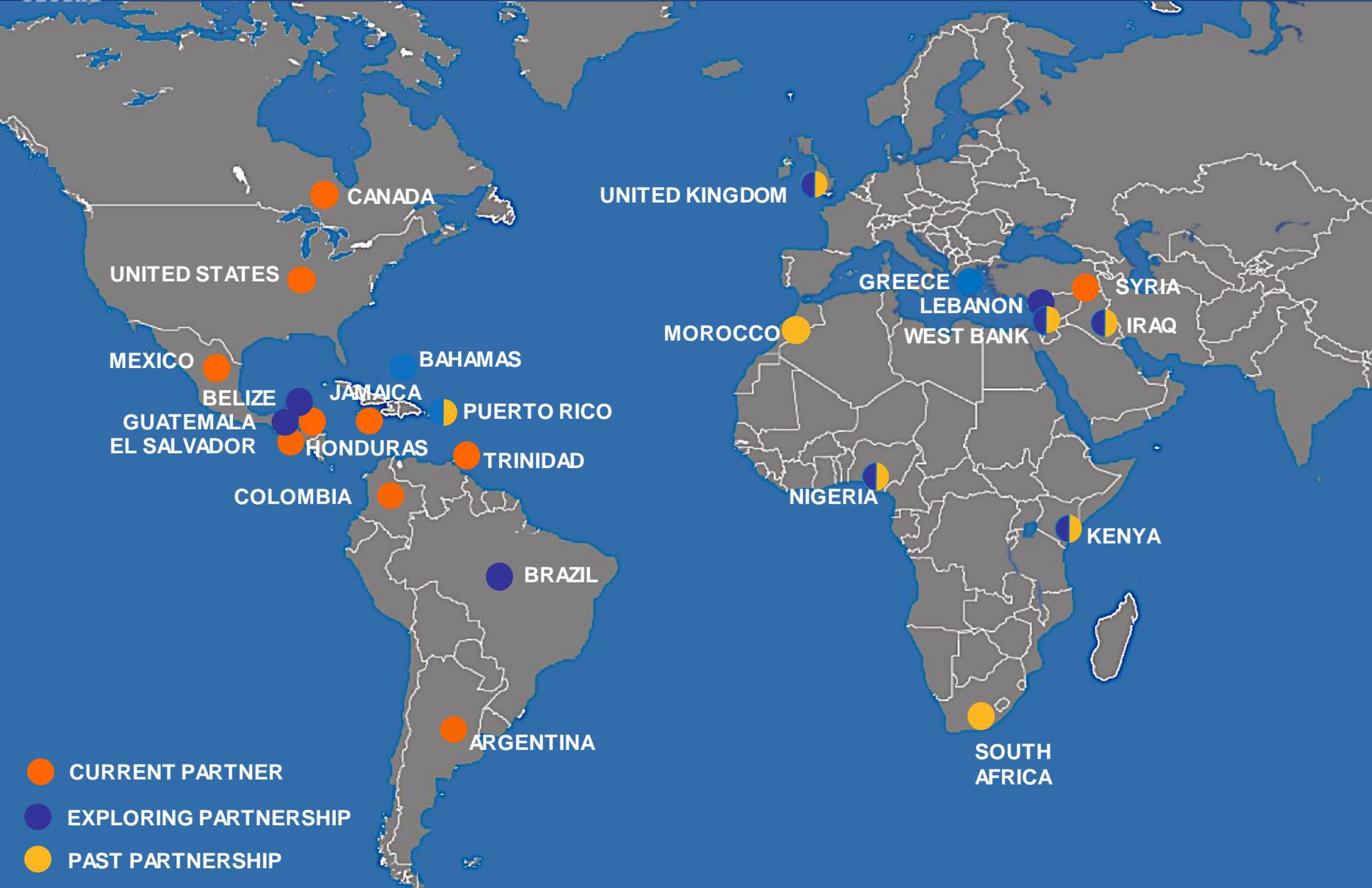
**Cure Violence Global**

**PAHO, October 2019**



# Cure Violence International Adaptation Partners

September 2019



- CURRENT PARTNER
- EXPLORING PARTNERSHIP
- PAST PARTNERSHIP

# Cure Violence Latin America Adaptation Partners/Experiences

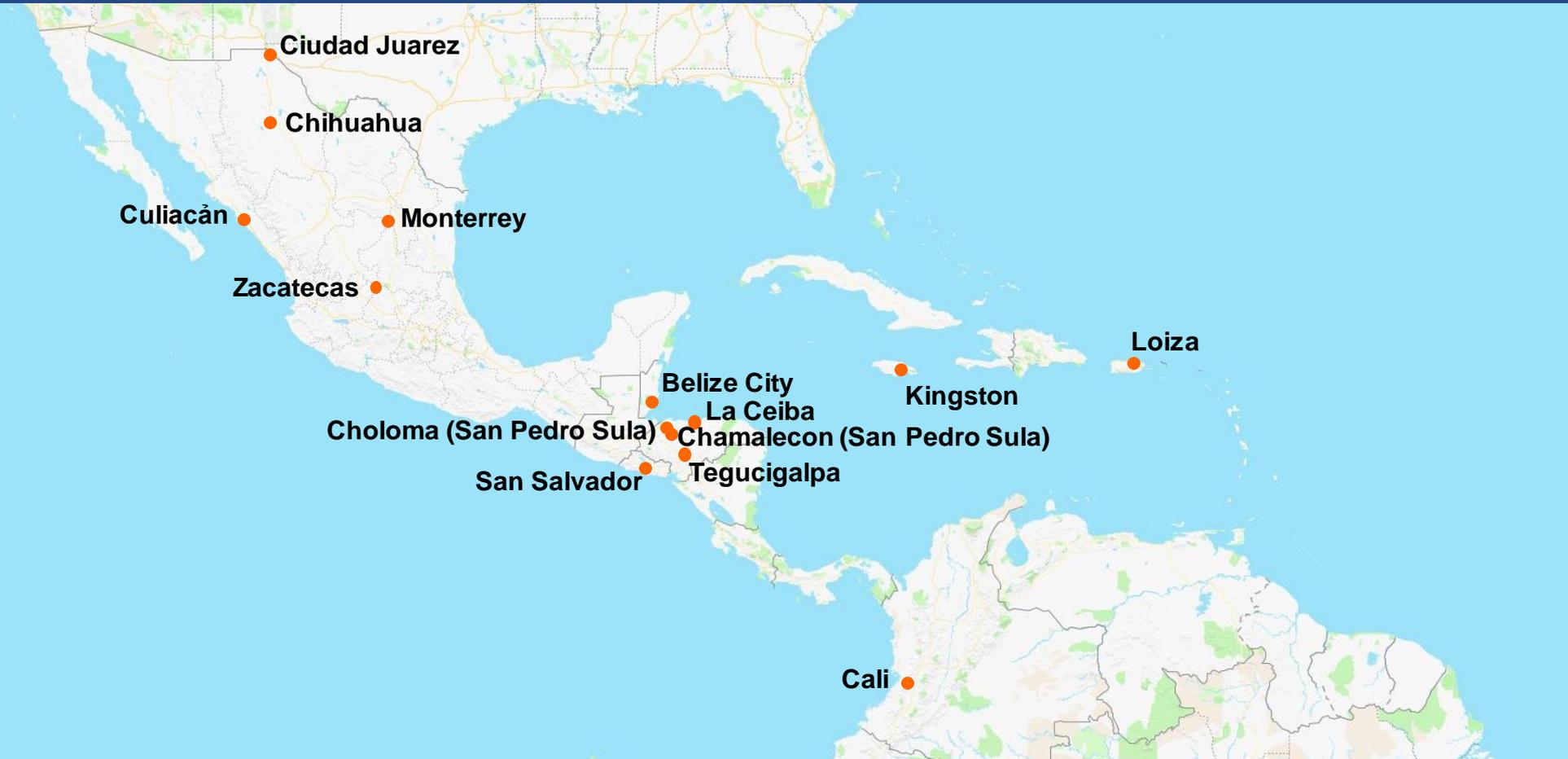
September 2019



- CURRENT PARTNER
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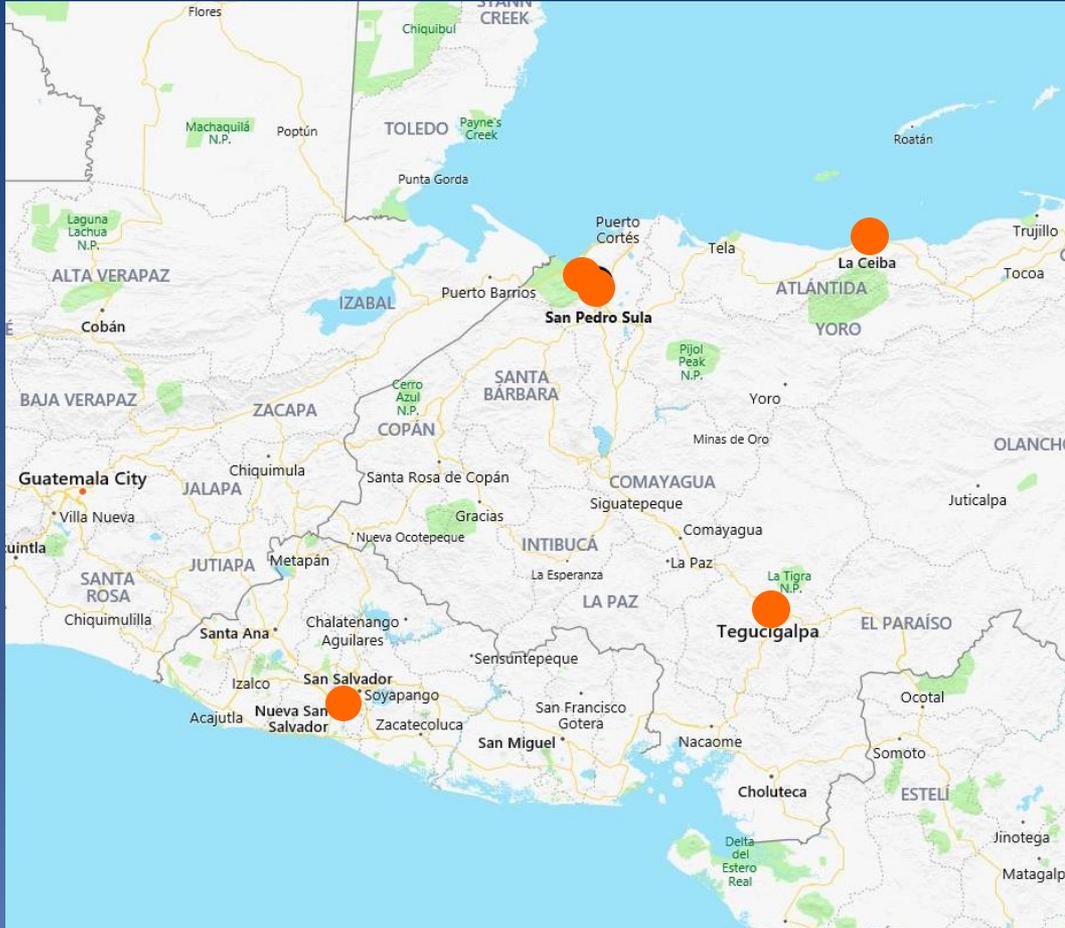
# Cure Violence Adaptations in Latin America

(October 2019)



# Cure Violence Adaptations in Honduras

(October 2019)



**Choloma (San Pedro Sula) – 2 workers**

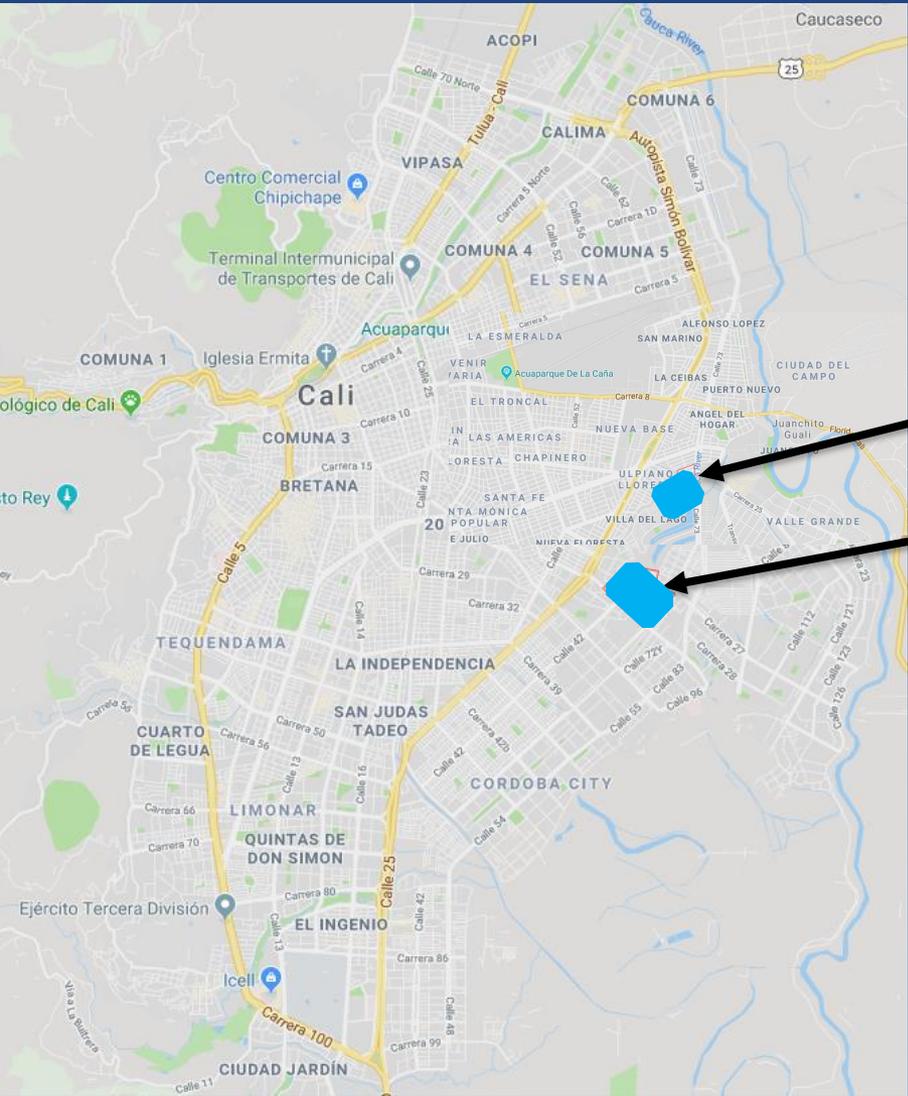
**Chamalecon (San Pedro Sula) – 6 sites**

**Tegucigalpa – assessment in November**

**La Ceiba – assessment in November**

# Cure Violence Adaptations in Ciudad Juarez

(October 2019)

