

Violence: Public Health View

NYC May 24, 2013
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Boston Medical Center

Overview

- The problem
- Frameworks
- Research issues
- Implications for research



FRONT PAGE

Girl who performed at Obama inaugural events slain on South Side

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By Jennifer Delgado, Tribune reporter
1:54 am, January 30, 2013

After taking their exams Tuesday, Hadiya Pendleton and a group of others decided to hang out at a park on Tuesday just blocks away from their high school on the South Side.

But the trip ended in tragedy when the 15-year-old King College Prep sophomore was fatally shot about a week after she attended President Barack Obama's inauguration and performed at inaugural events with the King College Prep band and drill team.

Pendleton and a 16-year-old boy wounded in the attack were shot in a park near the school about 2:20 p.m., in the 4500 block of South Oakenwald Avenue, police said.

Most of those who were in the park were gang members, and those in the group did not stay on scene to help after the shootings, according to police. The shooting occurred around 2:20 p.m. in the 4500 block of South Oakenwald Avenue.

They boy remained in serious condition Tuesday night. He was also a student at King, according to Pendleton's friends, though her relatives weren't sure what school the boy attended.



Video: Girl, 15, shot at park near school

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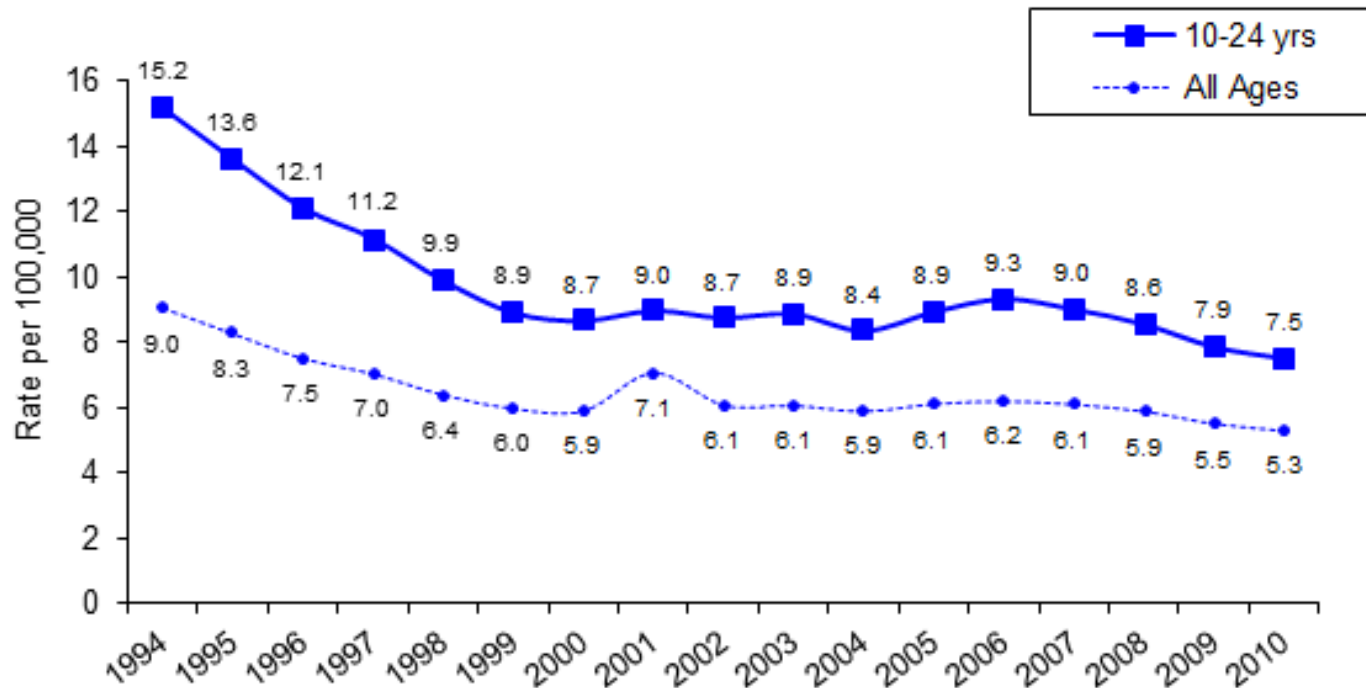
Related Content

One of the teens was taken in serious to critical condition to January homicide count worst since 2002

Homicide

A group of 10 to 12 teens at the park had taken shelter under a canopy there during a rainstorm when a boy or man jumped a fence in the park, ran toward the group and opened fire, police said in a statement this evening.

US VIOLENT DEATHS Ages 0-20



* Rates for All Ages are age-adjusted to the standard 2000 population; rates for the 10-24 yrs age group is age-specific.

