

HCME Annual Report 2008



An Analysis of the Harris County Medical Examiner's Office Pathology Services Caseload



HCMEO Case Summary, 2008



- Harris County Population Estimate 2008
 - 3,939,127
- Harris County DC's Filed 2007:
 - 24,637 (provisional data)
 - Crude Rate = 625 per 100K population per year
- Total Deaths Reported to HCME in 2008:
 - 16,454 (approx. 67% of deaths occurring in HC)
- External exams: 950
- Total Autopsies: 3,246*

**Partial autopsies are not performed at the HCME. Population estimate is for January 1, 2008 Texas Data Center, Office of the Texas State Demographer; DC total is provisional from Texas Dept. State Health Services (TXDSHS)*

HCMEO Case Summary, 2008

- Inquest Only Cases (IO)
 - 12,258
- Out of County Cases (OC)
 - 30, all autopsies
- ML Cases: 4,196
 - 60% are injury deaths (Manner = Homicide, Suicide, Accident)
 - 106 cases associated with a companion case
- All ML Cases (4,196) were transported to the HCMEO



HCMEO Case Summary, 2008



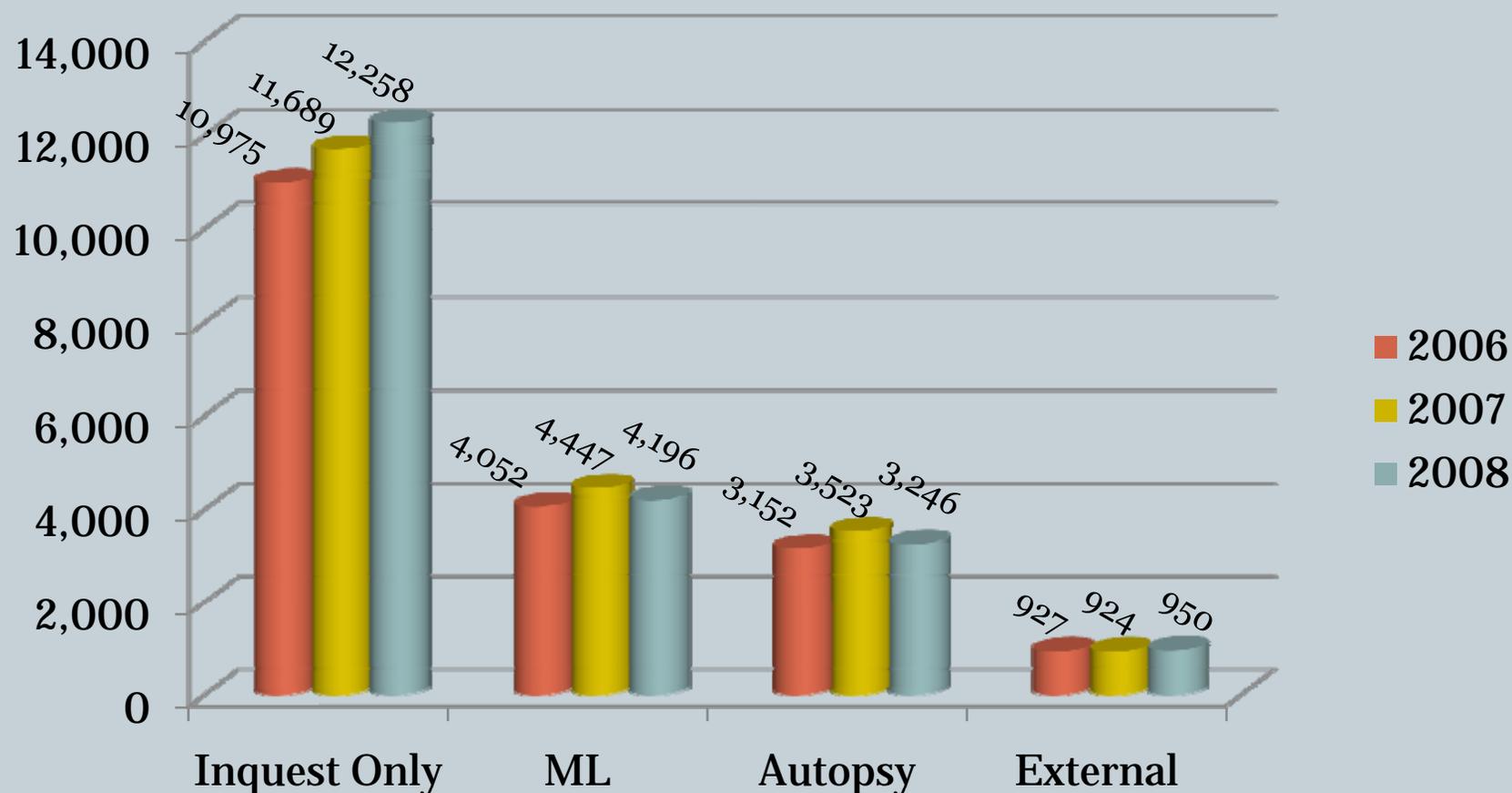
- Decedents unidentified on arrival: 134
 - Decedents remaining unidentified: 3
- 240 Referrals to Harris County Bereavement Services
- 1,477 Cremation requests (2007 = 1,471)
 - 7,931 cremations occurred in Harris County in 2008
(*provisional data from TXDSHS*)
- No exhumations were performed
- No hospital autopsies were retained

Organ and Tissue Procurement

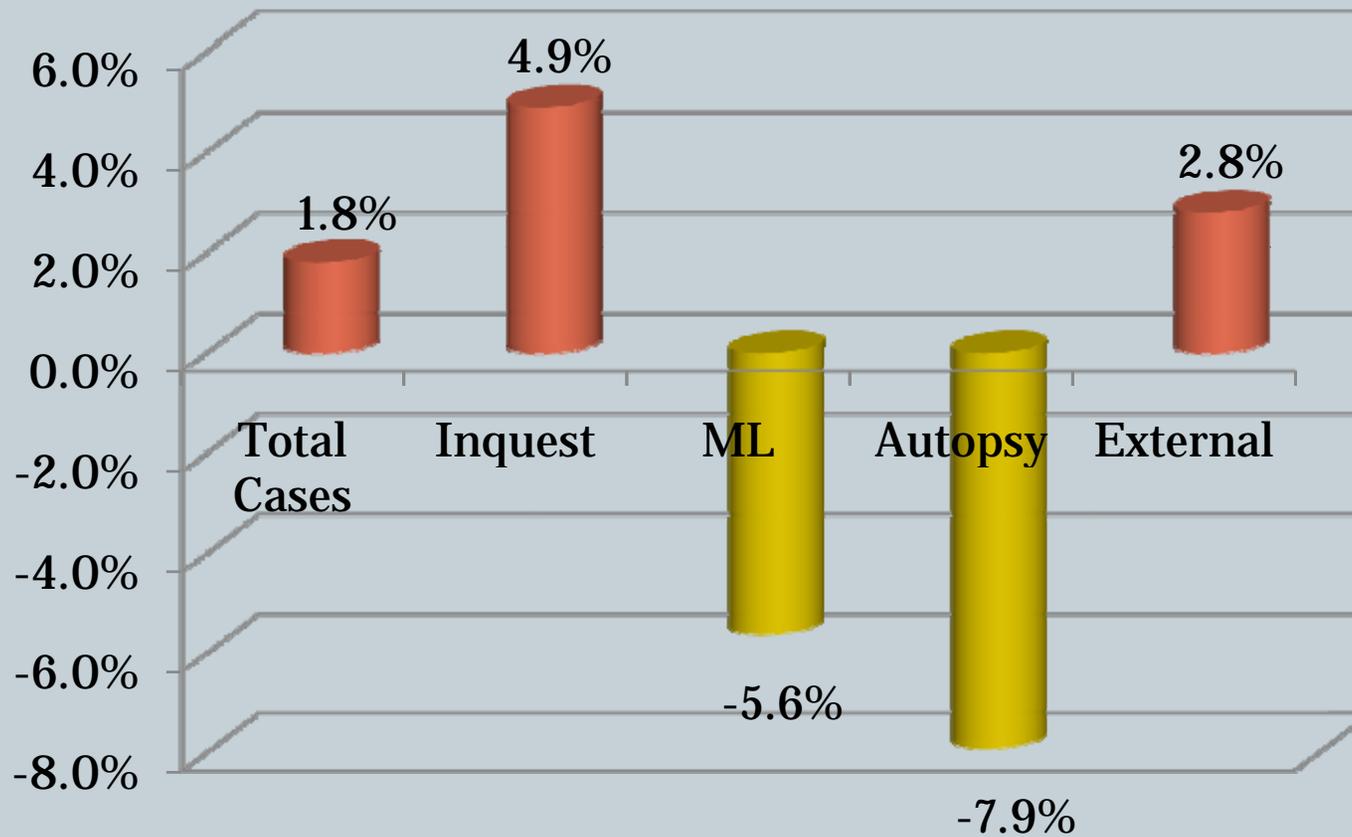


- **651** single and paired organs requested from September 1, 2008 to August 31, 2009
- **585** single and paired organs were released for recovery
 - Annual organ release rate of 90%
- **942** single tissue and paired cornea requests
- **638** single tissue and paired corneas released for recovery pre-autopsy
 - Annual *pre-autopsy* rate of 68%