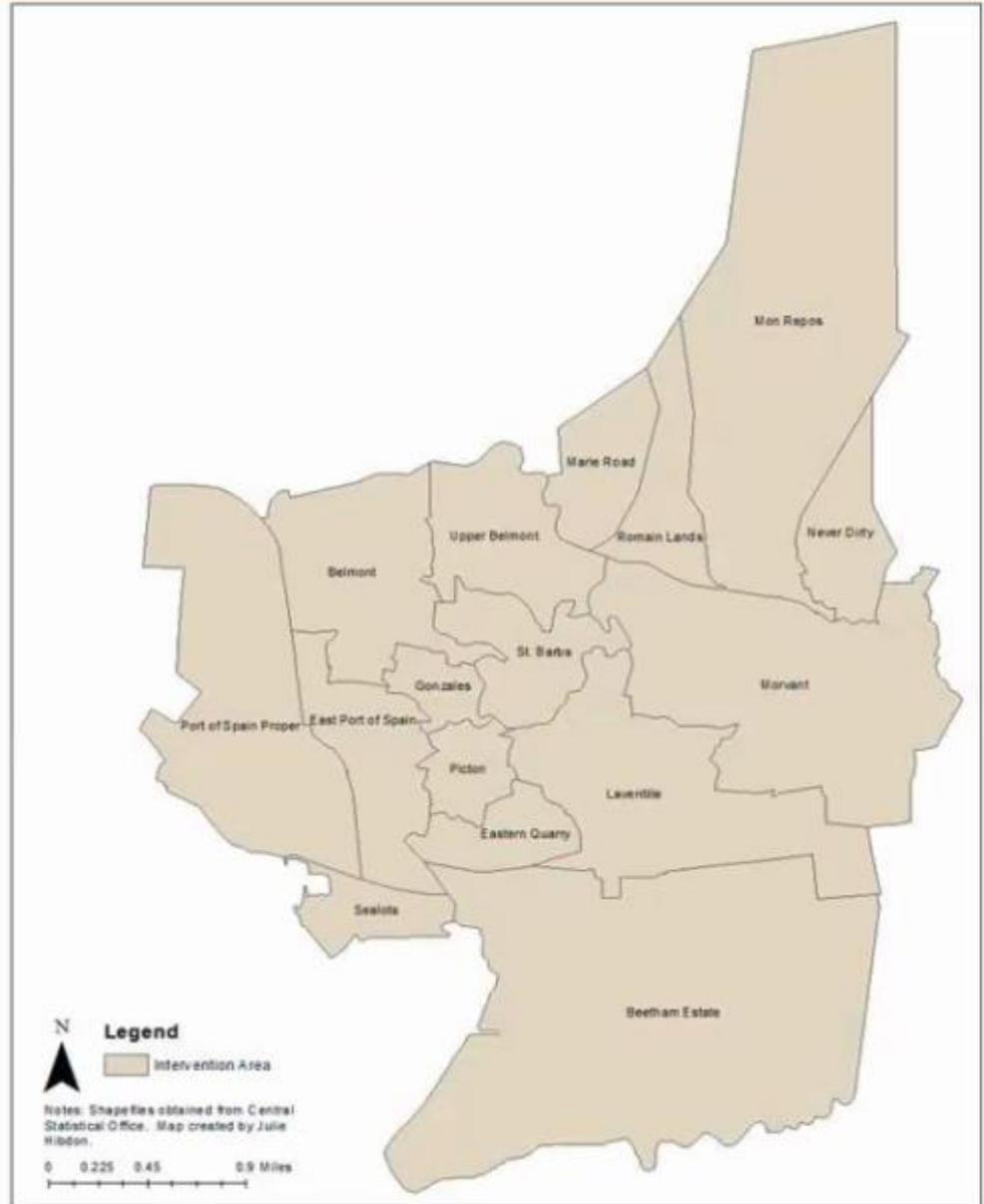


**Charco Azul – 7 workers**

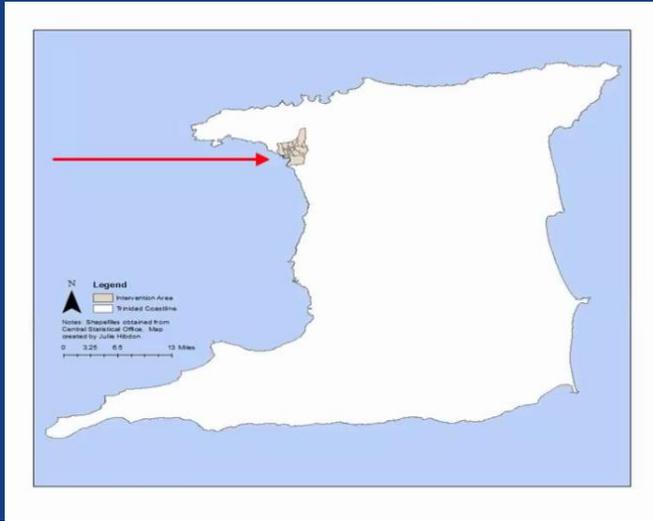
**Comuneros – 7 workers**

# Cure Violence Trinidad Community: Port of Spain

## 16 Intervention Communities



# Cure Violence Trinidad – 45% Reduction in Violent Crime



## IDB / Arizona State Univ. Evaluation

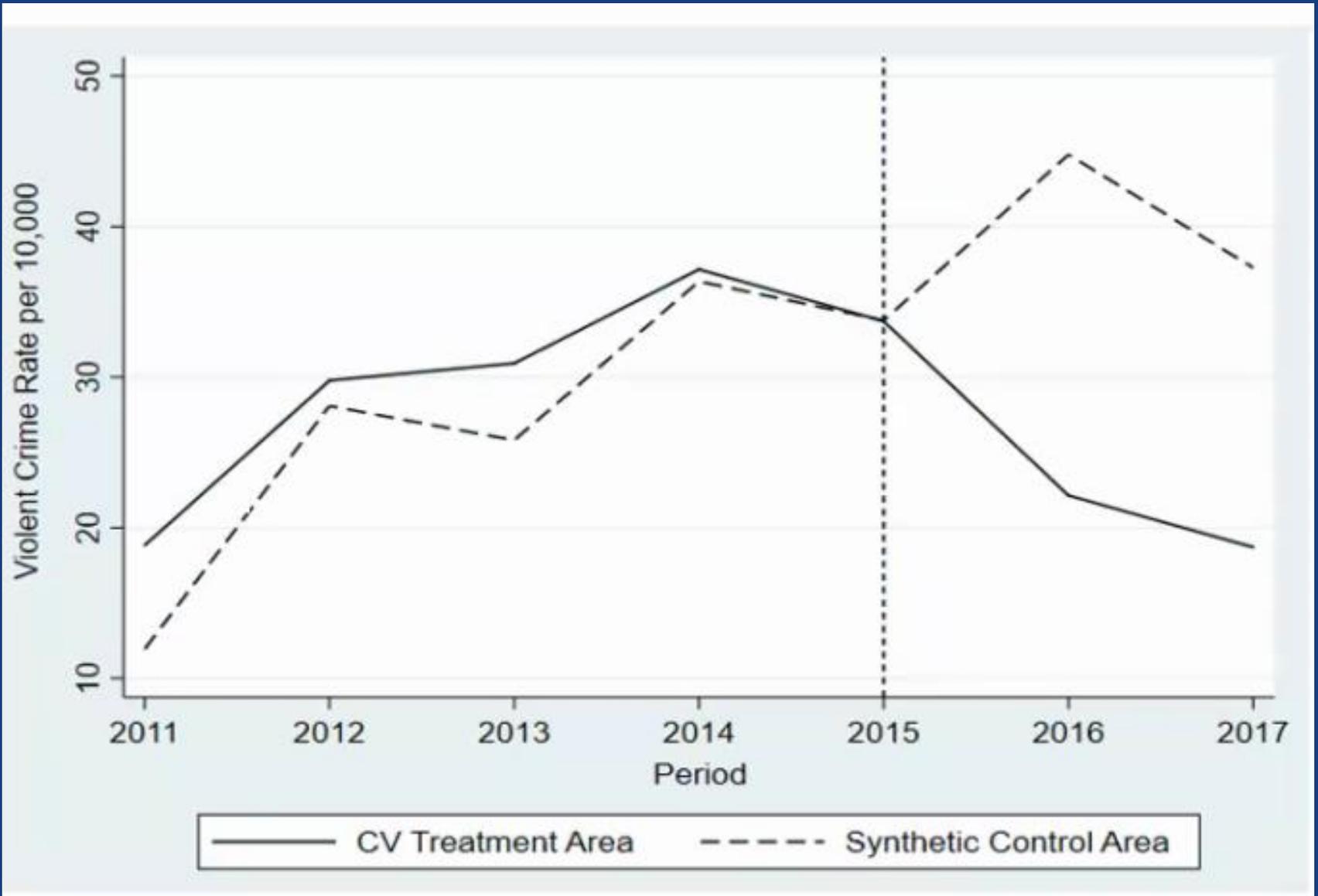
45% reduction in violent crimes

38% reduction in gunshot hospital admissions

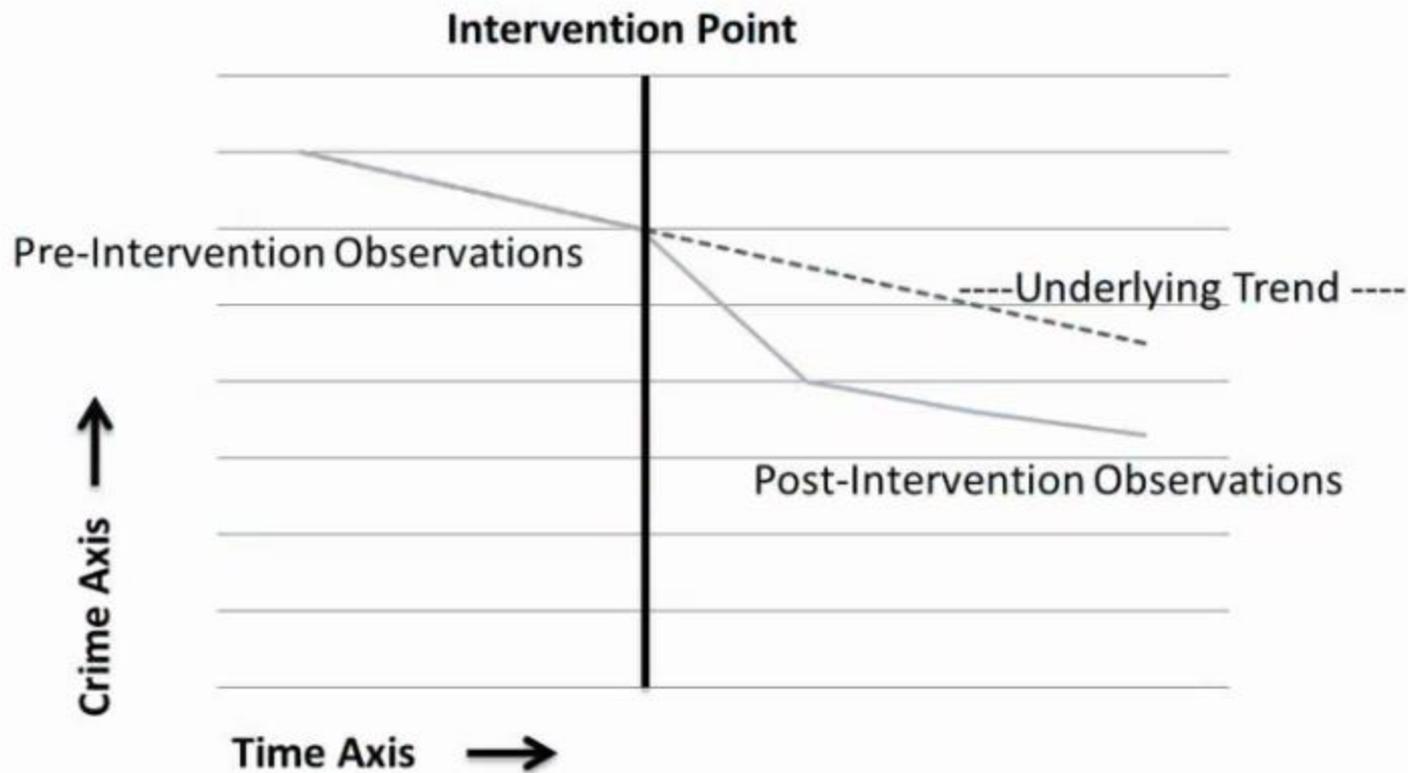


Source: Project REASON Facebook Page

# Cure Violence Trinidad – 45% Reduction in Violent Crime



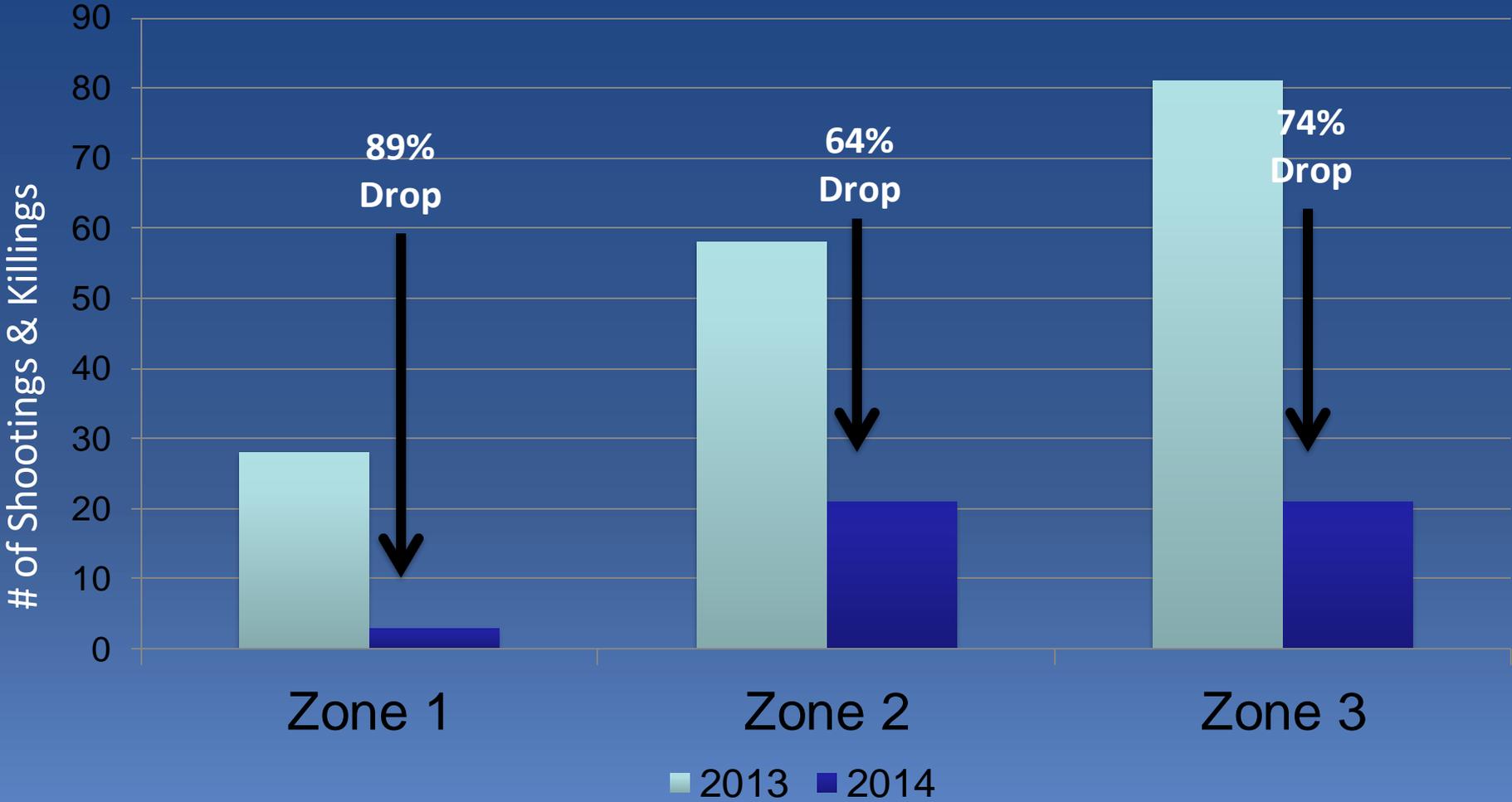
# Time Series Evaluation Design



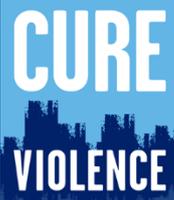
# Cure Violence San Pedro Sula, Honduras

2013 vs. 2014

Average shooting & killing reduction = 73%



Ransford, et al. (2016). Report on the Cure Violence Model Adaptation in San Pedro Sula, Honduras.. Chicago, IL: University of Illinois at Chicago.



# Measured success - Global

	Shootings and Killings	Other	Ref
Ciudad Juarez, Mexico	- 50% to -75% killings	Community much safer	Observatorio Ciudadano, 2016
San Pedro Sula, Honduras	-88% shooting & killings (avg. 5 sites)	Streak to 17 mos.	Ransford, 2017
Trinidad	- 38% shootings - 39% killings - 45% violent crime	-50% violent crime	Maguire, 2018 (unpub)
Cape Town, S. Africa	-14% killings	-29% attempted killings	Ransford, 2017 (unpub)
Halifax, Canada	-100% killings	Pro-social attitudes, more	Ungar, 2016
Puerto Rico	- 53% killings		PR site reports
UK prison	-51% violence -95% group attacks		UK Prison eval, 2014

# Health

“a complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity.”

Preamble to the Constitution of the World Health Organization as adopted 19 June - 22 July 1946; signed by the representatives of 61 States, and entered into force on 7 April 1948.

# Violence causes:

- Loss of life, imprisonment, break up of families
- Lower performing schools
- Significant mental health problems
- Significant behavioral problems
- Decreased business development
- Increased poverty
- Lower property values
- Lower tax revenue

Cost to society (medical, criminal justice, business, etc)

- \$1.2 million per shooting injury (in US)

