

The Role of
Epidemiology in
Building
Responses to
Violence:
Contributions &
Challenges

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Agenda

- Violence as a public health issue
- Contributions of epidemiology to violence prevention: Case study of Cure Violence
- Pitfalls/Opportunities for growth

Violence as a public health issue

- 1979 Surgeon General's Report: designated violence as one of 15 priority areas for public health action
- Minimal investment in addressing the *root causes* of violence from a health perspective
- Law enforcement and criminal justice institutions have borne the burden of violence prevention efforts
 - Emphasis on punitive policies and criminalization, which may further entrench differences in health across racial/ethnic groups

Cure Violence Global™

Model developed 20+ years ago by Gary Slutkin

Views violence through an epidemiology lens

- Based on Chicago CeaseFire
- In opposition to a criminal legal system approach
- Focus: firearm violence

Epidemiology is...

“the study of the distribution and determinants of health-related states or events in specified populations and the application of this study to control health problems”

James Last

“A Dictionary of Epidemiology”

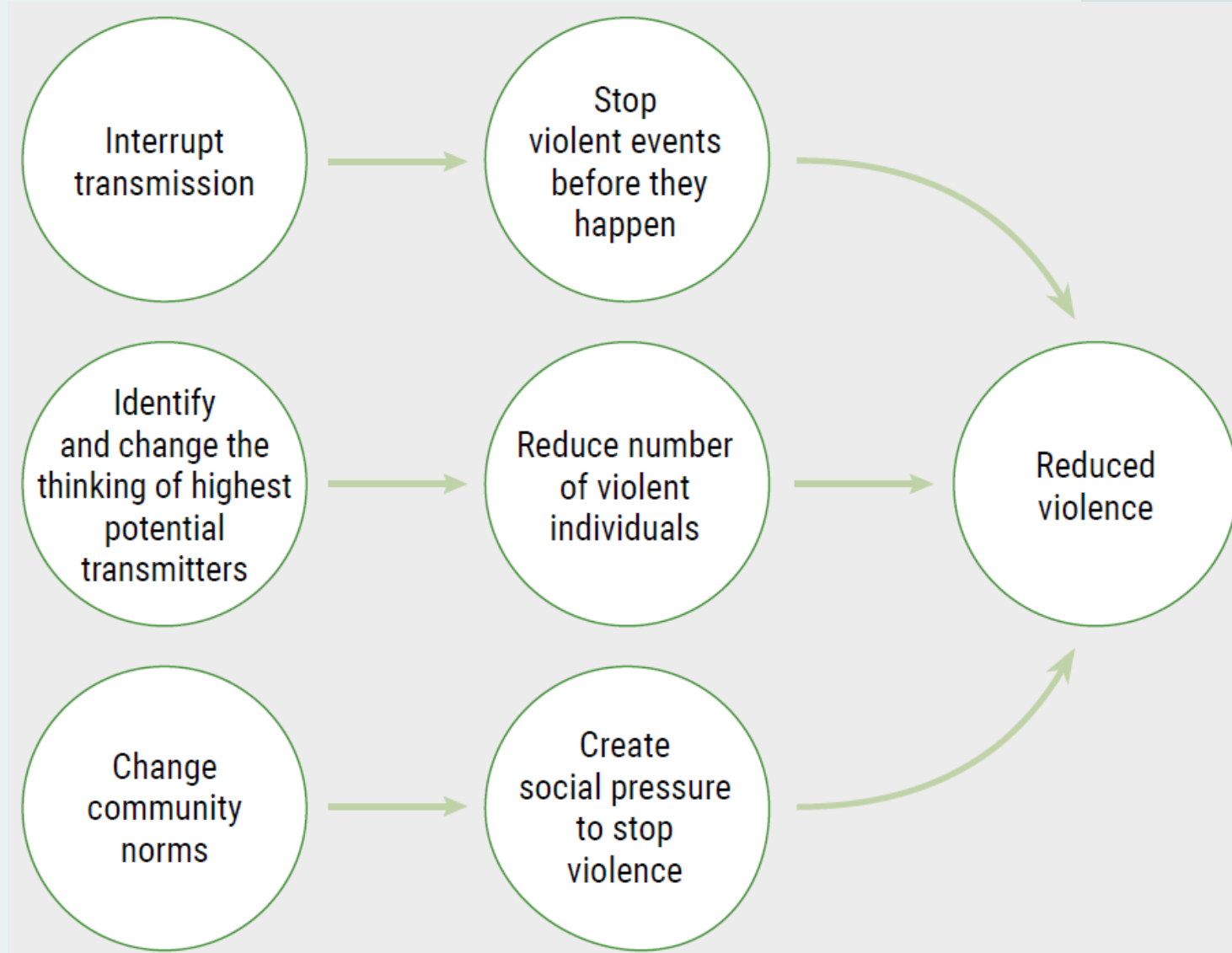
Epidemiology is...

