

# Youth Violence Data

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# Acknowledgements

## ■ NC-VDRS

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# Definition of Youth Violence

“The intentional use of physical force or power, threatened or actual, exerted by or against children, adolescents or young adults, ages 10–29, which results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation”

(World Report on Violence and Health WHO 2002)

# Scope of the Problem

“Youth violence is a high-visibility, high-priority concern in every sector of U.S. society. No community, whether affluent or poor, urban, suburban, or rural, is immune from its devastating effect. It has wounded entire communities and, in ways not yet fully understood, in the United States as a whole.”

Youth Violence: A Report from the Surgeon General (2001)

# Various consequences of youth violence

- Physical:
  - Injury, disability and death
- Psychological:
  - Depression, PTSD, anxiety, drug use
- Social:
  - Imprisonment, isolation, diminished educational and income opportunities

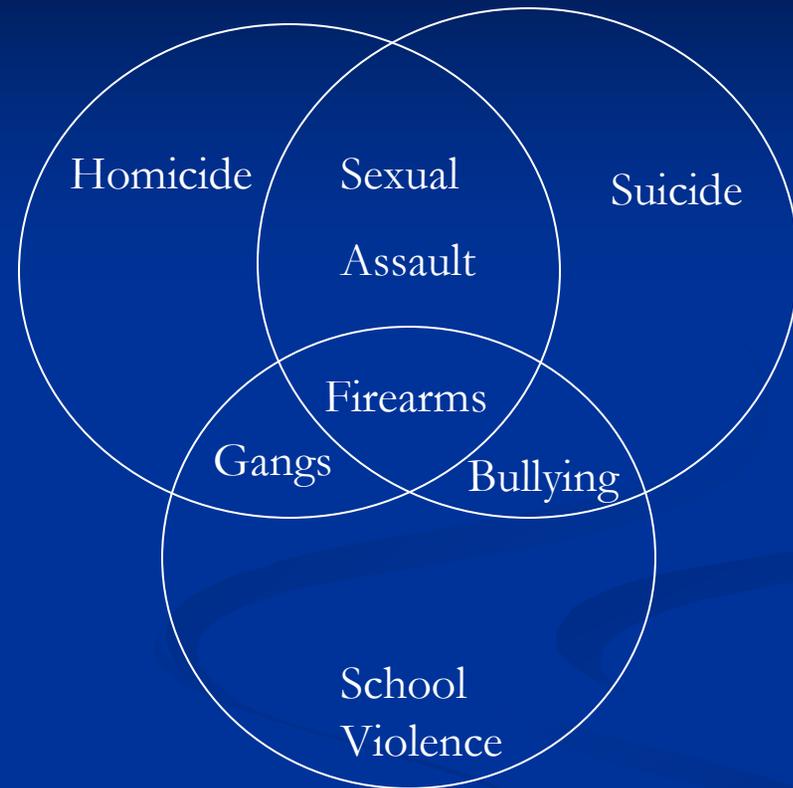
# Economic Impact of Youth Violence

- It is estimated that juvenile violence accounts for 24% of all violent crimes
- These events account for 46.6% of the total victim costs, leading to an estimated total annual cost of \$6.6 billion<sup>1</sup>

1. Miller, Fisher & Cohen. Costs of Juvenile Violence: Policy Implications. PEDIATRICS 107:1 No. 1 January 2001

# Types of Violence

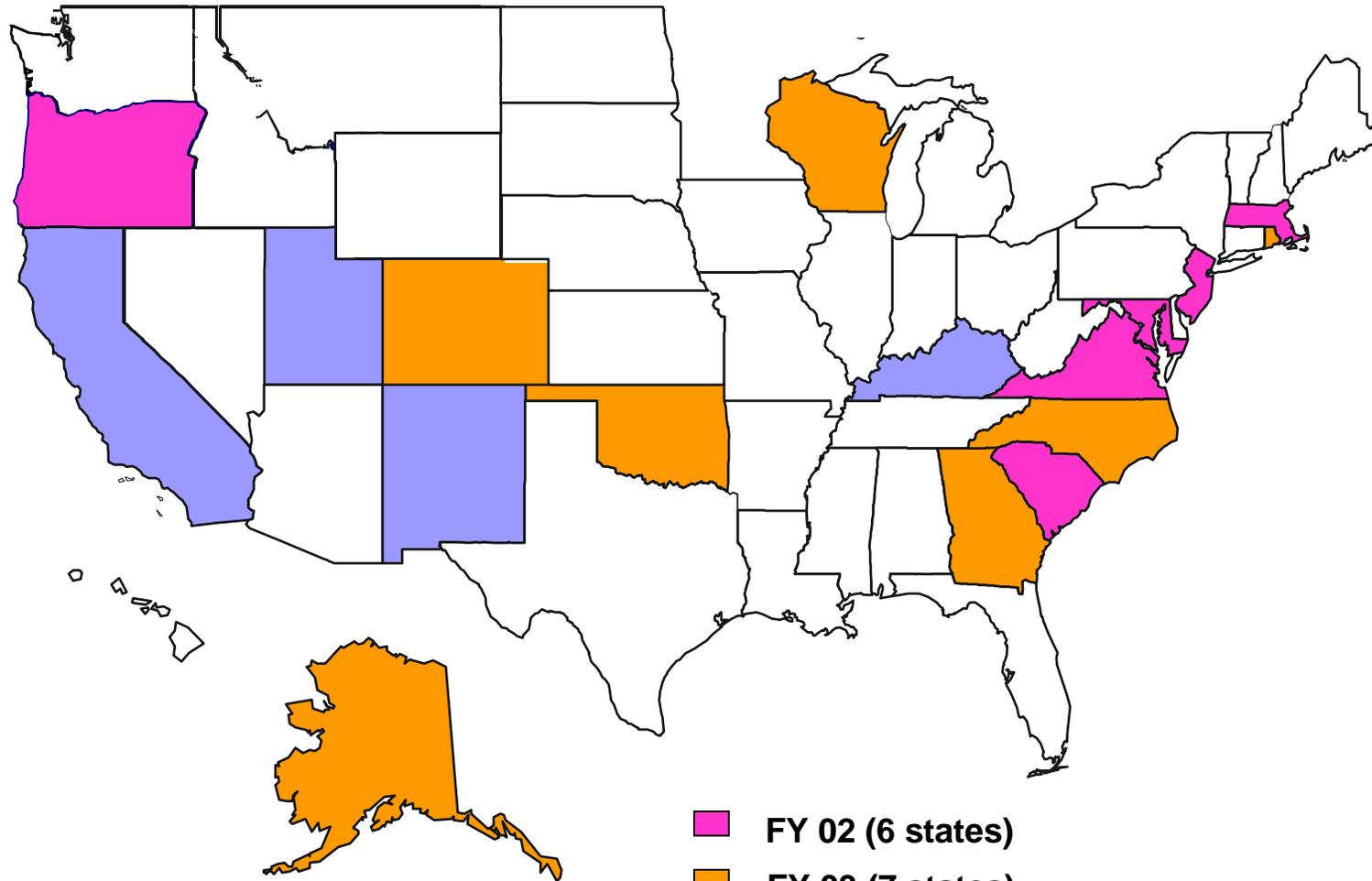
- Homicide
- Suicide
- Bullying
- Sexual Assault/rape
- Assaultive behaviors
- Gang violence
- Dating violence
- School violence
- Firearm violence
- Electronic Aggression/Cyberbullying



# Youth Violence Data Sources

- Mortality data
  - North Carolina Violent Death Reporting System
  - Child Fatality Task Force
  
- Morbidity data
  - Hospital discharge
  - ED data
  
- Annual School Violence Report
  - Department of Public Instruction
  
- Youth Risk Behavior Survey
  - Coordinated by DPI and DHHS
    - Weapon carrying
    - Assaults
    - Bullying
    - Dating violence

# National Violent Death Reporting System States in the U.S.



- FY 02 (6 states)
- FY 03 (7 states)
- FY 04 (4 states)