**Everybody should live, learn, work, play, and raise families in safe places.**

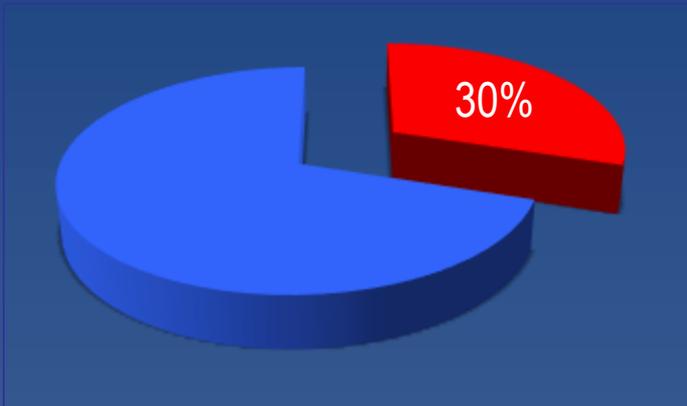


**But some communities & families still  
endure daily violence**

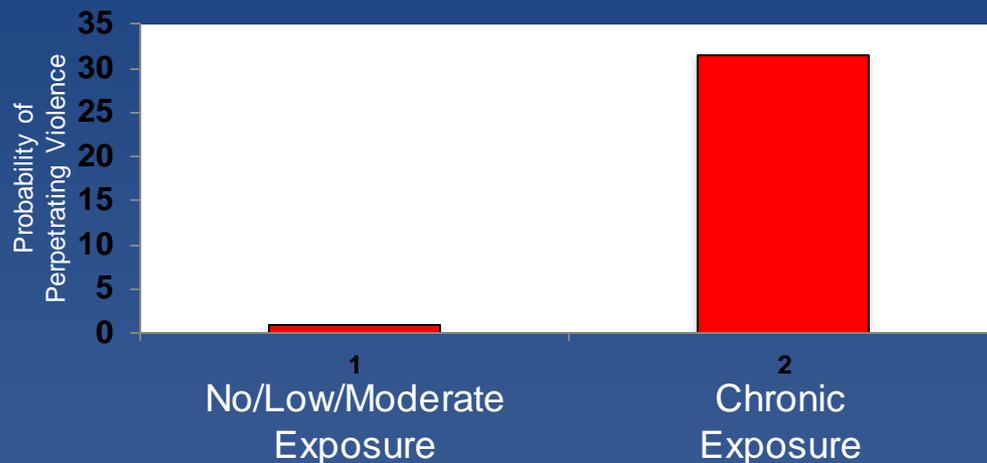


# Exposure to Violence → Perpetration of Violence

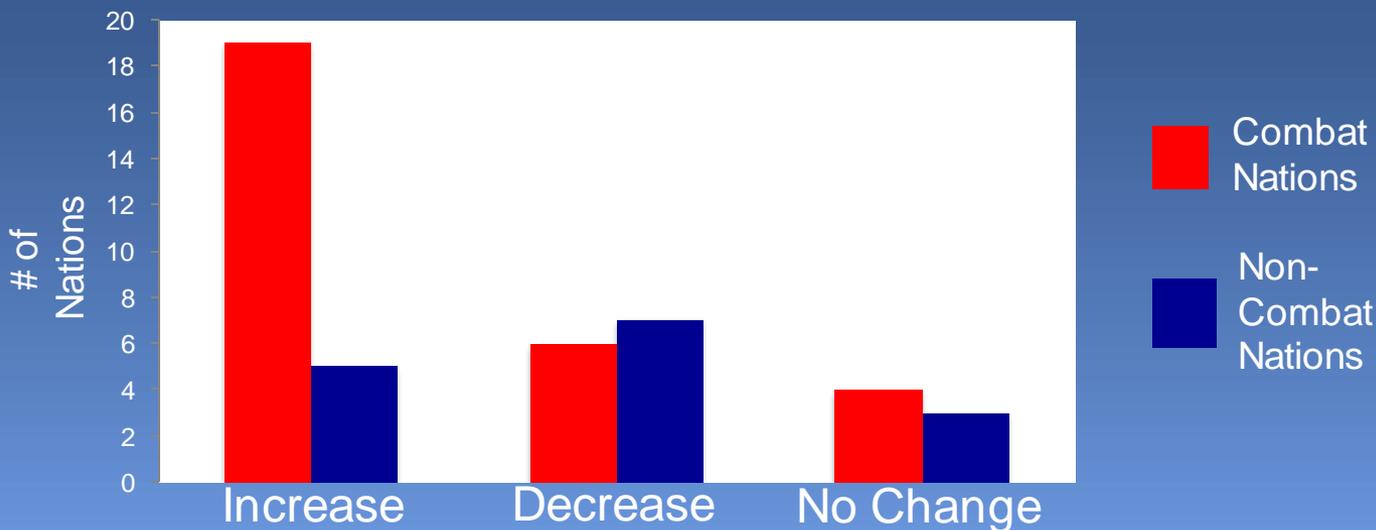
## Child Abuse Victims Becoming Abusers



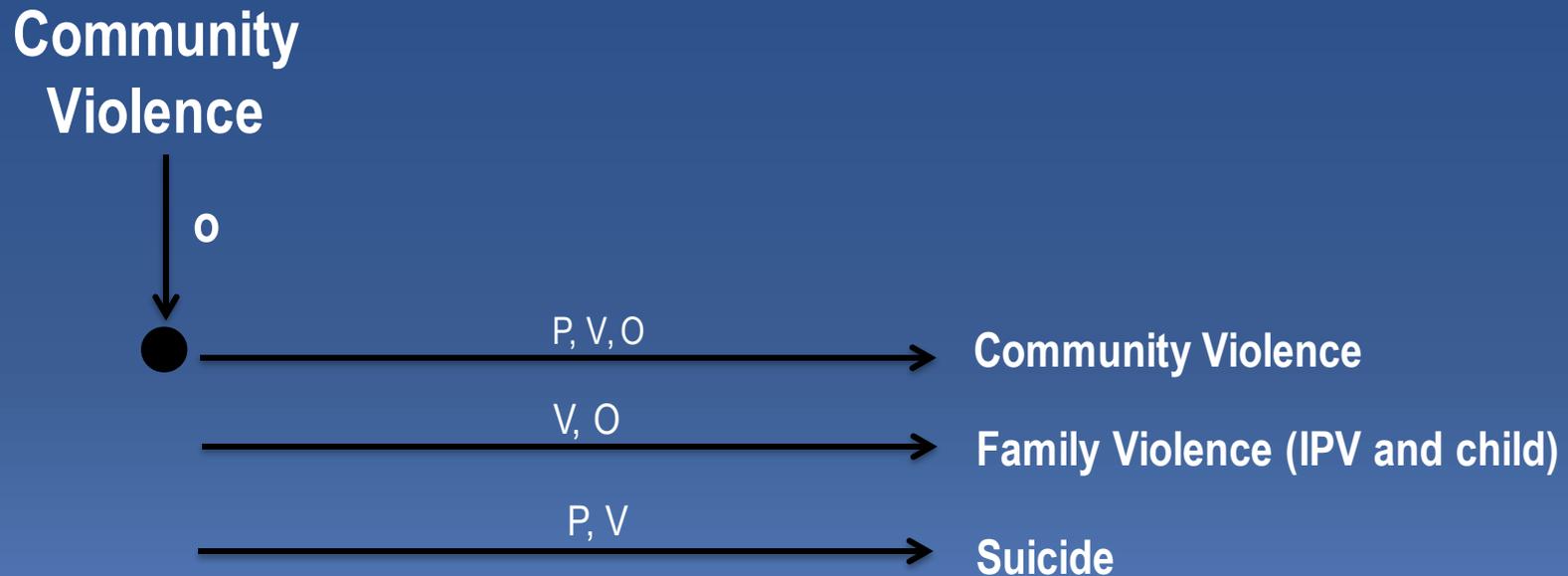
## Chronic Exposure to Community Violence Associated with Perpetration



## Community Violence Increases Post War (WW1 & WW2)



# Transmission across syndromes



Note: Perpetration for males and females, higher risk for males;

Barkin et al. 2001; Hanson et al. 2006

# Violence is contagious in all syndromes

**community**

**family**

**spousal**

**child**

**suicide**

**mass shootings**

**violent extremism**

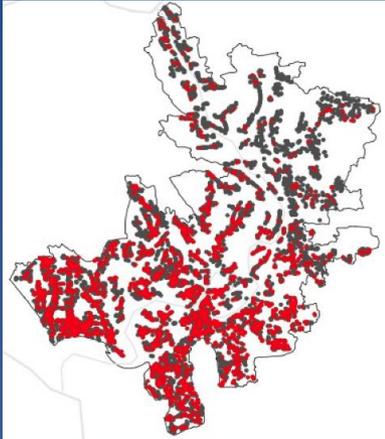
**war**

# New Scientific Understanding of Violence

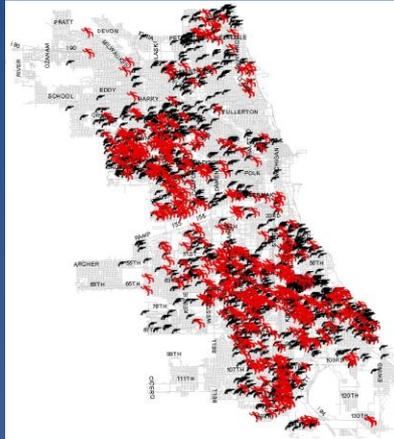
Violence has all three characteristics of an epidemic disease

## 1. Violence clusters like a disease

Cholera



Violence



## 2. Violence spreads like a disease

Influenza



Violence



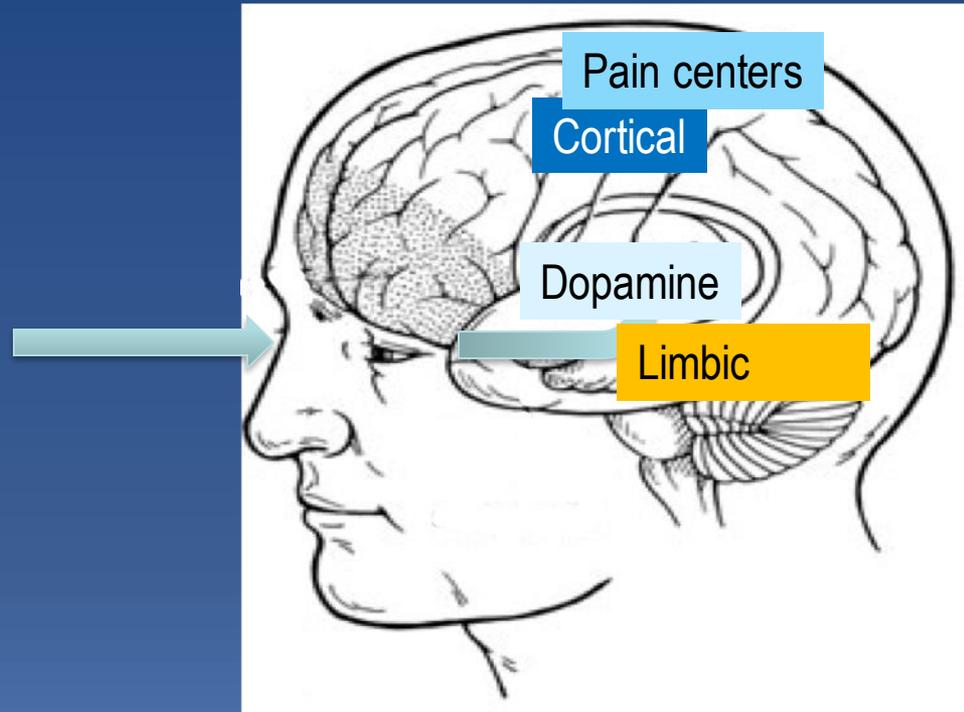
## 3. Violence transmits

through exposure, modeling, social learning, and norms.



# MEANS OF TRANSMISSION

**VIOLENCE**  
TRANSMISSION  
Observing  
Witnessing  
**Trauma**



**BRAIN PROCESSING**

Intake → Processing → Disease

Modulating factors: Age, prior immunity, type of exposure, dose, context, others

# Why do people behave violently?

## BRAIN PROCESSES

- Cortical - Copying
- Dopamine/Pain - Social pressure
- Limbic - Emotion system dysregulation

- **Neurological Effects / Trauma**

**desensitization, hyper-arousal,  
hyper-vigilance, startle response**

# What Is Known About The Transmission of Violence?

1

Social Learning



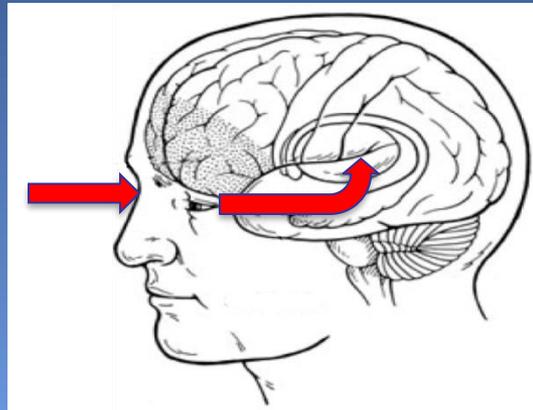
2

Social Norms



3

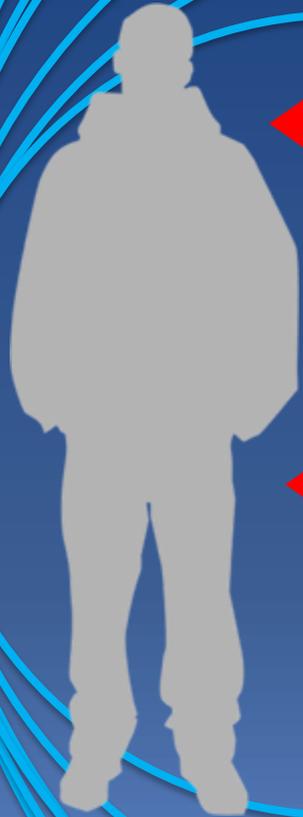
Neurological Effects



4

Modulating Factors

# Increasing exposure, increasing rate of symptoms



**Proximity/contact**

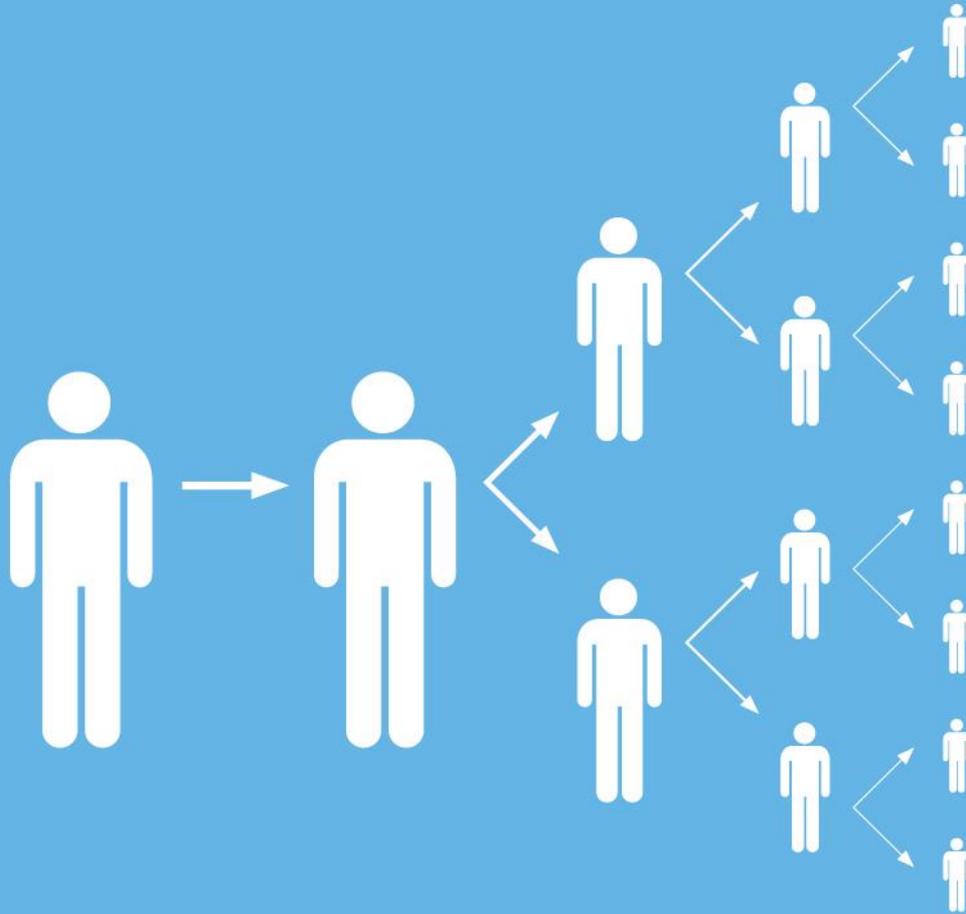
Previously shot    In immediate social network    Beat 735 (Englewood)    Englewood (7<sup>th</sup> District)    City of Chicago    United States

**Rates (Shooting)**

59,000    740    300    230    62    52

# Epidemic Health Problem

**CURE**  
**VIOLENCE**



# *After decades of effort, why is violence still a serious issue?*

*Because we have misdiagnosed the problem...*

<b>Old Thinking</b>	<b><i>New Scientific Understanding</i></b>
Moralistic judgments	<i>The latest brain research on thinking and decision-making</i>
“Bad” Individuals	<i>Learned (contagious) behavior (which can be unlearned)</i>
Gang-related	<i>The power of group and community norms</i>
Imprisonment	<i>Prevention through changing behavior and influences</i>

# Health and Violence

Health effects

Unhealthy state

Contagious

Can be treated as contagious

# STOPPING EPIDEMICS

1. Interrupt transmission
2. Prevent future spread
3. Change group norms



# INTERRUPT TRANSMISSION





# 1. INTERRUPTION

Detecting ongoing conflicts that could become violent and deploying trained public health workers to mediate

# Interrupters

## Criteria

*From inside/same group*

*See that/want violence to stop*

*Trust, access, credibility*

## Mode

*Total transparency*

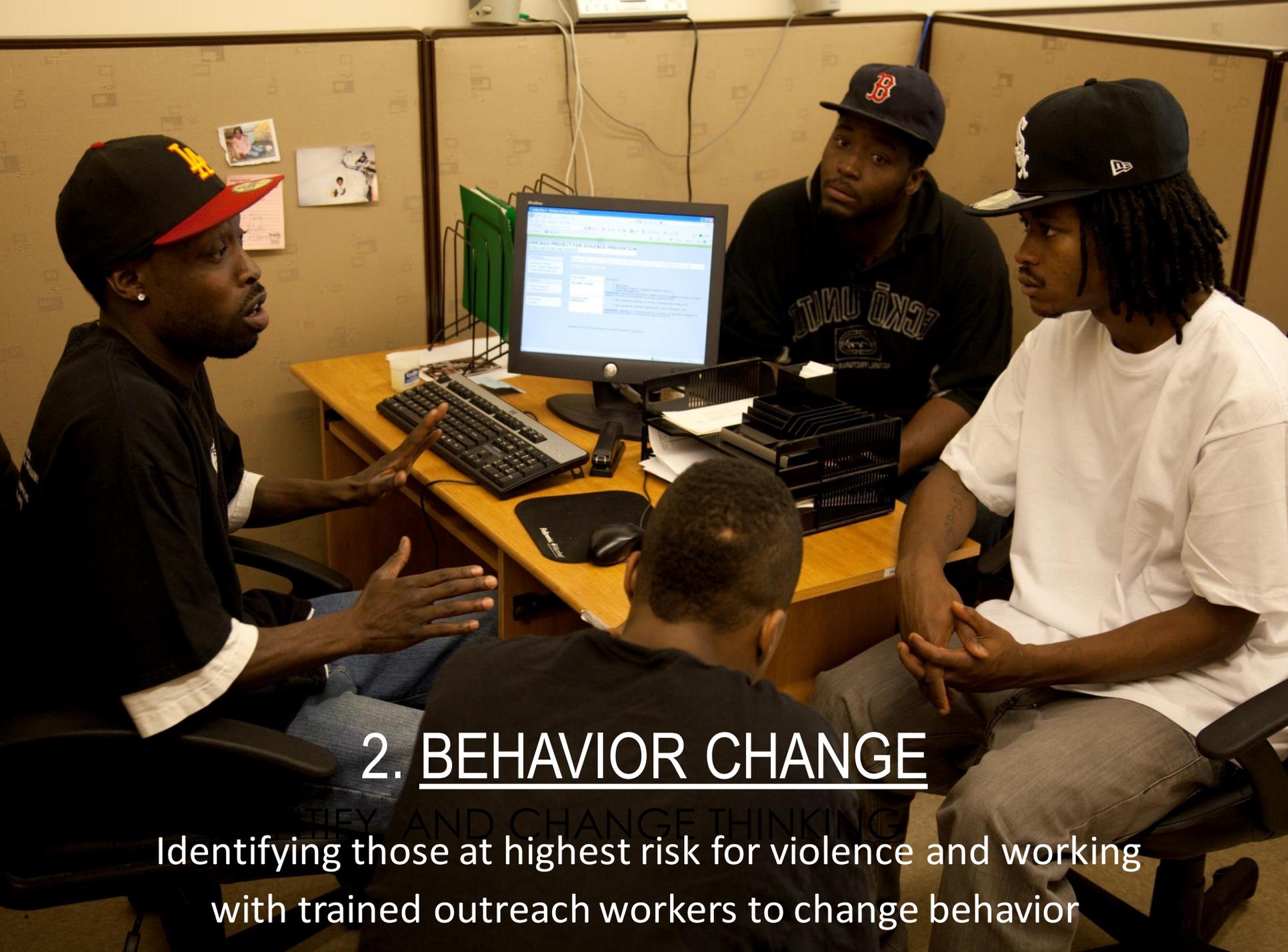
*Nothing to be found out, no betrayal possible*