HCMEO Caseload: 2006-2008

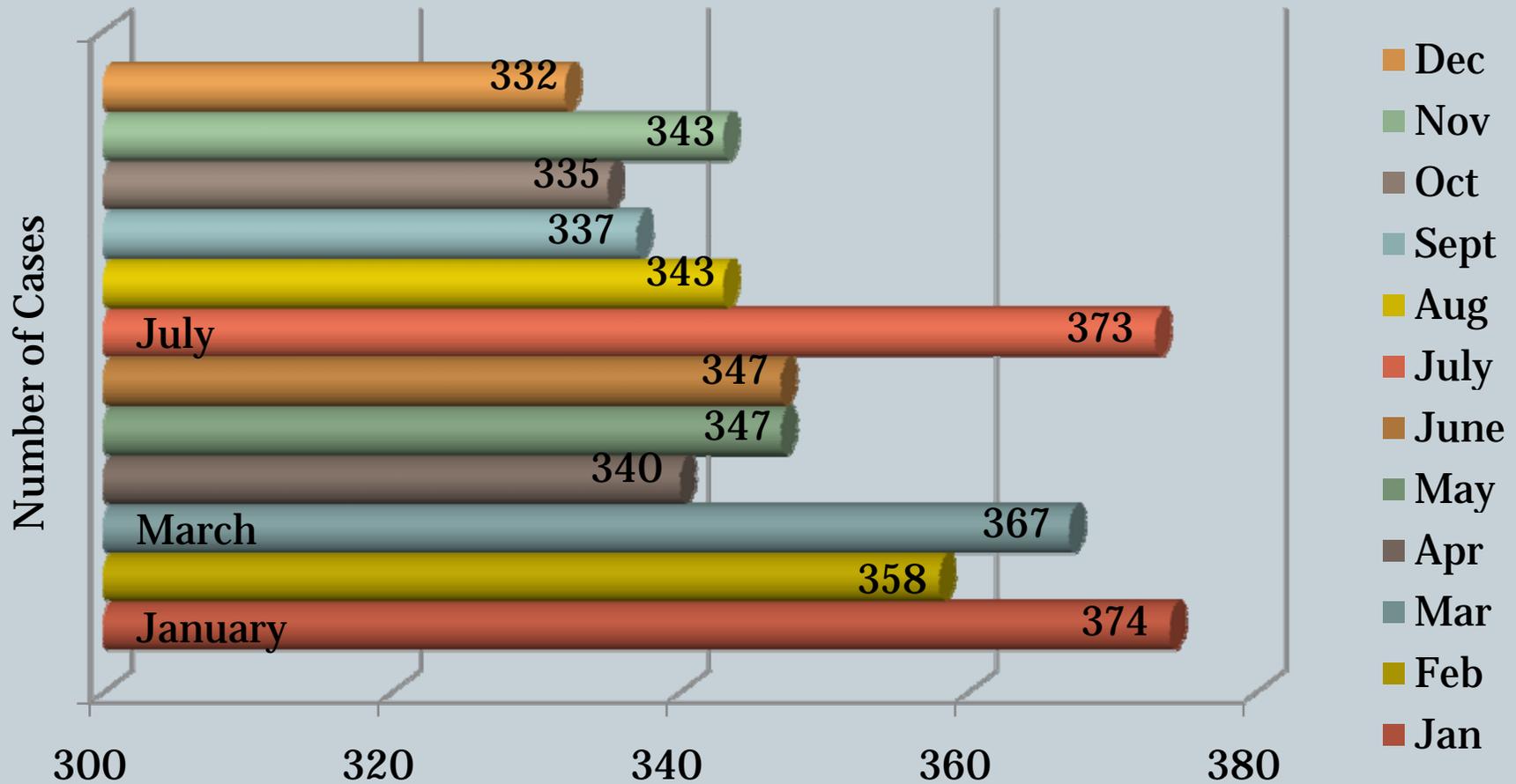


HCMEO Caseload: 2007-2008



Percent Change 2007-2008 in Volume of Case Types

Monthly ML Case Counts 2008

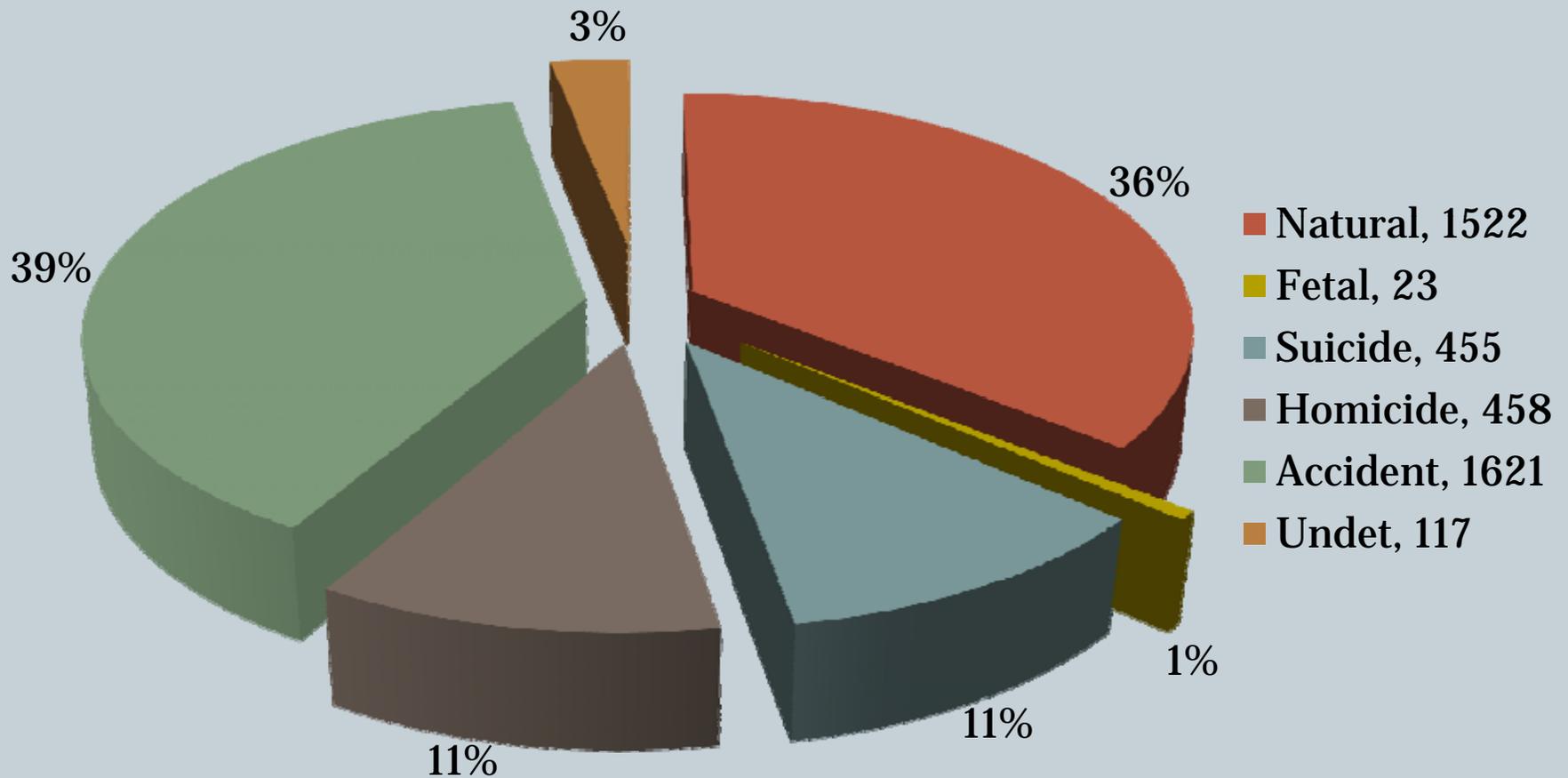


Average Daily ML Case Load