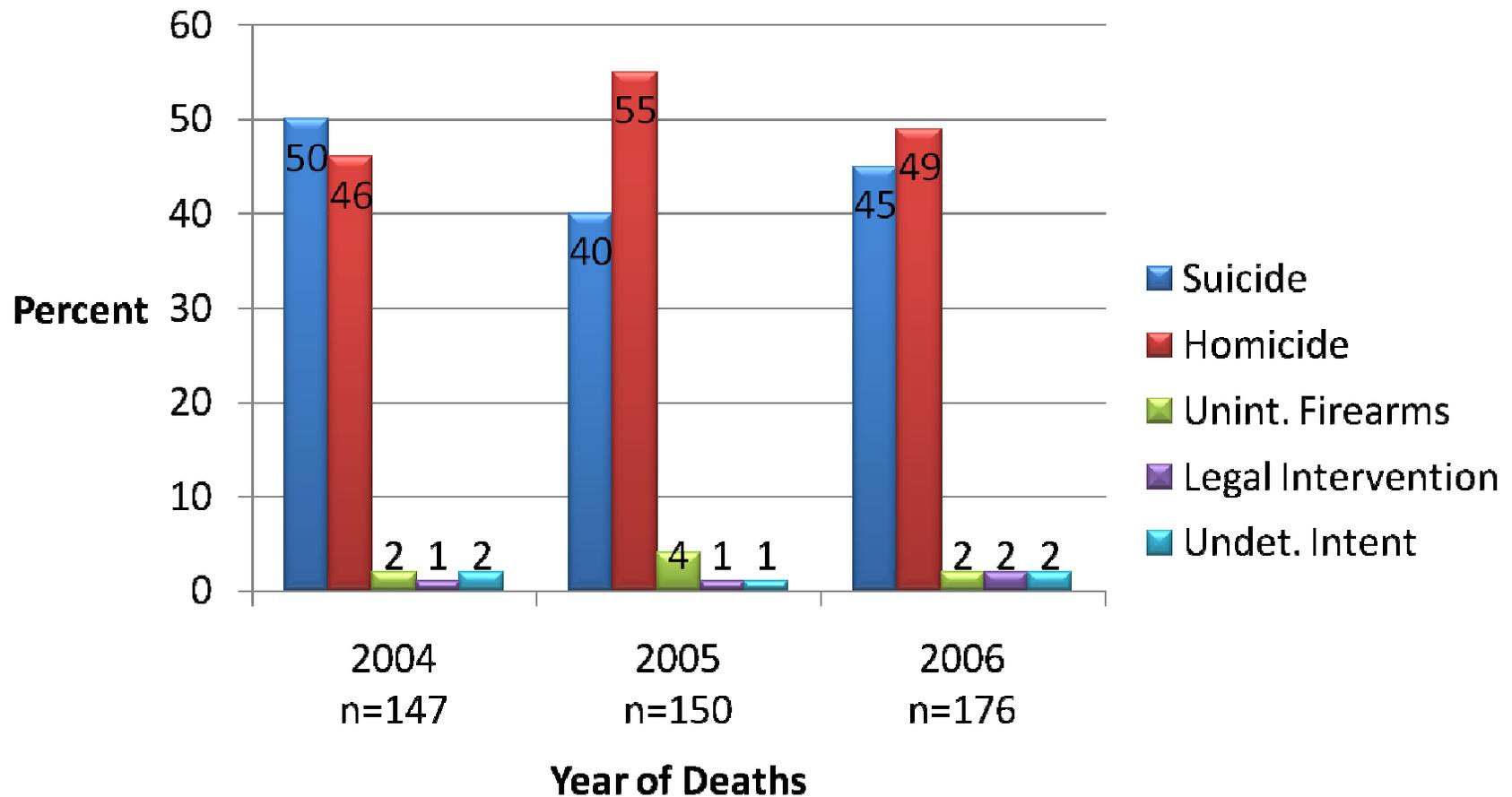
# The VDRS in N.C.

- **Run by the NC-DHHS Division of Public Health**
- **Started collecting data in January 2004, sends to CDC**
  - Death Certificate data (SCHS)
  - Medical Examiner data (OCME)
  - Law Enforcement data (SBI and local LEAs)
- **Provides timely data on deaths from violence to help develop programs to prevent violence**
- **Provides aggregate information to the public on all incidents of fatal violence**

# All Violent Deaths Among 10-20 year olds

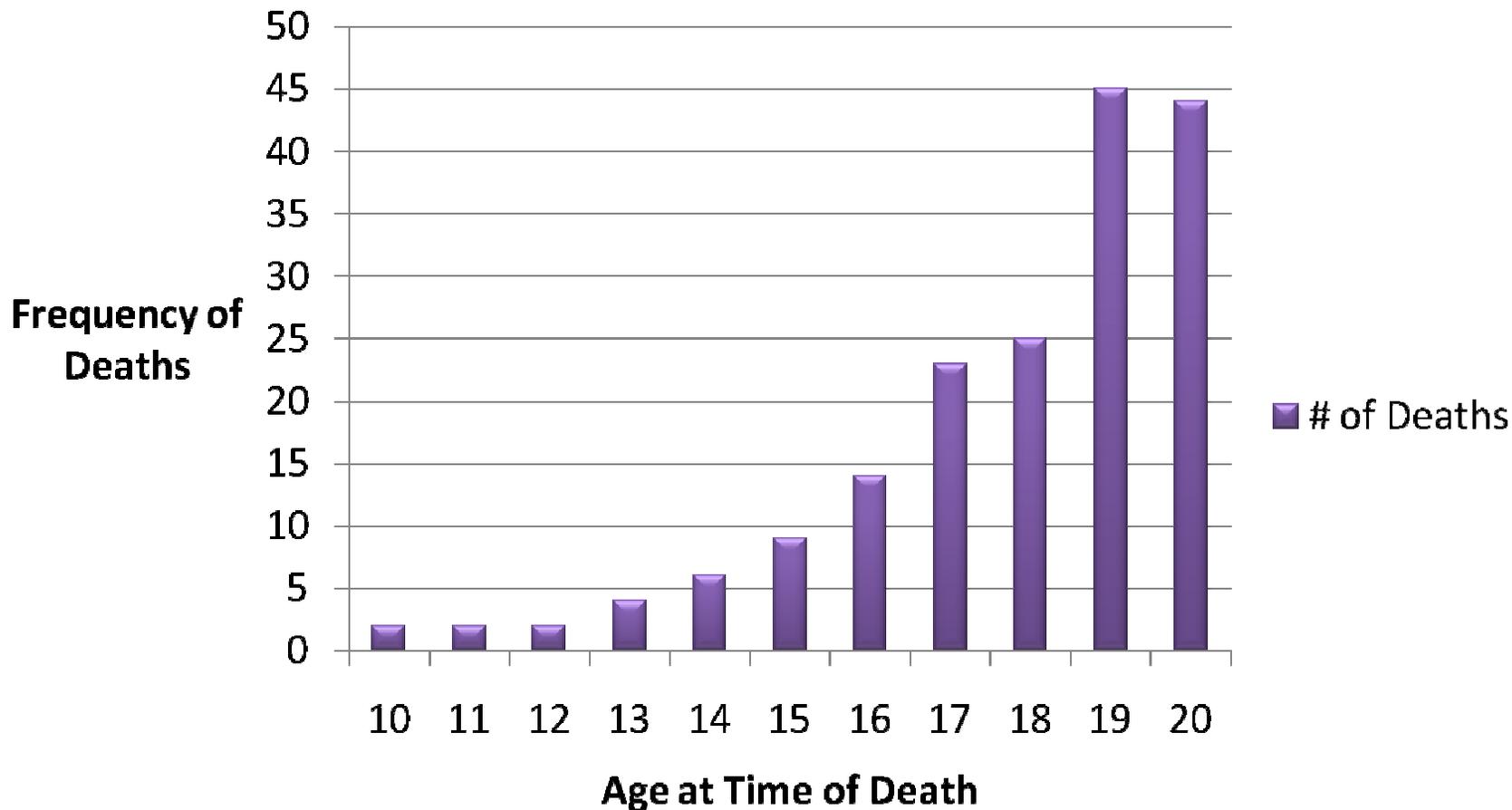
Reported in NC Violent Death Reporting System

2004-2006



# Overall Mortality Data

All Violent Deaths for NC Residents aged 10-20 years  
By Age at Time of Death - 2006