10 Leading Causes of Death, New York 2001 - 2010, All Races, Both Sexes

Rank	Age Groups										All Ages
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 2,575	Unintentional Injury 488	Unintentional Injury 370	Unintentional Injury 495	Unintentional Injury 5,353	Unintentional Injury 5,160	Malignant Neoplasms 9,164	Malignant Neoplasms 31,336	Malignant Neoplasms 62,300	Heart Disease 442,409	Heart Disease 514,642
2	Short Gestation 2,388	Congenital Anomalies 279	Malignant Neoplasms 302	Malignant Neoplasms 281	Homicide 2,982	Homicide 3,079	Heart Disease 6,688	Heart Disease 21,135	Heart Disease 41,826	Malignant Neoplasms 251,241	Malignant Neoplasms 358,297
3	Maternal Pregnancy Comp. 638	Malignant Neoplasms 240	Congenital Anomalies 126	Congenital Anomalies 118	Suicide 1,647	Malignant Neoplasms 2,323	Unintentional Injury 6,643	Unintentional Injury 7,496	Chronic Low. Respiratory Disease 5,801	Chronic Low. Respiratory Disease 58,771	Chronic Low. Respiratory Disease 67,581
4	Respiratory Distress 582	Homicide 177	Heart Disease 55	Homicide 85	Malignant Neoplasms 1,062	Suicide 1,927	HIV 4,627	HIV 6,070	Diabetes Mellitus 5,545	Cerebro-vascular 57,448	Cerebro-vascular 67,005
5	SIDS 494	Heart Disease 98	Homicide 55	Suicide 77	Heart Disease 563	Heart Disease 1,575	Suicide 2,614	Liver Disease 3,242	Unintentional Injury 4,915	Influenza & Pneumonia 44,262	Influenza & Pneumonia 49,909
6	Placenta Cord Membranes 450	Influenza & Pneumonia 75	Chronic Low. Respiratory Disease 52	Heart Disease 75	Congenital Anomalies 290	HIV 1,099	Homicide 2,117	Cerebro-vascular 3,026	Cerebro-vascular 4,873	Diabetes Mellitus 28,843	Unintentional Injury 48,860
7	Bacterial Sepsis 370	Septicemia 42	Benign Neoplasms 33	Chronic Low. Respiratory Disease 65	HIV 212	Diabetes Mellitus 309	Cerebro-vascular 1,110	Suicide 2,849	Liver Disease 3,536	Nephritis 20,516	Diabetes Mellitus 38,502
8	Unintentional Injury 303	Chronic Low. Respiratory Disease 40	Septicemia 24	Cerebro-vascular 35	Chronic Low. Respiratory Disease 119	Cerebro-vascular 299	Liver Disease 1,077	Diabetes Mellitus 2,696	Influenza & Pneumonia 2,775	Alzheimer's Disease 20,494	Nephritis 24,041
9	Circulatory System Disease 281	Benign Neoplasms 32	Influenza & Pneumonia 22	Influenza & Pneumonia 35	Influenza & Pneumonia 119	Complicated Pregnancy 269	Diabetes Mellitus 1,019	Chronic Low. Respiratory Disease 1,958	HIV 2,593	Septicemia 18,569	Septicemia 22,866
10	Necrotizing Enterocolitis 261	Perinatal Period 32	Cerebro-vascular 20	Benign Neoplasms 33	Anemias 107	Congenital Anomalies 256	Influenza & Pneumonia 627	Influenza & Pneumonia 1,651	Septicemia 2,206	Unintentional Injury 17,623	Alzheimer's Disease 20,763

WISQARS™ Note: For leading cause categories in this State-level chart, counts of less than 10 deaths have been suppressed (- --).

Produced By: Office of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention

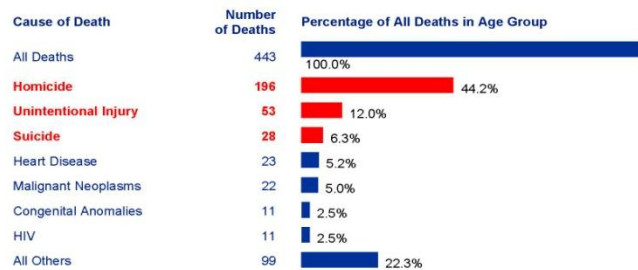
Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System

Racial Disparity

Black Teen Deaths, NY

WISQARS Leading Causes of Death Report

10 Leading Causes of Deaths, New York
2010, Black, Both Sexes
Ages: 15-24



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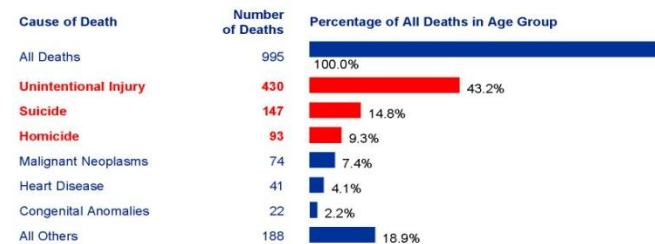
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WISQARS™ Note: Leading Cause categories with counts of less than 10 deaths have been collapsed into "All Other".
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Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System