*Assigned to look for way out*

# 50 – 100 % drop in Retaliations

## Results from Gang Network Analysis

	program	control
Auburn Gresham	-100%	-25%
Englewood	-100%	-100%
Logan Square	-100%	+100%
Rogers Park	no change	n/a
Southwest	-100%	no change
West Garfield Park	-46%	+41%
West Humboldt Park	-50%	-57%
East Garfield Park	-100%	+60%



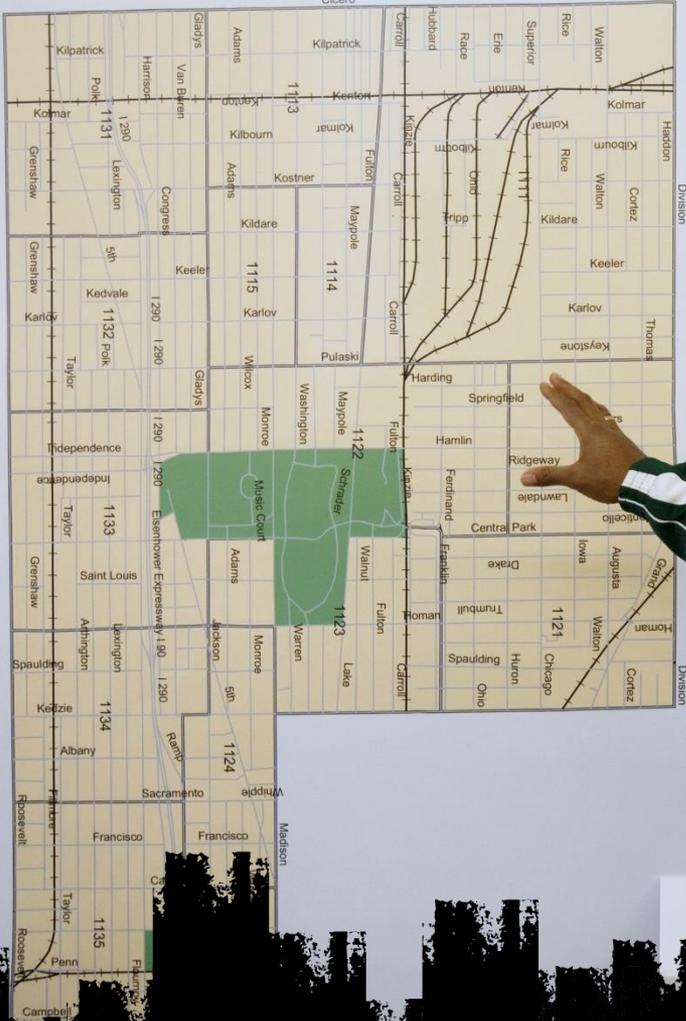
## 2. BEHAVIOR CHANGE

Identifying those at highest risk for violence and working with trained outreach workers to change behavior



### 3. Community Norm Change

Reversing social pressure to discourage the use of violence



Communicator sense of humor  
societal change  
empathy relate to population  
judgmental  
hardworker  
ethics social skills  
meet people where they're at  
persistence non-discriminating  
desire self-care  
good listener advocate  
compassion good partner  
humility patient  
vision solidarity on point  
determination  
lead by example  
sincere  
confidence  
critical  
common sense  
le Car  
mart  
creative

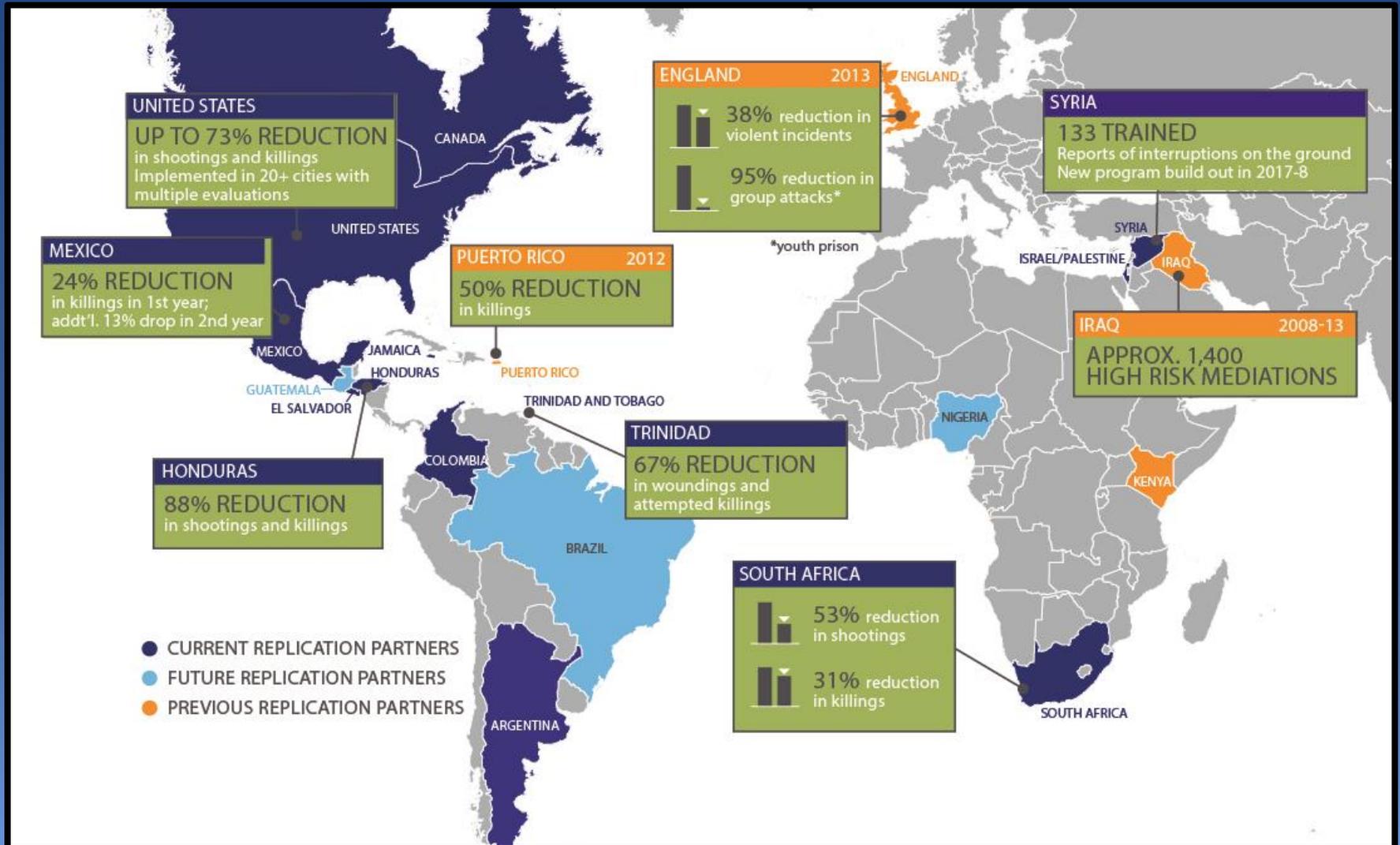
# Mapping

Data Driven  
And Evidence Based

**Hospital focused interrupters**

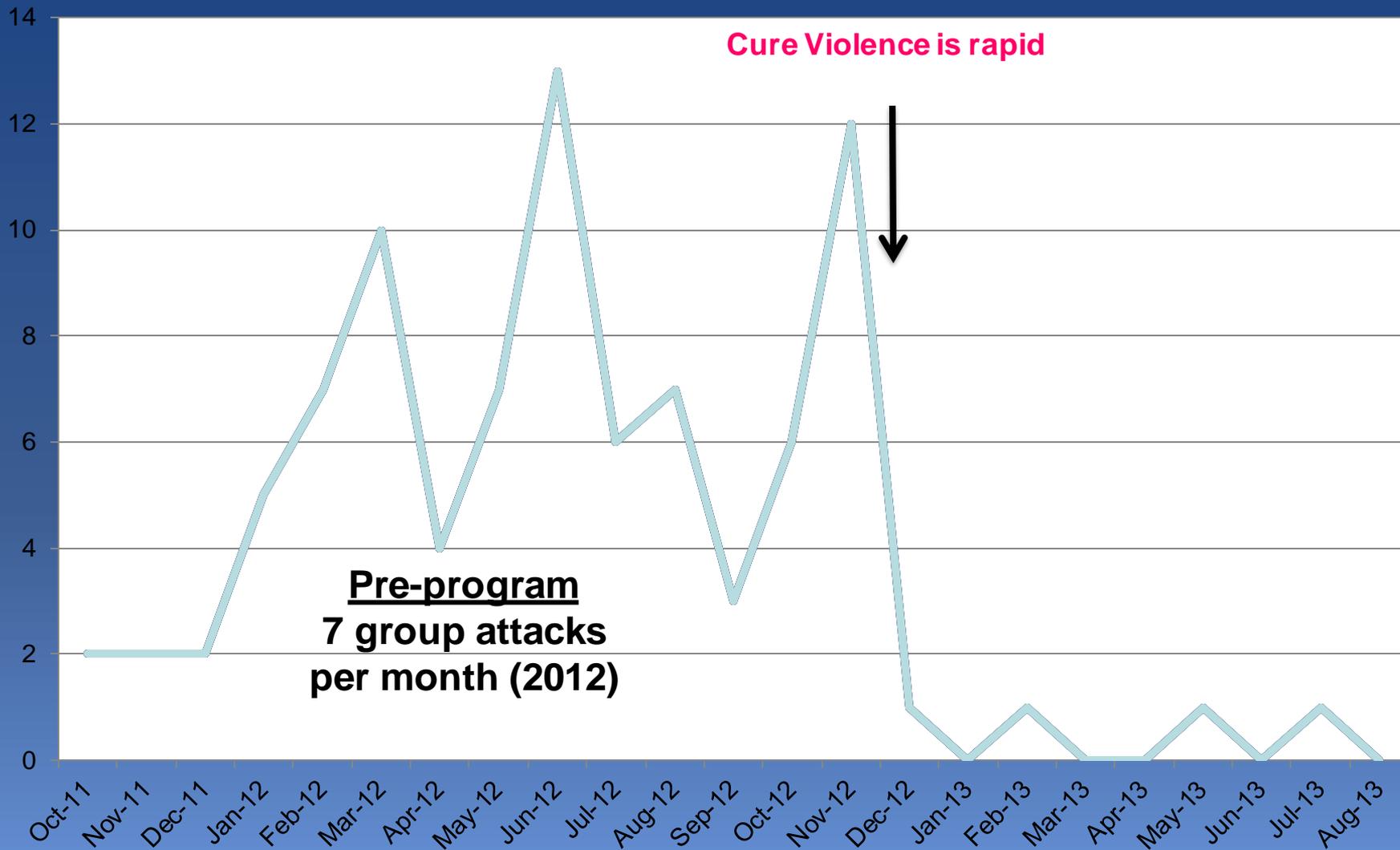


# National and International Replications



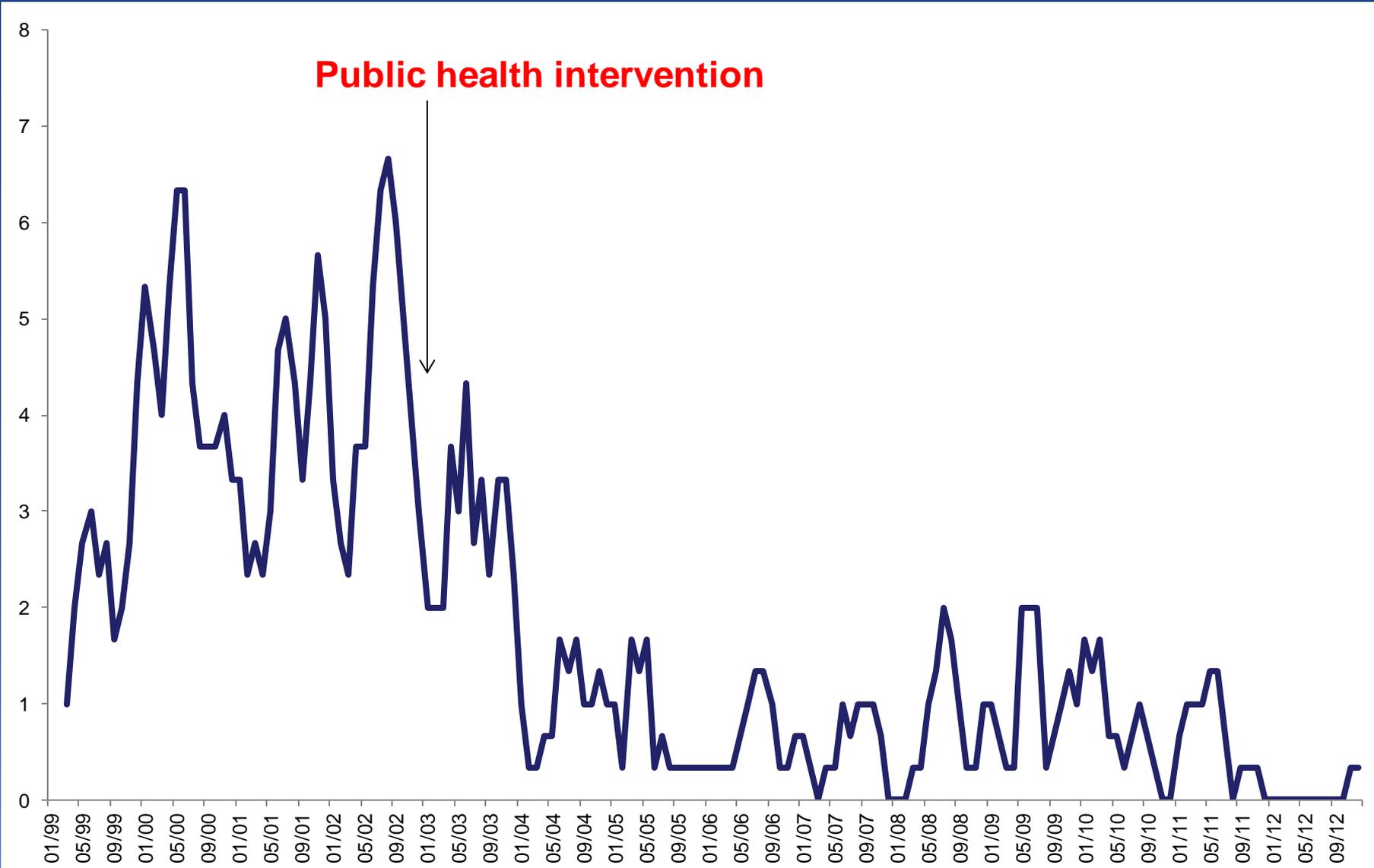
# Prison Program, UK

95% Reduction in Group Attacks



# Chicago - Logan Square (rapid)

**Public health intervention**



# *Public health methods*

Detects events early

Prevents spread

Works w/ community in acceptable ways

Reaches hardest to reach

Changes behaviors

Changes norms

# Health epidemic approach adds new synergies

1. Police and military efforts	2. Political & diplomatic negotiation	3. Adding public health
<ul style="list-style-type: none"><li>• <u>Kills &amp; apprehends offenders, enemy</u></li><li>• Some - but not all</li><li>• Major hostilities remain as well as reprisals</li><li>• Displaces</li><li>• Recruits new combatants</li><li>• Perpetuates contagion</li></ul>	<ul style="list-style-type: none"><li>• <u>Addresses grievances</u> (some)</li><li>• Not everyone agrees</li><li>• Takes years or decades</li><li>• While violence, death, etc. continues as talking does or doesn't occur</li></ul>	<ul style="list-style-type: none"><li>• <u>Focuses on Violence First</u></li><li>• Prevents lethal events</li><li>• Prevents retaliations</li><li>• Offers face saving</li><li>• Reverses social pressure to perform acts</li><li>• Mobilizes whole community</li><li>• Changes Norms</li><li>• Simult. increase impact of other programs and the potential for diplomatic and police/military approach to succeed.</li><li>• Can prevent violence outbreak relapses</li></ul>