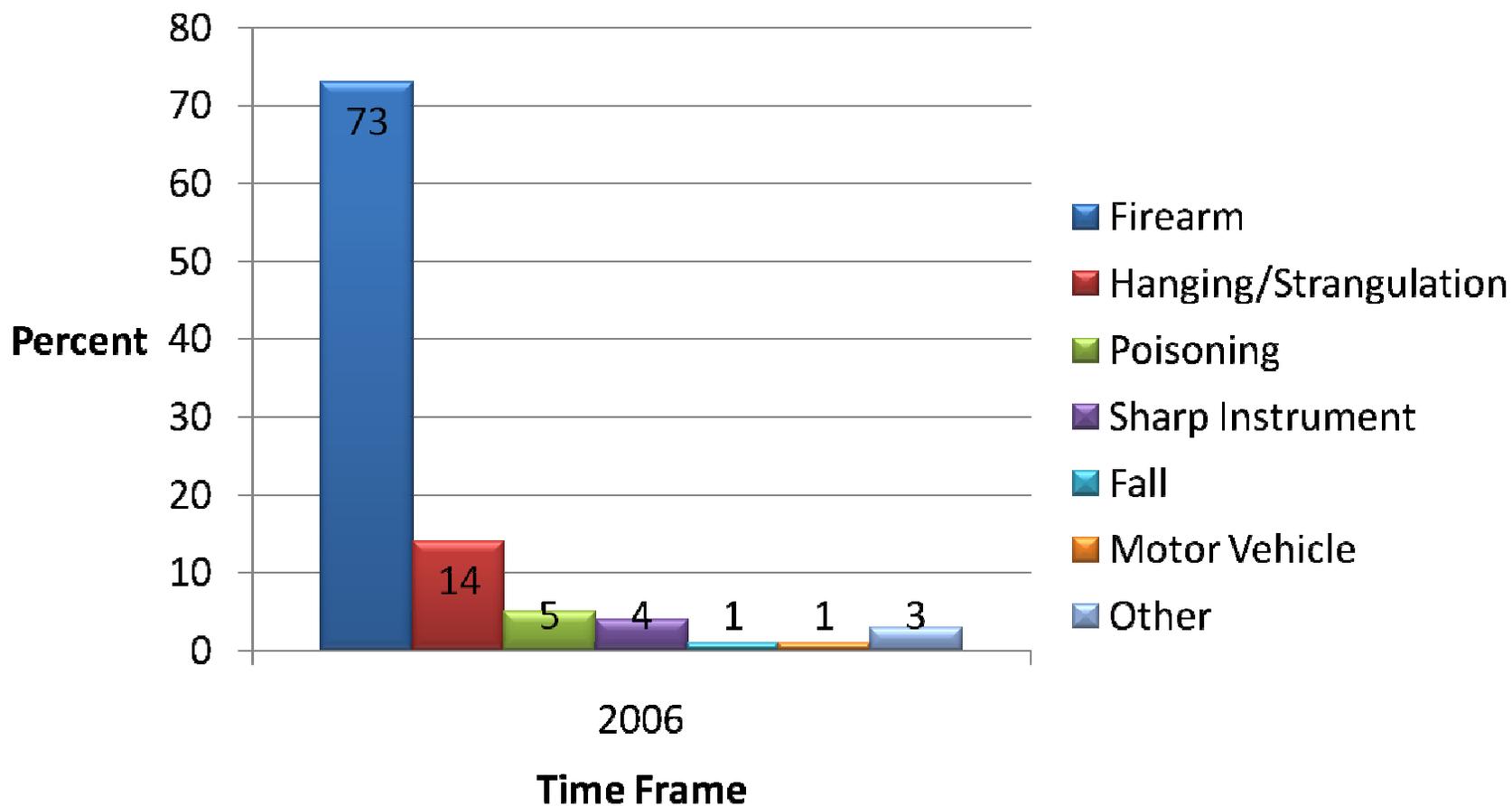


Source: NC-VDRS

# Overall Mortality Data

All Violent Deaths for NC Residents aged 10-20 years

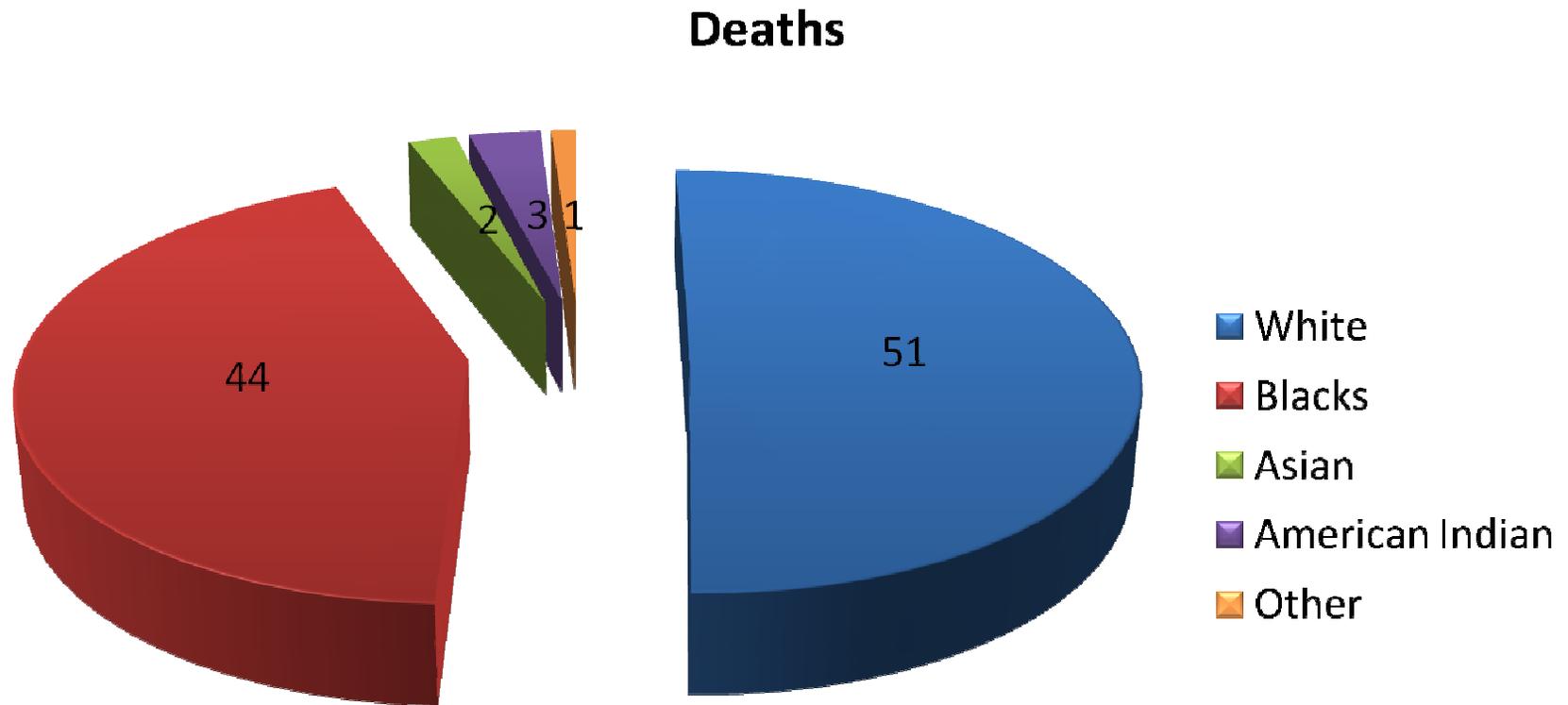
By Type of Weapon - 2006



Source: NC-VDRS

# Overall Mortality Data

Percent Violent Deaths for NC Residents aged 10-20 years  
By Race, 2006 (n=176)



Source: NC -VDRS

# Homicide Data

Deaths for NC Residents aged 10-20 years  
2006

## Homicide: By Sex by Age

Sex	Age Group		Total
	Ages 10-15	Ages 16-20	
Male	6 7%	66 77%	72 84%
Female	1 1%	13 15%	14 16%
Total	7 8%	79 92%	86 100%

Source: NC-VDRS

# Homicide Data

Deaths for NC Residents aged 10-20 years  
2006

## Homicide: by Race by Sex

Race Group	Sex		Total
	Male	Female	
Asian	1 1%	0 0%	1 1%
Black	52 60%	8 9%	60 70%
American Indian	3 3%	0.0116 1%	4 5%
Other	1 1%	0 0%	1 1%
White	15 17%	5 6%	20 23%
<b>Total</b>	<b>72</b> <b>84%</b>	<b>14</b> <b>16%</b>	<b>86</b> <b>100%</b>

Note: 5% of residents reported Hispanic ethnicity

# Homicides by Circumstances of Death

All Races, Both Sexes for NC Residents aged 10-20 years

NC-VDRS (2006)

<b>Circumstance</b>	<b>Death Counts</b>	<b>Percentage</b>
Other Argument, Abuse, Conflict	38	57%
Precipitated by another Crime	24	36%
Crime in Progress	20	30%
Person Used Weapon	12	18%
Drug Involvement	9	13%
Intimate Partner Violence Related	8	12%
Gang Related	5	7%
Justifiable Self Defense/Law Enforcement	3	4%
Victim was a Bystander	3	4%
Argument Over Money/Property	2	3%
Jealousy (Lovers Triangle)	1	1%
<b>All Persons with Known Circumstances</b>	<b>67</b>	<b>100%</b>

**Note:** Victims can have one or more circumstances; therefore, subcategories may not sum to all known circumstances.

**Data Sources:** National Violent Death Reporting Systems (NVDRS) for Number of Deaths, Bureau of Census for Population Estimates.