White Teen Deaths, NY

WISQARS Leading Causes of Death Report

10 Leading Causes of Deaths, New York
2010, White, Both Sexes
Ages: 15-24



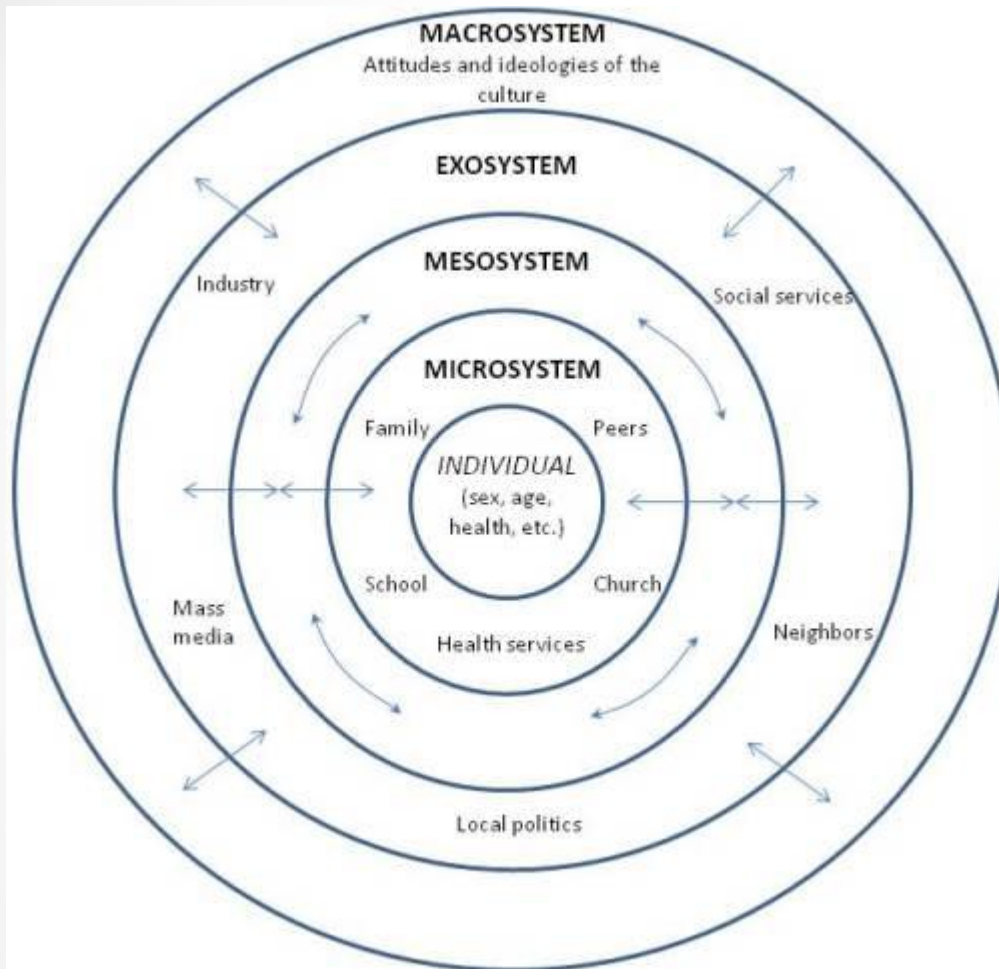
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WISQARS™ Note: Leading Cause categories with counts of less than 10 deaths have been collapsed into "All Other".
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Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System

Public Health Frameworks

- Complex systems
- Environmental changes v. behavior change



Complex Systems Theory

- Theory based interventions
- Modeling for impact
- Use of existing data for validation











