

Stanley Manne
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Using the Illinois Violent Death Reporting System to examine violent deaths in the City of Chicago by Planning Region: 2005, 2010 and 2015

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Violent death in the City of Chicago

- The City of Chicago has received lots of media attention regarding homicides of late
- Suicides also important when looking at violent death
- Proportion of firearms important
- Rates of violent death vary greatly within Chicago by location



IVDRS 1.0 versus IVDRS 2.0

In 2005, IVDRS 1.0 is born

- Funded by the Illinois Department of Public Health and the Joyce Foundation
- Based on CDC's NVDRS system – IVDRS is a shadow system
 - Uses CDC software and follows CDC protocols
 - No official CDC support

2005 and 2010 data

In 2014, IVDRS becomes part of NVDRS, IVDRS 2.0 is born

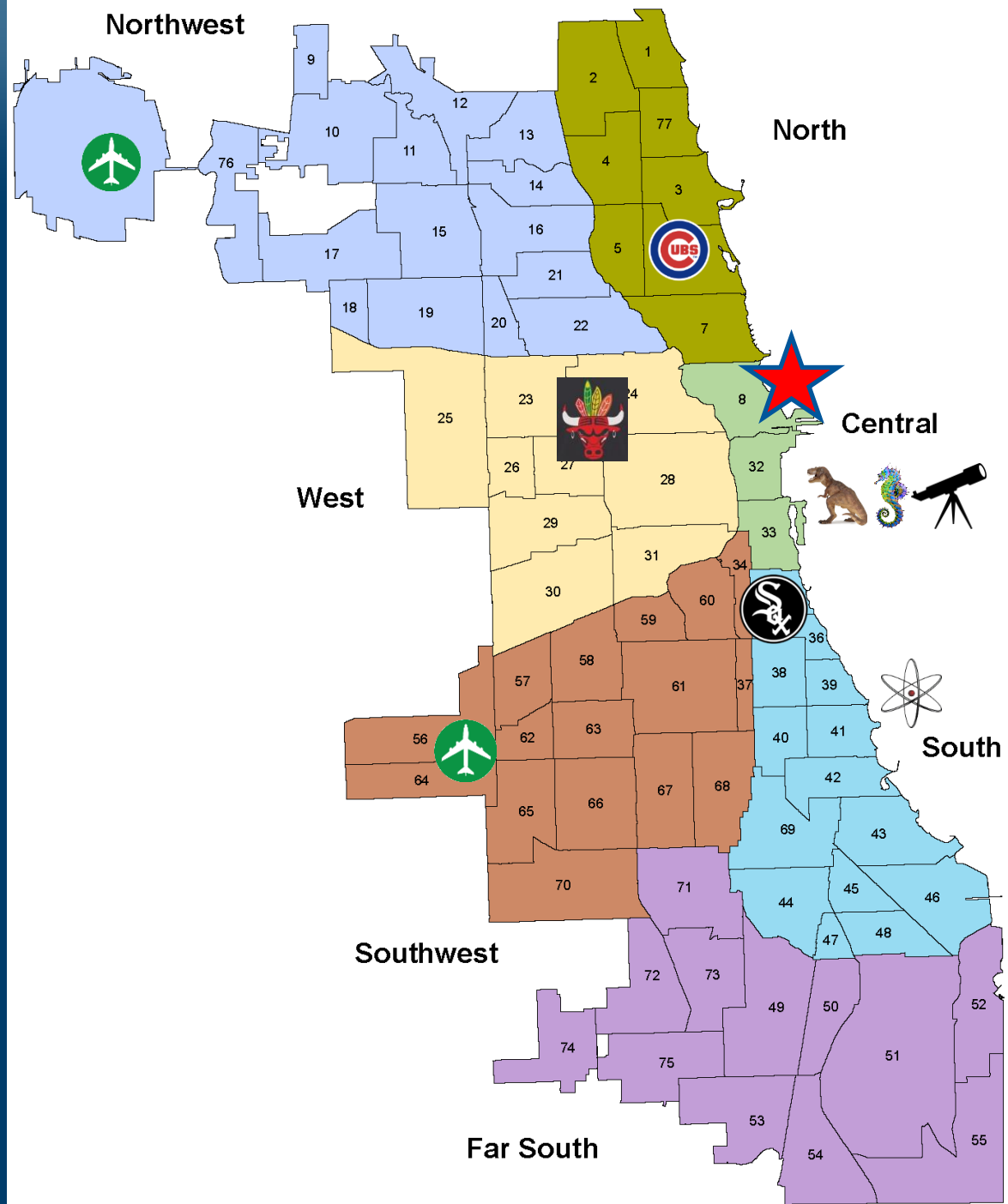
- Lurie Children's functions as IDPH's bona fide agent
- Funded by CDC
- Jan 1, 2015-Dec 31, 2019

2015 data

Methods

- Serial cross-sectional analysis
- Cases included in analysis:
 - ❖ Homicides and suicides
 - ❖ Occurred in the City of Chicago (Cook County)
 - ❖ Location determined by where injury leading to death occurred
 - ❖ Dates of death Jan 1-Dec 31: 2005, 2010 and 2015
- City of Chicago broken into 7 Planning Regions, based on 77 Community Areas
- Rates and 95% Confidence Intervals determined using American Community Survey data
- Analyses using SPSS 24.0/SAS 9.3

City of Chicago Regions



*Chicago Department of
Public Health
Office of Policy & Planning
September 24, 2010*

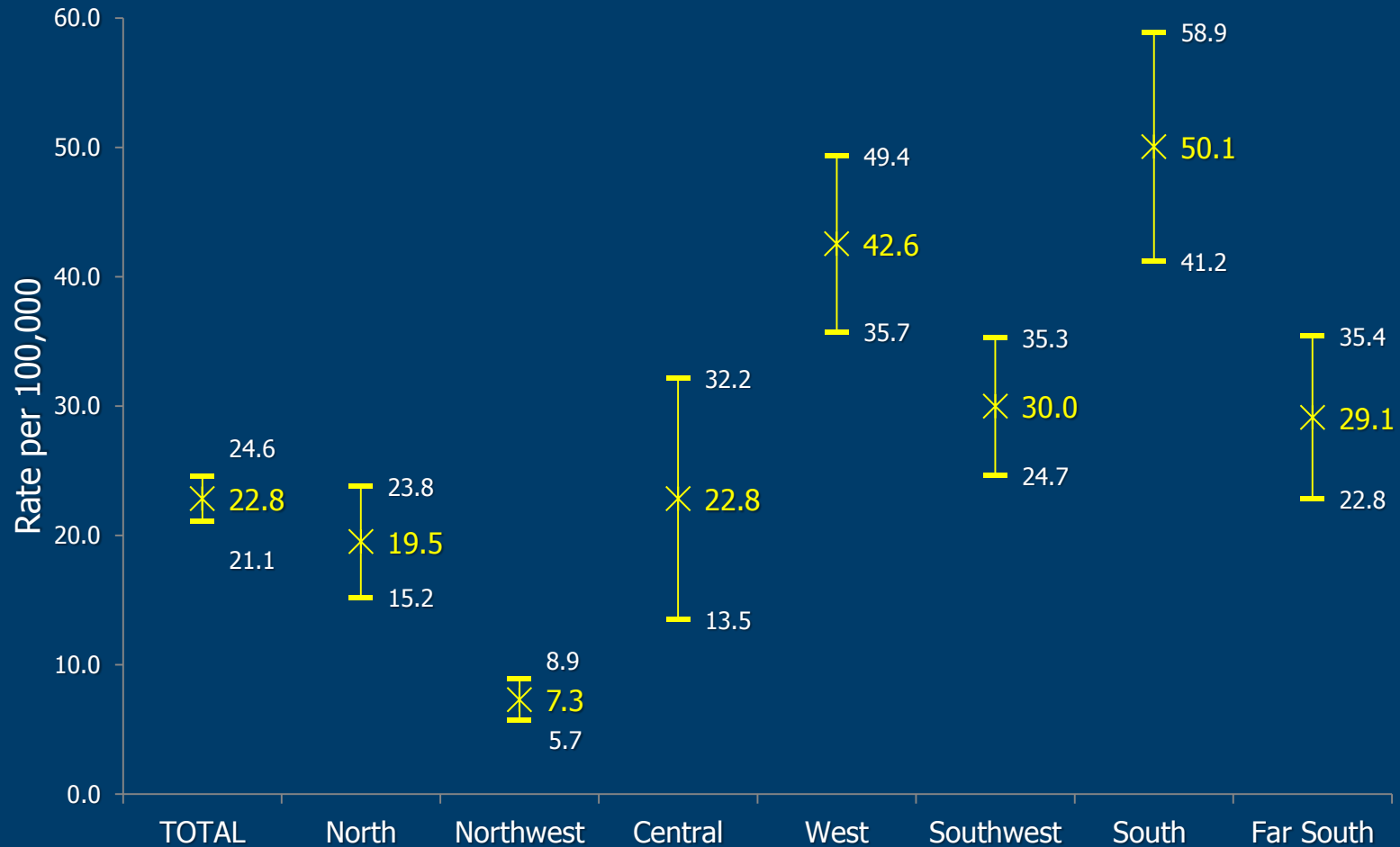
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Violent Death in the City of Chicago by Planning Region:

2005
N=663

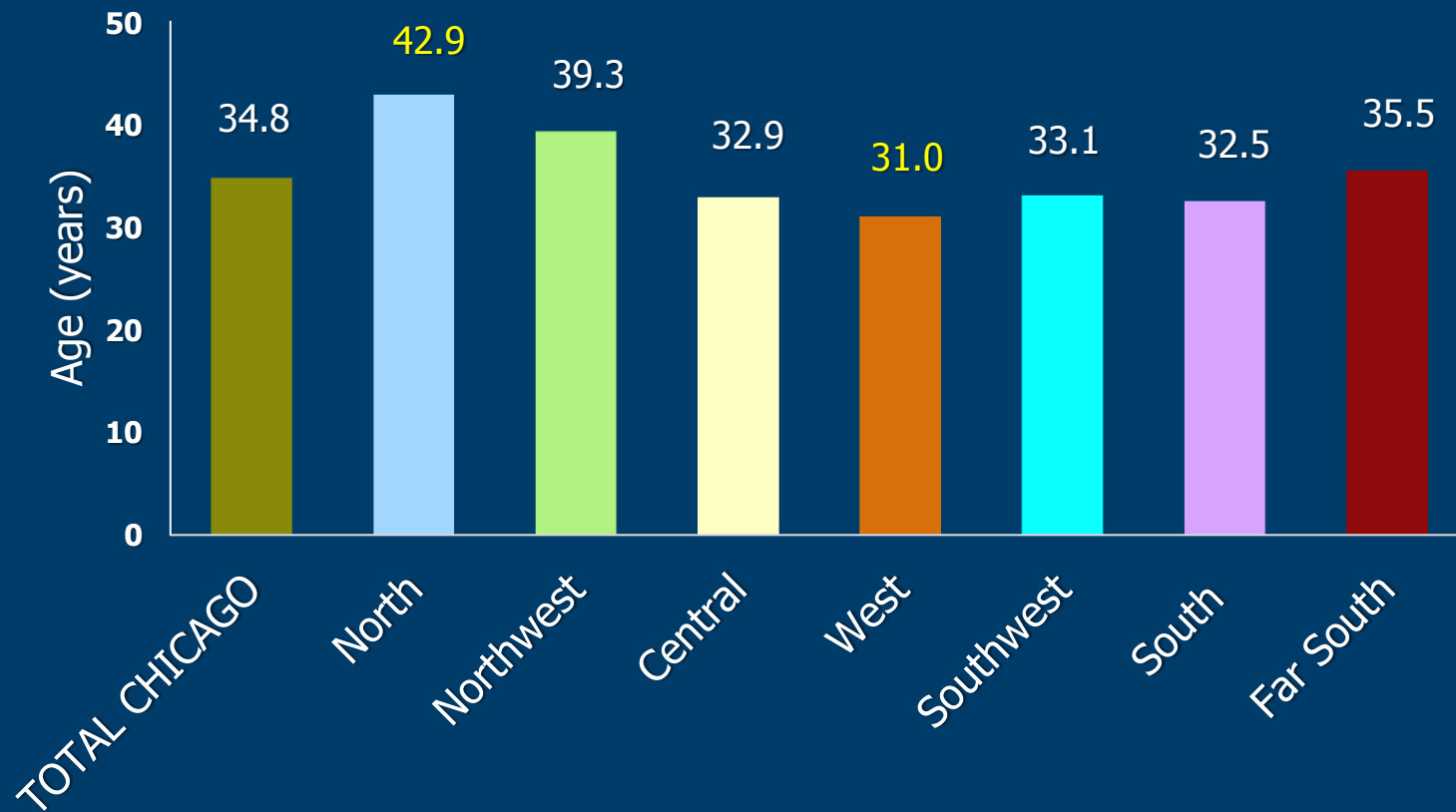


Violent death rate per 100,000: 2005



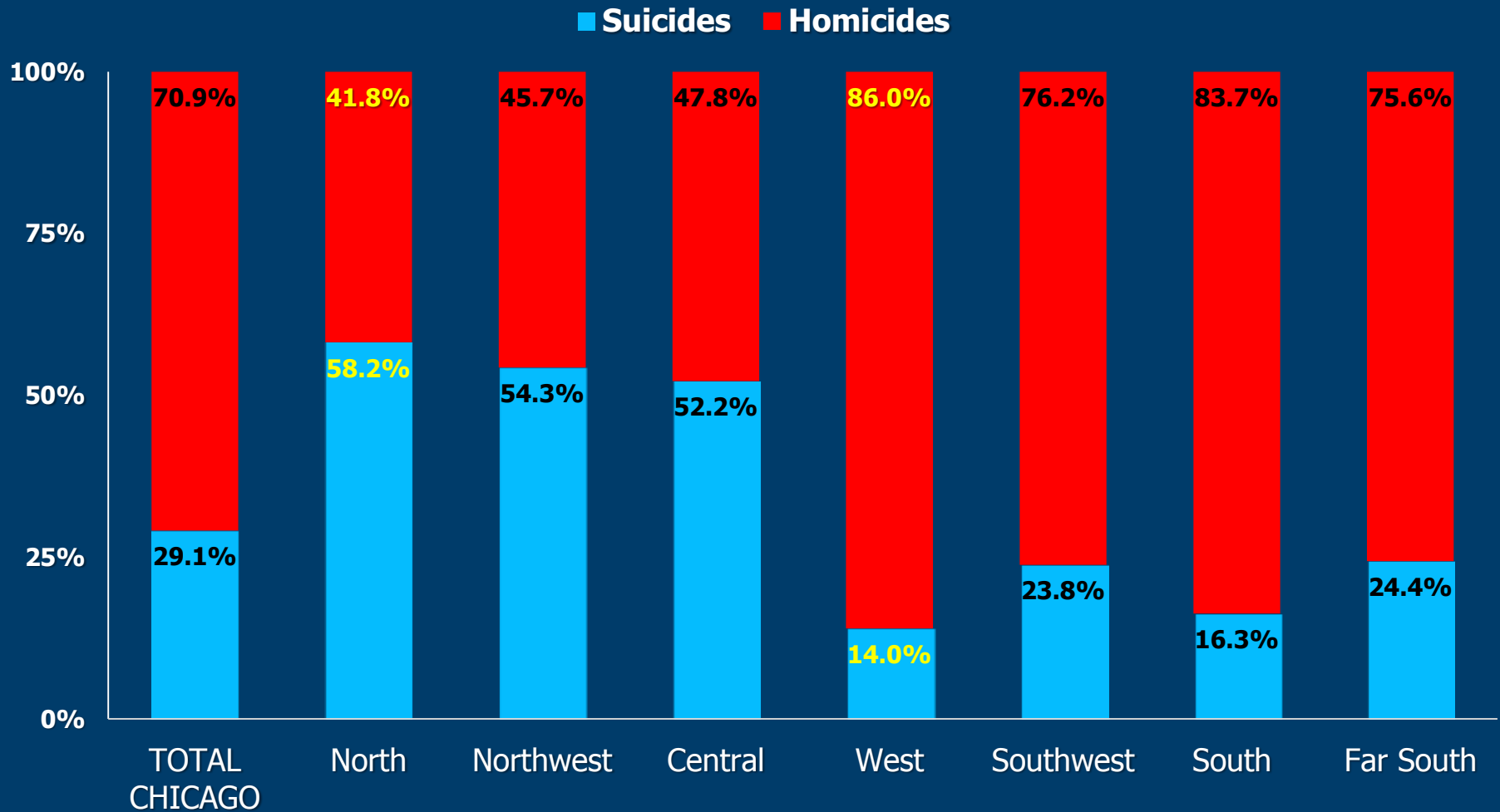
$p < 0.001$

Average age of victim of violent death, in years: 2005



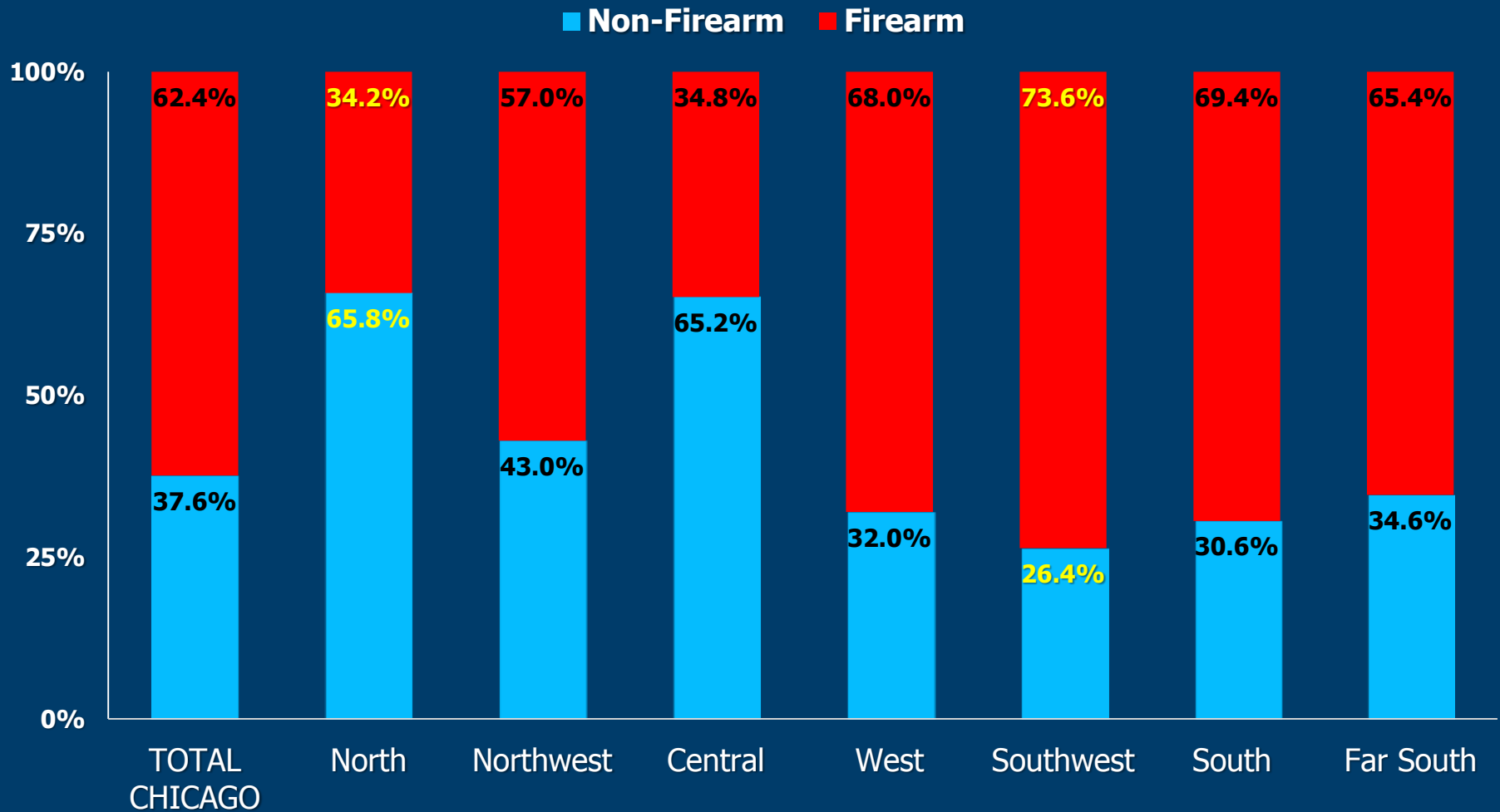
$p < 0.001$