**Produced by:** Office of Statistics and Programming, National Center for Injury Prevention and Control, CDC

## Homicides by Place of Injury

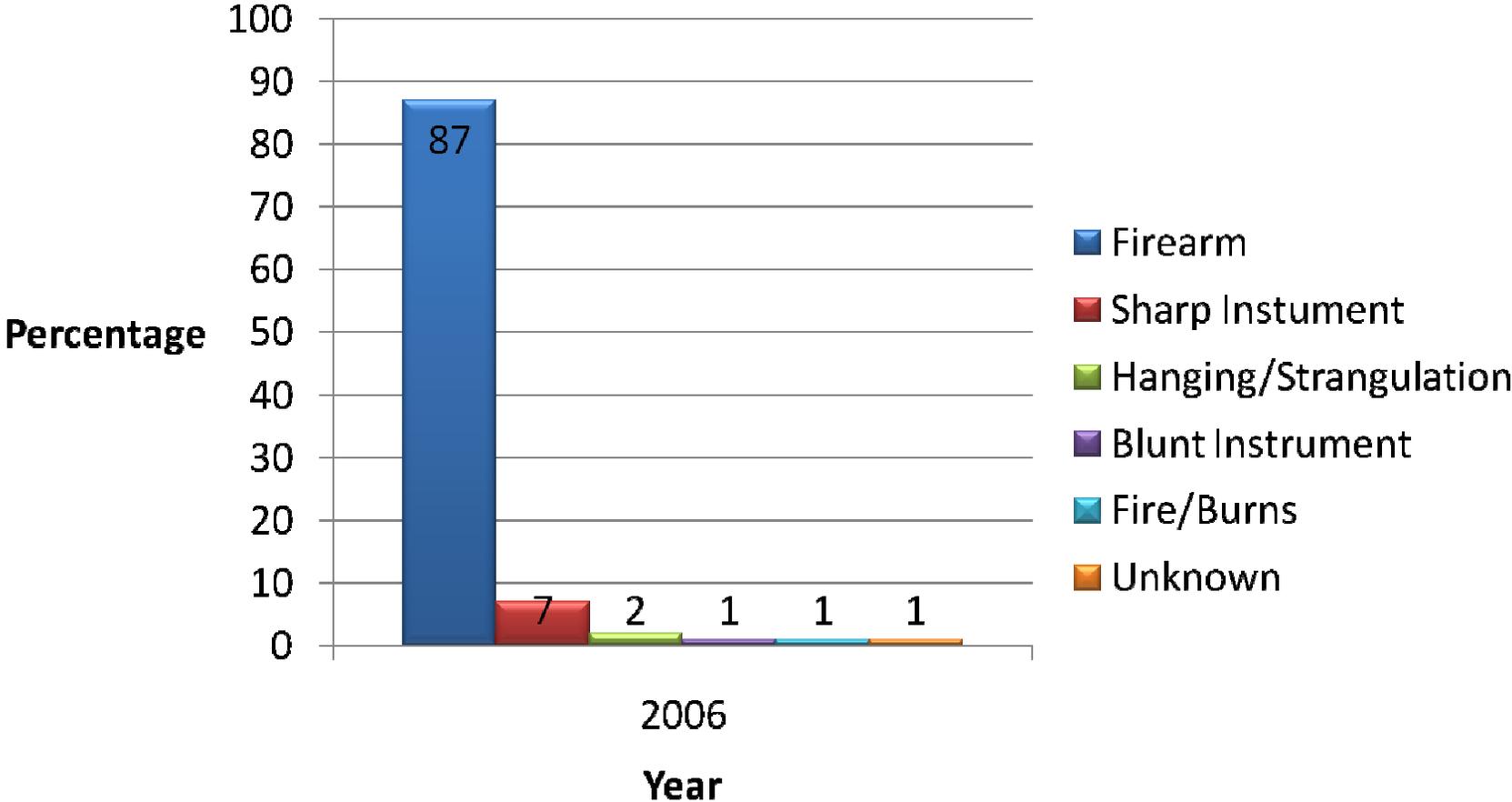
All Races, Both Sexes for NC Residents aged 10-20 years  
NVDRS (2006)

Place of Injury	Death Counts	Percentage
Natural Area/Countryside	4	5%
Commercial Area (non-recreational), Including medical service area, farm, industrial, or construction area	10	12%
Transport Area: Other, including inside Motor Vehicle	11	13%
Transport Area: Public Highway, Street, or Road	20	24%
House, Apartment, including Driveway, Porch, Yard	37	45%
<b>ALL</b>	<b>82</b>	<b>100%</b>

Data Source: National Violent Death Reporting System (NVDRS) for Numbers of Deaths, Bureau of Census for Population Estimates.

# Homicide Deaths for NC Residents aged 10-20 years

By Type of Weapon - 2006



Source: NC-VDRS

# Child Fatality Task Force Homicide Data 10-17 year olds, 1999-2007

- 258 homicides (average 29 annually)
- 83% killed by firearms
- 77% victims were males
- 71% handguns
- 67% African-American
- Unable to easily determine:
  - Storage patterns
  - Legal weapon
  - Ownership by felons
  - Stolen



# Morbidity and Mortality Data

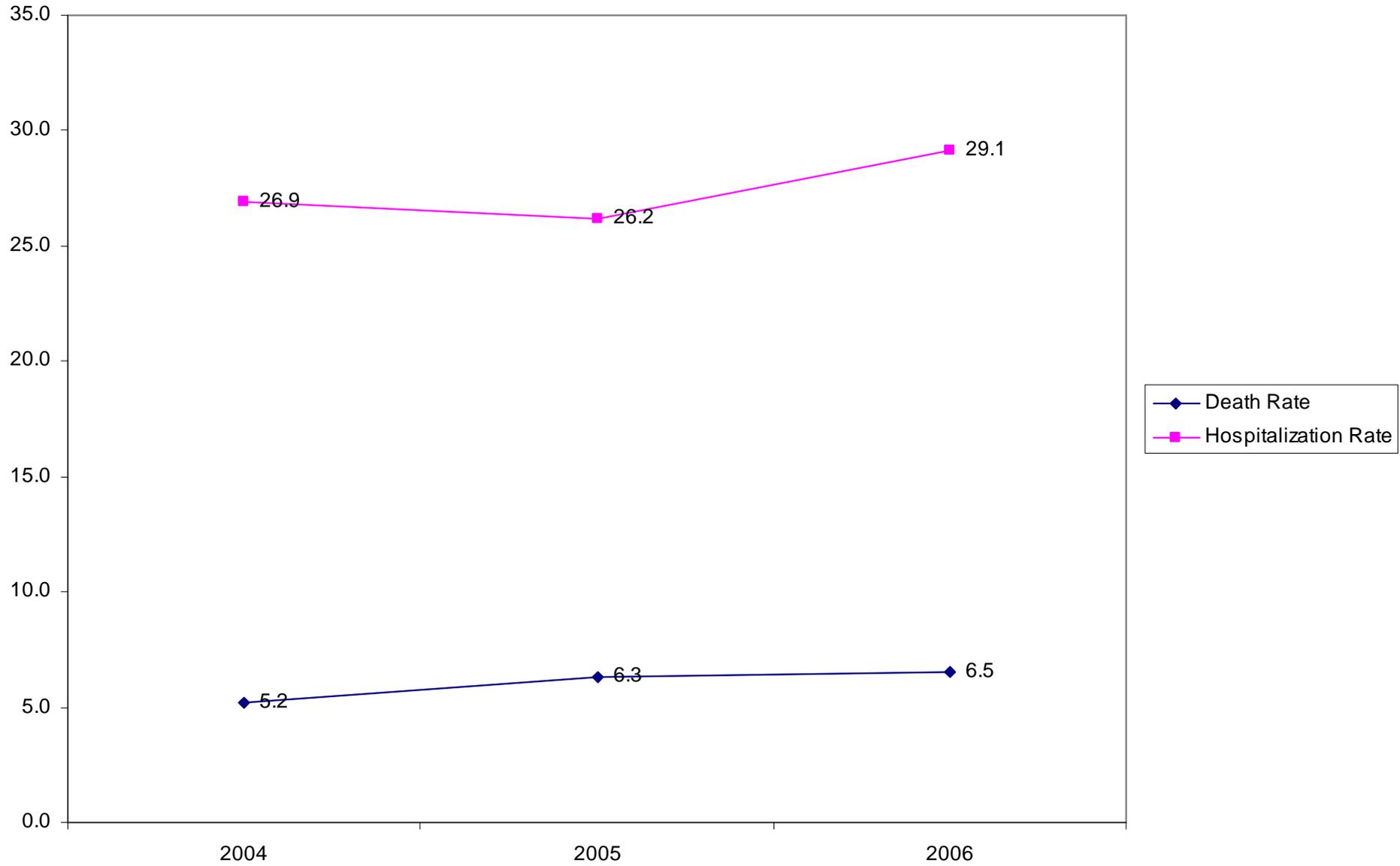
Time of Admissions to ED with all Dispositions including death for NC  
Adolescents aged 10-20 years  
2007

## Time of Admission

<b>Intent</b>	<b>Day (10:00AM - 9:59PM)</b>	<b>Night (10:00pm - 9:59AM)</b>	<b>Total</b>
Assault	3981	3019	7000
Self-Inflicted	1223	815	2038
<b>Total</b>	<b>5204</b>	<b>3834</b>	<b>9038</b>

Source: NC-VDRS

# Rates for homicide deaths and hospitalization assaults, aged 10-20, 2004-2006



NC Violent Death Reporting System- 2004-2006, NC Hospital Discharge file 2004-2006  
Injury Epidemiology & Surveillance Unit, Injury and Violence Prevention Branch, Division of Public Health

# Morbidity Data

Violent Injuries for NC Residents aged 10-20 years  
ED Dataset (2007)