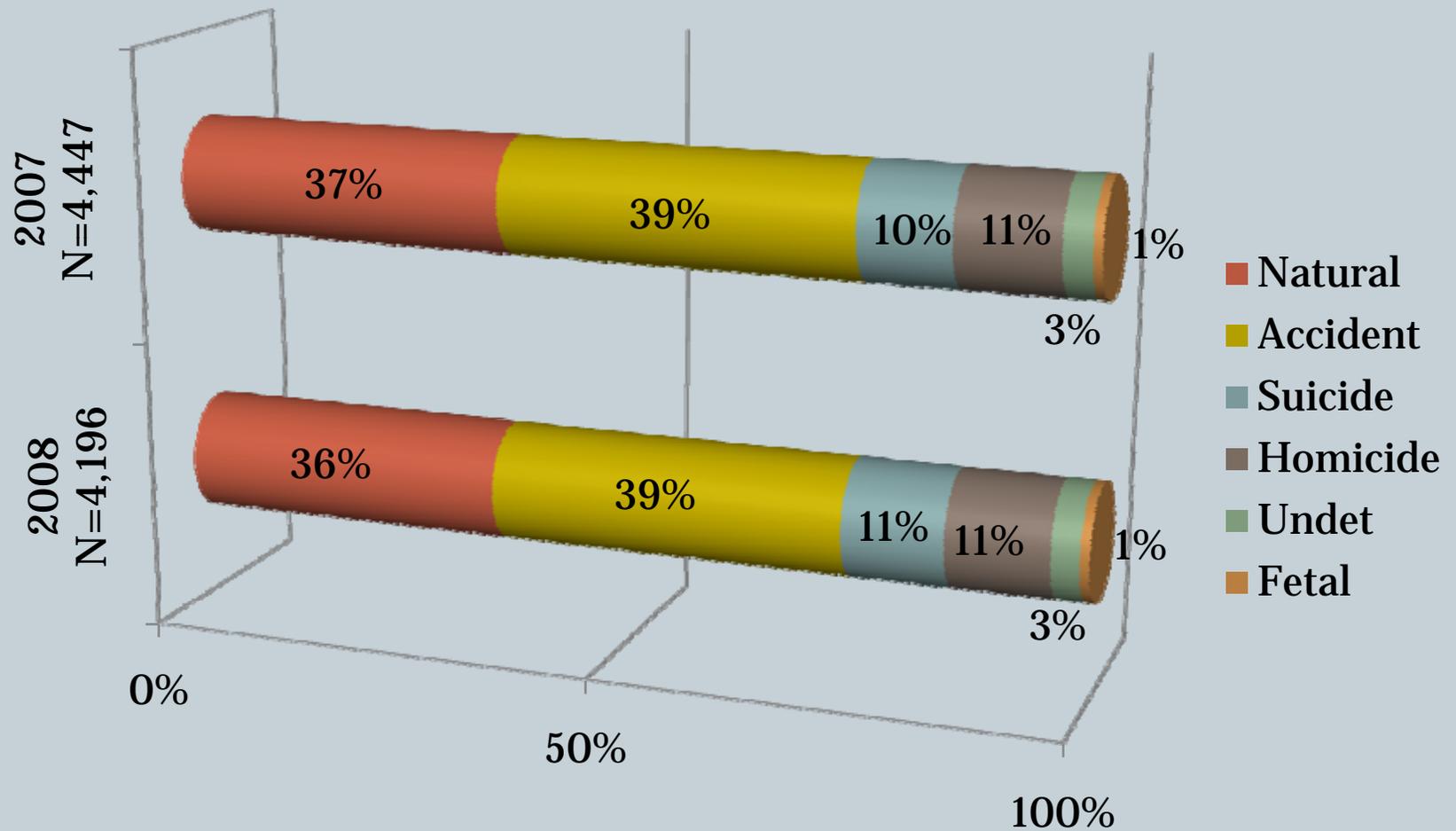


- Average daily case load:
 - 2008: 11.5 cases
 - 2007: 12.1 cases
- Months with highest average daily case load:
 - 2008 – February, January (12.1), July
 - 2007 – December, August, January (12.8)