- Defining the problem
- Surveillance
- Characterizing spread & distribution
- Informing interventions
- Assessing efficacy of interventions

Cure Violence Global™ (cont.)

- Define violence as a learned, transmissible behavior that is rooted in social norms and can be interrupted
 - Initial conflict resulting in a violent response
 - “Outbreak” of retaliatory shootings
 - Contagion of violent behavior
- Key characteristics: Clustering, geo-temporal spreading, person-to-person transmission

Theory of Change



Cure Violence Global™ (cont.)

Individual participants must meet at least 4 of 7 criteria:

- Gang-involved
- Major player in a drug or street organization
- Violent criminal history
- Recent incarceration
- Reputation of carrying a gun
- Recent victim of a shooting
- Being between 16 and 25 years of age

Cure Violence Global™ (cont.)

Anticonflict & antiviolenence neighborhood norms:

- Public education efforts and events designed to convey on a community level that:
 - violence is harmful to everyone
 - violence is unacceptable
 - violence can be stopped
- Based on the understanding that individuals are embedded in a community context

Independent Studies

	YEAR	MAJOR FINDINGS	OTHER FINDINGS	RESEARCH BY (FUNDER)
Cali (Colombia)	2020	30% - 47% reduction in killings	40% participants went back to school	ICESI University (Alvarallice, Cali)
Port of Spain (Trinidad)	2018	45% reduction in violent crime	39% reduction in shootings	Arizona State University (IADB)
New York City (USA)	2018	63% reduction in shooting victimizations	33% positive shift in norms	John Jay College of Criminal Justice (RWJF, NYC)
Philadelphia (USA)	2017	30% reduction in shootings	2.4 shootings prevented per month	Temple University (DOJ)
Chicago (USA)	2014	31% reduction in killings	19% reduction in shootings	University of Illinois & University of Chicago (McCormick Fdn.)
New York City (USA)	2013	20% reduction in shootings	norm change	Center for Court Innovation (DOJ)
Baltimore (USA)	2012	56% reduction in killings	34% reduction in shootings	Johns Hopkins University (CDC)
Chicago (USA)	2009	41% -73% reduction in shootings	100% reduction in retaliation killings	Northwestern University (DOJ)

