



Firearm Injuries and Deaths among Children and Adolescents, Marion County, Indiana, 2003-2005

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INTRODUCTION

- In 2004, the age-adjusted homicide/assault firearm death rate in Marion County, Indiana (Indianapolis) for adolescents ages 10-24 years was 16.75 per 100,000 which is higher than the Indiana (6.30 per 100,000) and the national (6.76 per 100,000) death rates for 10-24 year olds (1, 2).

OBJECTIVE

- This study describes the epidemiology of both fatal and non-fatal firearm injuries for individuals ages 10-24 years during 2003-2005 determined from a city-wide firearm injury and death surveillance system.

METHODS

- From 2003-2005, firearm injury and death data was collected from the metropolitan police departments, coroner's office, and six hospital emergency departments encompassing the metropolitan area of Indianapolis, Indiana.
- Information regarding incident, intent, location, wound location, and disposition of victim were collected.
- When available, the relationship of the shooter and the victim, type of weapon used, and circumstances surrounding the shooting were coded and categorized.
- A previous evaluation of this database has demonstrated reliability with a Kappa value of 0.814 (0.803-0.822).
- Descriptive statistics are used to present data and rate denominators use population data from the 2000 US Census (4).

LIMITATIONS

- The type of firearm was identified in only 54% of the cases.
- Shooter's relationship to the victim was identified in only 37% of cases.
- Confounding factors such as previous arrest record and alcohol and drug abuse in many cases are unknown.

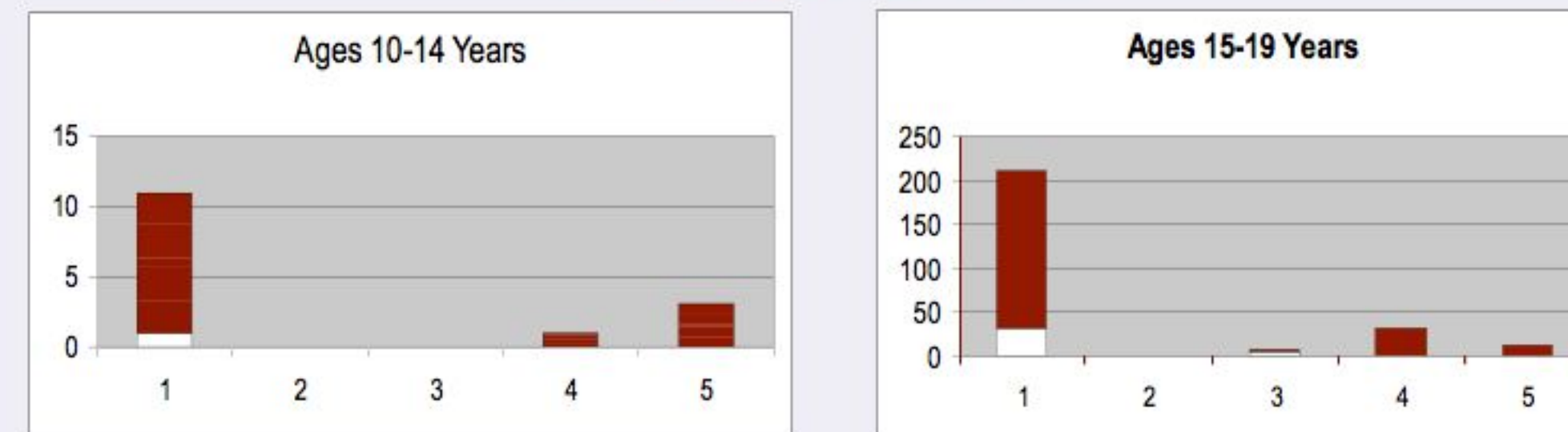
RESULTS

- There were 681 cases of firearm injuries and deaths among individuals 10-24 years of age.
 - Gender: 89% male, 9% female, 2% not listed
 - Race: 76% African American, 22% White, 2% Other
 - Disposition: 34% treated in Emergency Department and released, 36% admitted for treatment
 - Fatalities: 20% (137) with 43% dying at the scene
 - When identified, handguns were involved in 46% of all incidents

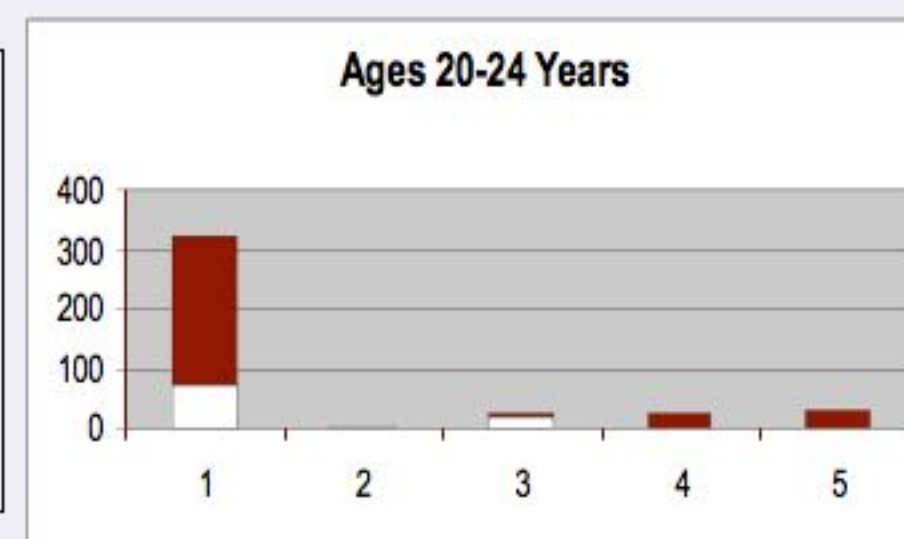
Age Specific Firearm Fatality Rates per 100K, 2004			
	10 to 14	15-19	20 to 24
Marion County, Indiana (1)	0*	7.14	46.6
Indiana (2)	1.30*	5.84	12.29
United States (2)	0.66	7.74	12.4

* Rate may be unstable due to small numbers

Intent By Age Group 2003-2005



1. Assault/Homicide
2. Legal Intervention
3. Self-Inflicted/Suicide
4. Unintentional
5. Undetermined



■ Nonfatal
□ Fatal

DISCUSSION

- The firearm fatality rate for individuals ages 20-24 years in Marion County are at least 3.5 times that of Indiana and US.
- The majority (64%) of cases resulted in a non-fatal injury due to an assault and was most frequent among individuals ages 20 to 24 years.
- The data provides a more comprehensive picture of how adolescents are injured and killed by firearms.
- The data is useful in planning and evaluating violence prevention efforts.
- The data is useful for the allocation of resources for prevention and intervention efforts.

Firearm Fatality Rates for 20-24 year olds in Selected Cities per 100K, 2004 (3)

Baltimore	140.2	Detroit	65.1
Boston	24.7	Gary	73.6
Cincinnati	51.0	St. Louis (MO)	77.1
Columbus (OH)	23.6	Washington DC	70.1

REFERENCES

1. Indiana Partnership to Prevent Violent Injury and Death
2. Centers for Disease Control, WISQARS
<http://www.cdc.gov/ncipc/wisqars/>
3. Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2004. CDC WONDER On-line Database, compiled from Compressed Mortality File 1999-2004 Series 20 No.2J, 2007.
4. US Census Bureau, Census 2000
<http://www.census.gov/main/www/cen2000.html>