## Total Assault and Self-Inflicted Injuries

SEX	AGE GROUP		
	10-15	16-20	10-20 (Total)
Female	1,074	2,846	3,920
Male	1,369	3,909	5,278
<b>Total</b>	<b>2,443</b>	<b>6,755</b>	<b>9,198</b>

## Assault Injuries

SEX	AGE GROUP		
	10-15	16-20	10-20 (Total)
Female	632	1,994	2,626
Male	1,175	3,311	4,486
<b>Total</b>	<b>1,807</b>	<b>5,305</b>	<b>7,112</b>

Source: NC-DHHS

# Morbidity Data

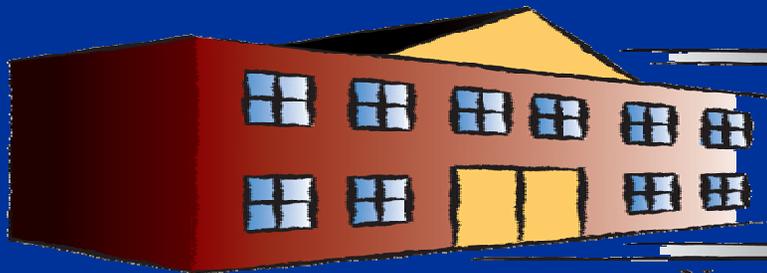
E-codes associated with Diagnosis in Hospital Charges for NC Adolescents  
aged 10-20 years  
2005-2006

Encounters by E-Codes					
Primary	ED	Inpatient	Ambulatory Surgery	All	ICD-9
NO VIOLENCE E-CODE	141,832	97,694	79,795	319,321	Not a E95* or E96* code
Fight	2,360	156	217	2,733	E960
Acid	2	1	0	3	E961
Poison	2	1	0	3	E962
Hanging	4	0	0	4	E963
Drown	1	0	0	1	E964
Guns	169	278	12	459	E965
Sharp	741	127	20	888	E966
Abuse	102	19	10	131	E967
Other	1,598	135	101	1,834	E968
Late	17	45	15	77	E969
<b>Total</b>	<b>146,828</b>	<b>98,456</b>	<b>80,170</b>	<b>325,454</b>	

Source: Sheps Center – Claims data to Solucint

# School Violence

“Behavior that violates educational mission or climate of respect or jeopardizes the schools’ intents to be free of aggression against persons or property, drugs, weapons, and disorder.”



**Center for the  
Prevention of  
School Violence**

North Carolina Department of Juvenile Justice  
and Delinquency Prevention

## Number and Rate of the 17 Reportable Acts of Crime and Violence, 2002-2007

Reporting Year	Total Acts	Rate Per 1000 Students
2002-03	8,548	6.58
2003-04	9,800	7.37
2004-05	10,107	7.49
2005-06	10,959	7.90
2006-07	11,013	7.77

Source: North Carolina Department of Public Instruction

## 17 Reportable Offenses of Crime and Violence, 2005-2006 and 2006-2007 School Years

Reportable Acts	Number of Acts 2005-06	Number of Acts 2006-07
Possession of controlled substance in violation of law	4,427	4,339
Possession of a weapon excluding firearms and powerful explosives	3,845	3,925
Possession of alcoholic beverage	1,053	1,081
Bomb threat	176	175
Possession of a firearm or powerful explosives	134	139
Burning of school building	20	20
<b>Assault on school personnel not resulting in serious injury</b>	<b>862</b>	<b>889</b>
<b>Assault resulting in serious injury</b>	<b>128</b>	<b>122</b>
<b>Sexual assault not involving rape or sexual offense</b>	<b>89</b>	<b>97</b>
<b>Assault involving use of a weapon</b>	<b>111</b>	<b>94</b>
<b>Sexual offense</b>	<b>62</b>	<b>78</b>
<b>Robbery without a dangerous weapon</b>	<b>42</b>	<b>44</b>
<b>Robbery with a dangerous weapon</b>	<b>4</b>	<b>5</b>
<b>Kidnapping</b>	<b>2</b>	<b>3</b>
<b>Rape</b>	<b>1</b>	<b>2</b>
<b>Death by other than natural causes</b>	<b>0</b>	<b>0</b>
<b>Taking indecent liberties with a minor</b>	<b>3</b>	<b>0</b>
<b>TOTAL</b>	<b>10,959</b>	<b>11,013</b>

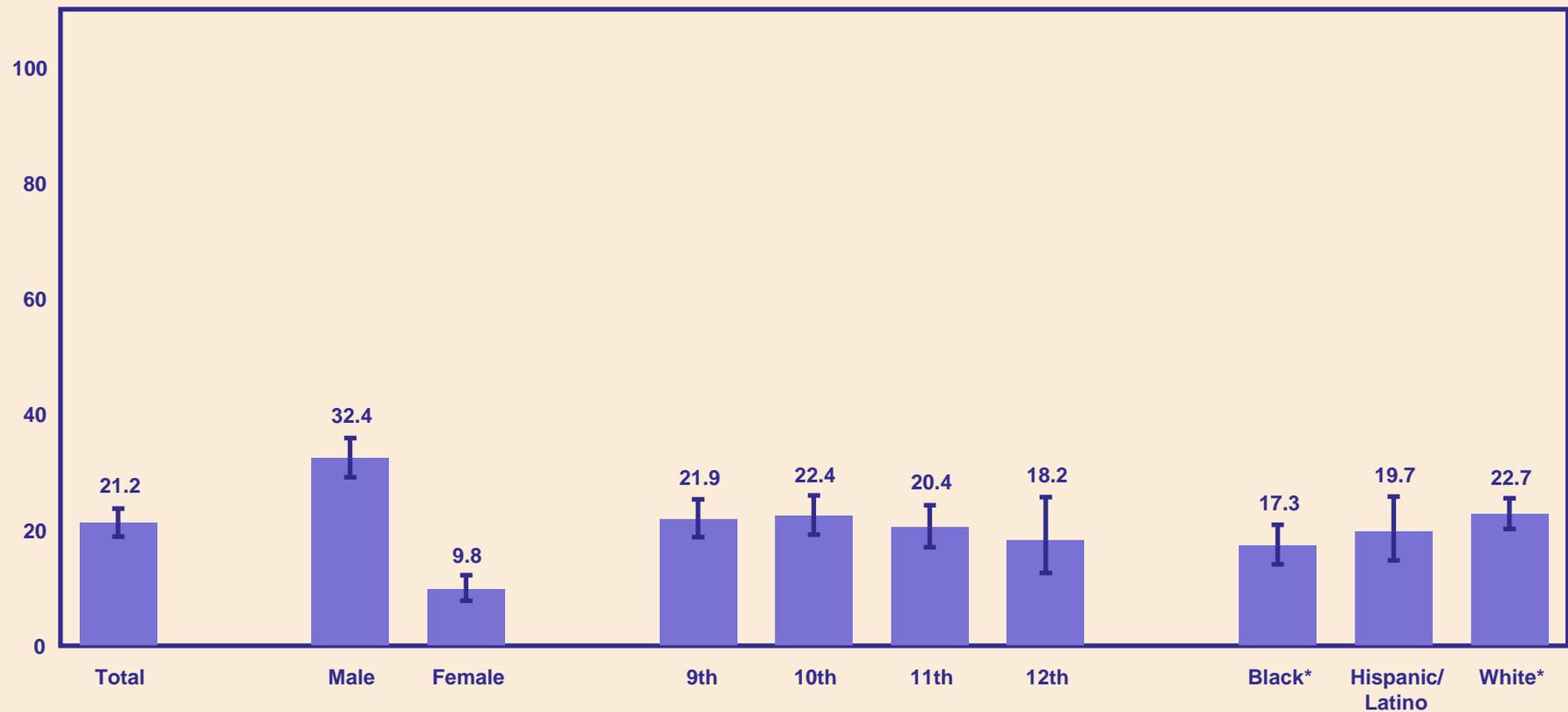
## 2007 YRBS Violence-related Risk Behaviors Reported Among High School Students in North Carolina and the U.S.

Self-reported Violence-related Risk Behaviors	NC Students %	U.S. Students %
Ever carried a weapon such as a gun, knife, or club	21.2 ↑	18.0
Carried a weapon such as a gun, knife, or club on school property on at least 1 day	6.8 ↑	5.9
Threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the 12 months before the survey	6.6	7.8
In a physical fight on school property one or more times during the 12 months before the survey	10.4	12.4
Did not go to school on at least 1 because they felt they would be unsafe at school or on their way to or from school	7.0 ↑	5.5
Had property deliberately stolen or damaged on school property	26.9	27.1
Were offered, sold or given an illegal drug by someone on school property during the 12 months before the survey	28.5 ↑	22.3

# 2007 Youth Risk Behavior Survey Results

## North Carolina High School Survey

Percentage of students who carried a weapon such as a gun, knife, or club on one or more of the past 30 days



QN12 - Weighted Data  
\*Non-Hispanic.