Other Studies and Reports

	YEAR	MAJOR FINDINGS	OTHER FINDINGS	RESEARCH BY
San Pedro Sula (Honduras)	2018	94% reduction in shootings	80% reduction in shootings	University of Illinois - Chicago
Simulation (USA)	2018	13% reduction in violent victimization	19% reduction with CV and more police	University of California - Davis
New Orleans (USA)	2016	56% reduction in shootings	85% reduction in retaliation killings	City of New Orleans
Baltimore (USA)	2016	43% improvement in violence norms	Overall improvement in attitudes	Johns Hopkins University
Loiza, PR (USA)	2016	58% reduction in killings	38% reduction in total crime	University of Puerto Rico
San Salvador (El Salvador)	2016	64% of clients say violent behavior has dropped	2.4 shootings prevented per month	Save the Children
Halifax (Canada)	2016	100% reduction in killings	Successful adaptation	Dalhousie University
Cookham Wood (UK)	2016	95% reduction in group attacks	50% reduction in overall violence	Cure Violence & Metropolitan Univ. of London
New York (USA)	2015	18% reduction in killings	69% increase in control community	John Jay College of Criminal Justice
Kansas City (USA)	2014	42% reduction in killings	166 conflicts mediated	University of Kansas
Cape Town (South Africa)	2014	38% reduction in killings	32% reduction in shootings	University of Cape Town
Chicago (USA)	2014	45% reduction in re-injury	- -	Advocate Christ Medical Center

* Two studies (Baltimore 2021 and 2018) are excluded from this table due to lack of significant finding, but are included in this report.

Impact Simulation (2018)

Researchers used an agent-based model to simulate the effects of Cure Violence and policing approaches in New York City.

VIOLENCE REDUCTION

Implementing the violence interrupter intervention for 10 years decreased victimization by 13%. Implementing hot-spots policing and doubling the police force for 10 years reduced annual victimization by about 11%. Increasing the police force by 40% combined with implementing the violence interrupter intervention for 10 years decreased violence by 19%.



CITATIONS

[Cerdá, M., Tracy, M., & Keyes, K. M. \(2018\). Reducing urban violence: a contrast of public health and criminal justice approaches. *Epidemiology* \(Cambridge, Mass.\), 29\(1\), 142.](#)

"We found investment in Cure Violence could actually achieve the same reduction in victimization as did a much larger investment in targeted policing."