mix of strategies and programs



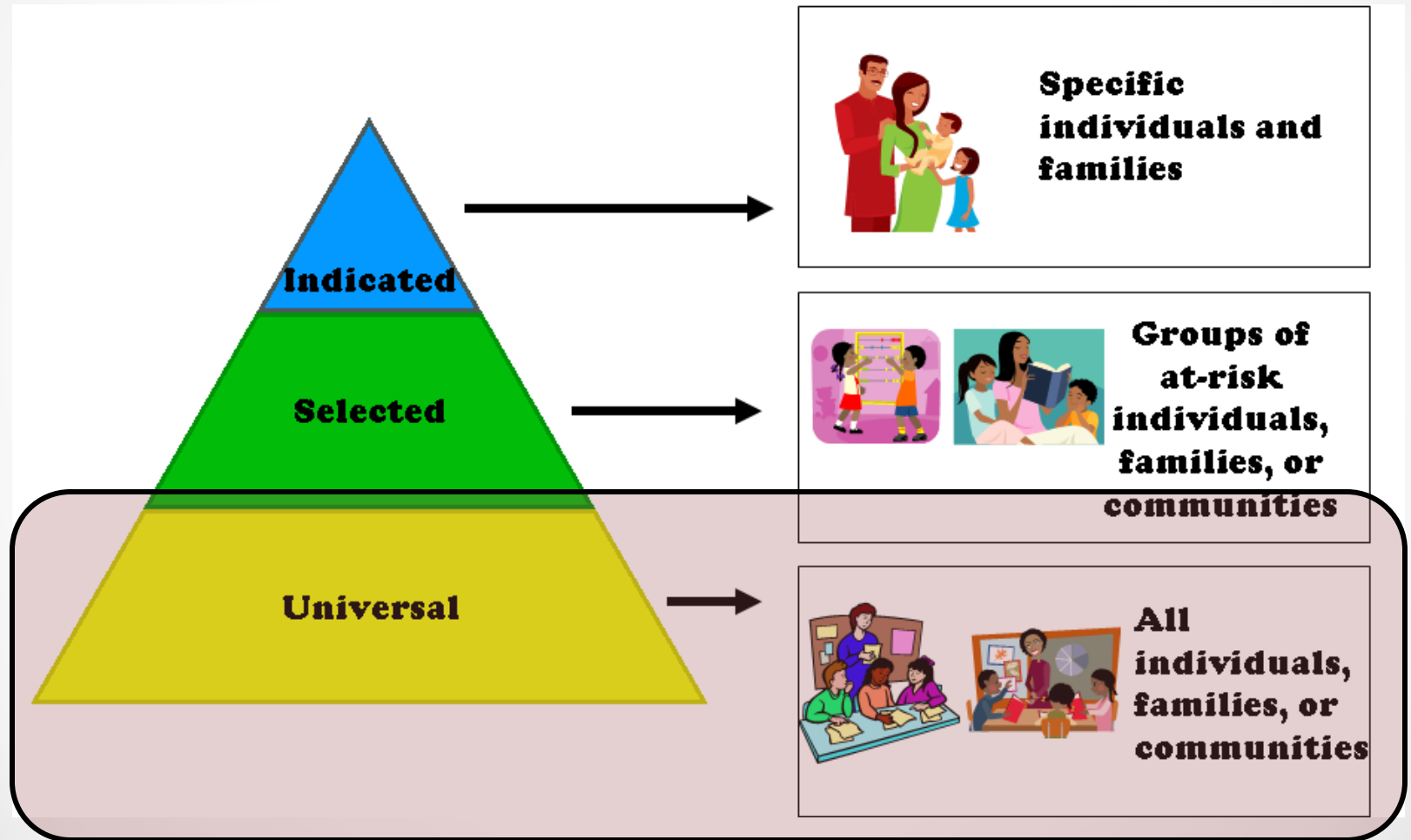


Current State of the Art

Firearms

Positive Youth Development

Universal Prevention



Overview: 2012 AAP Policy Statement

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN™

Organizational Principles to Guide and Define the Child
Health Care System and/or Improve the Health of all Children

POLICY STATEMENT

Firearm-Related Injuries Affecting the Pediatric Population

The absence of guns from children's homes and communities is the most reliable and effective measure to prevent firearm-related injuries in children and adolescents. Adolescent suicide risk is strongly associated with firearm availability. Safe gun storage (guns unloaded and locked, ammunition locked separately) reduces children's risk of injury. Physician counseling of parents about firearm safety appears to be effective, but firearm safety education programs directed at children are ineffective. The American Academy of Pediatrics continues to support a number of specific measures to reduce the destructive effects of guns in the lives of children and adolescents, including the regulation of the manufacture, sale, purchase, ownership, and use of firearms; a ban on semiautomatic assault weapons; and the strongest possible regulations of handguns for civilian use.