Manner of Death Composition

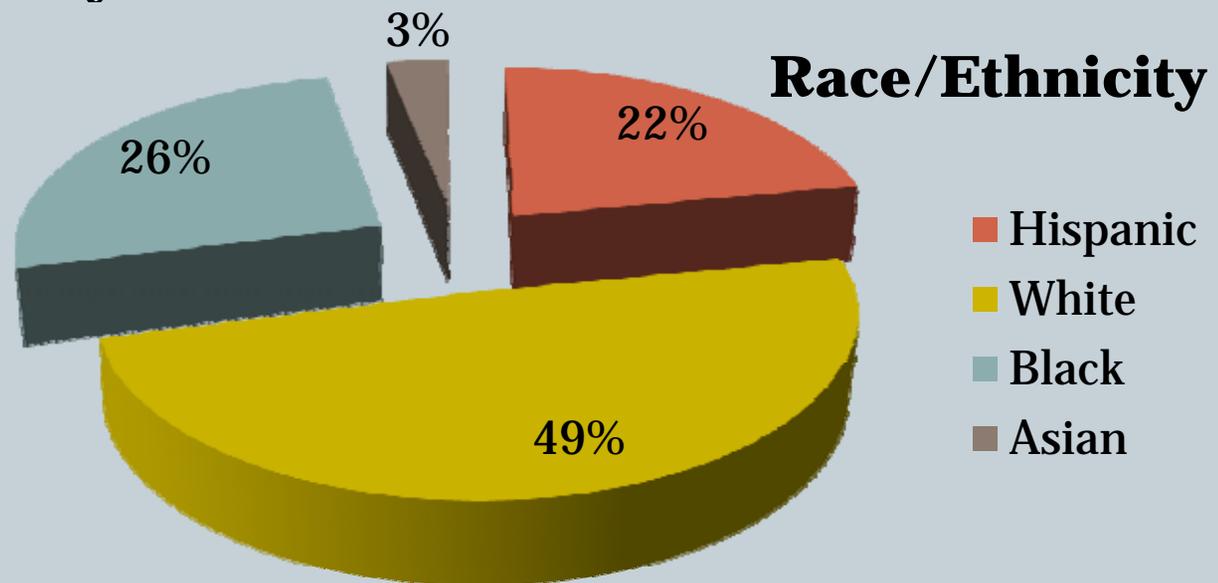


Manner of Death 2007-2008

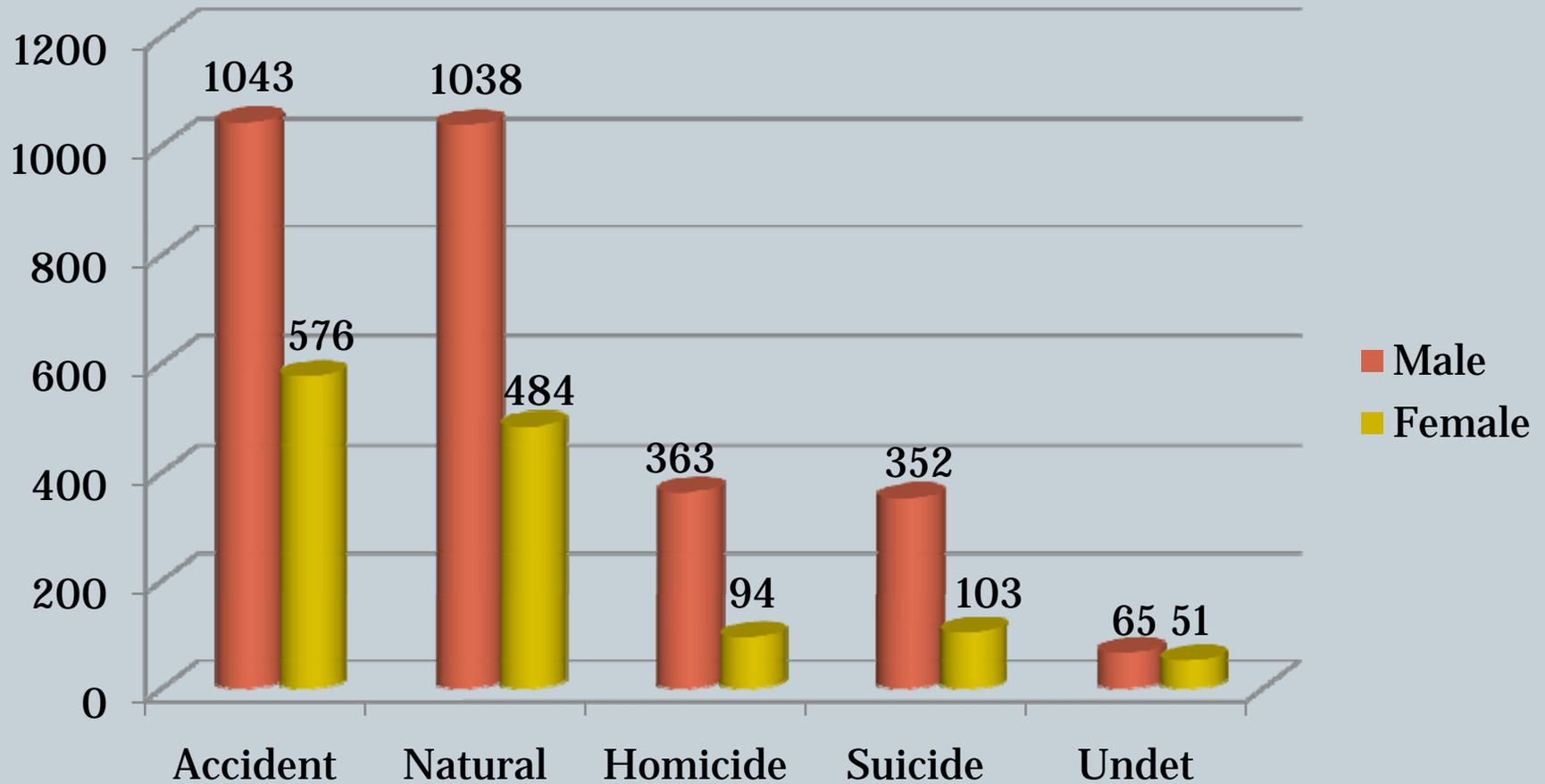


Demographic Components of ML Cases

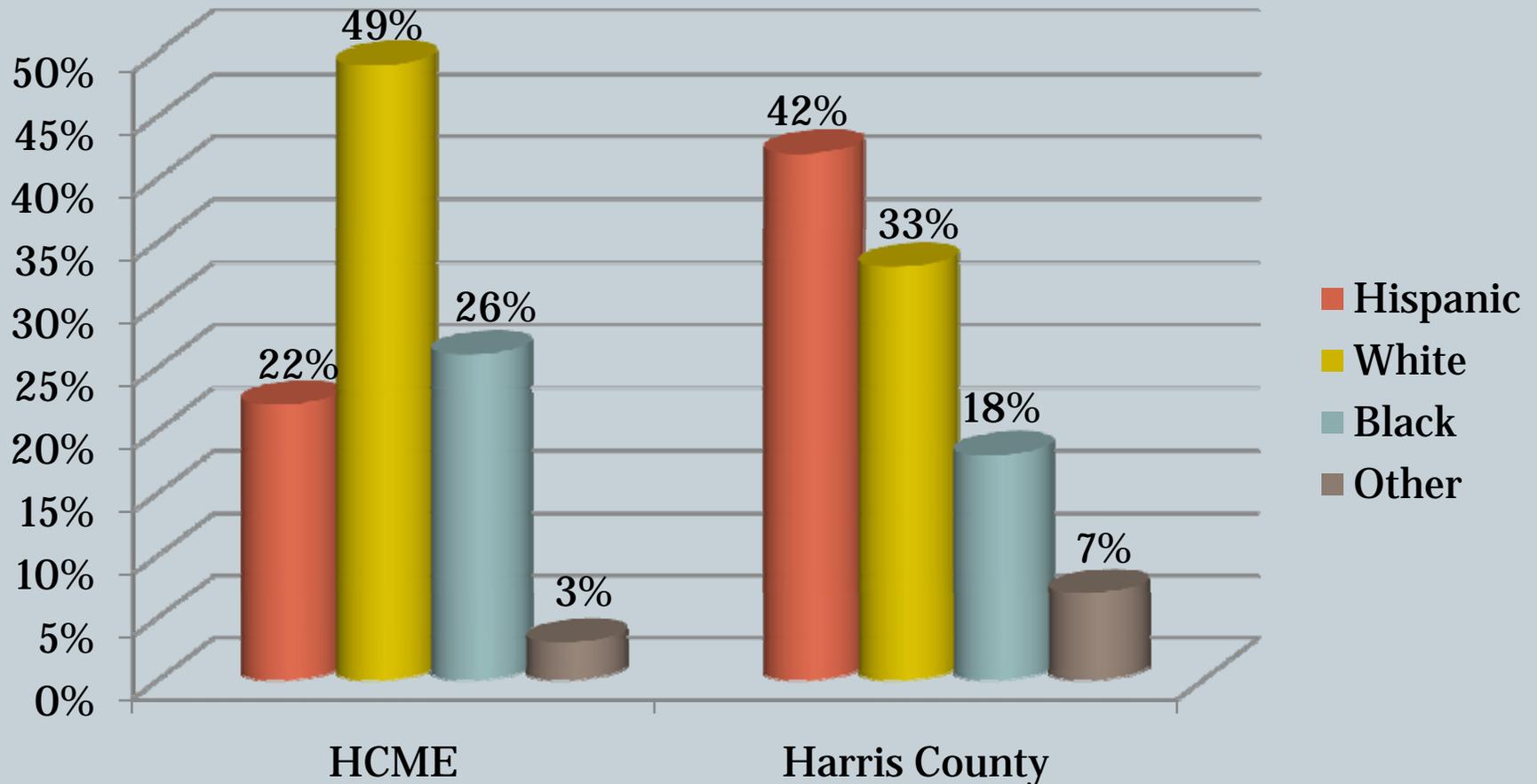
- Male to Female ratio is 2:1
- Age range (excluding fetal manner)
 - <1 day to 107 years