Proportion of violent deaths which are homicides vs suicides: 2005



$p < 0.001$

Proportion of violent deaths which are due to firearms: 2005



$p < 0.001$

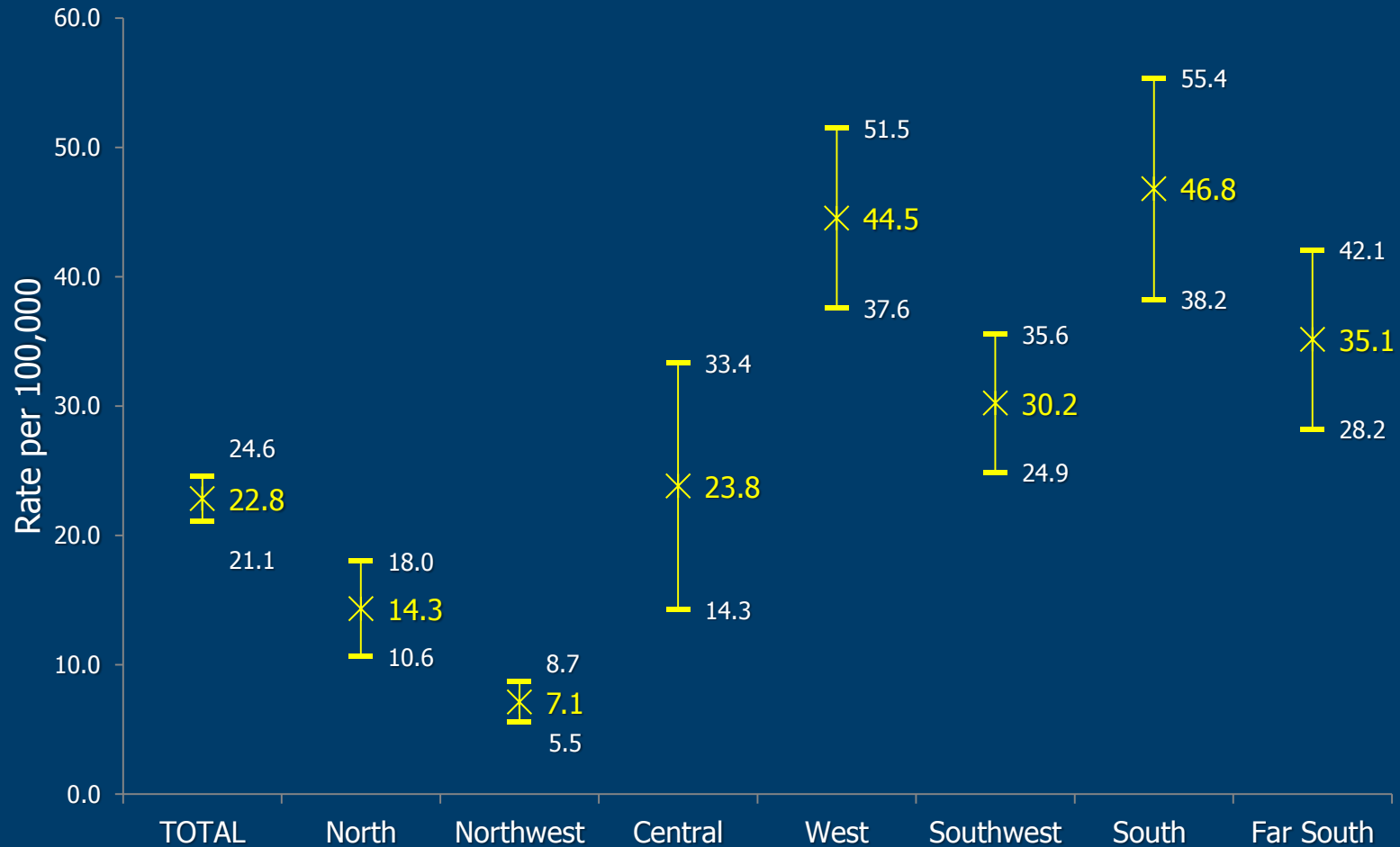
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Violent Death in the City of Chicago by Planning Region:

2010
N=663

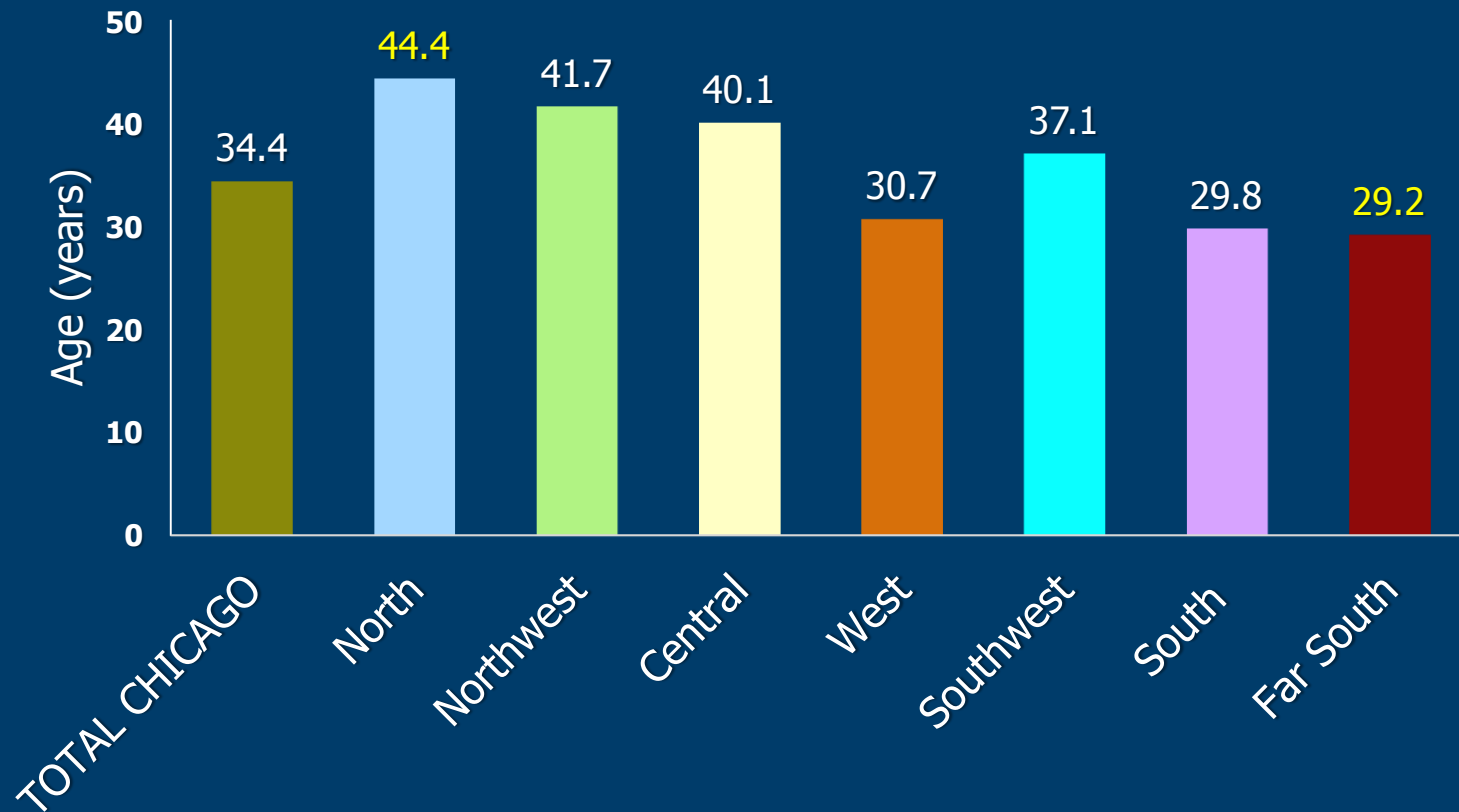


Violent death rate per 100,000: 2010



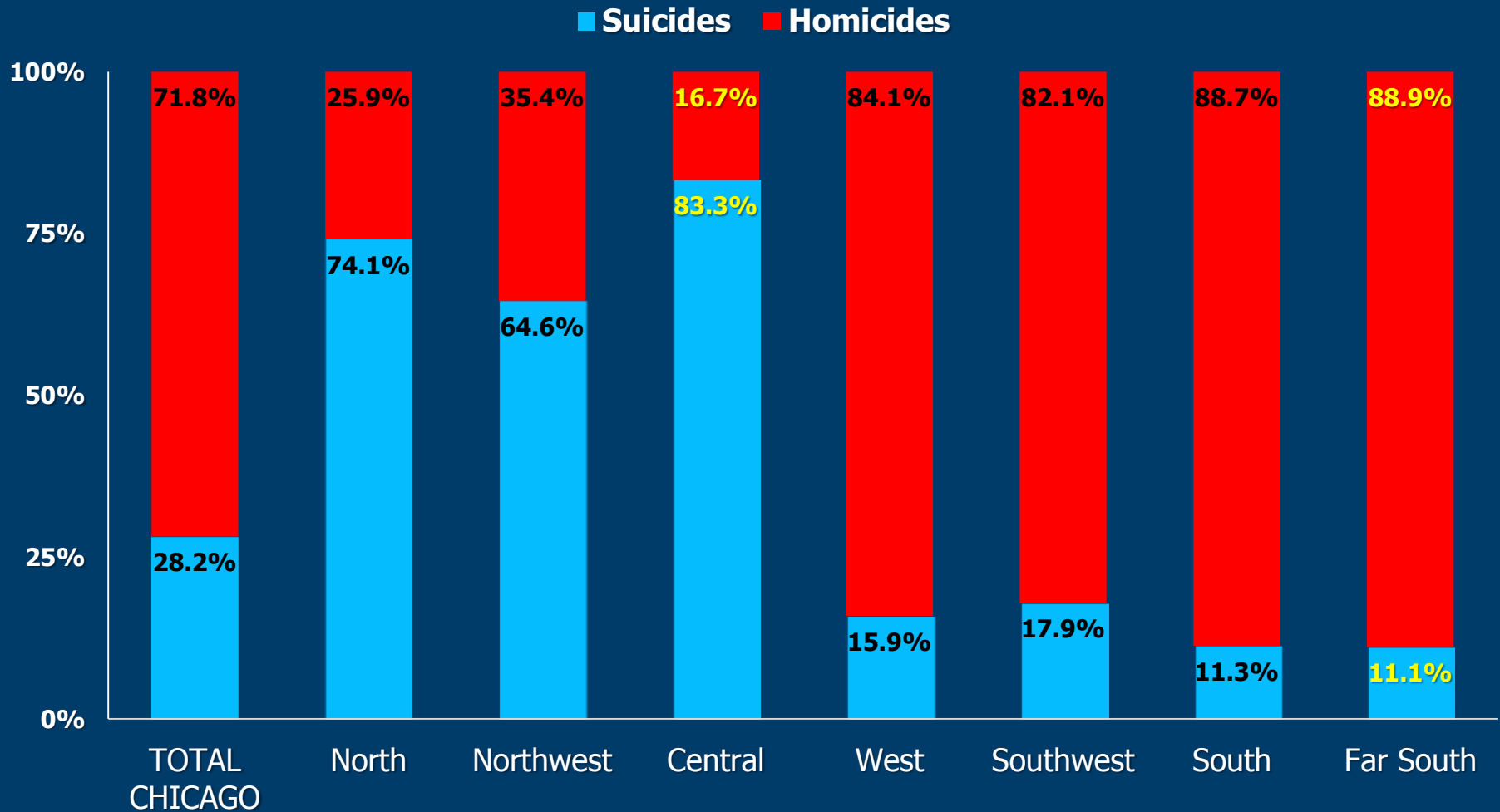
$p < 0.001$

Average age of victim of violent death, in years: 2010



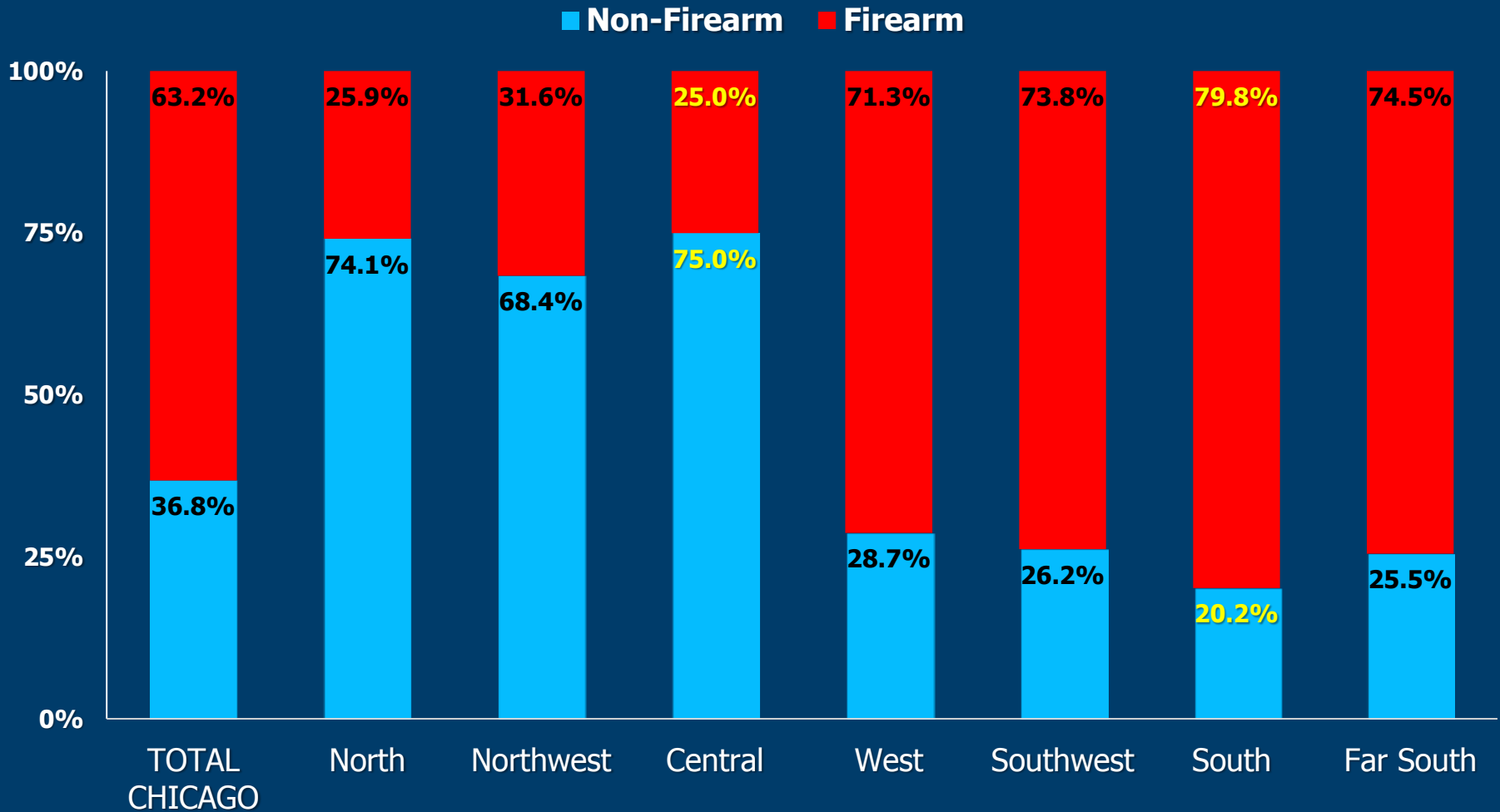
$p < 0.001$

Proportion of violent deaths which are homicides vs suicides: 2010



$p < 0.001$

Proportion of violent deaths which are due to firearms: 2010