COUNCIL ON INJURY, VIOLENCE, AND POISON PREVENTION EXECUTIVE COMMITTEE

KEY WORDS

child, adolescent, violence, homicide, suicide, injury,
epidemiology, policy

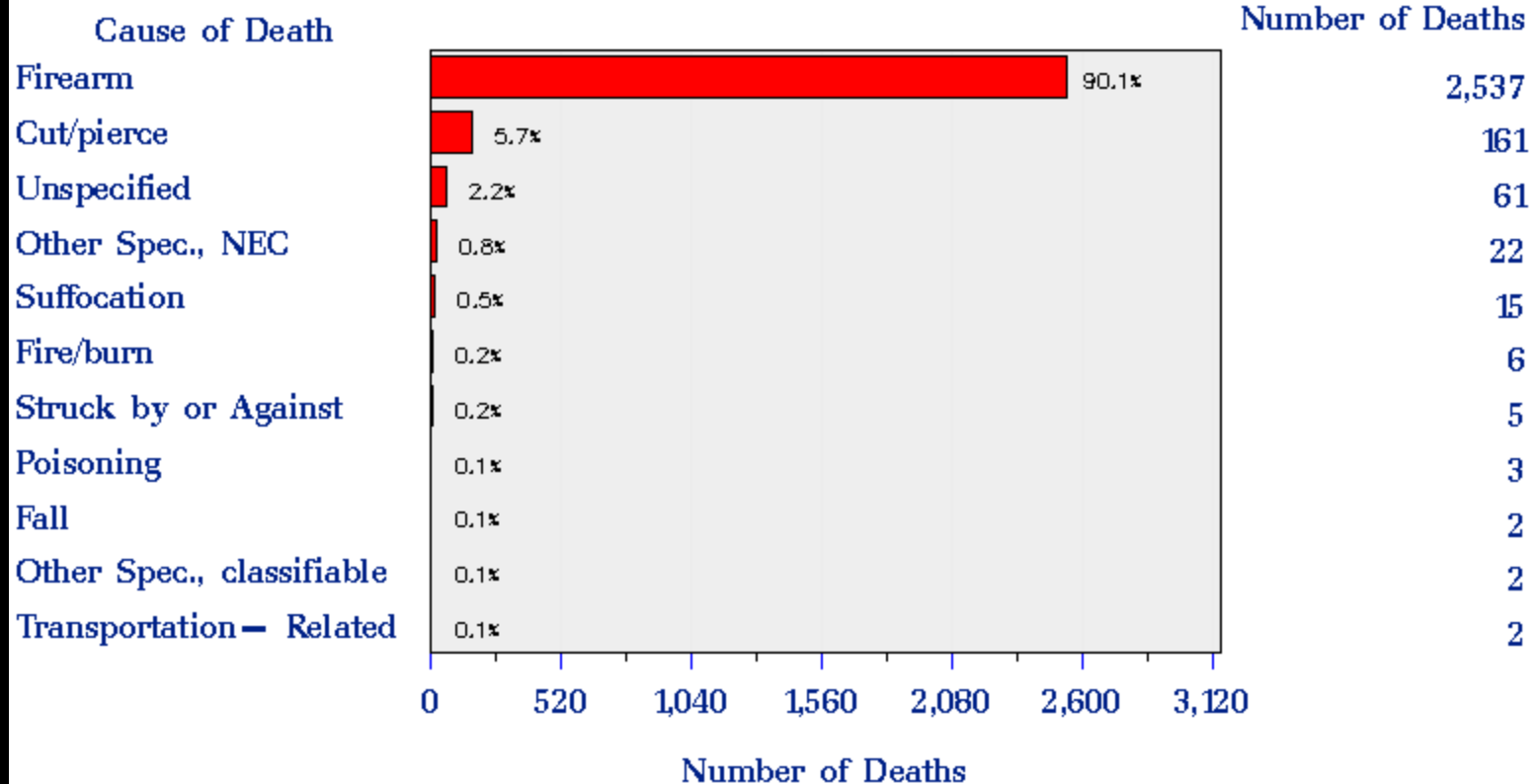
ABBREVIATIONS

AAP—American Academy of Pediatrics
NVDRS—National Violent Death Reporting System

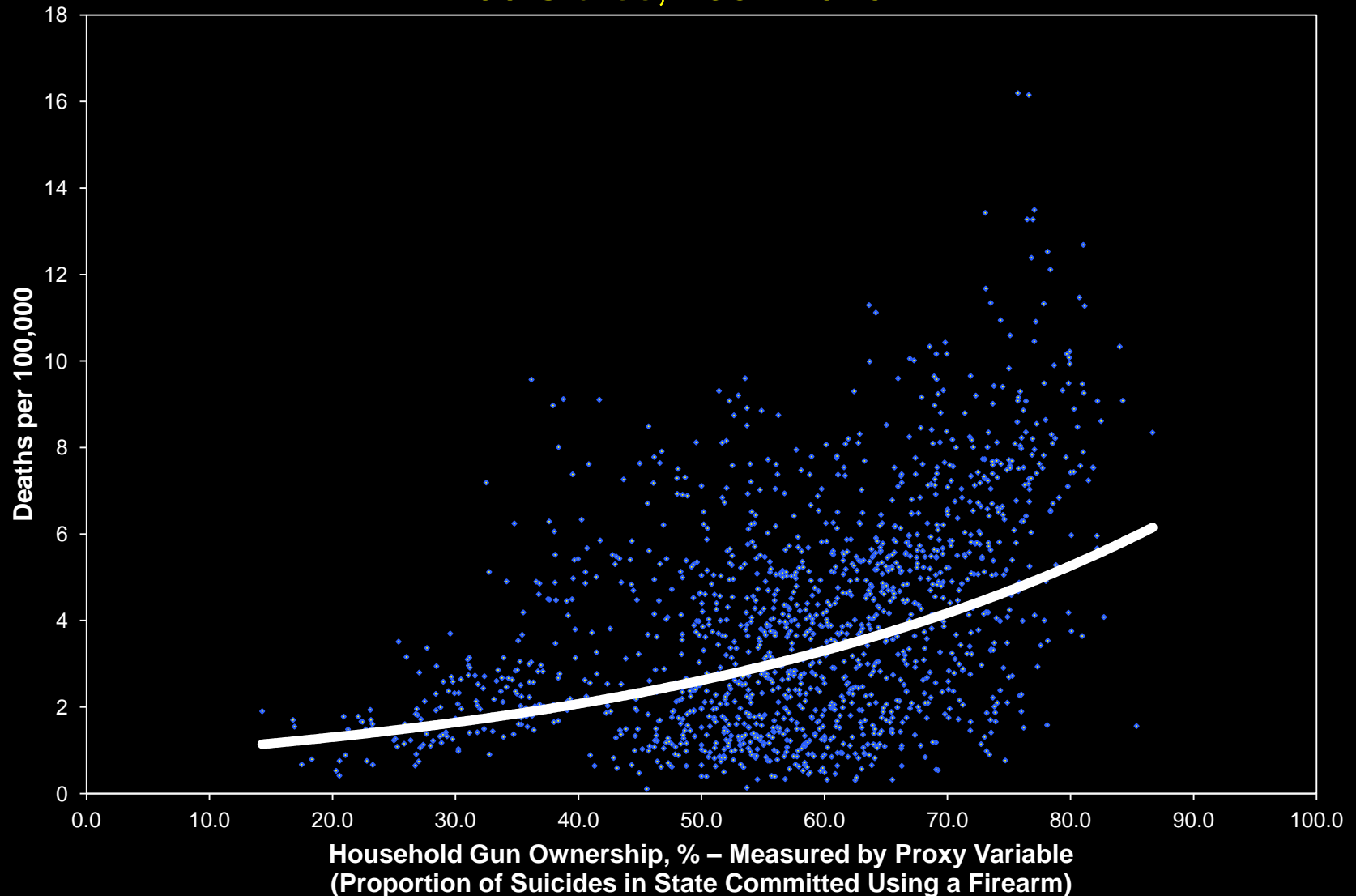
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2010, United States
Homicide
Ages 15–24, Black, Both Sexes
Total Deaths: 2,816