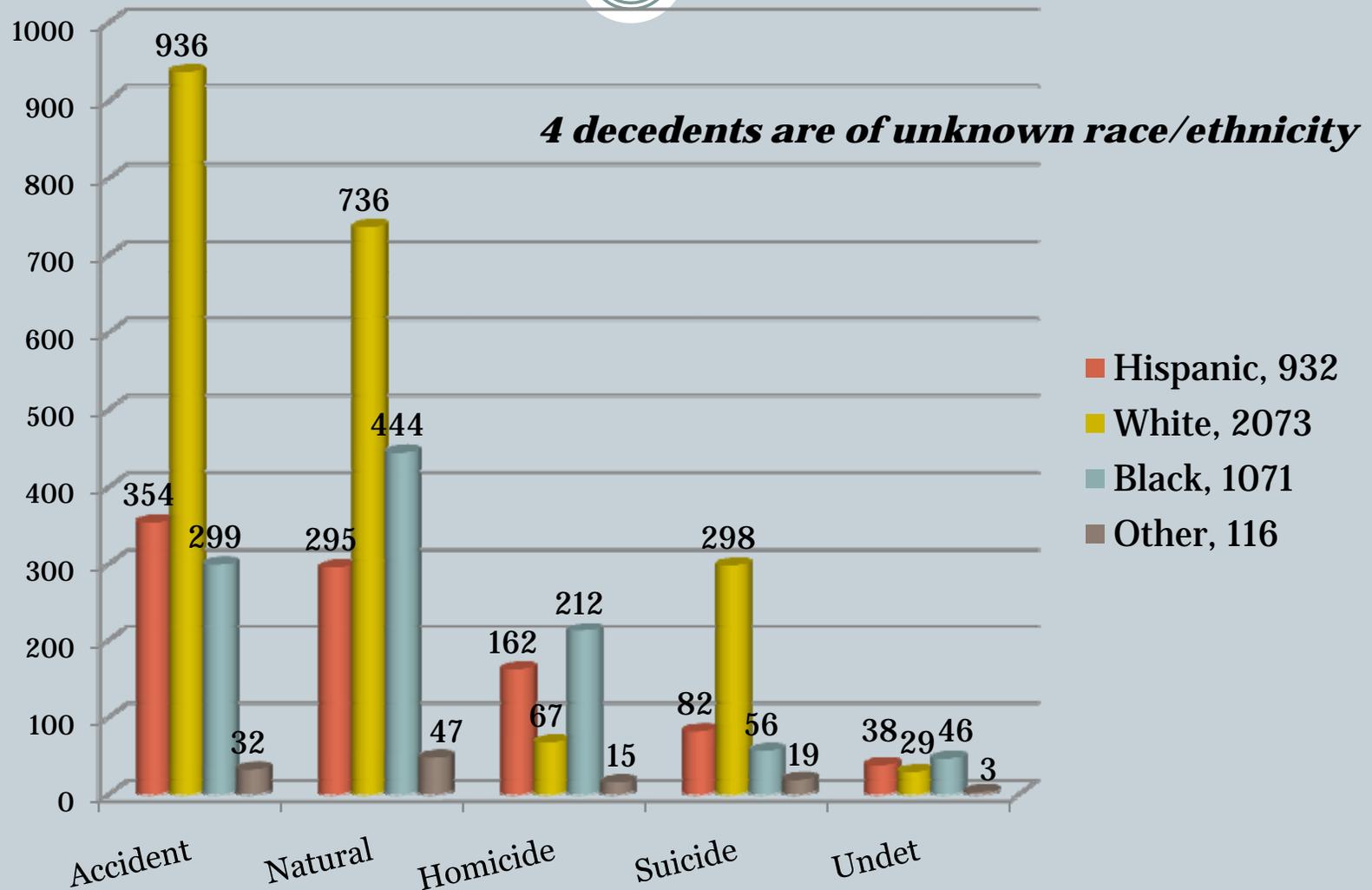
Manner Stratified by Sex



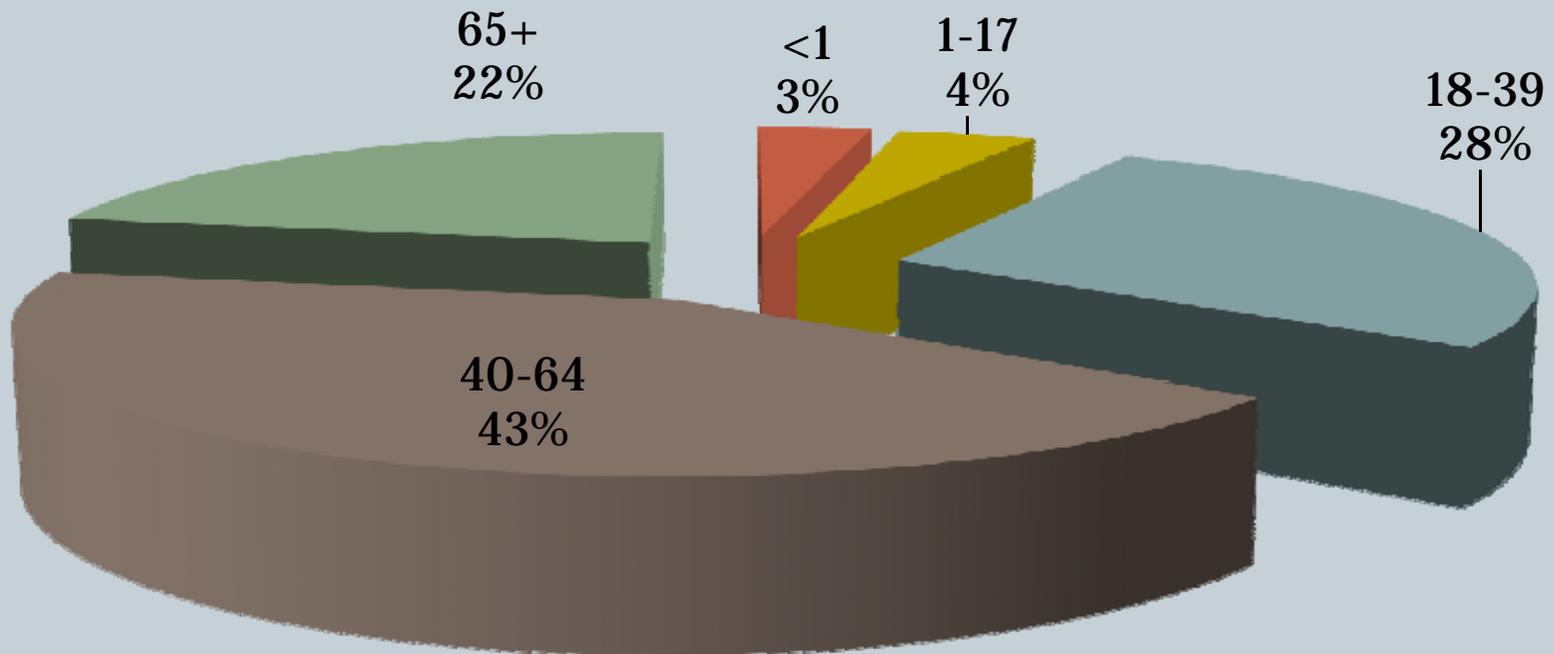
Race/Ethnicity Breakdown Compared to Harris County Population



Race/Ethnicity Breakdown of ML Cases by Manner



Age Categories Represented by Proportion



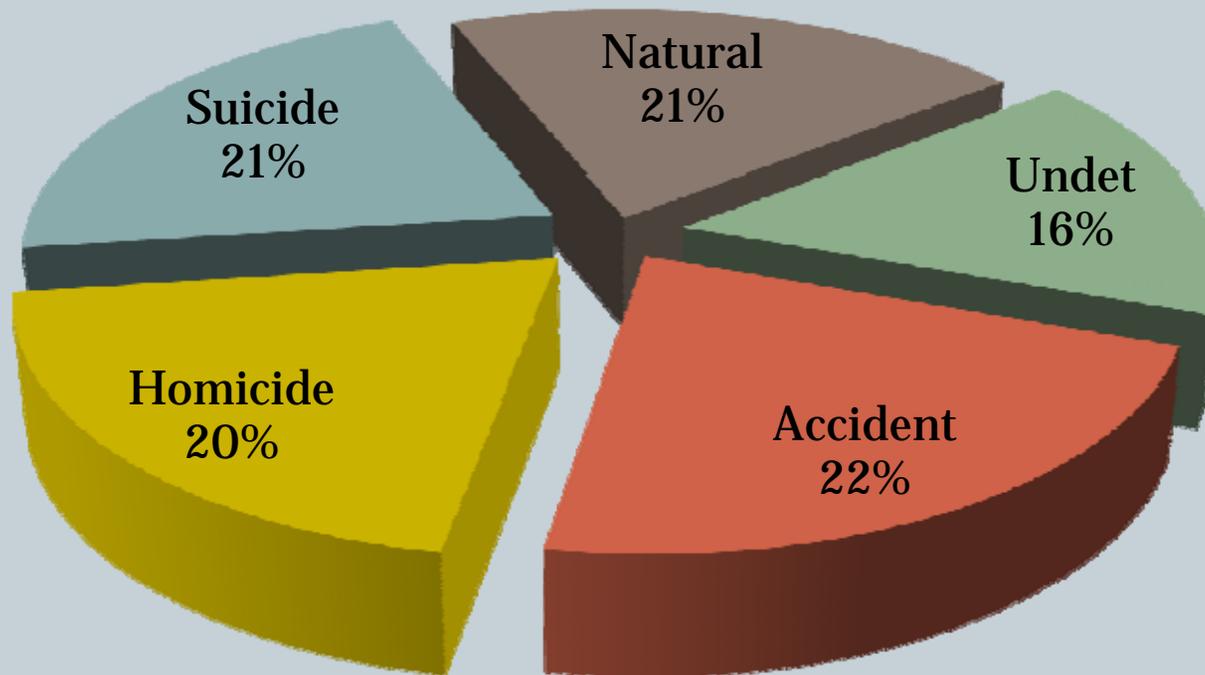
Age Categories and Age-Specific Rates



Age-specific rates of HCMEO decedents as a proportion of the Harris County population are presented below.