$p < 0.001$

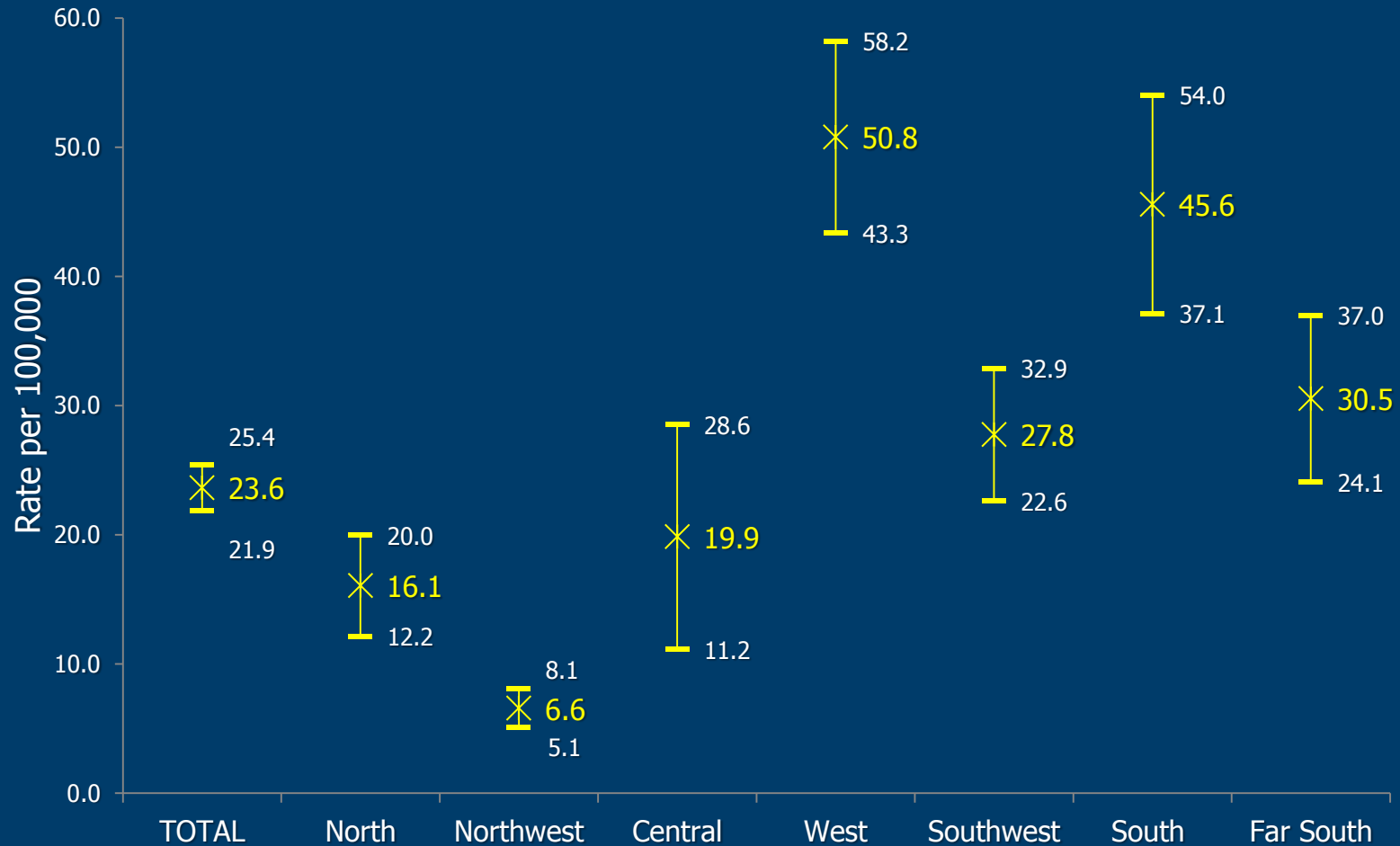
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Violent Death in the City of Chicago by Planning Region:

2015
N=686

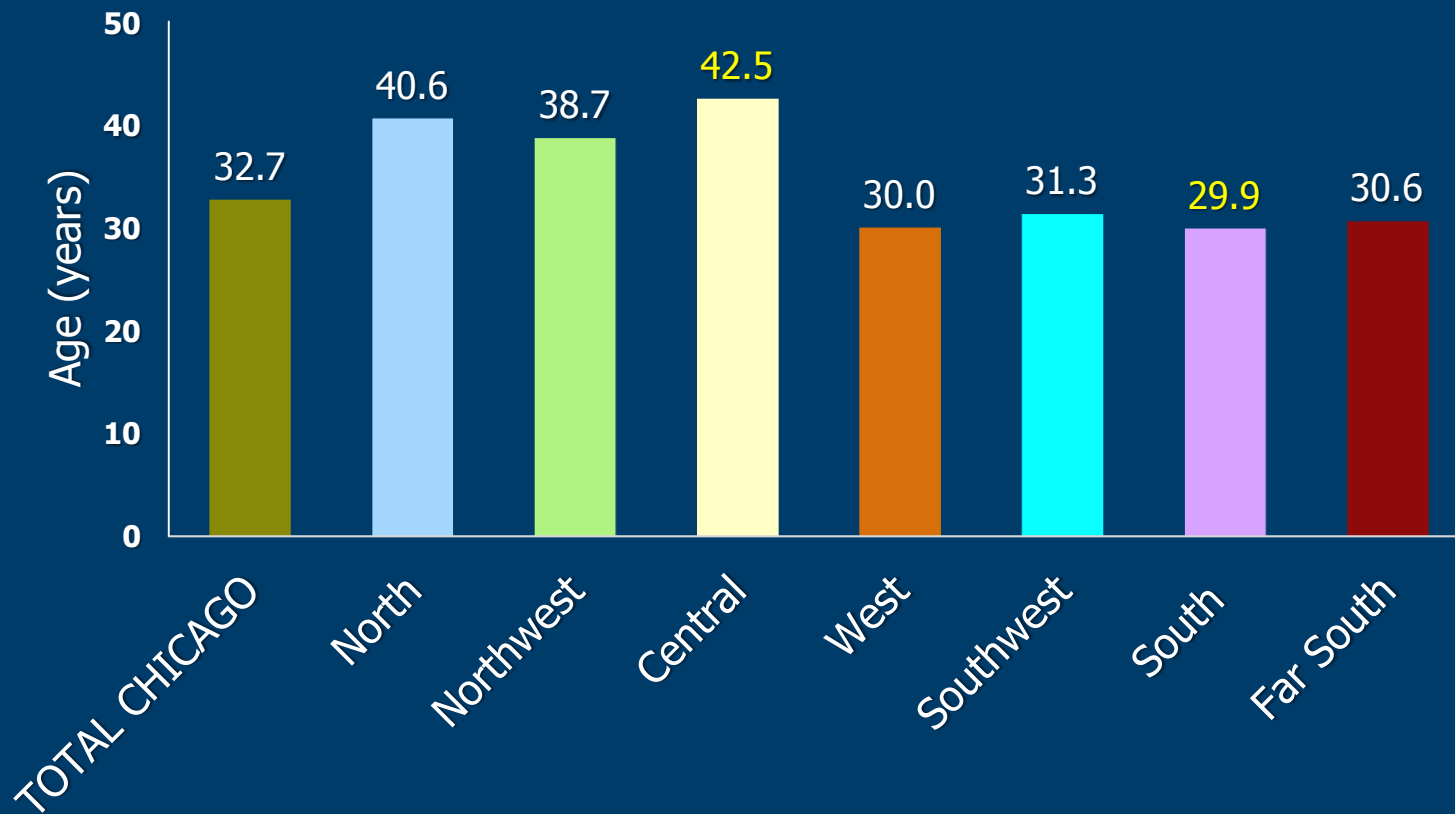


Violent death rate per 100,000: 2015



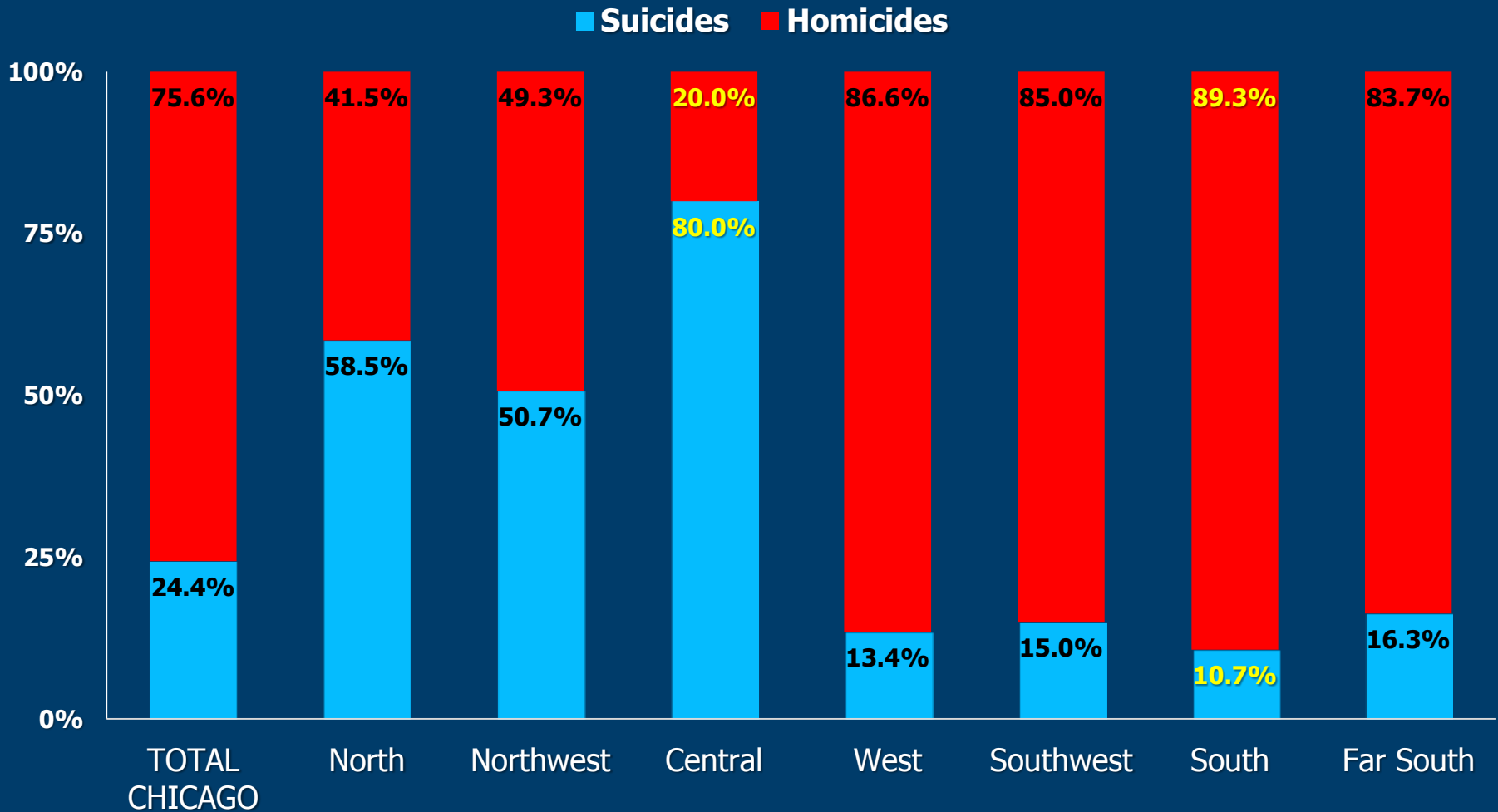
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Average age of victim of violent death, in years: 2015