## 2007 YRBS School Violence-related Behaviors Reported Among North Carolina Middle School Students Compared with High School Students

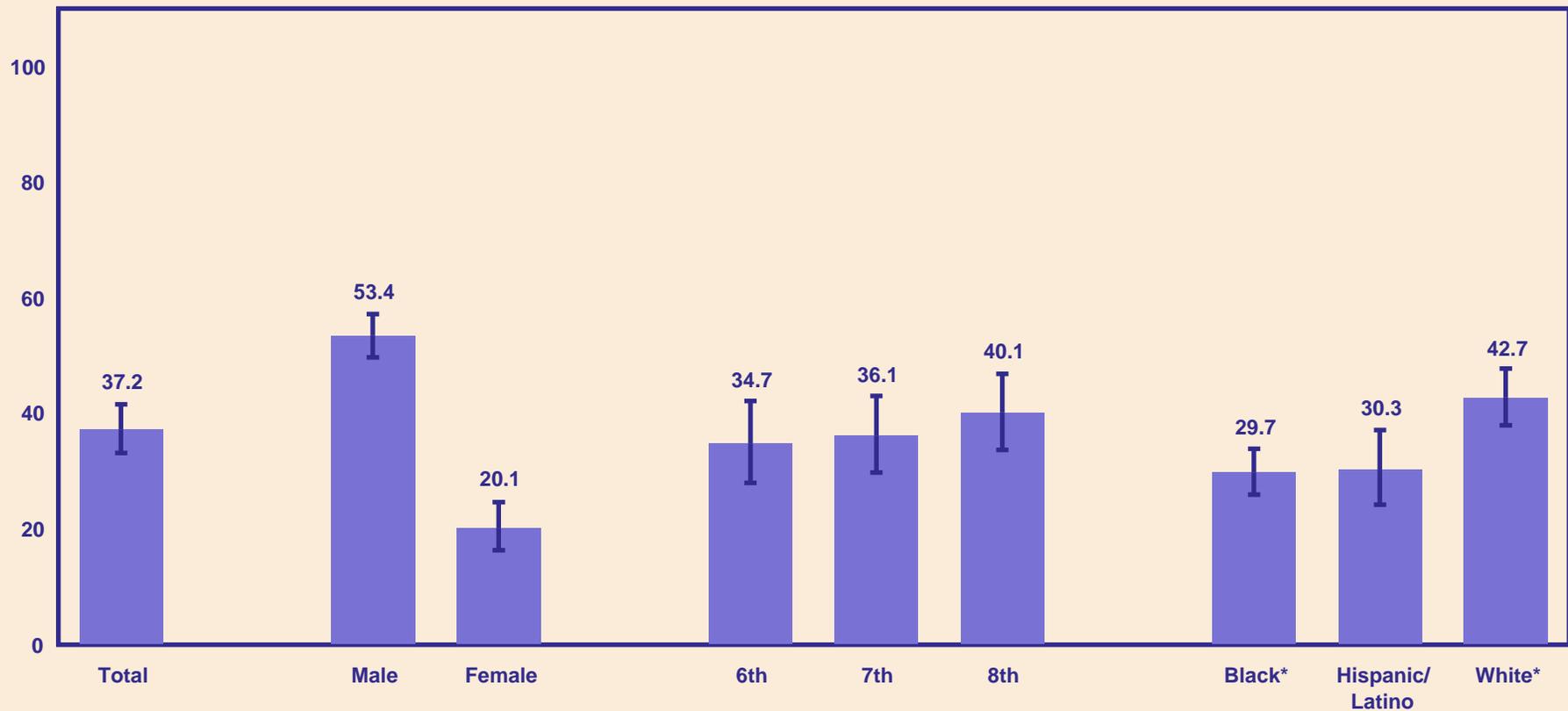
Self-reported Violence-related Risk Behavior	NC Middle School Students %	NC High School Students %
Ever carried a weapon such as a gun, knife, or club	37.2 ↑	21.2
Threatened or injured with a weapon such as a gun, knife, or club on school property one or more times during the 12 months before the survey	7.6 ↑	6.6
Ever been in a physical fight one or more times during the 12 months before the survey*	56.5 ↑	30.1
Did not go to school on at least 1 day during the 30 days before the survey because they felt they would be unsafe at school or on their way to or from school	5.7	7.9
Had property deliberately stolen or damaged on school property	27.8 ↑	26.9
Were offered, sold or given an illegal drug by someone on school property during the 12 months before the survey	11.4	28.5
Percentage of students who strongly agree or agree that illegal drugs are a problem at their school	32.1	N/A

\* Note: Middle school students were not asked about weapon carrying or physical fighting on school property.

# 2007 Youth Risk Behavior Survey Results

## North Carolina Middle School Survey

Percentage of students who ever carried a weapon, such as a gun, knife, or club

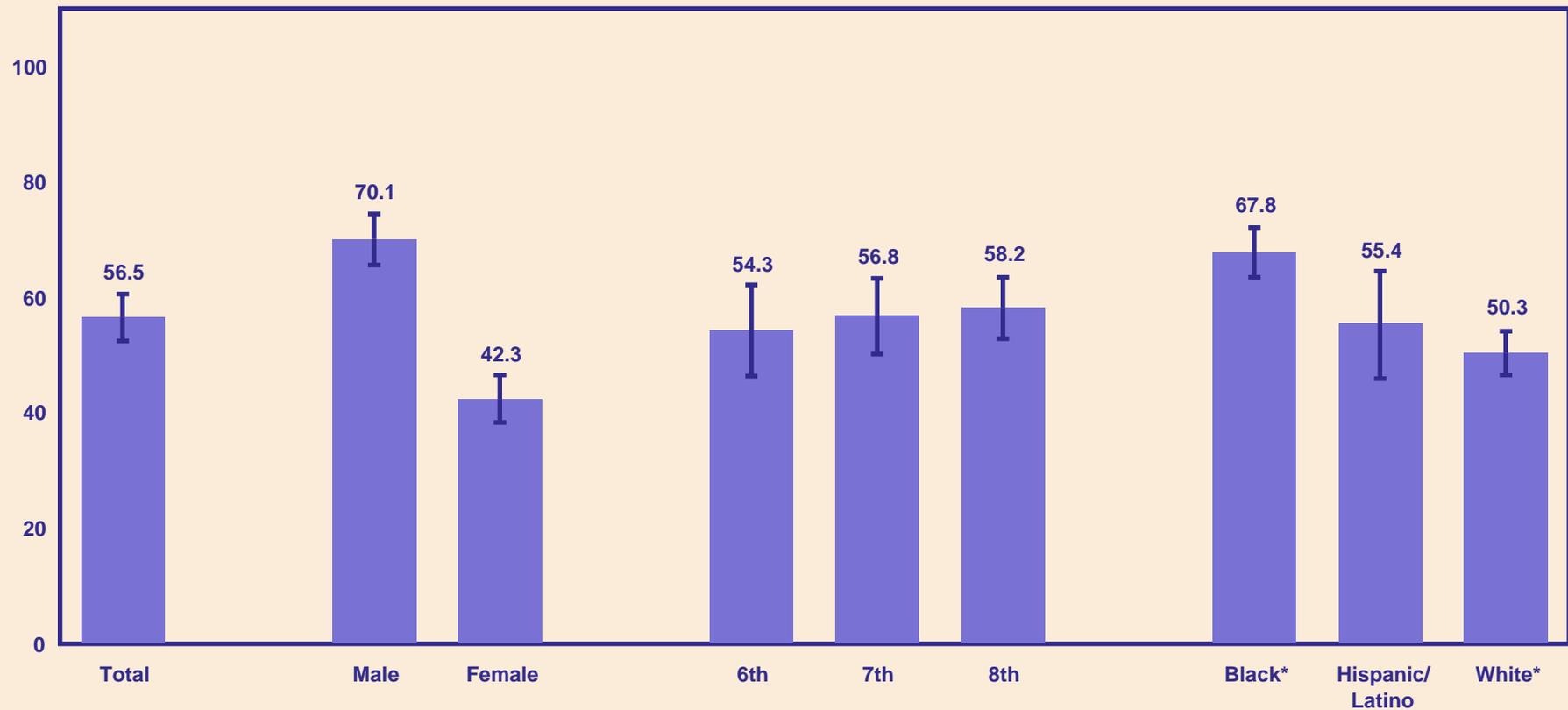


QN10 - Weighted Data  
\*Non-Hispanic.

# 2007 Youth Risk Behavior Survey Results

## North Carolina Middle School Survey

Percentage of students who have ever been in a physical fight



QN11 - Weighted Data  
\*Non-Hispanic.