- 0-19 yrs: 32 per 100,000
- 20-39 yrs: 67 per 100,000
- 40-64 yrs: 139 per 100,000
- 65+ yrs: 293 per 100,000

Manner in Children 0-17 Years

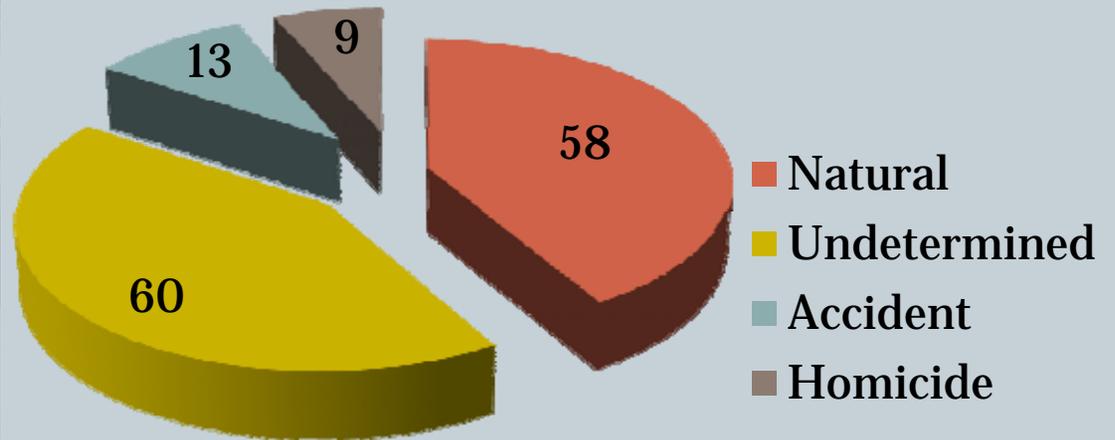


Infant Deaths

- 140 infant death cases
 - Approx. 0.2% of Harris County live births in 2008
- 36 cases of Undetermined/Co-sleeping (37 total)
- 37 SIDS cases



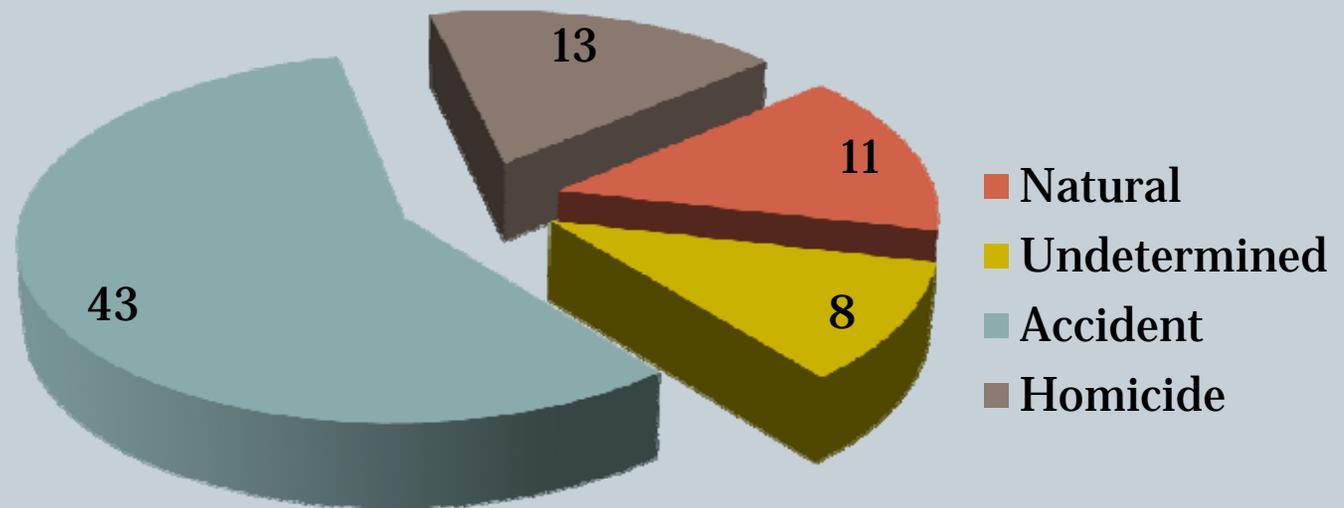
Infant Case Manner



Toddler Deaths (1-4 Years)

- 75 toddler death cases
- 17 toddlers drowned in Accidents
- Homicide cases
 - 6 Females
 - 7 Males

Toddler Case Manner

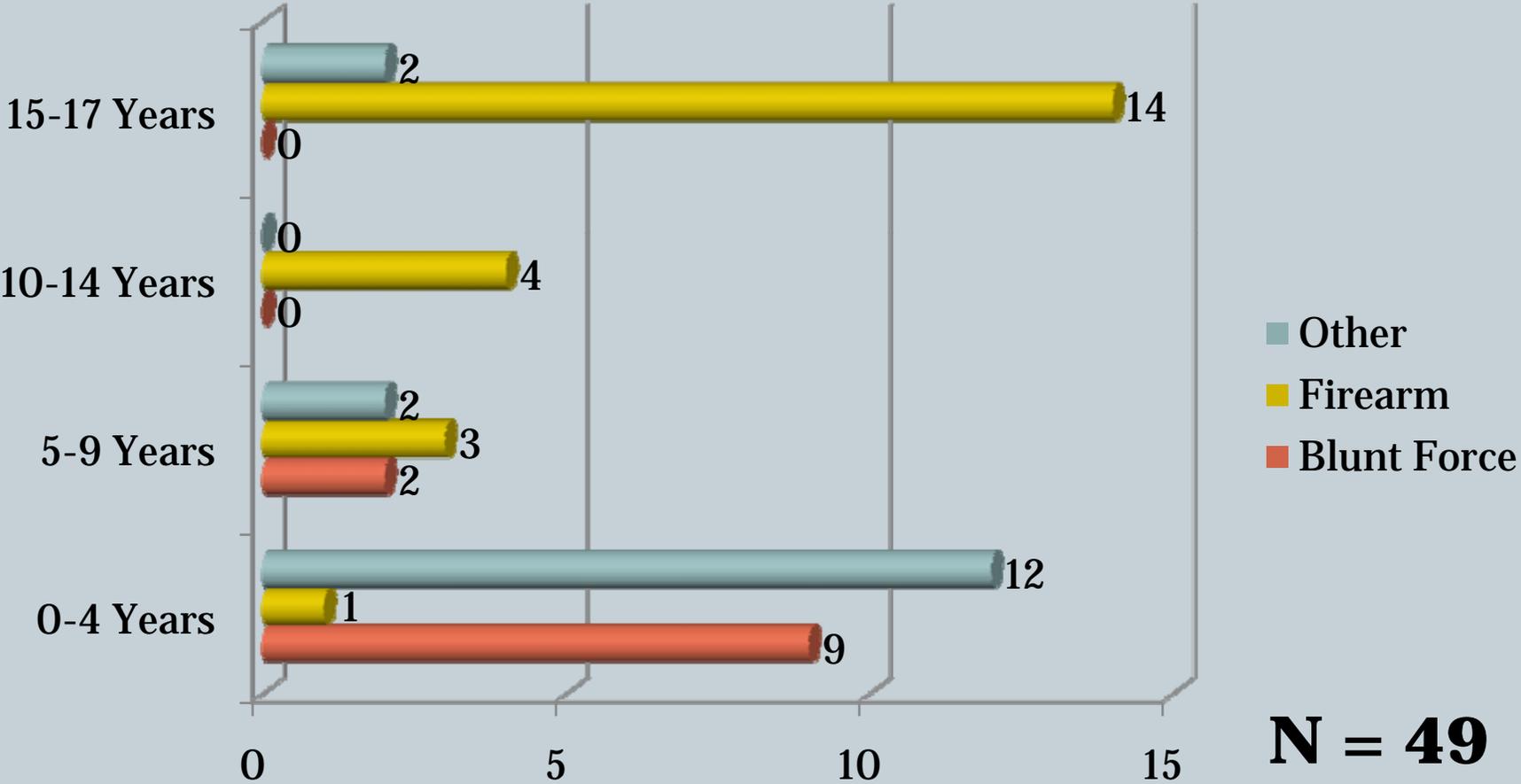


Top Five Injury Deaths of Children 0-17



1. Injuries sustained in motor vehicle crashes (43)
2. Firearm injuries (27)
3. Drowning (25)
4. Asphyxia/choking/suffocation (22)
5. Toxicity (10)