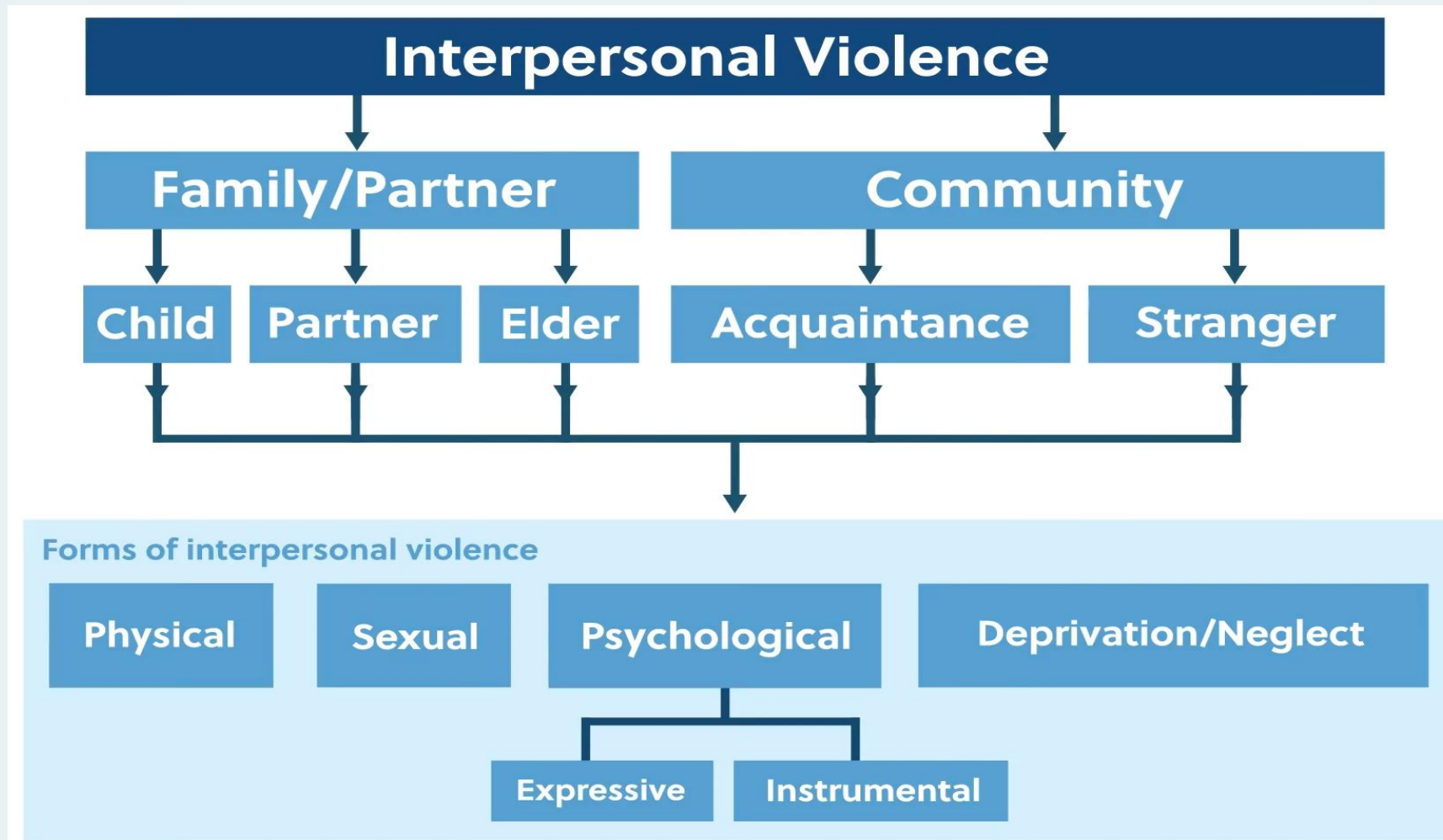
- Katherine Keyes
Evaluator

Pitfalls/Opportunities

- Defining the problem
 - a limited scope of firearm violence in “the ‘hood” – pathologizing marginalization

WHO: “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation”

Categorization of Types & Domains of Interpersonal Violence



Pitfalls/Opportunities (cont.)

- Defining the problem
 - a limited scope of firearm violence in “the ‘hood” – pathologizing marginalization
 - neglects the role of physical police violence



In 2016 — moved by the deaths of Tamir Rice, Philando Castile, Natasha McKenna, Eric Garner and many others — the Department of Health and Mental Hygiene began to examine various surveillance approaches for law enforcement intervention deaths in New York City. The goal of this project was to create a more robust public health surveillance system for law enforcement deaths and not just rely on information provided on death certificates as currently reported in the Annual Summary of Vital Statistics, which is a system used by every other vital registrar in this country.

Attached is a preliminary draft of an academic manuscript from 2017 that outlines the project; this is the document that is referenced in the New York Times article. Please note that this is a draft manuscript intended to go through additional review at the Department and standard peer-review journal processes and is not intended for publication in its current state. This remains an ongoing project.