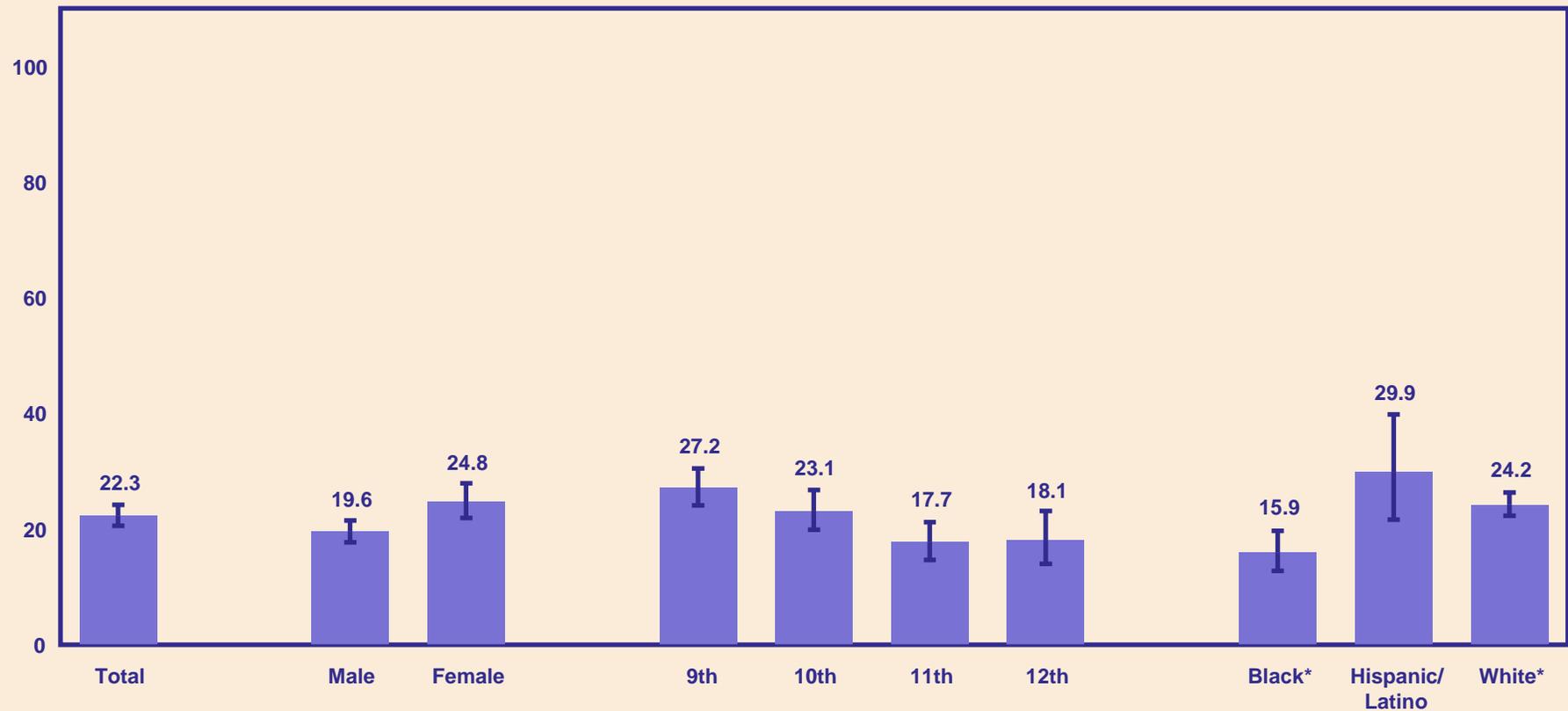
## 2005 and 2007 YRBS Bullying and Harassment Behaviors Reported Among High School Students in North Carolina

Self-reported Bullying and Harassment Behaviors	2005 %	2007 %
Have been harassed or bullied on school property one or more times during the past 12 months	26	22
Have been the victim of teasing or name calling because of their weight, size, or physical appearance during the past 30 days	21	20
Agree or strongly agree that harassment and bullying by other students is a problem at their school	33	43 ↑

# 2007 Youth Risk Behavior Survey Results

## North Carolina High School Survey

Percentage of students who have been harassed or bullied on school property one or more times during the past 12 months



QN89 - Weighted Data  
\*Non-Hispanic.

## 2007 YRBS Bullying and Harassment Reported Among North Carolina Middle School Students Compared with High School Students

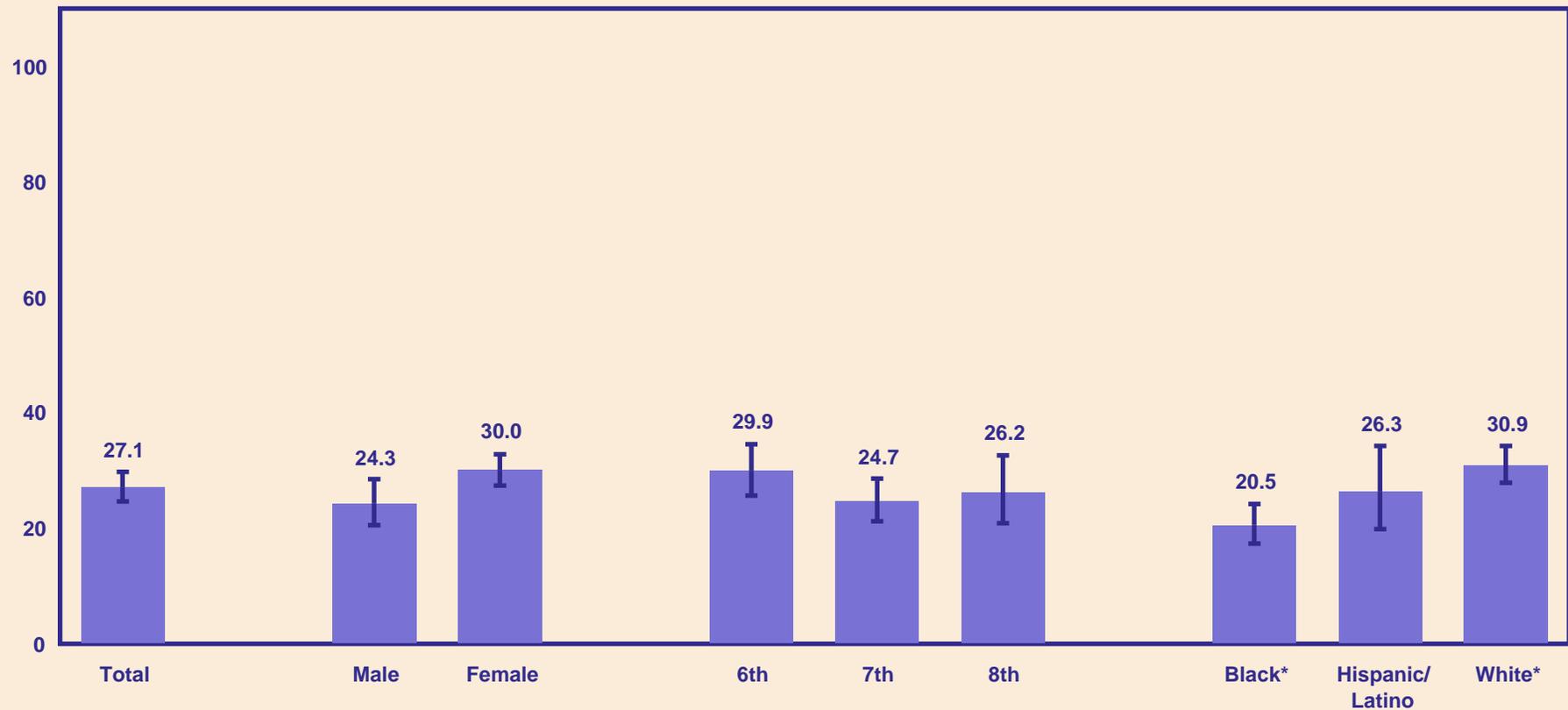
<b>Self-reported Bullying and Harassment Behaviors</b>	<b>Middle School Students %</b>	<b>High School Students %</b>
Have been harassed or bullied on school property one or more times during the past 12 months	27 ↑	22
Have been the victim of teasing or name calling because of their weight, size, or physical appearance during the past 30 days	33 ↑	20
Agree or strongly agree that harassment and bullying by other students is a problem at their school	54 ↑	43

Note: Middle school students were not asked about bullying and harassment in 2005, nor were they asked about dating/sexual violence in 2007.

# 2007 Youth Risk Behavior Survey Results

## North Carolina Middle School Survey

Percentage of students who have been harassed or bullied on school property during the past 12 months



QN54 - Weighted Data  
\*Non-Hispanic.