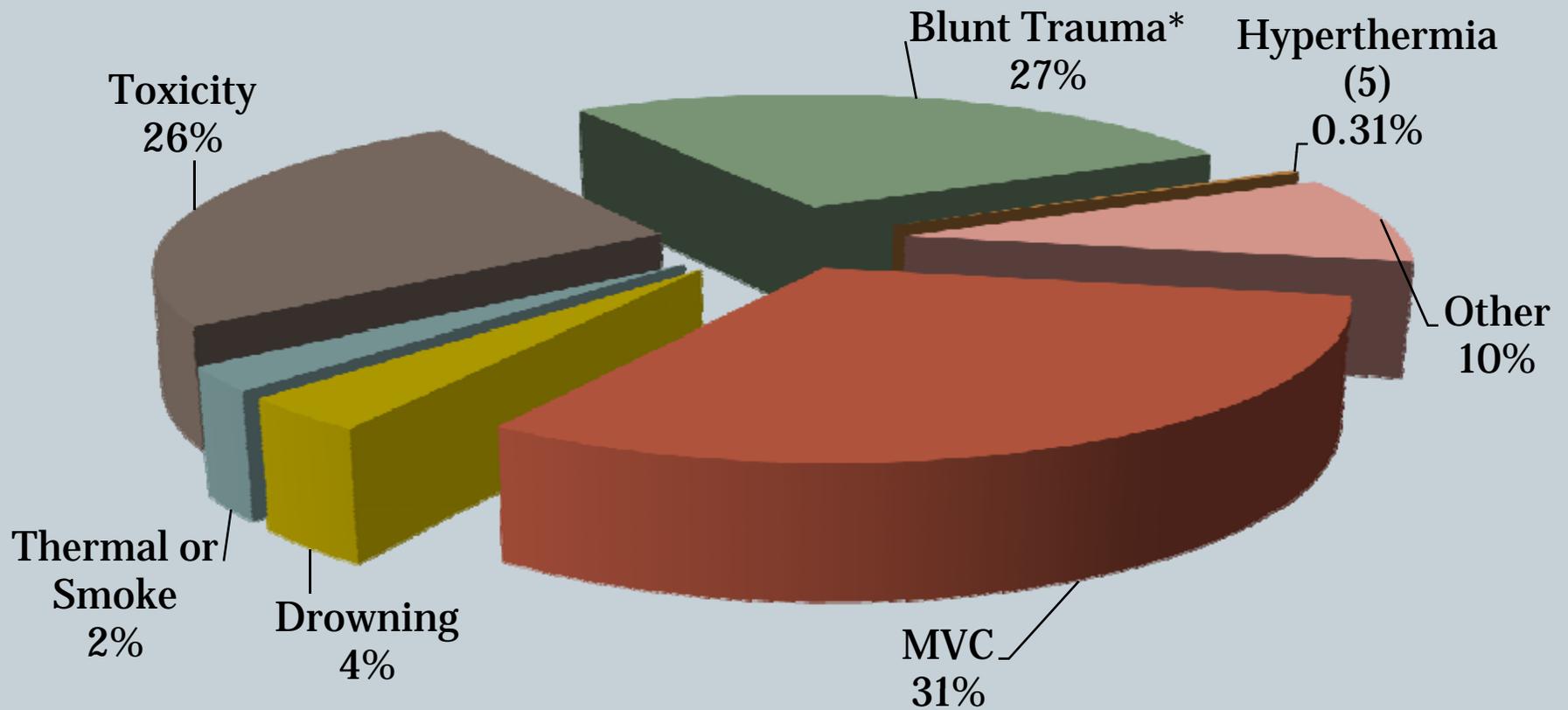
Homicide Deaths of Children 0-17



Accidental Death



N = 1,621



**Blunt Trauma refers to non-MVC Deaths*

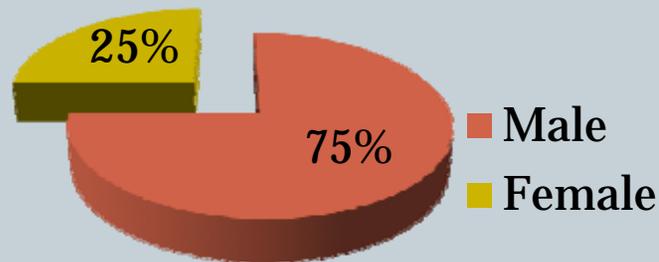
Motor Vehicle Crash Deaths



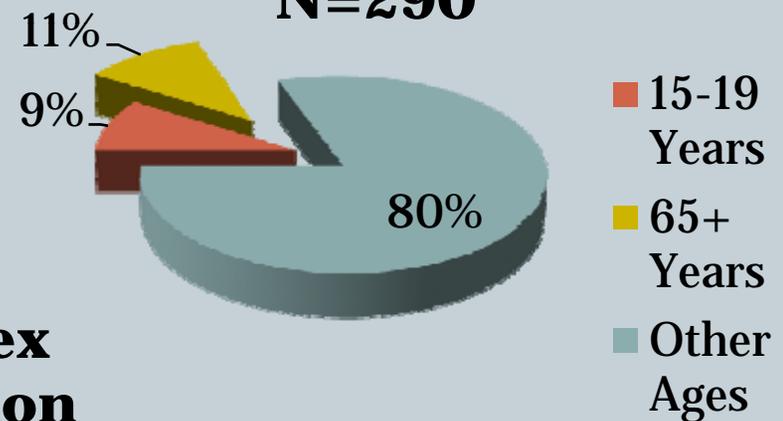
- N = 508
- 290 Drivers
 - 111 drivers were alcohol-impaired
 - ✦ 91 drivers had a BAC of 0.08 g/dl or higher
 - ✦ 20 drivers had a BAC below 0.079 g/dl
- 103 Pedestrians (10 were children 1-11 years)
- 115 passengers or unknown position