Click on the colored bars to drill down to the ICD code level



Relationship Between Household Gun Ownership (%) and Age-Adjusted Firearm Homicide Rate – 50 States, 1981-2010



All data are from Centers for Disease Control and Prevention WISQUARS (Web-based Injury Statistics Query and Reporting System) database.

Graph prepared by Michael Siegel, MD, MPH; Professor, Boston University School of Public Health

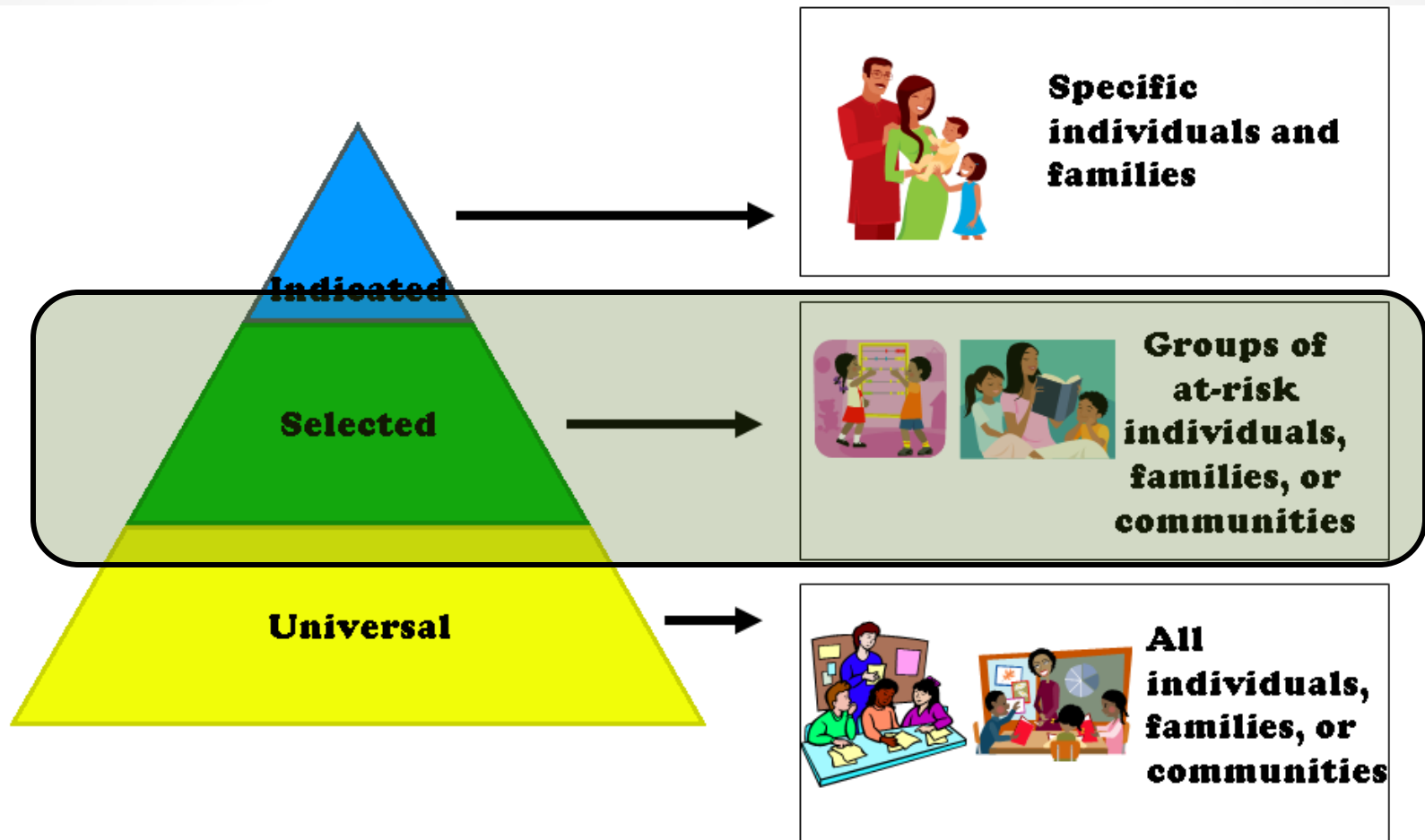
What Do We Know?