*Thank you!*

Karen Volker

Director, Strategic & International Partnerships

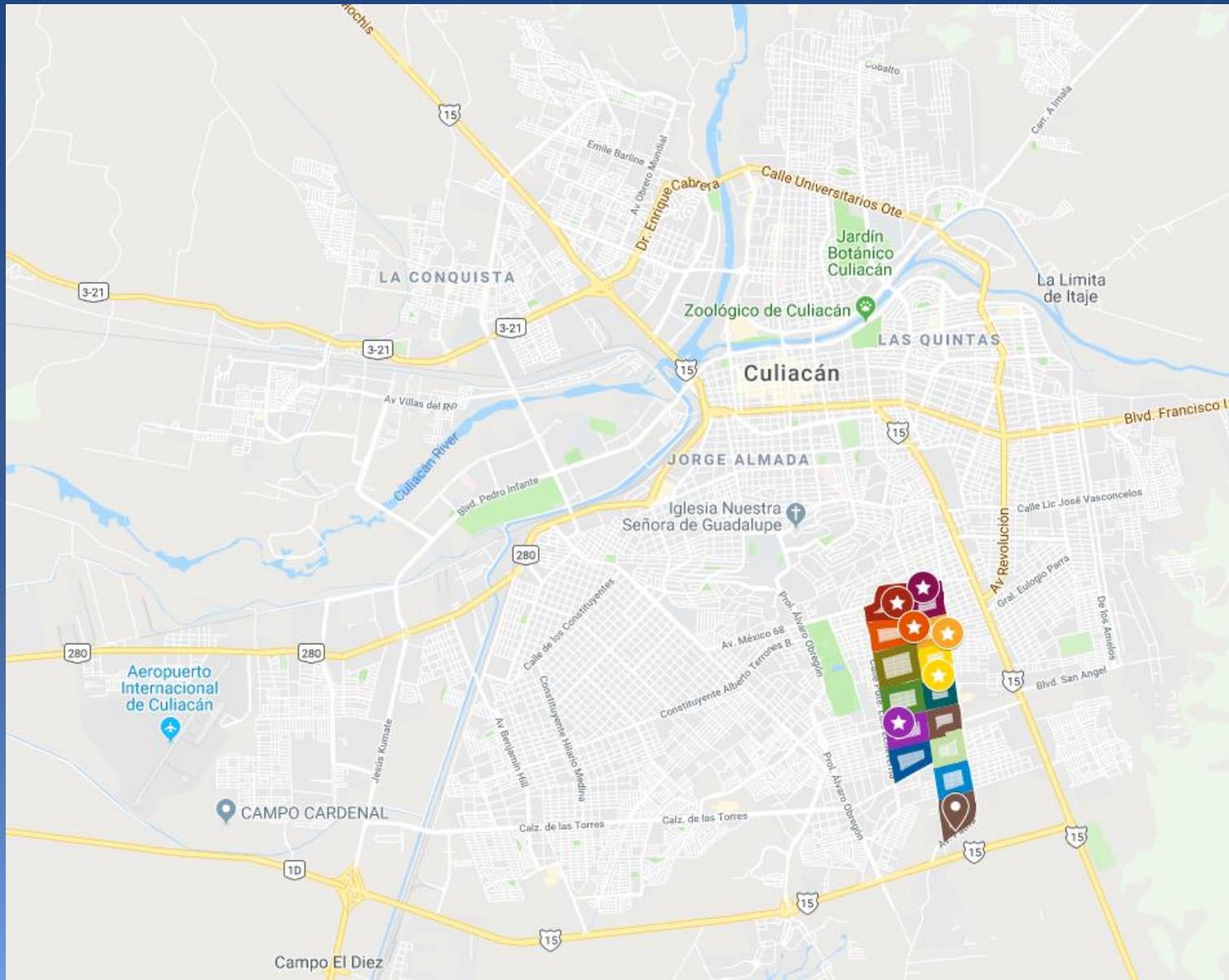
[kvolker@cvg.org](mailto:kvolker@cvg.org)

[www.cvg.org](http://www.cvg.org)

[@cureviolence](https://www.instagram.com/cureviolence)

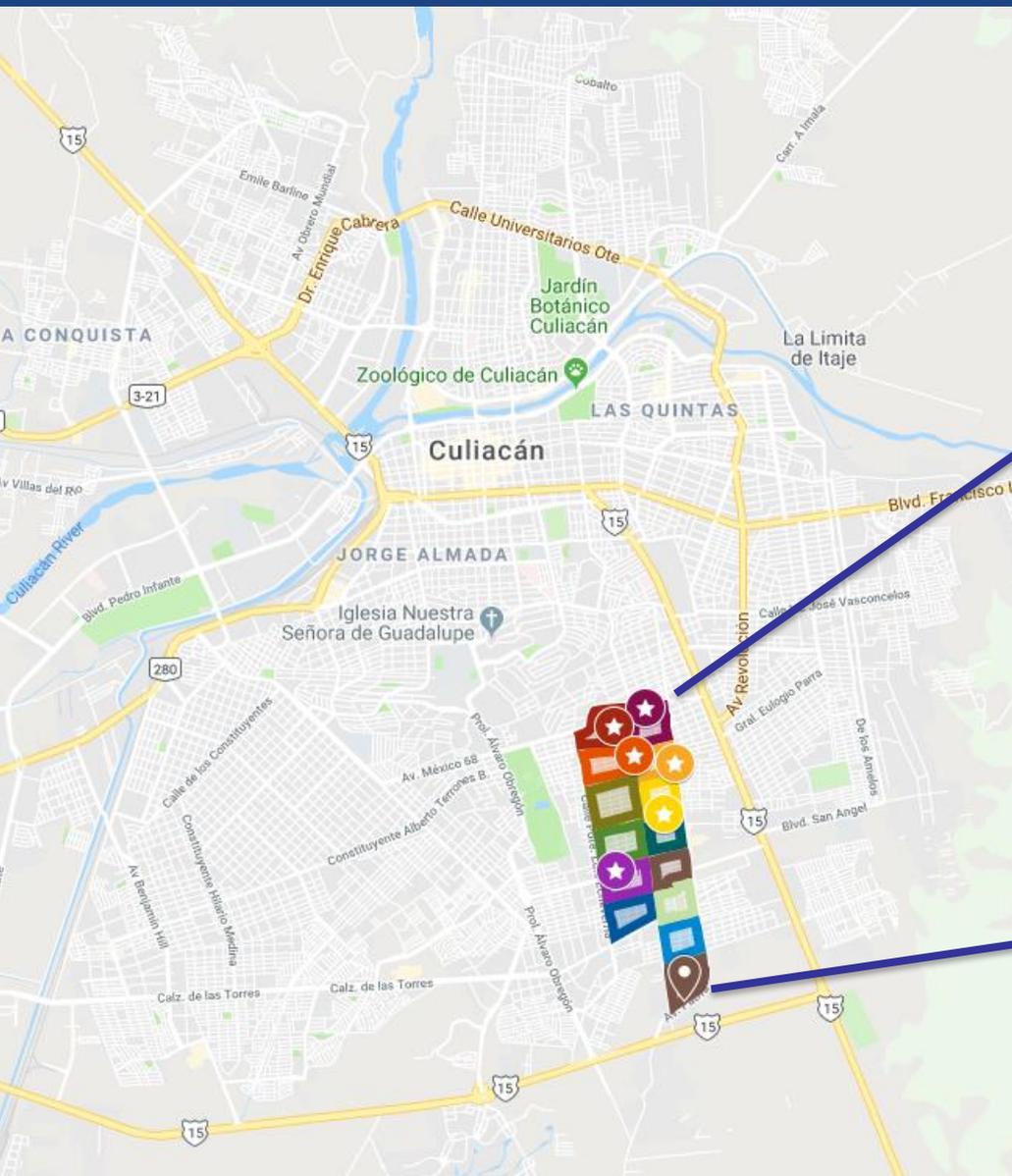
# Cure Violence Adaptations in Cuiacán

(October 2019)



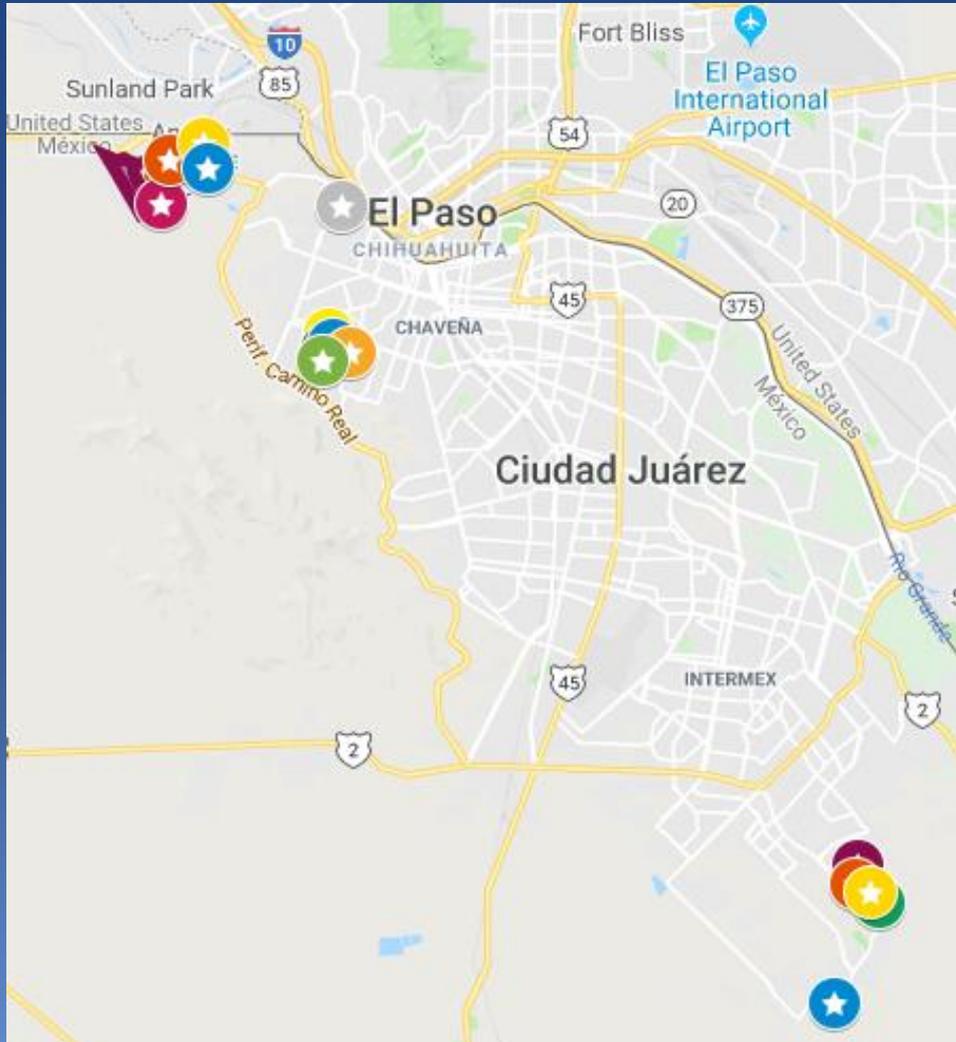
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# Cure Violence Adaptations in Ciudad Juárez

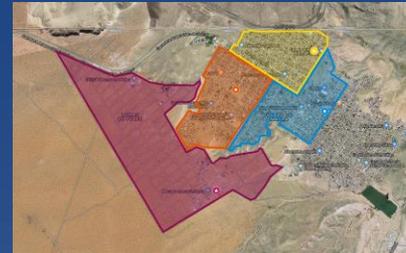
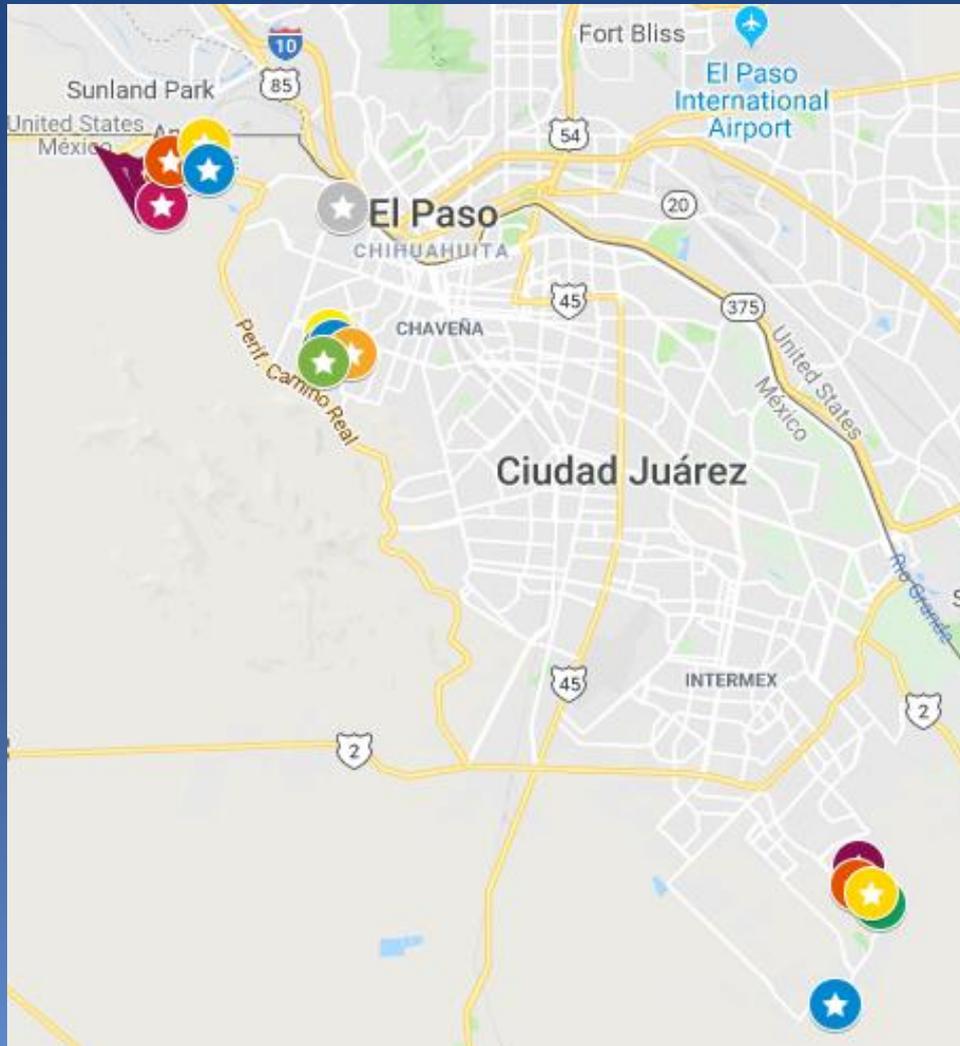
(October 2019)



# Cure Violence Adaptations in Ciudad Juárez

(October 2019)

Community (# of staff)



- Loma de Poleo Alto (1)
- Loma de Poleo Bajo (1)
- Rancho Anapra 1 (1)
- Rancho Anapra 2 (1)



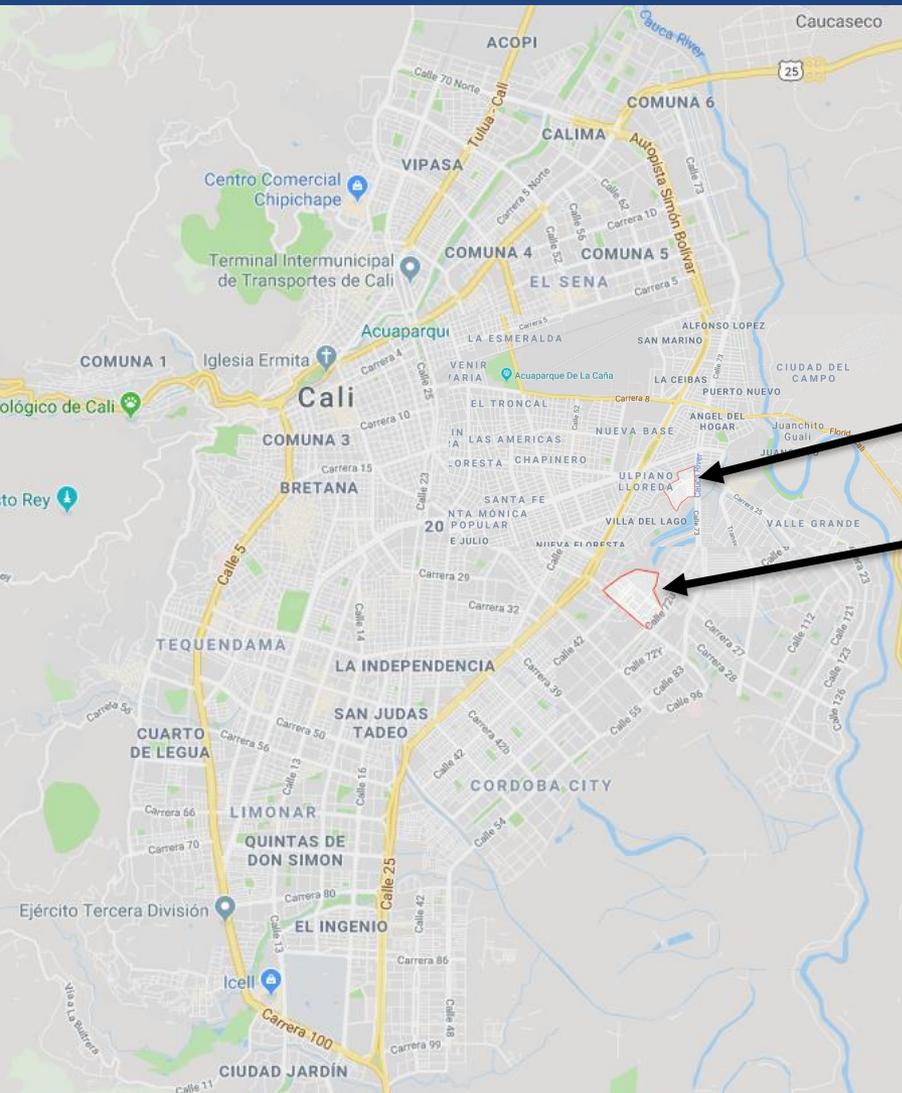
- Callejon 2 (1)
- Callejon 16 (2)
- Teclas 13 (1)
- Presa (1)
- Tiburones (1)
- La Playa (1)



- San Juan (1)
- Campo Loko (1)
- La Cuarta (1)
- Valle de Orient (1)

# Cure Violence Adaptations in Ciudad Juarez

(October 2019)