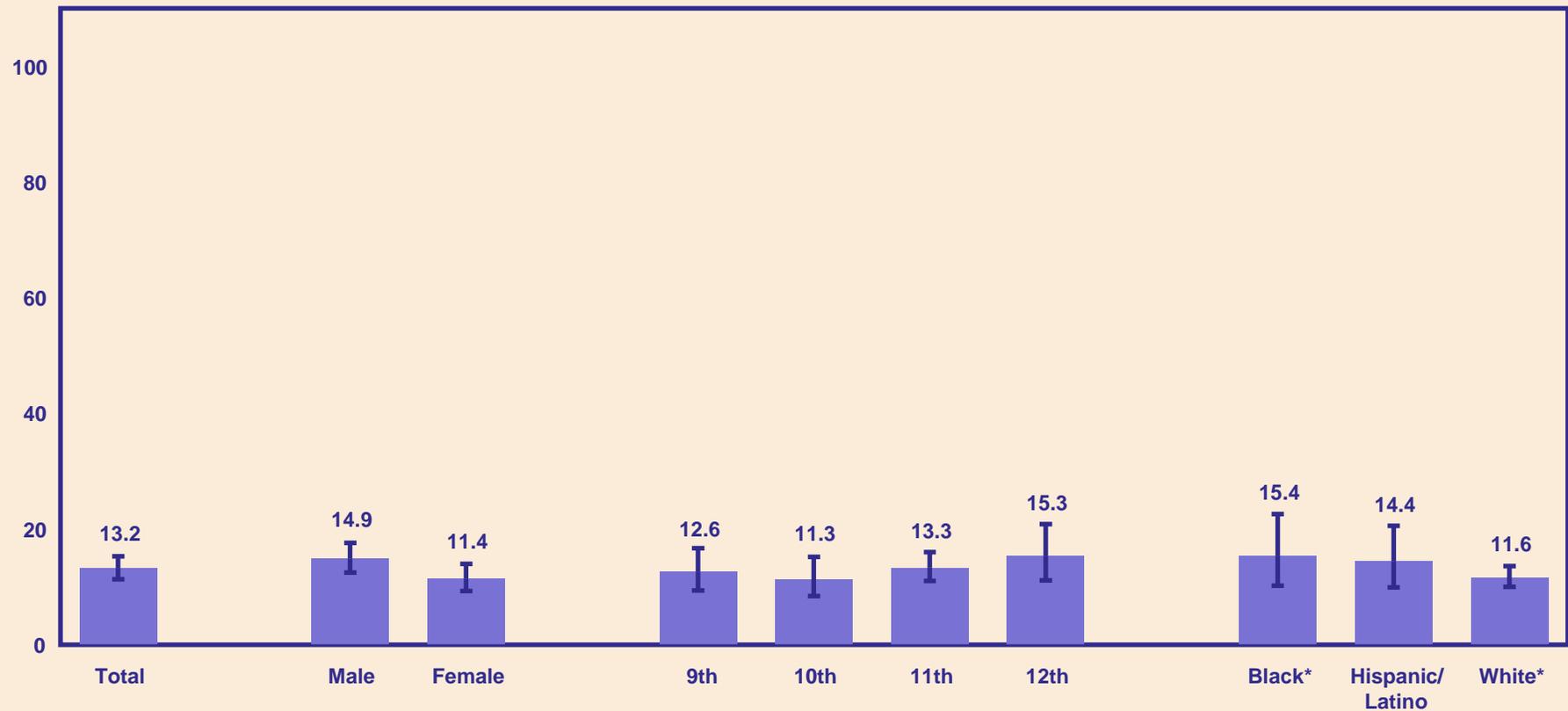
## 2007 YRBS Dating/Sexual Violence Behaviors Reported Among High School Students in North Carolina and the U.S.

Self-reported Dating/Sexual Violence-related Behaviors	NC Students %	US Students %
Were hit, slapped or physically hurt on purpose by their boyfriend or girlfriend 12 months before the survey	13.2 ↑	9.9
Students who had ever been physically forced to have sexual intercourse when they did not want to	9.3 ↑	7.8

# 2007 Youth Risk Behavior Survey Results

## North Carolina High School Survey

Percentage of students who were ever hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend during the past 12 months

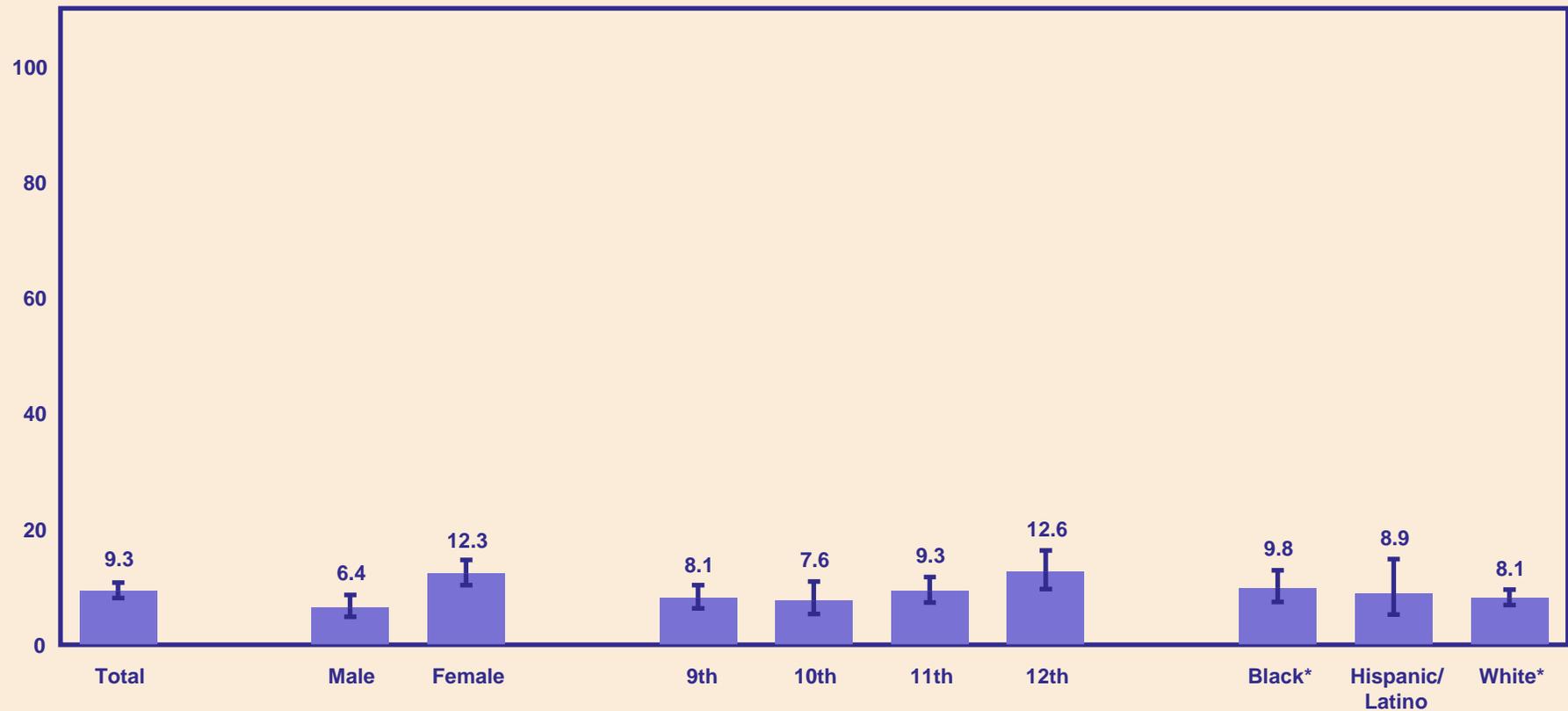


QN21 - Weighted Data  
\*Non-Hispanic.

# 2007 Youth Risk Behavior Survey Results

## North Carolina High School Survey

Percentage of students who had ever been physically forced to have sexual intercourse when they did not want to



QN22 - Weighted Data  
\*Non-Hispanic.

# Selected Key Points

- Violence types and risk factors/behaviors often interrelated
- More whites die of violent deaths
- Homicides are a leading cause of death for youth 10-20
- Arguments, abuse and conflict most common cause of homicides
- Most homicides occurred in homes and violent deaths during the day
- Most violent deaths are caused by firearms
  - >70% suicide, > 80% homicide
  - Few details known about firearms in homicides

# Selected Key Points

- Rates of assaults 4-5 times greater than homicide rates
- Data on assaults need improvement
  - Not all hospitals participate fully
- Episodes of school violence high
- Many measures of violence on HS YRBS higher than US
  - Dating/Sexual violence among HS students higher than US average
  - Males more likely to report physical violence by dating partner
- Most measures of violence on MS YRBS higher than high school
- Latinos report bullying more than any racial/ethnic group
- Race may also be a proxy for concepts not easily measured or understood

# Selected Recommendations

- Continued support and use of NC-VDRS
- A standard surveillance system for non-fatal injuries should be developed:  
NC – Nonfatal Violent Injury Reporting System (NC-NVIRS)
  - Require hospital, medical facility compliance
- Use of E-codes should be further encouraged
- Further research is needed about firearms (i.e. access, prevention)
- Disentangle race as risk factor
- Evidence-based, culturally sensitive programs to prevent homicide and non-fatal violence are needed

Nonviolence is the answer to the crucial political and moral questions of our time; the need for mankind to overcome oppression and violence without resorting to oppression and violence. Mankind must evolve for all human conflict a method which rejects revenge, aggression, and retaliation.

Returning violence for violence multiplies violence, adding deeper darkness to a night already devoid of stars... Hate cannot drive out hate: only love can do that.

**Martin Luther King, JR**