- The safest home for children is a home without guns
- Safe storage helps
- 3 general types of gunshot-related deaths among children:
 - Accidents – mostly young
 - Suicide – adolescents and young adults
 - Homicide – adolescents and young adults

Summary

- Changing the environment is always more effective than changing behavior
- Firearms make the environment more dangerous / less forgiving

Public Health Framework: Selected



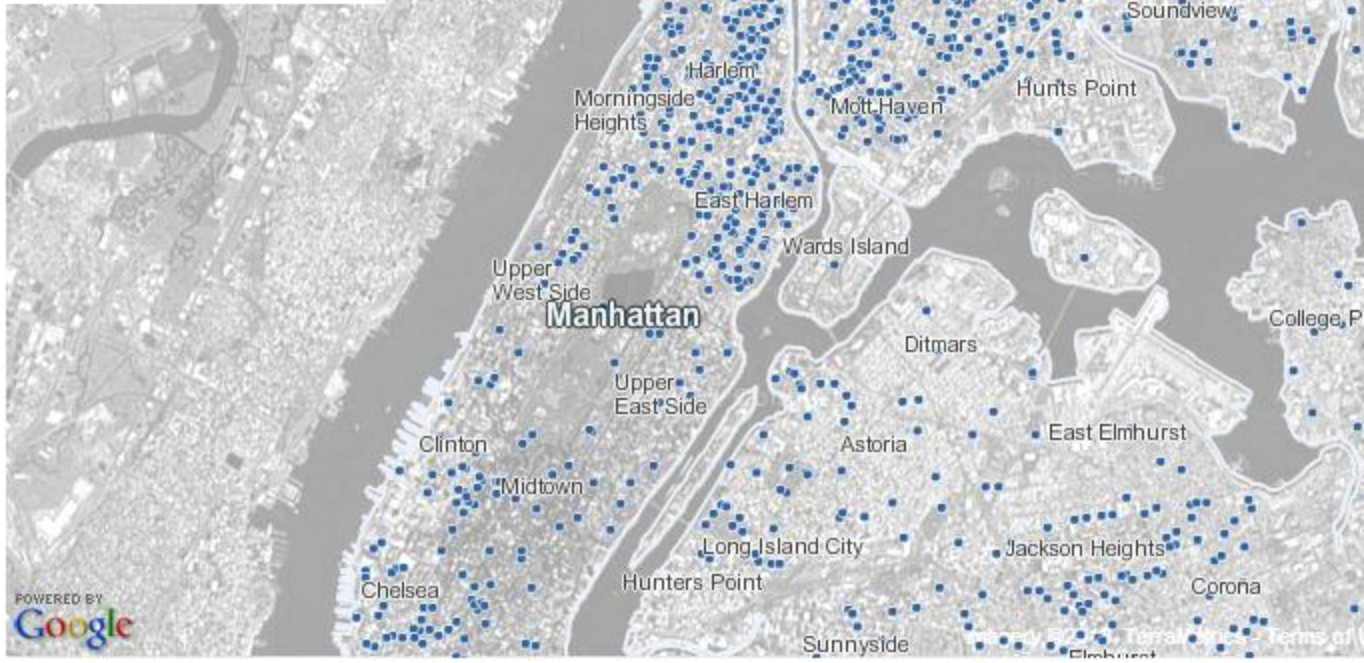
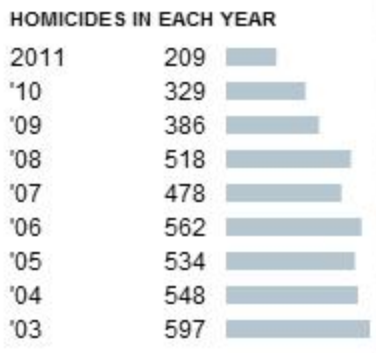
All years 2003 2004 2005 2006 2007 2008 2009 2010 2011

Zoom to address or ZIP Go

Homicides 2003-2011 4,161

Average homicides per year: 494

- All homicides
- Month and time of day
- Race/ethnicity of victim
- Race/ethnicity of perpetrator
- Sex of victim
- Sex of perpetrator
- Age of victim
- Age of perpetrator
- Weapon used
- Borough



Map does not show 39 locations that the police have not released.

Do you see patterns that should be explored further? Have suggestions for stories? Comments about this database? Please email us.

Note: The New York Police Department updates a portion of its initial statements, often within a few days after the crime or when there is an arrest. In addition, the NYPD issues weekly summary statistics by police precinct. The New York Times also obtains periodic updates of police data. Additional information is provided by court records and the city medical examiner. This database excludes vehicular homicides. The New York Times compiles news accounts and conducts additional reporting and editing to supplement these official accounts. The status and details on certain deaths may happen months after they occur, and tracking those is difficult.