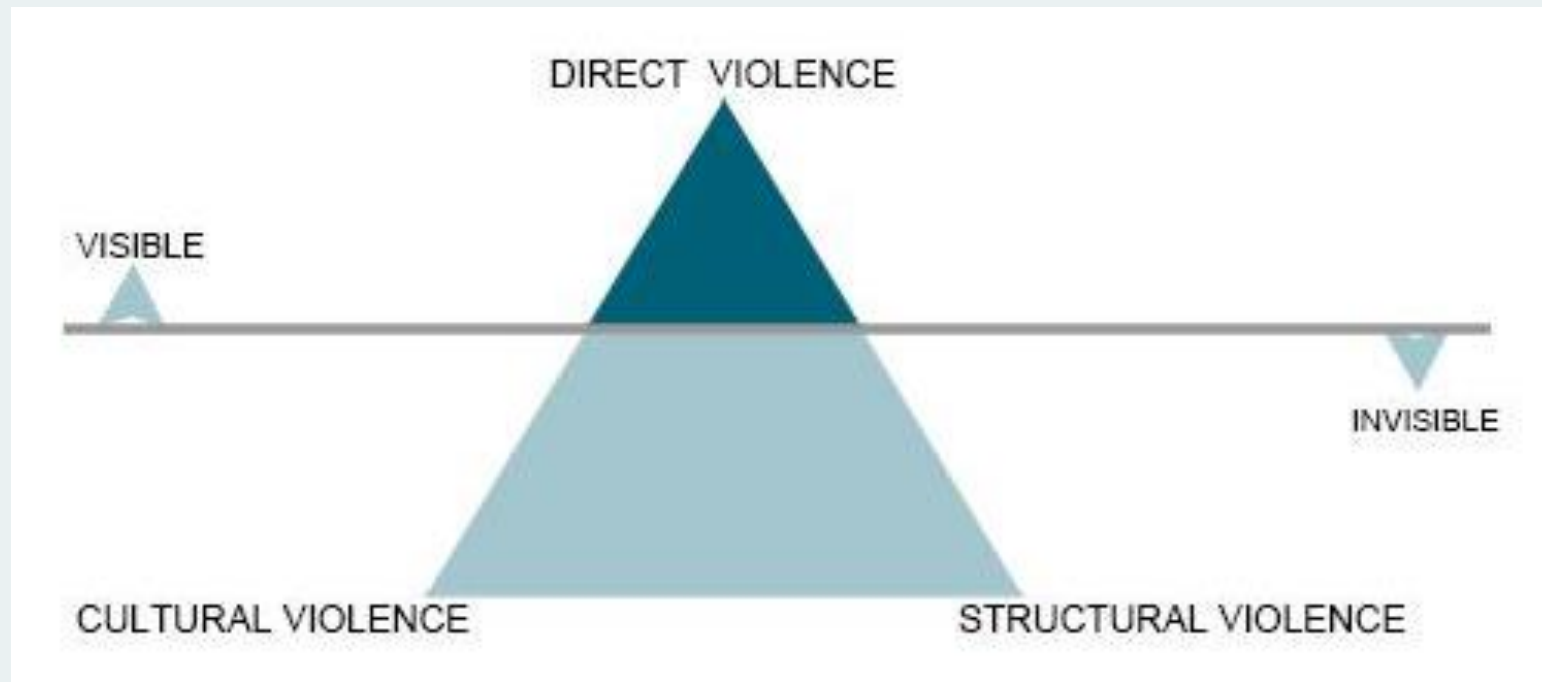
The racial/ethnic disparities highlighted in the preliminary findings, combined with recent calls for increased transparency on police-related interactions requires complete, accurate, and timely surveillance of law enforcement related deaths moving forward. Over the last four years we have researched various methods to gather this data, drafted new case definitions to capture an expanded list of law enforcement-related deaths and spoken to stakeholders, both inside and outside of City government. The Department has developed and piloted a novel surveillance system, but for it to be useful in understanding, preventing, and reducing law enforcement deaths, it must be routinely updated with timely data that only NYPD collects. In early 2020, I met with Commissioner Shea for a discussion on how to move this pilot project forward and

Pitfalls/Opportunities (cont.)

- Defining the problem
 - a limited scope of firearm violence in “the ‘hood” – pathologizing marginalization
 - neglects the role of physical police violence
 - neglects the role of structural violence

Structural violence

- Violence imposed by entire systems, including social, political, & economic violence, preventing marginalized people from having full access to resources and expression of their rights



Pitfalls/Opportunities (cont.)

- Defining the problem
 - a limited scope of firearm violence in “the ‘hood” – pathologizing marginalization
 - neglects the role of physical police violence
 - neglects the role of structural violence
- Neglects a broader public health approach
 - Primary (or primordial!) prevention aimed at systems change – systems that give rise to violent structures

Thank
you



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