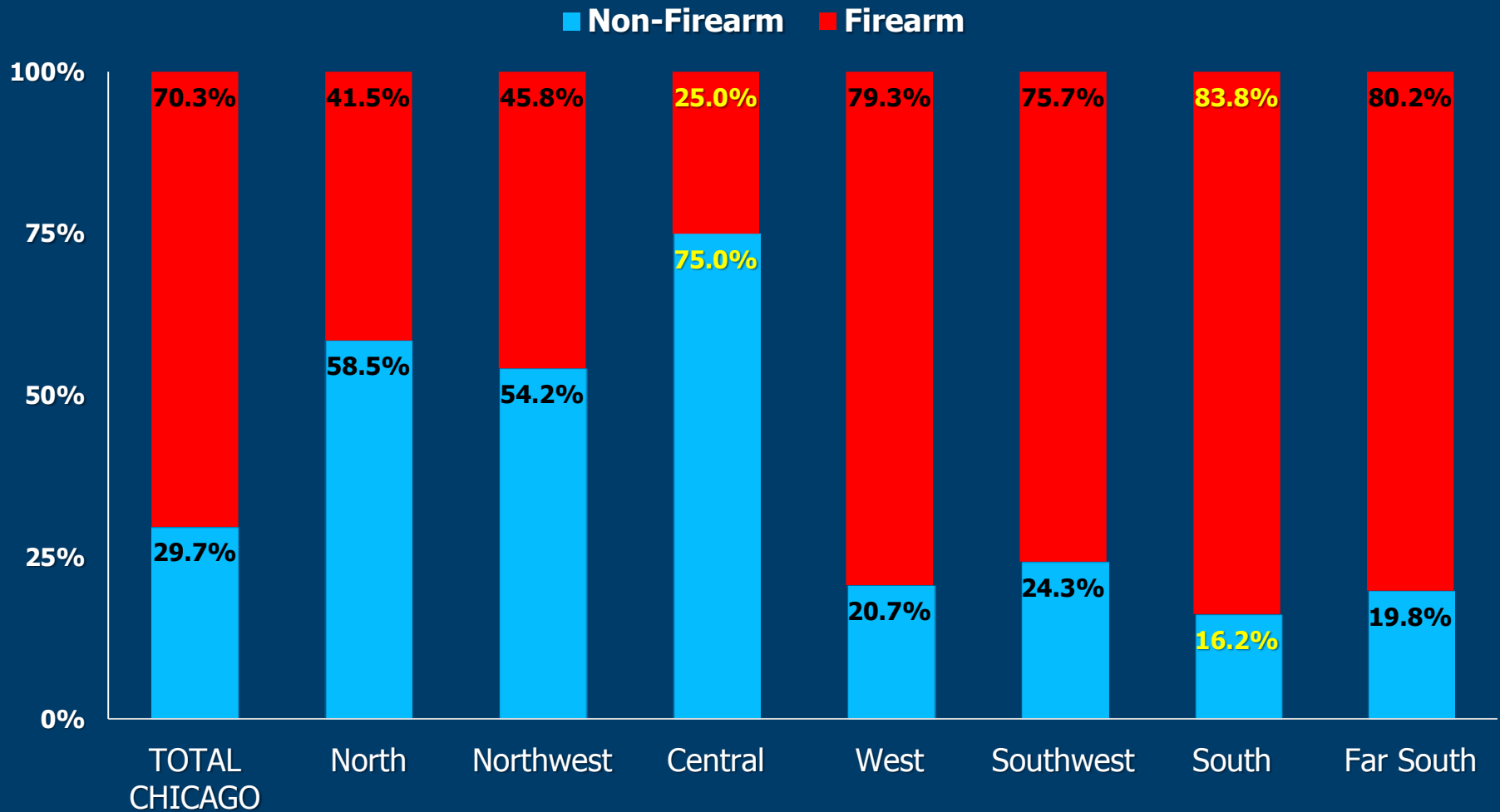
$p < 0.001$

Proportion of violent deaths which are homicides vs suicides: 2015



$p < 0.001$

Proportion of violent deaths which are due to firearms: 2015

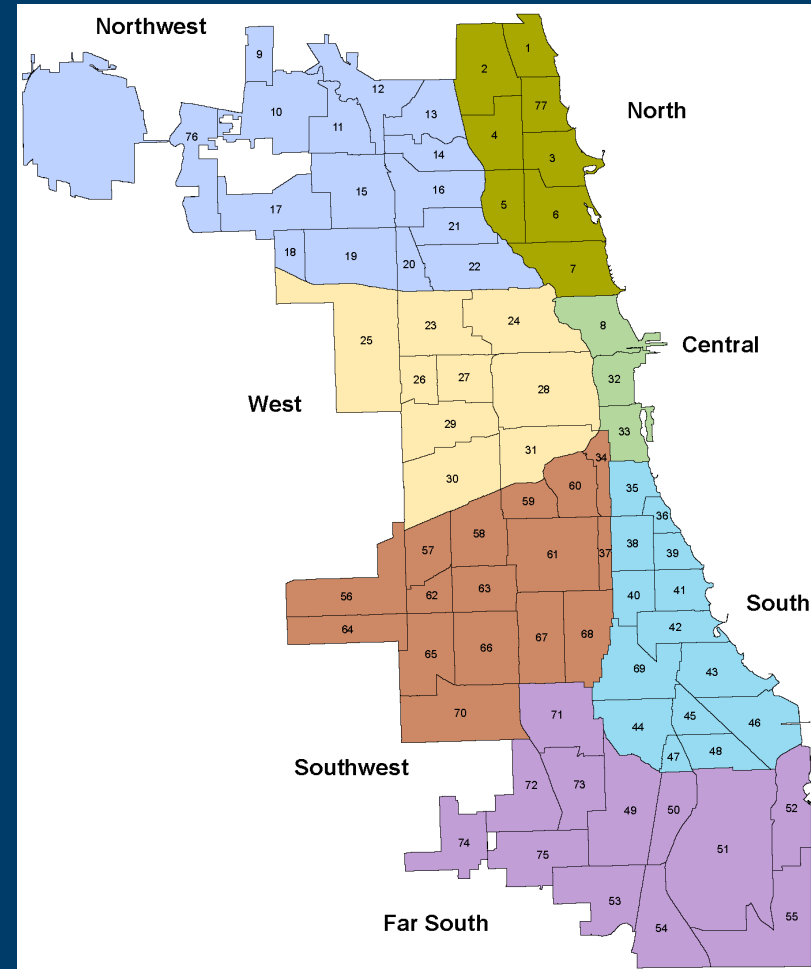
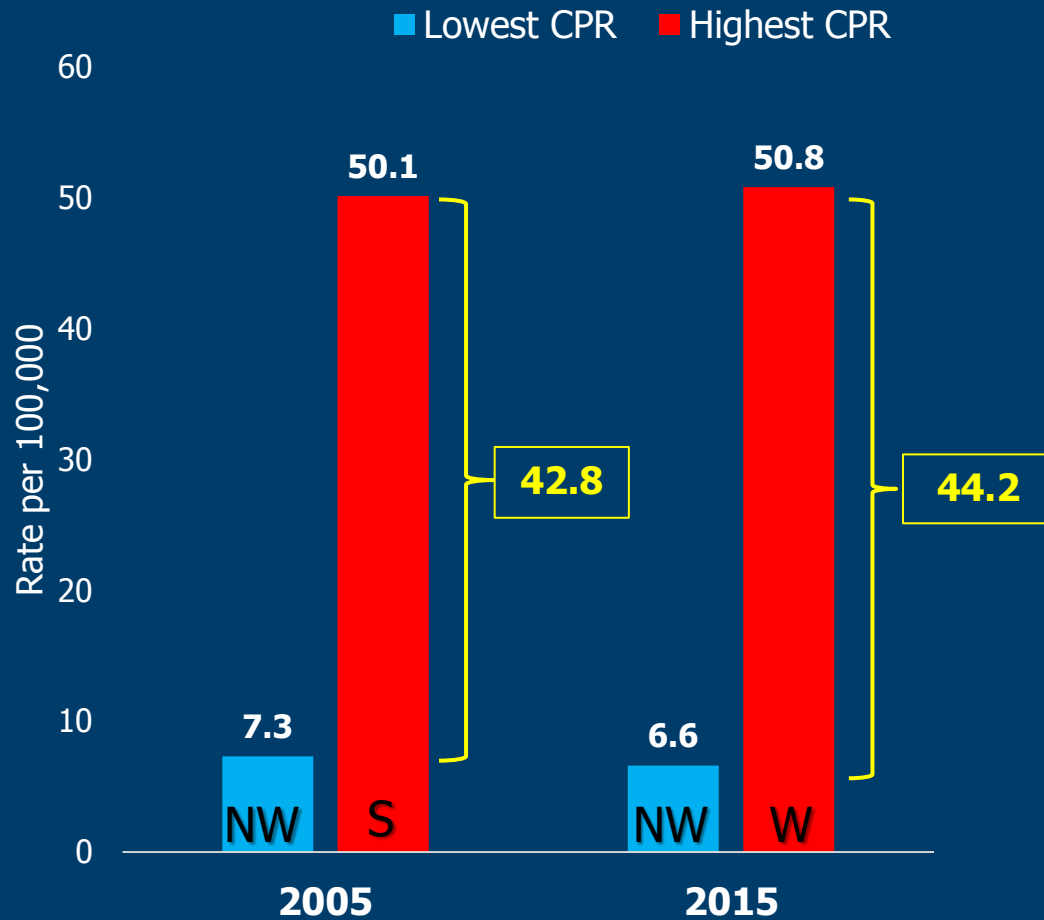