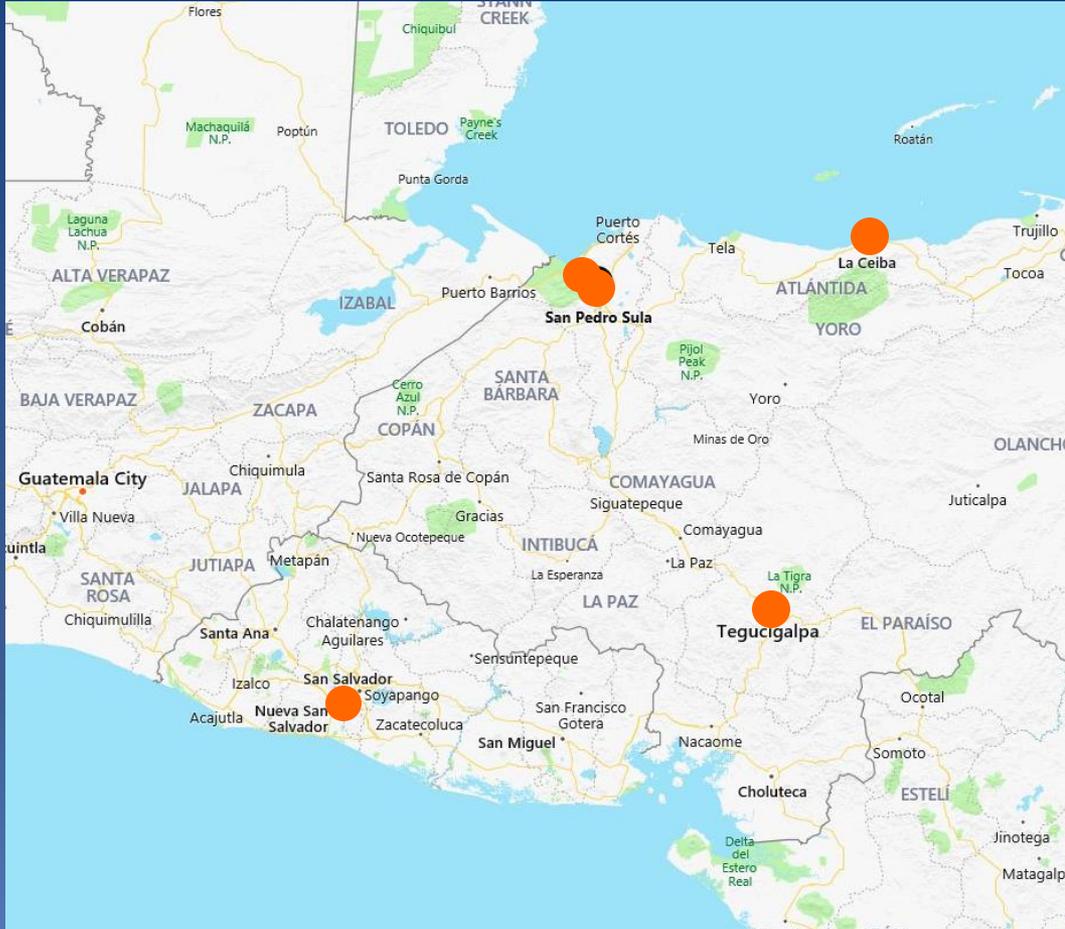


**Charco Azul – 7 workers**

**Comuneros – 7 workers**

# Cure Violence Adaptations in Honduras

(October 2019)



**Choloma (San Pedro Sula) – 2 workers**

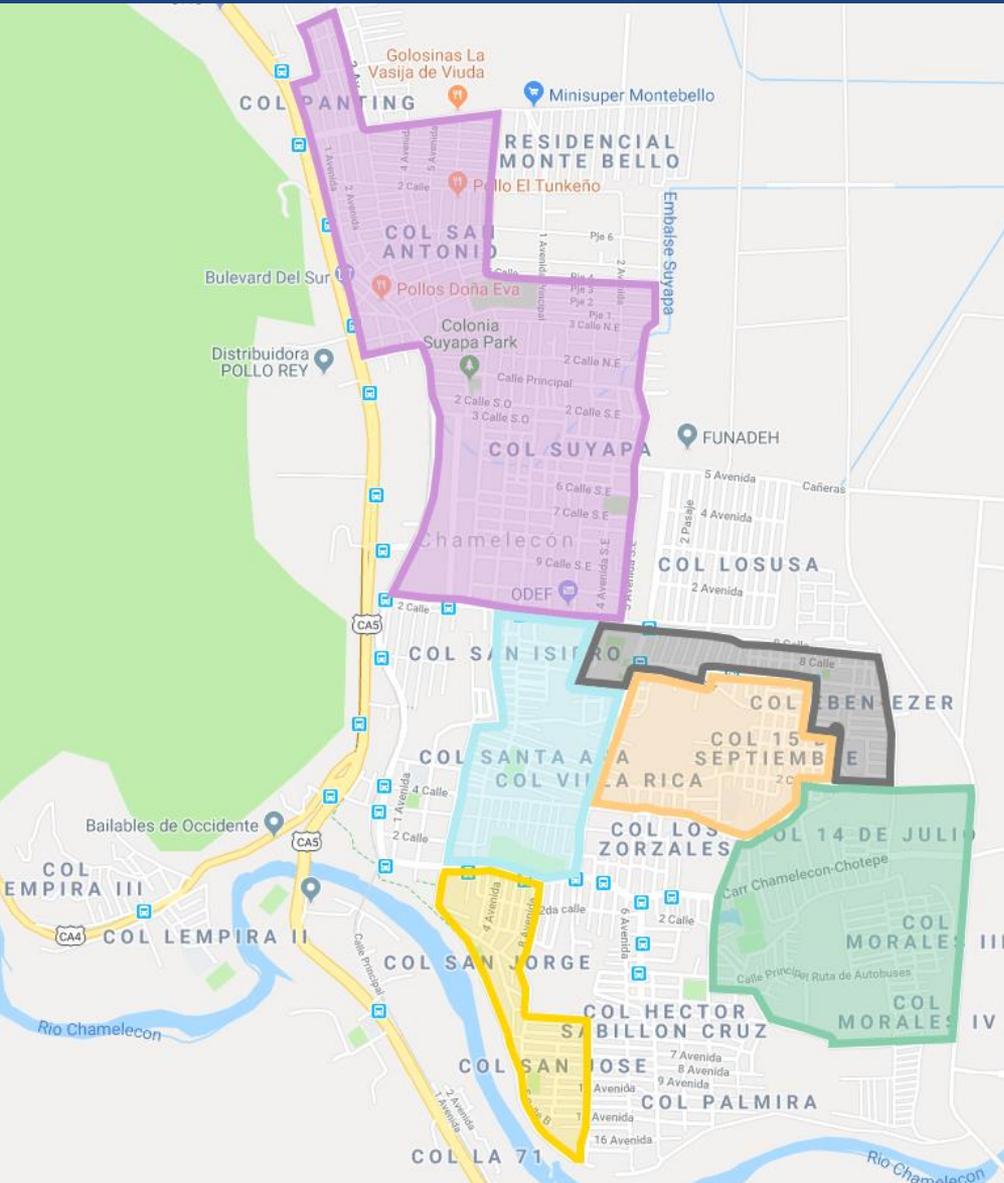
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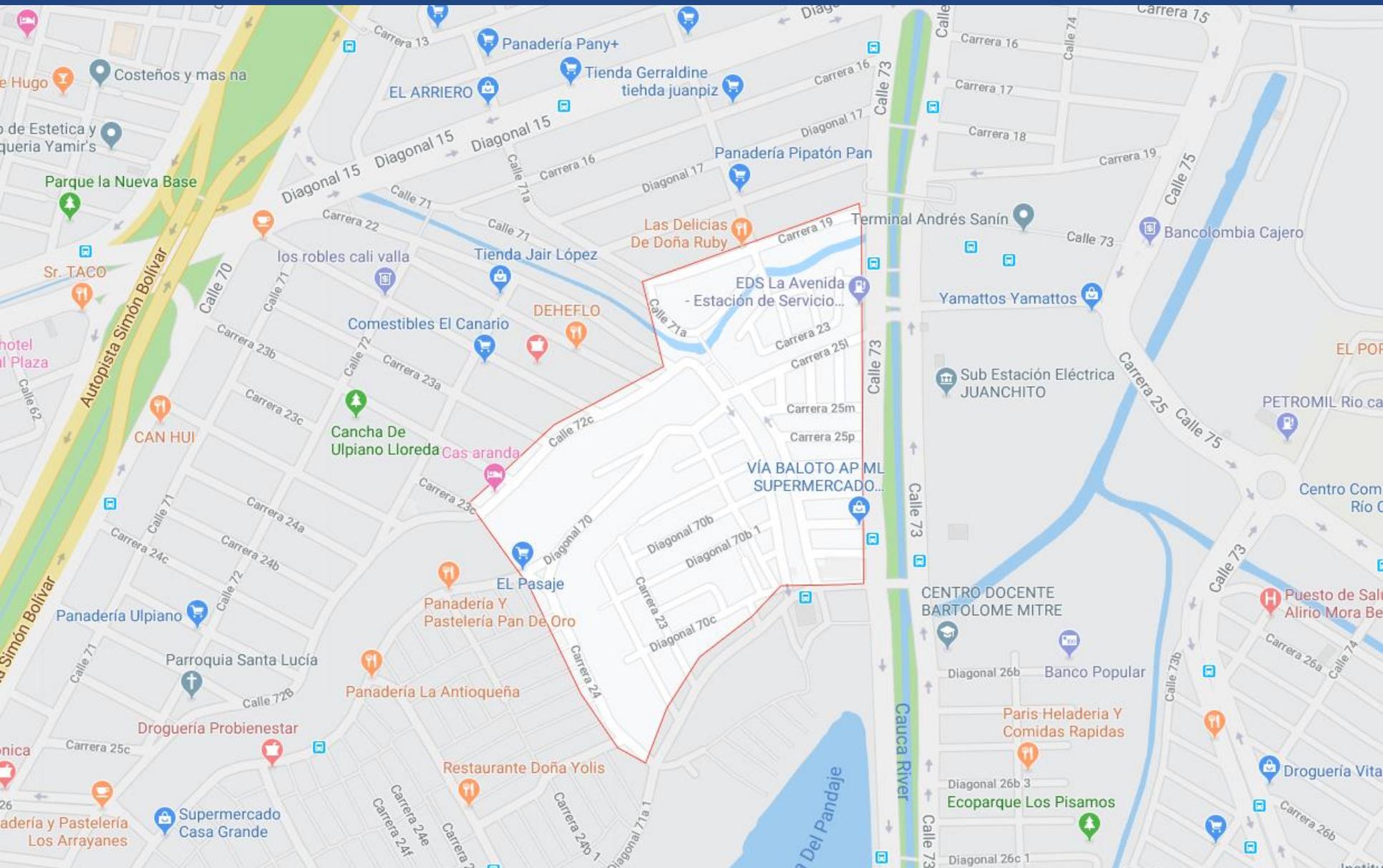
# Cure Violence Adaptations in Chamalecon (San Pedro Sula)

(October 2019)



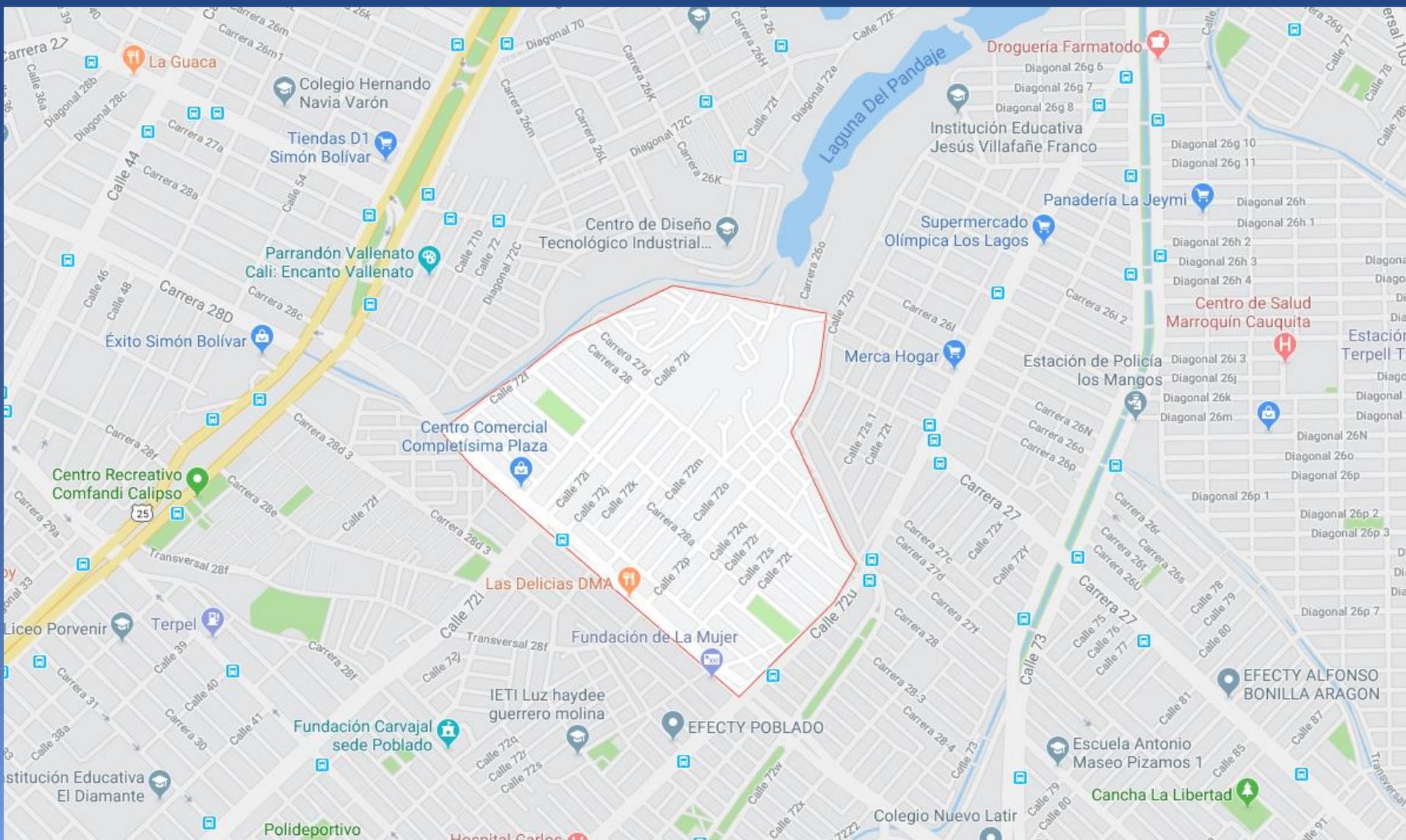
# Cure Violence Adaptation Charco Azul, Cali, Colombia

(October 2019)



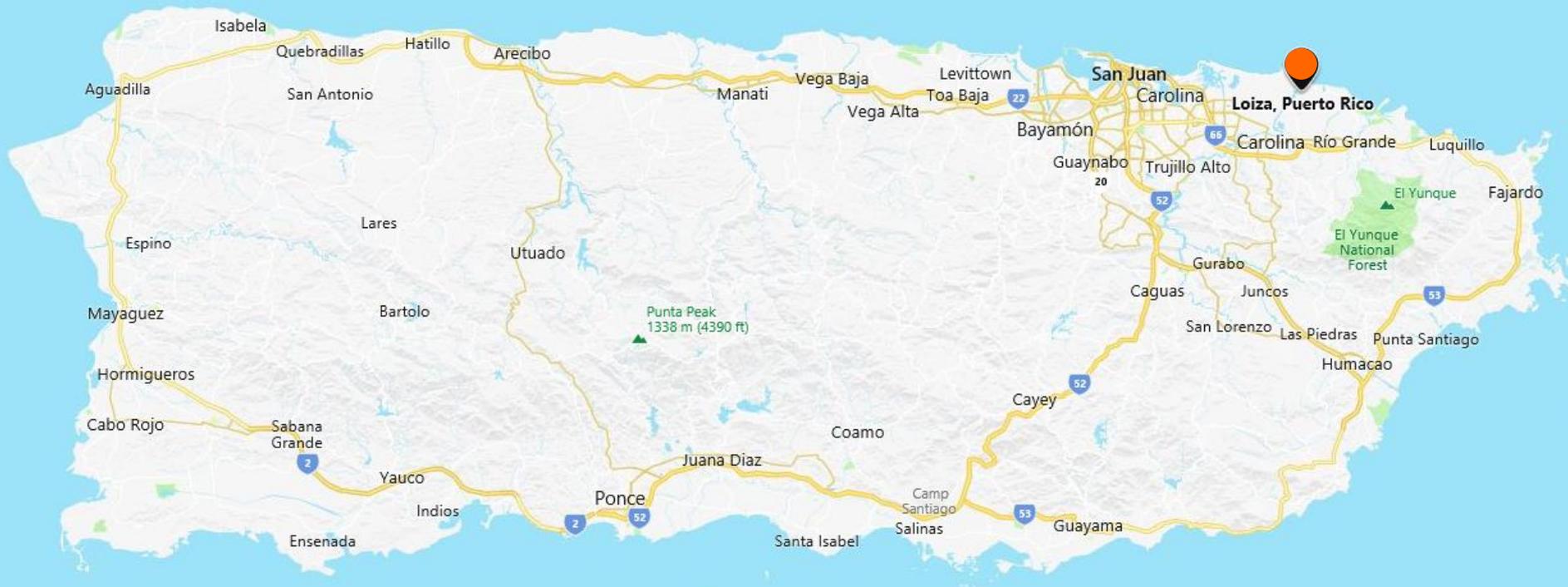
# Cure Violence Adaptation Cumuneros, Cali, Colombia

(October 2019)



# Cure Violence Adaptation – Puerto Rico

(October 2019)