The solutions are
in the
community.





The Science of the Positive is a new
FRAMEWORK for community prevention.

So how do we grow
the solutions
which already
exist in our
communities?



Positive Youth Development

NCSL: Positive youth development (PYD) is a comprehensive framework outlining the supports young people need in order to be successful. PYD emphasizes the importance of focusing on youths' strengths instead of their risk factors to ensure that all youth grow up to become contributing adults.

Children's Bureaus: PYD builds on young people's strengths and recognizes their unique contributions..

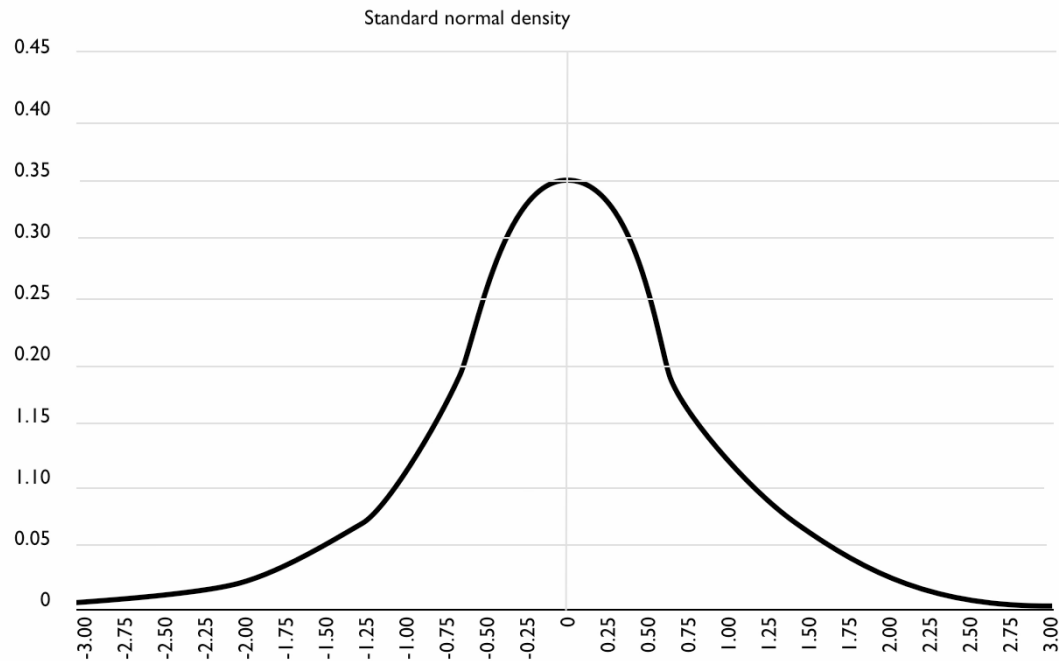


Core Assumption

The **POSITIVE**
exists and is
worth growing.

Risk and Protection

Risk-based factors



Developmental Assets

Search Institute

- Support
- Empowerment
- Boundaries and Expectations
- Constructive use of time
- Commitment to learning
- Positive values
- Social Competencies
- Positive Identity

Community Connection

Boundaries and Expectations:

11. **Family boundaries**—Family has clear rules and consequences and monitors the young person's whereabouts.
12. **School Boundaries**—School provides clear rules and consequences.
13. **Neighborhood boundaries**—Neighbors take responsibility for monitoring young people's behavior.
14. **Adult role models**—Parent(s) and other adults model positive, responsible behavior.
15. **Positive peer influence**—Young person's best friends model responsible behavior.
16. **High expectations**—Both parent(s) and teachers encourage the young person to do well.

Constructive Use of Time

17. **Creative activities**— three or more hours per week in lessons or practice in music, theater, or other arts.
18. **Youth programs**—Three or more hours per week in sports, clubs, or organizations at school and/or in the community.
19. **Religious community**— one or more hours per week in activities in a religious institution.
20. **Time at home**—Young person is out with friends “with nothing special to do” two or fewer nights per week.

Public Health Approach

- Identify social assets
 - Survey
 - Observation
- Implement programs
 - Youth programs
 - Social norms change
- Monitor success
- Relate success to meaningful outcomes
 - Crime
 - School performance
 - Employment
- Repeat





Harlem Children's
Z O N E

414 Homicides in '12 Is a Record Low for New York City



Seth Wenig/Associated Press

New York police officers graduated Friday. Mayor Michael R. Bloomberg praised a decline in murders.

By WENDY RUDERMAN

Published: December 28, 2012 | 178 Comments

Murders in New York have dropped to their lowest level in over 40

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What's Popular Now

Illicit Nightclub in a Chelsea Water Tower



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Prevention Summary

- Methodologically complex
- Requires awareness of on-going related work
- Complex systems and intermediate results
- Stakes are high and success is likely
- Key will be to allow out of the box thinking