$p < 0.001$

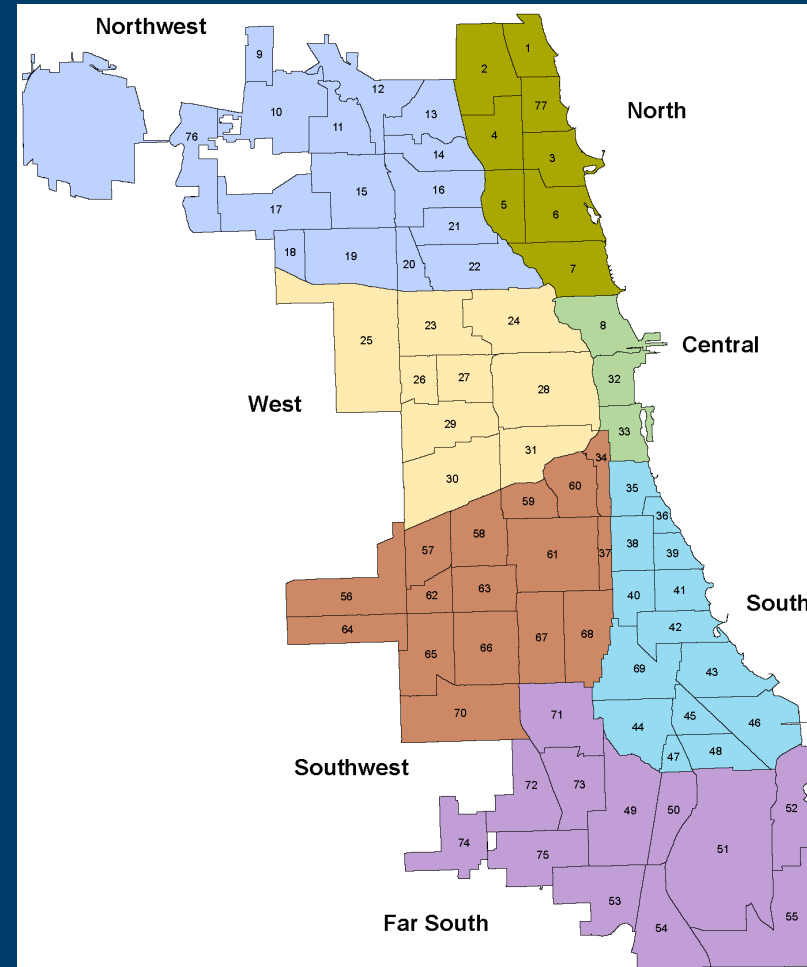
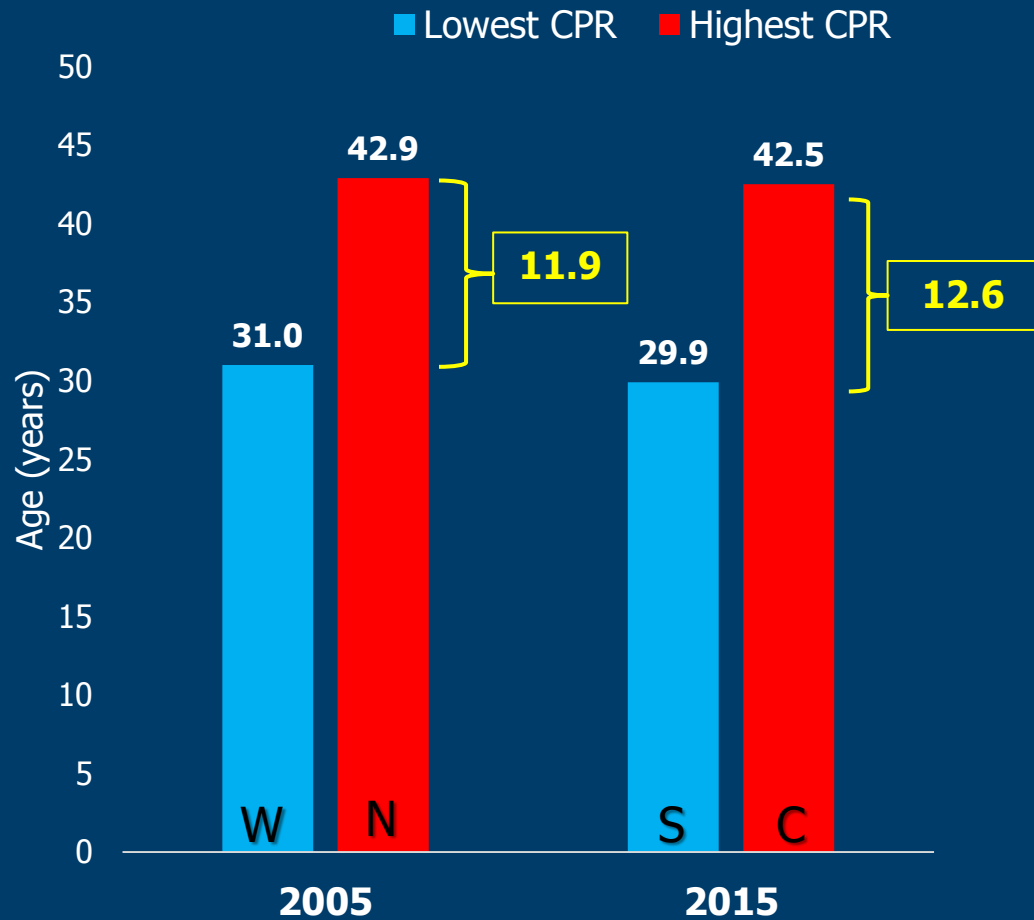
Overall in the City of Chicago: 2005 to 2015

	<u>2005</u>	<u>2015</u>
Violent death rate per 100,000	22.8	23.6
Mean age (years)	34.8	32.7
Proportion homicides	70.9%	75.6%
Proportion FA	62.4%	70.3%

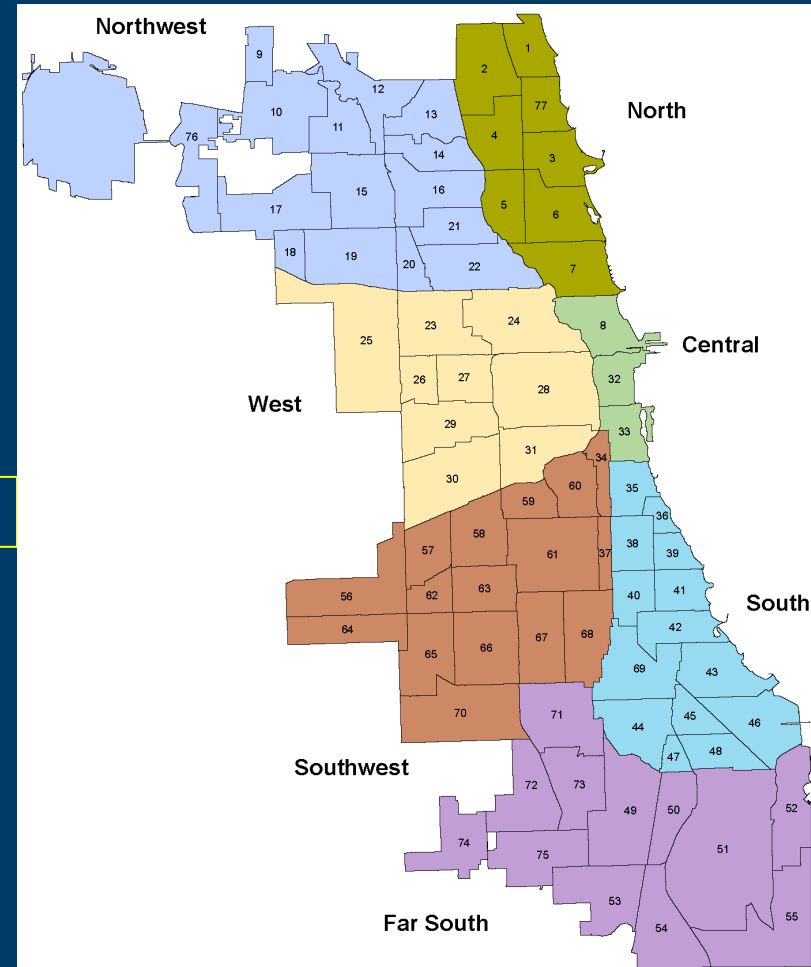
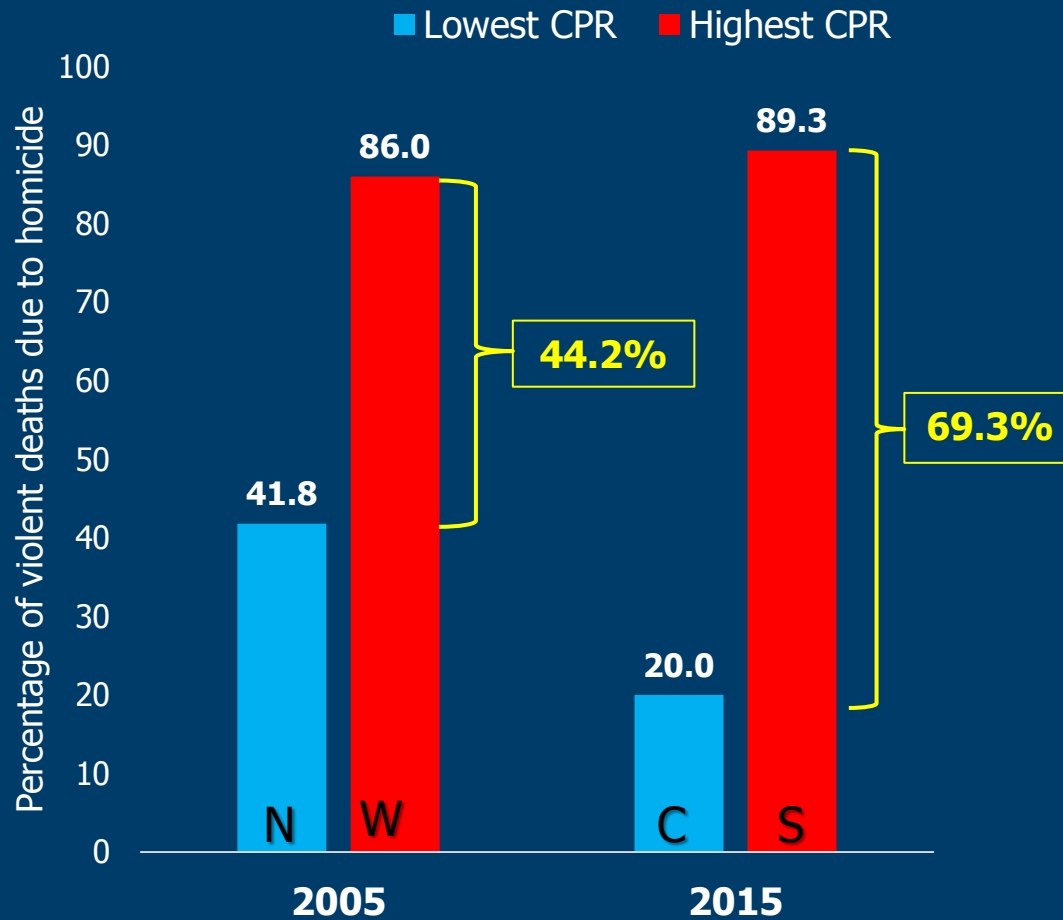
Chicago Planning Regions with highest and lowest rates of violent death: 2005 to 2015