# Trinidad Evaluation

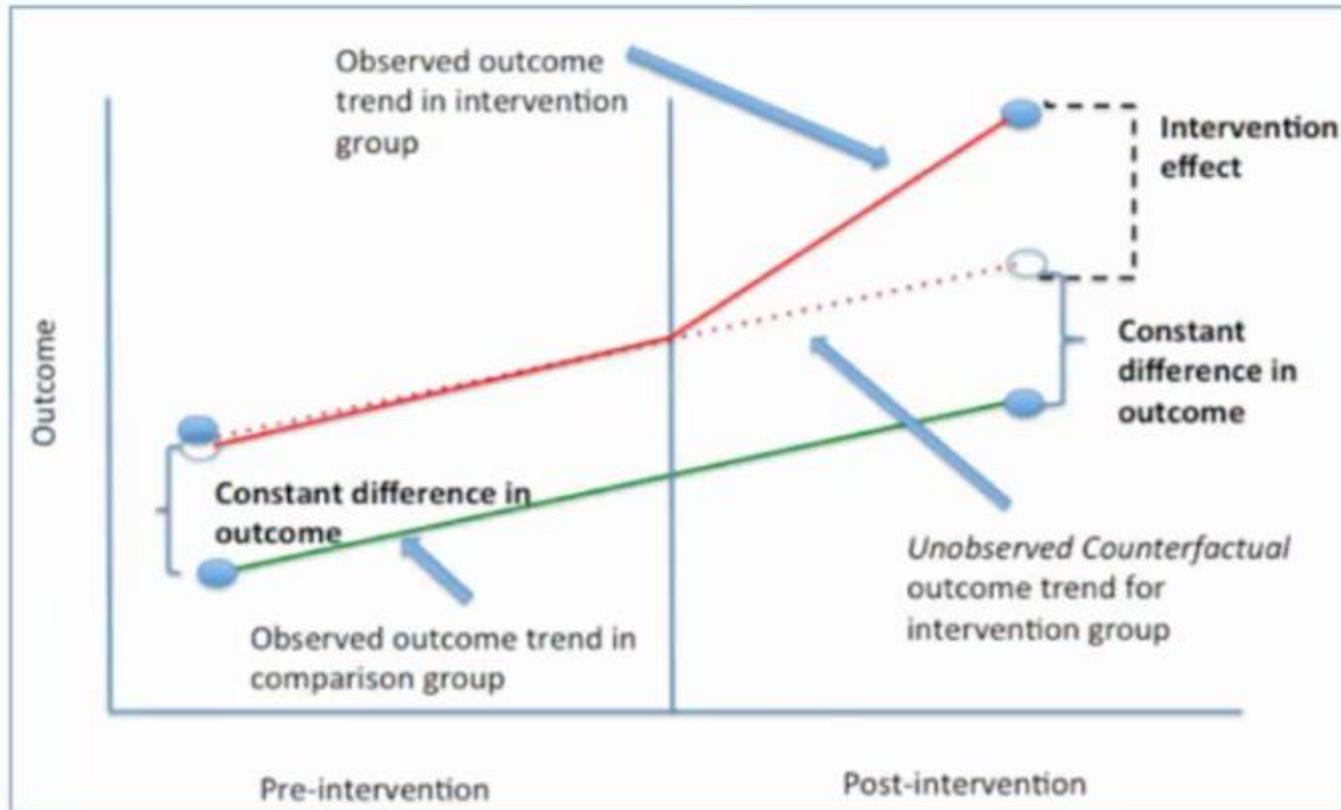
- “Cure Violence intervention was associated with significant and substantial reductions in violence.”
- Statistically significant results by 3 methods
  - 38.7% reduction in shootings (hospital injury)
  - 38% reduction in violent crime (reported to police)(control up 16%)
  - 45.1% lower violent crime (vs. synthetic comparison)
- Approximately 262 violent incidents prevented
- Cost  $\approx$  \$3,500 - \$4,500 for every violent incident prevented

# Time Series Findings

Interrupted time series analyses of data from two hospitals found that CV reduced gunshot wound admissions in a nearby hospital in POS (-38%,  $p < .05$ ) but not in a comparison hospital located elsewhere.



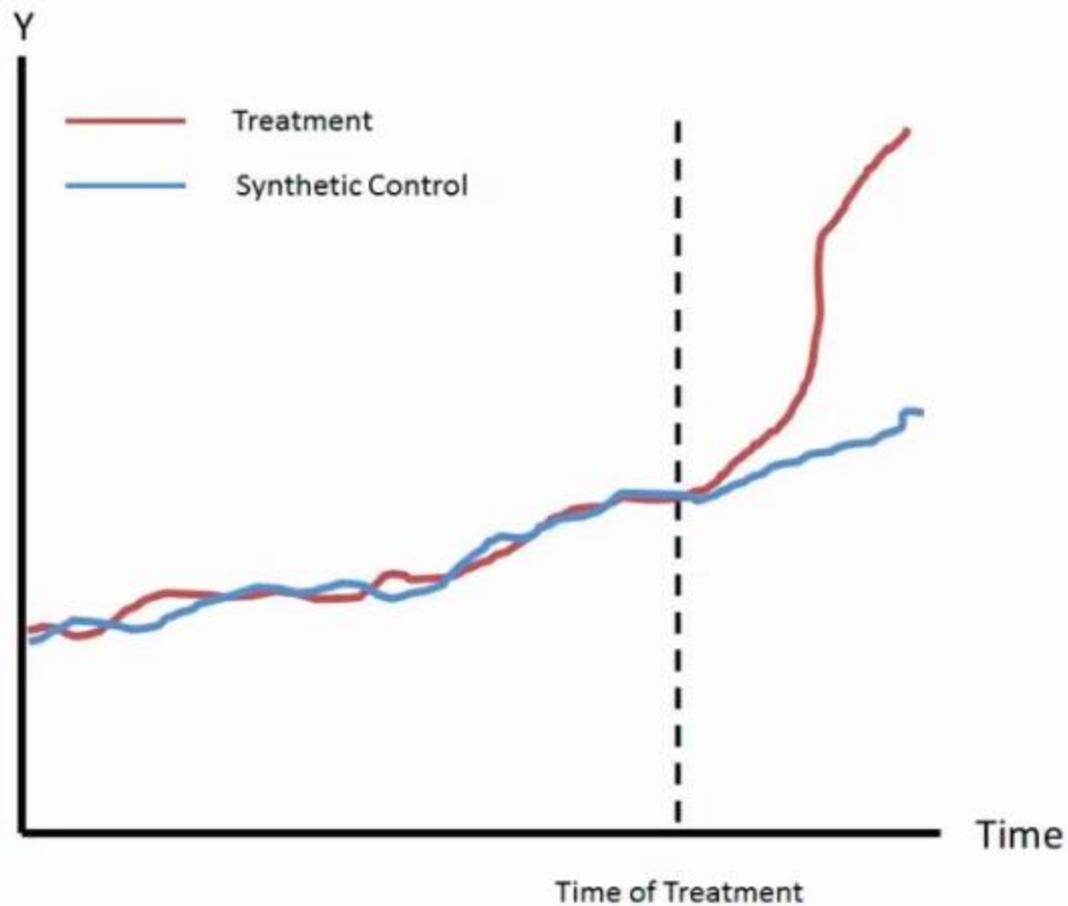
# Diff-in-Diff Regression



# Diff-in-Diff Regression

- Difference-in-differences analyses of E-999 call data showed that CV was associated with significant reductions in calls to the police for violence (-5.1 fewer violent offenses per community per year)
- Finding held controlling for community differences in census-based population stability, percent African population, percent youth population, employment, and living conditions (e.g., running water)

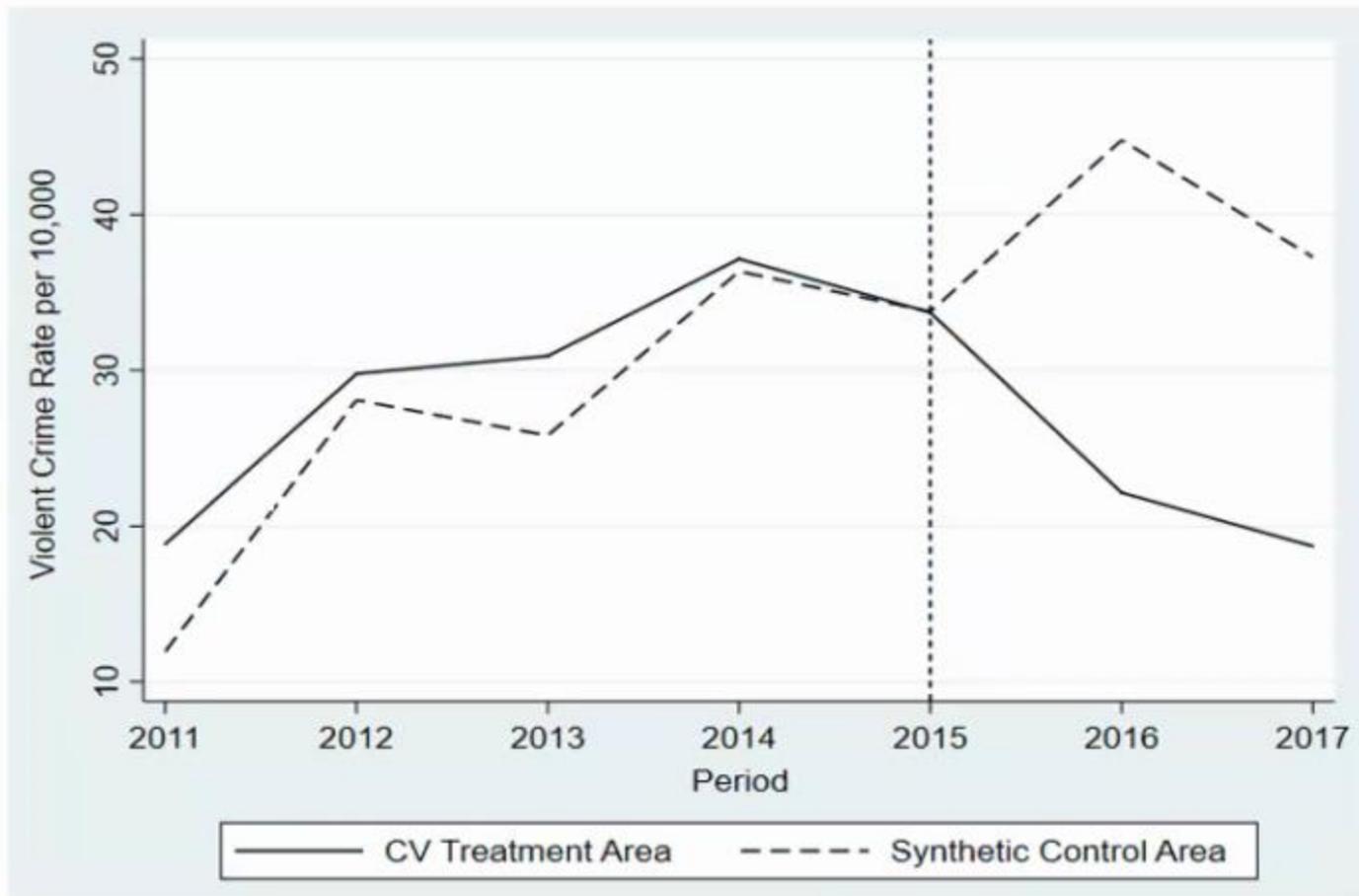
# Synthetic Control Analysis



# Synthetic Control Analysis

- The most rigorous quasi-experimental design (creates weights to other comparison sites on pre-intervention crime outcomes and census-based demographic controls)
- Violent crime rates were identical in treatment and synthetic control areas in the 12-to-24 months prior to intervention, but were -45% lower in treatment area post-intervention

# Synthetic Control Analysis



# Quasi-Experimental Findings

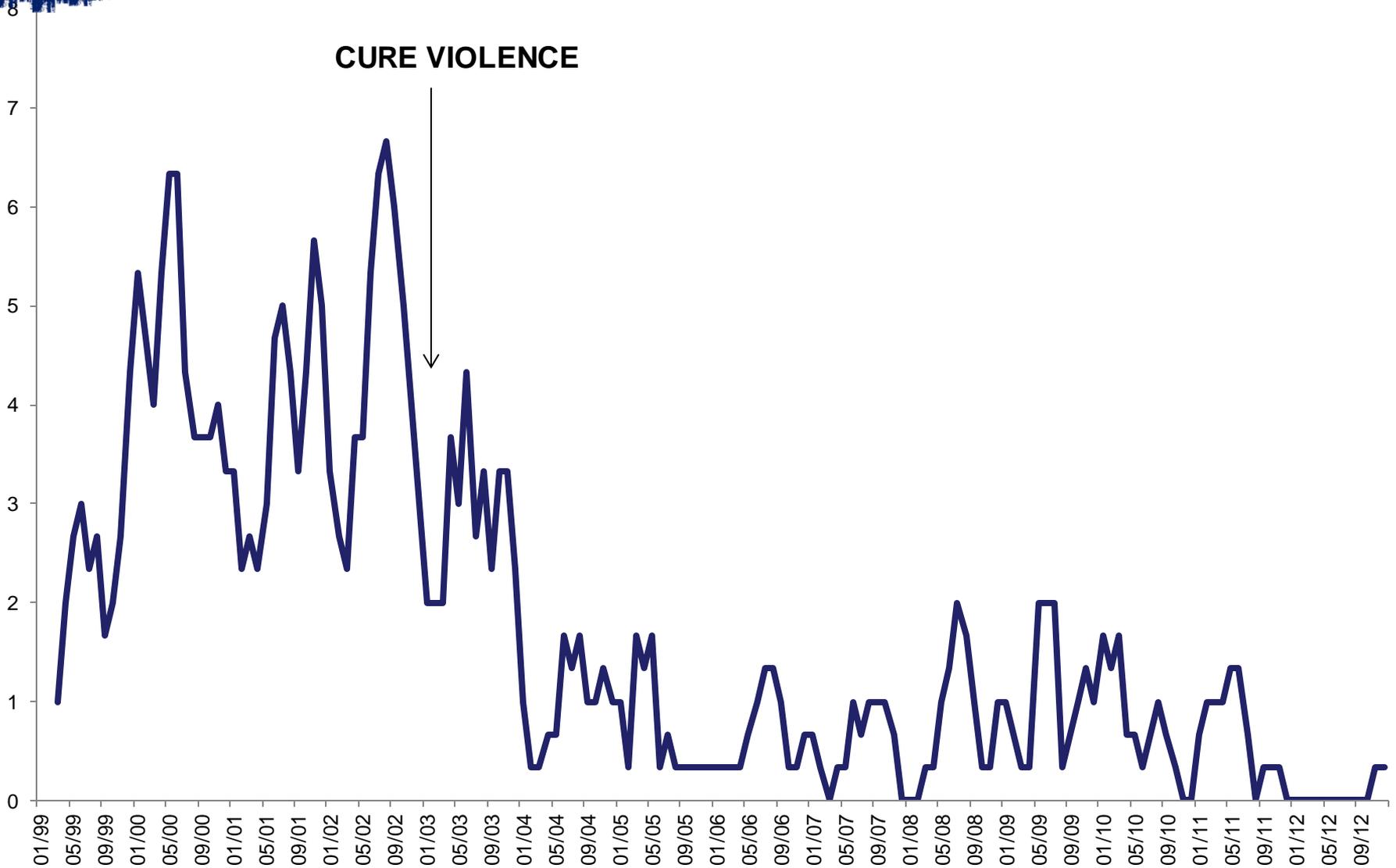
- Thus the combined findings showed:
  - A 38% monthly reduction in gunshot hospital admissions in Port of Spain;
  - 5.1 fewer violent crime calls per year in the treatment communities relative to controls ( $p < .01$ );
  - Roughly 45% decline in violent offense rates in the treatment areas relative to synthetic controls matched comparison group

# Cost Effectiveness Findings

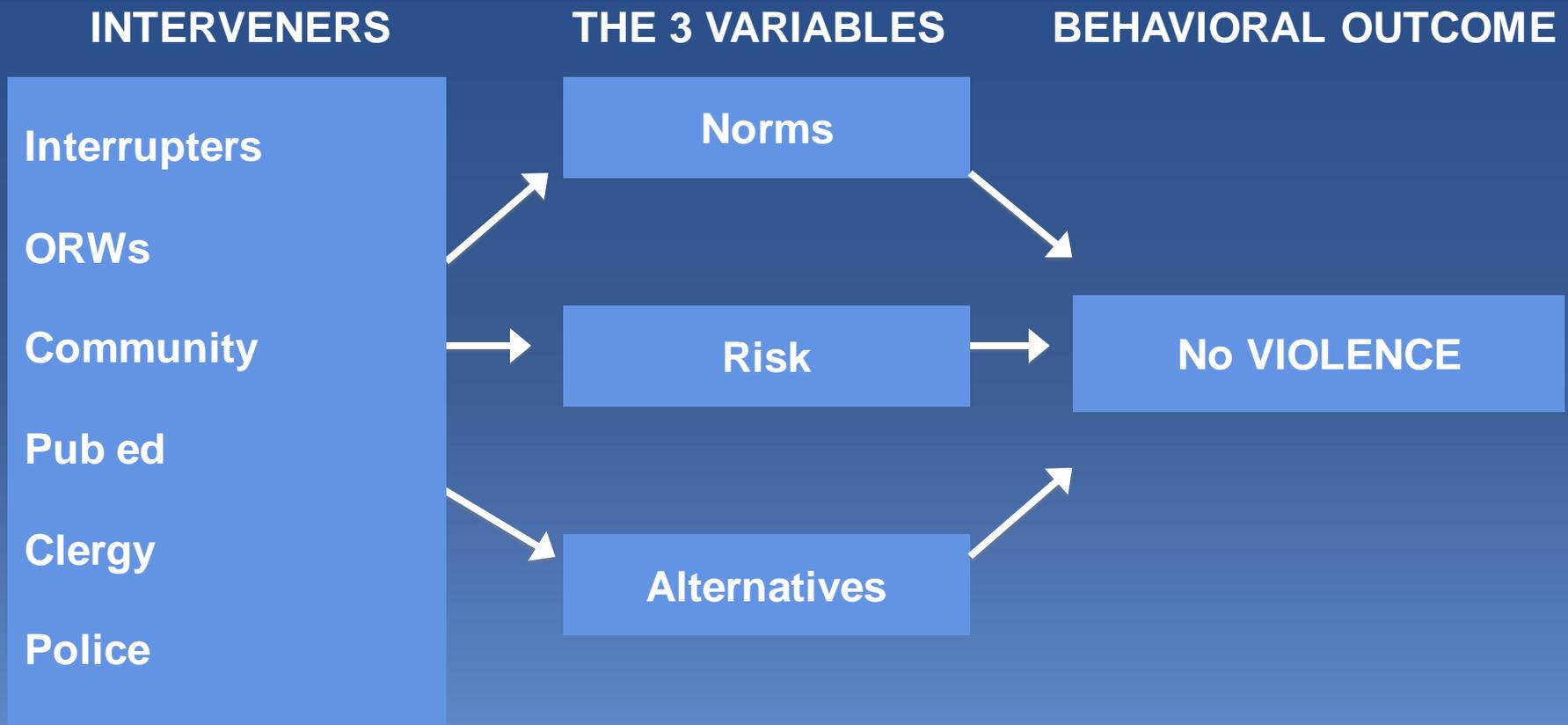
Cost-effectiveness analyses from these three data sets showed that CV cost approximately \$3,500 to \$4,500 (US) for every violent incident it prevented.

# Implications

- Cure Violence CAN work.
- Anticipate implementation issues. Invest in process evaluation to learn more about these issues.
- Conduct rigorous impact evaluations to determine the conditions under which it is more effective.

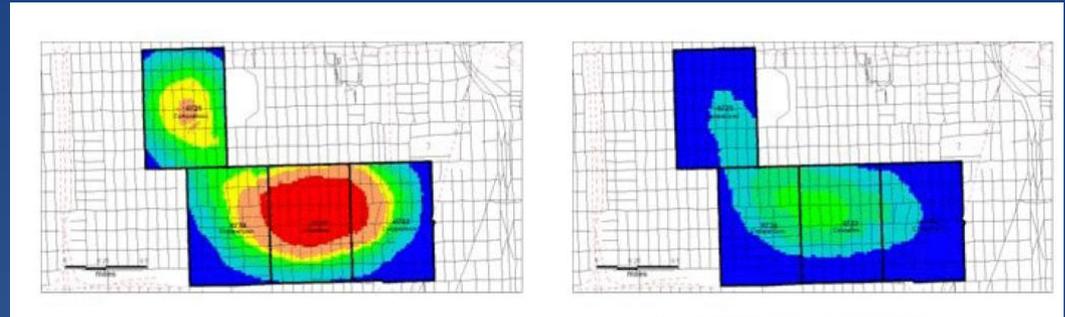


# CHANGE GROUP NORMS

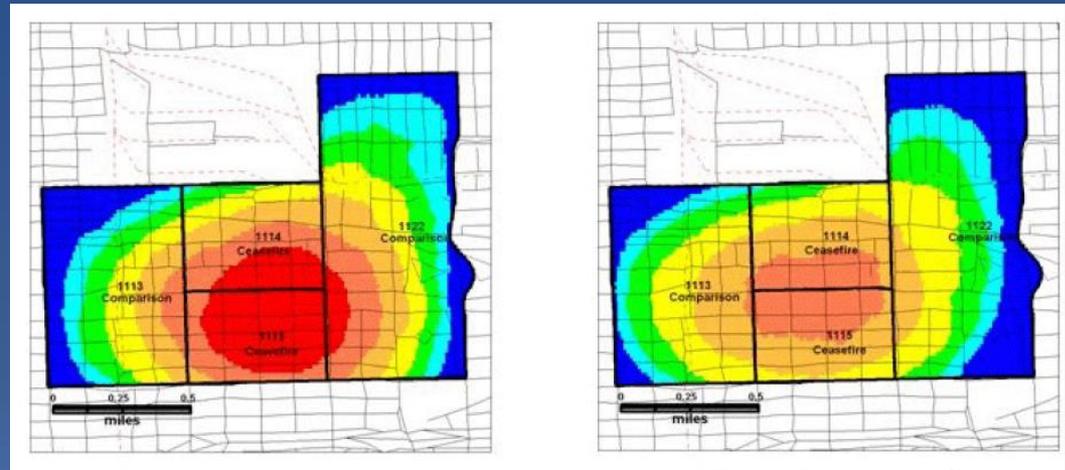


# Shooting Hot Spots Reduced

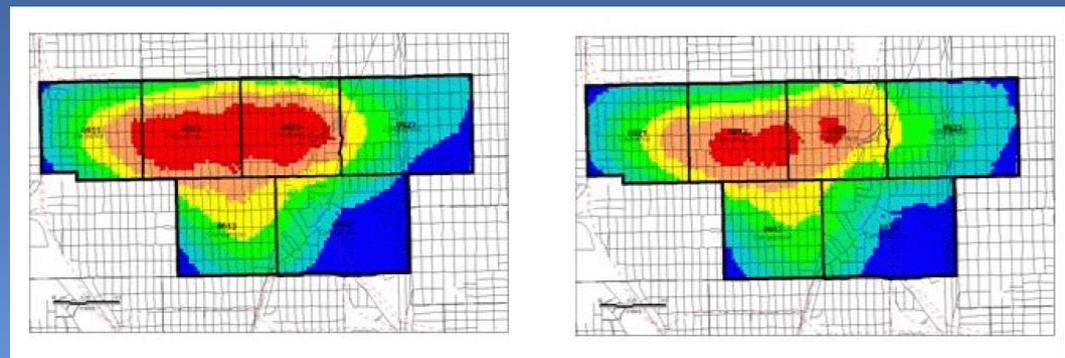
Community One



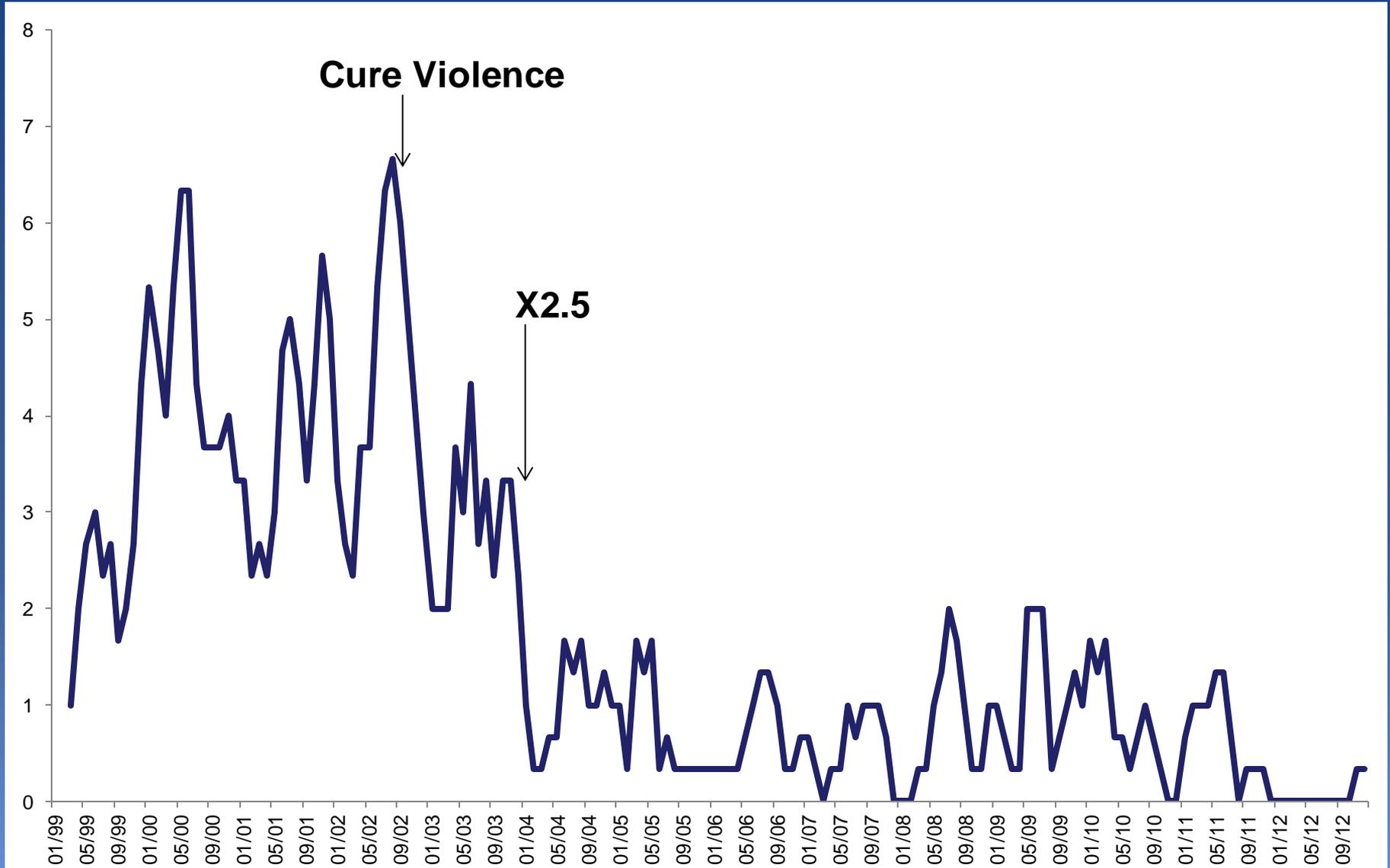
Community Two

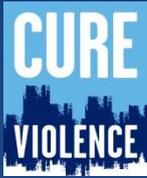


Community Three



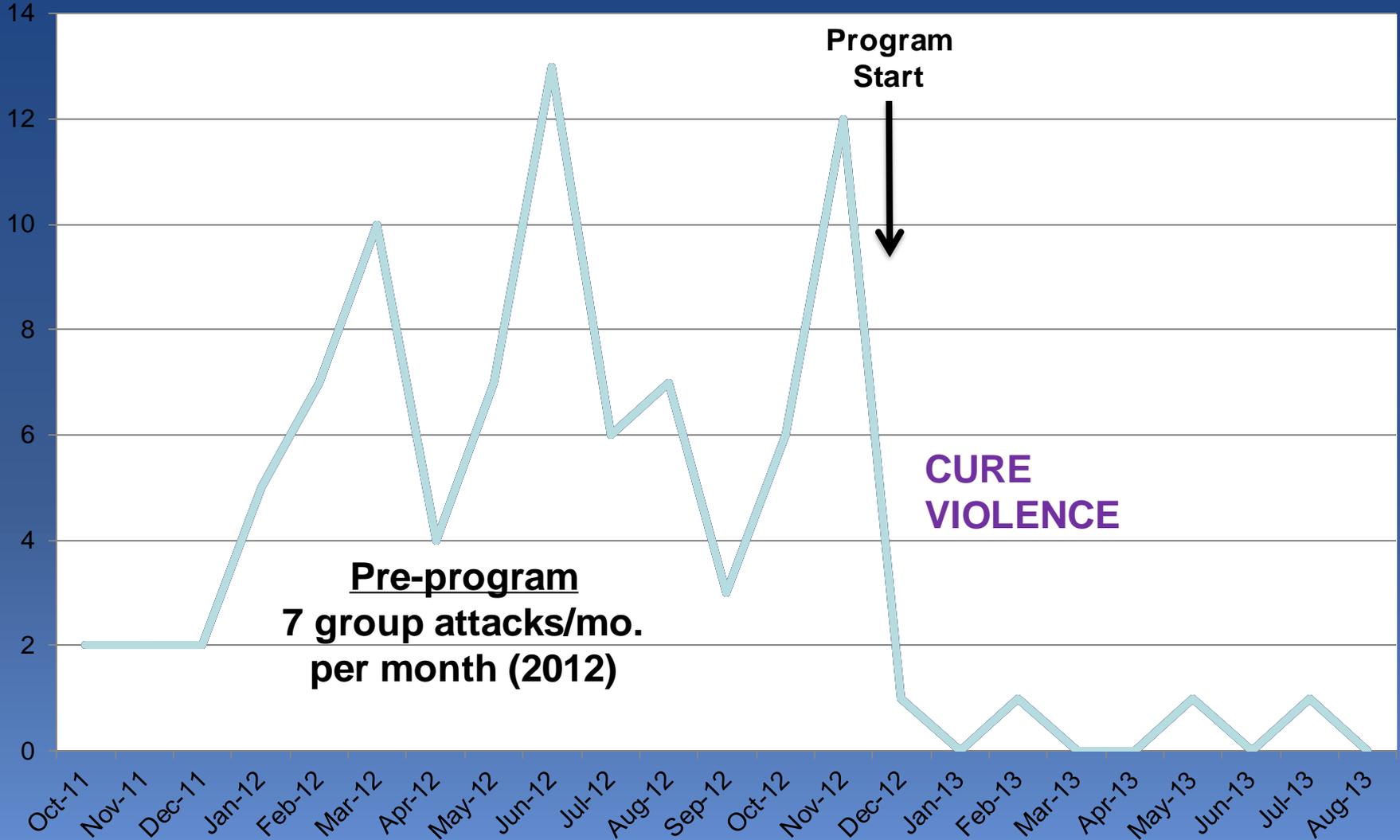
# Logan Square – reduction is dose dependent on effort





# Prison Program

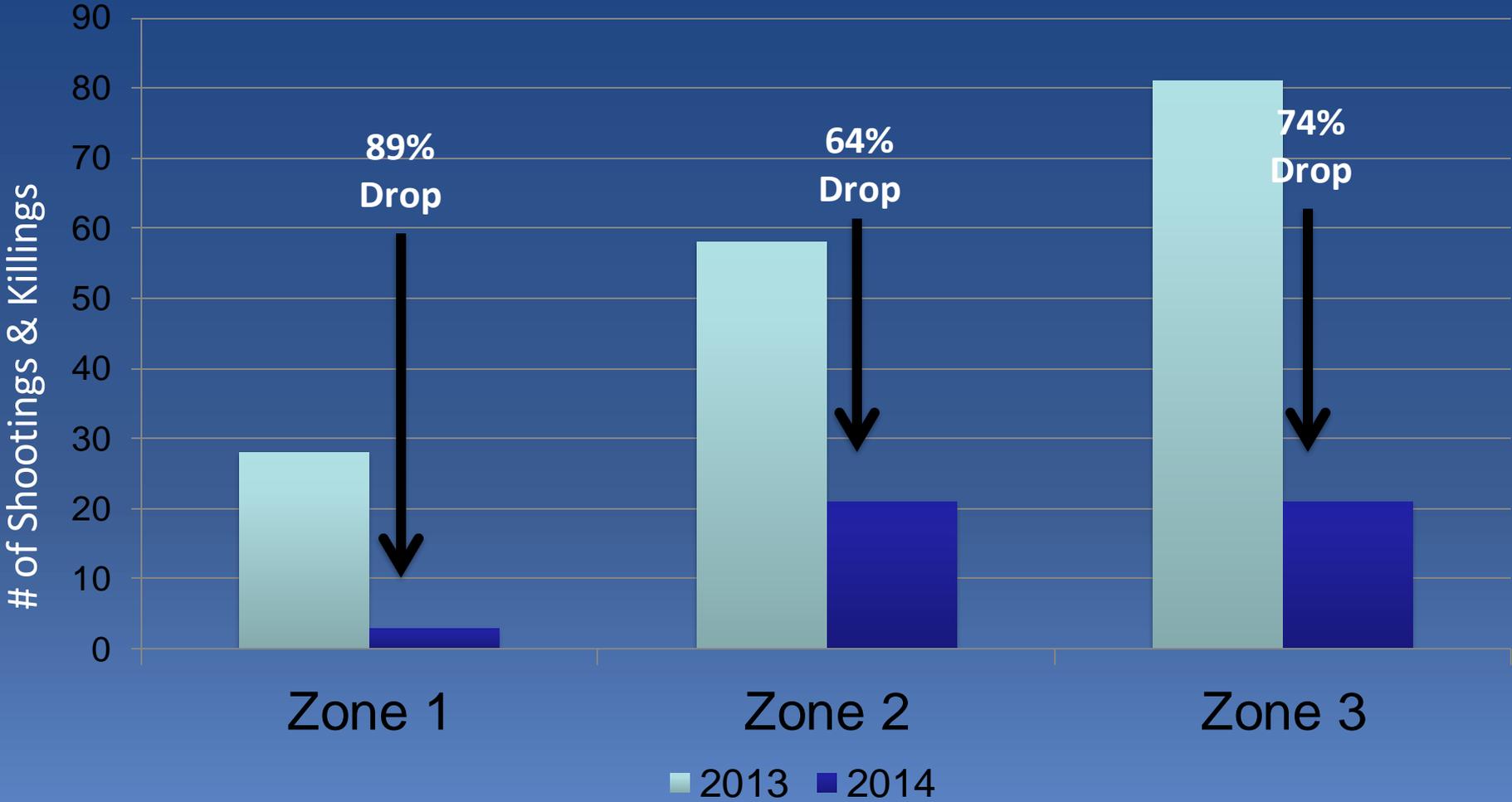
95% Reduction in Group Attacks



# Cure Violence San Pedro Sula, Honduras

2013 vs. 2014

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Ransford, et al. (2016). Report on the Cure Violence Model Adaptation in San Pedro Sula, Honduras.. Chicago, IL: University of Illinois at Chicago.

*Violence is just an epidemic*

*Treat as an Epidemic*

*Fast Results*

*Strong Results*

*Humane, w/o usual side effects*

*Community does it*

*New/additional systems*

Northwestern  
University



Chicago  
shootings  
and  
killings

41% -  
73%

TEMPLE  
UNIVERSITY



Philadelphia  
shootings

-30%



JOHNS HOPKINS  
UNIVERSITY

Baltimore  
killings

-56%

JOHN  
JAY  
COLLEGE  
OF CRIMINAL  
JUSTICE

NYC  
Office of the Mayor

New York  
City  
shootings

-63%

# *Six Blocks, 96 Buildings, Zero Shootings: New Recipe at the Queensbridge Houses*

About New York

By JIM DWYER JAN. 19, 2017