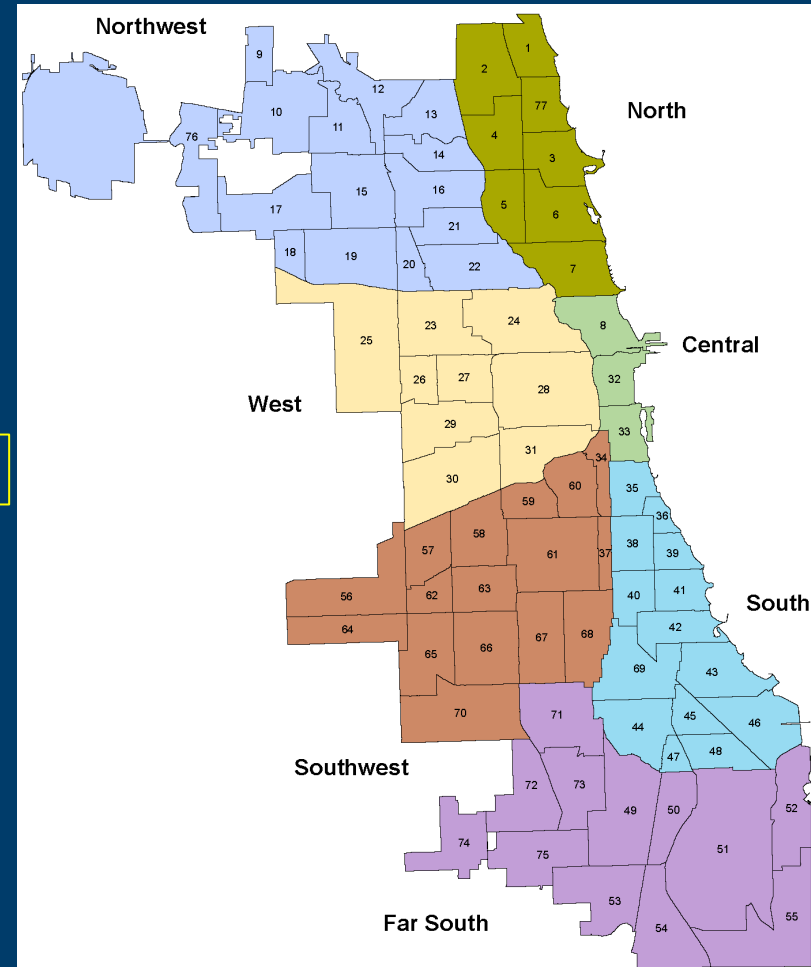
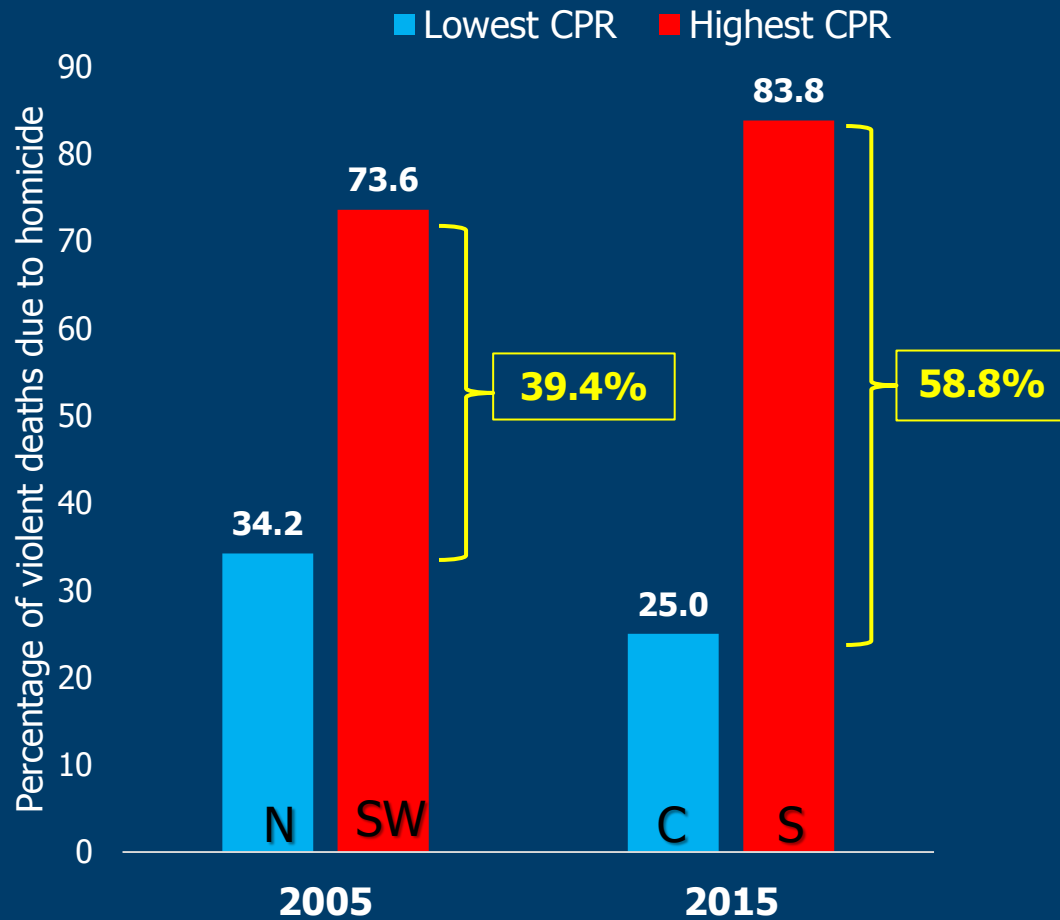
Chicago Planning Regions with highest and lowest mean ages of victims of violent death: 2005 to 2015



Chicago Planning Regions with highest and lowest proportion of violent deaths which are homicides: 2005 to 2015



Chicago Planning Regions with highest and lowest proportion of violent deaths due to firearms: 2005 to 2015



Summary

- Significant variation among Chicago Planning Regions at all three time points:
 - ❖ Violent death rates
 - ❖ Mean age of victims of violent death
 - ❖ Proportion of homicides to suicides
 - ❖ Proportion of violent deaths due to firearms

Summary

➤ From 2005 to 2015 in the City of Chicago:

- ❖ Violent death rate overall increased
- ❖ Mean age of victims of violent death decreased*
- ❖ Proportion of homicides to suicides increased**
- ❖ Proportion of violent deaths due to firearms increase

Summary

- From 2005 to 2015, the disparity among Chicago Planning Regions:
 - ❖ Violent death rate disparity - increased
 - ❖ Mean age of victims disparity - decreased
 - ❖ Proportion of homicide to suicide disparity - increased
 - ❖ Proportion of violent deaths due to firearms disparity - increased

Limitations

- This analysis looked specifically at differences by geography
- Race/Ethnicity and geography are highly correlated in the City of Chicago
- Important in terms of racial/ethnic disparities of violent death

Questions?



Luriechildrens.org/IVDRS



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