Driver Distribution

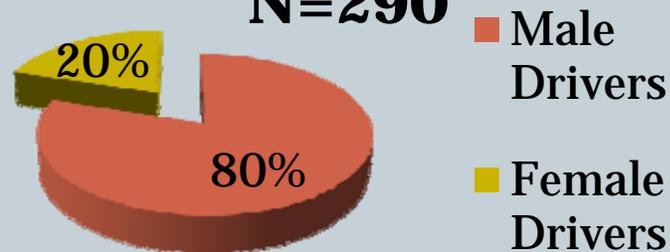
**Sex Distribution
All MVC, N=508**



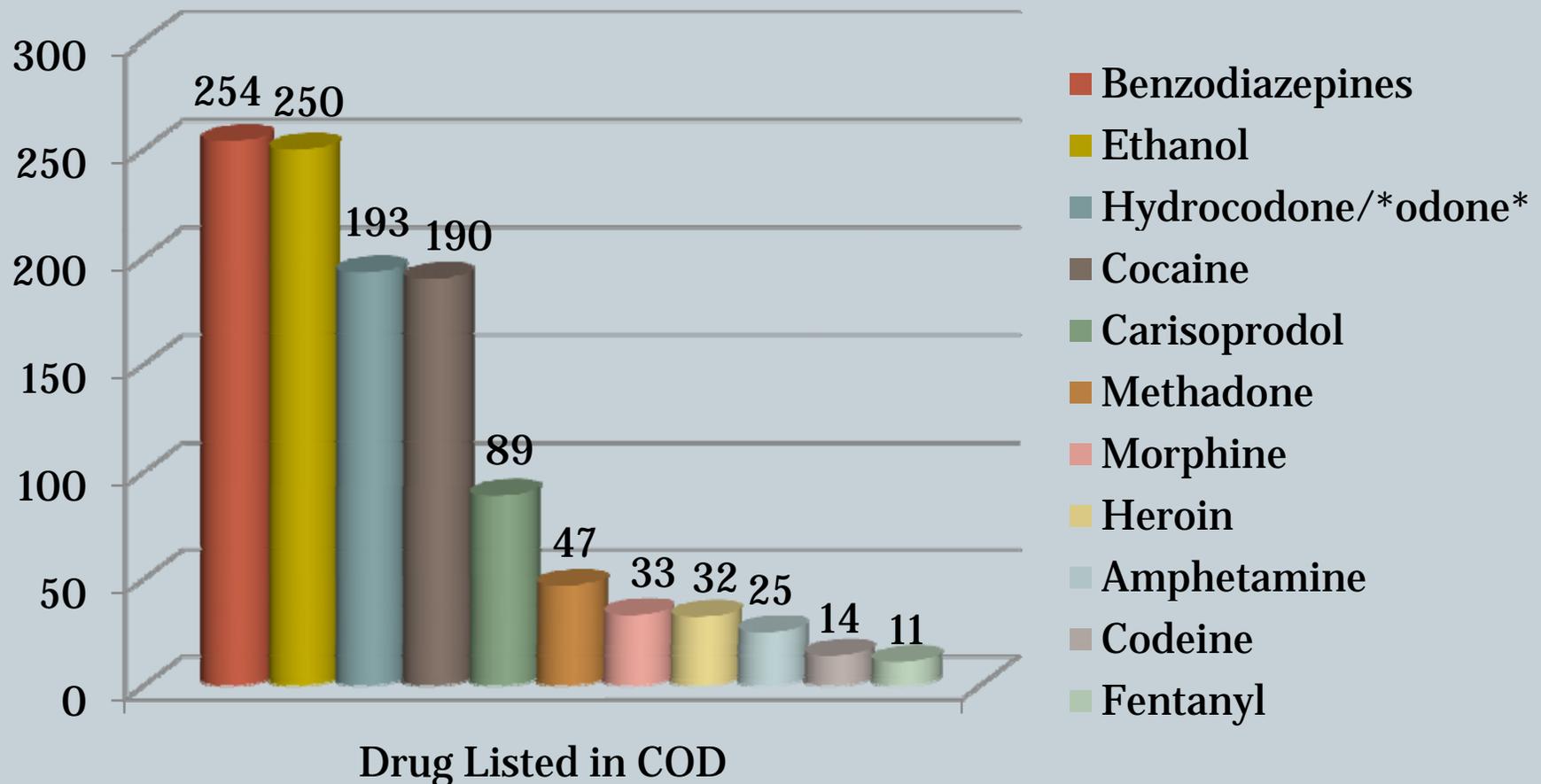
**Proportion of
Drivers who were
teens or seniors,
N=290**



**Driver Sex
Distribution
N=290**

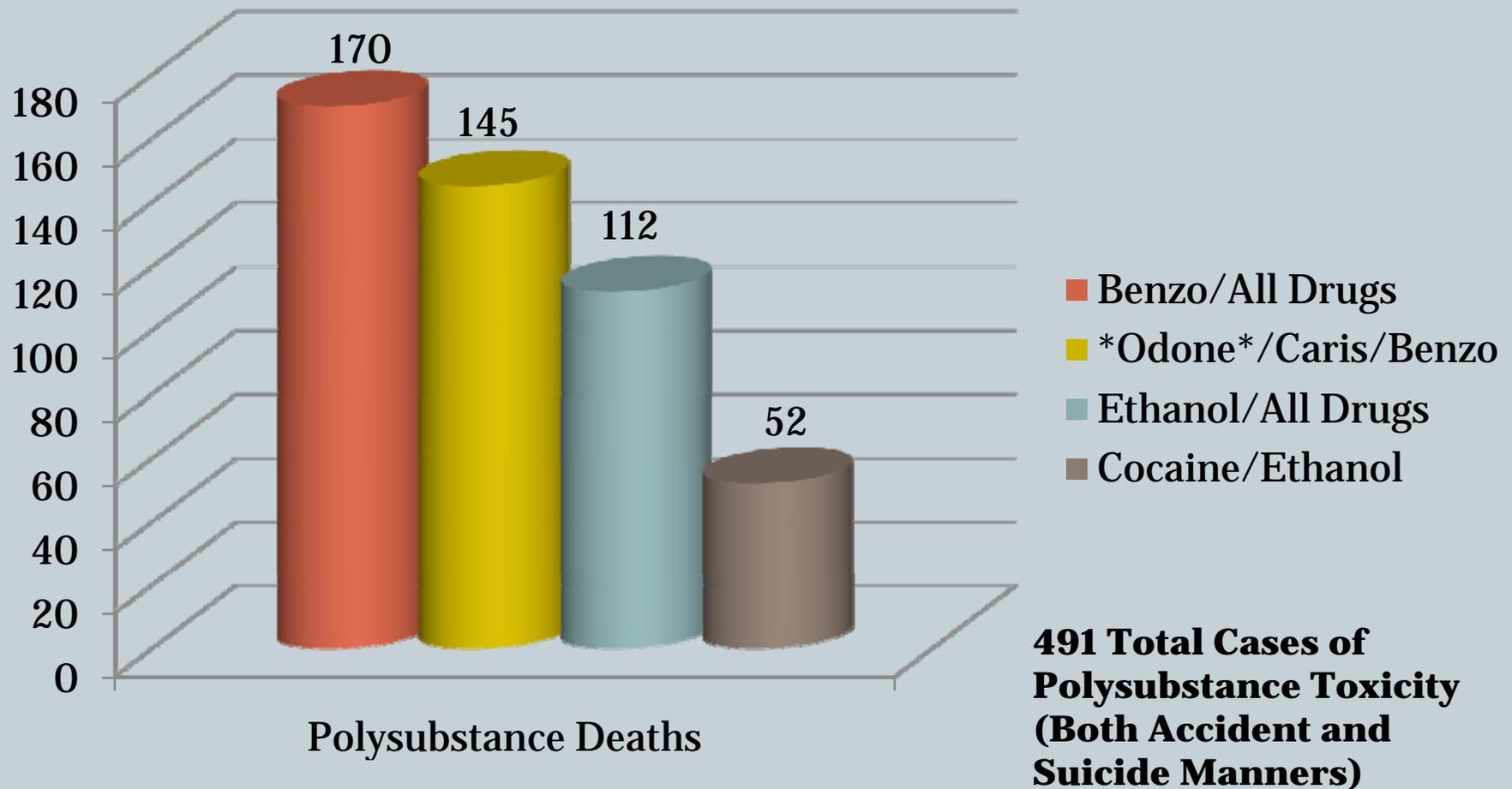


Drugs of Abuse



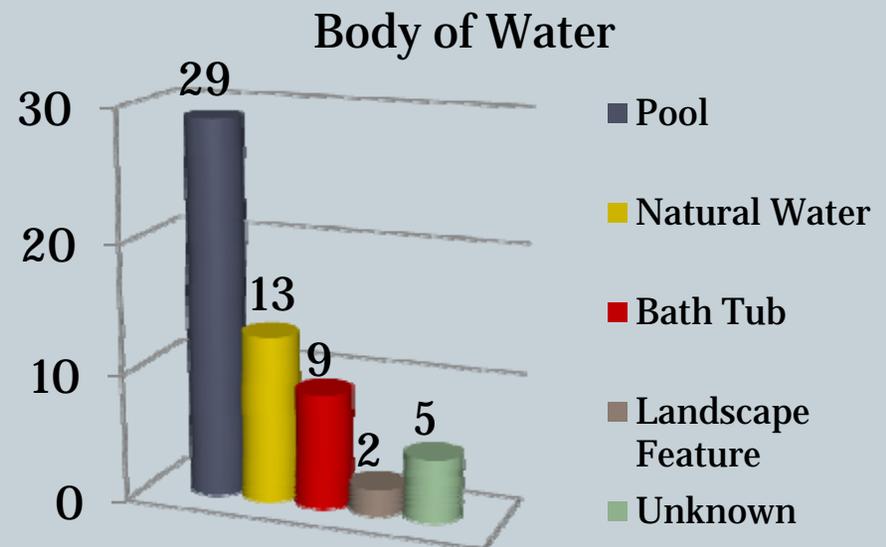
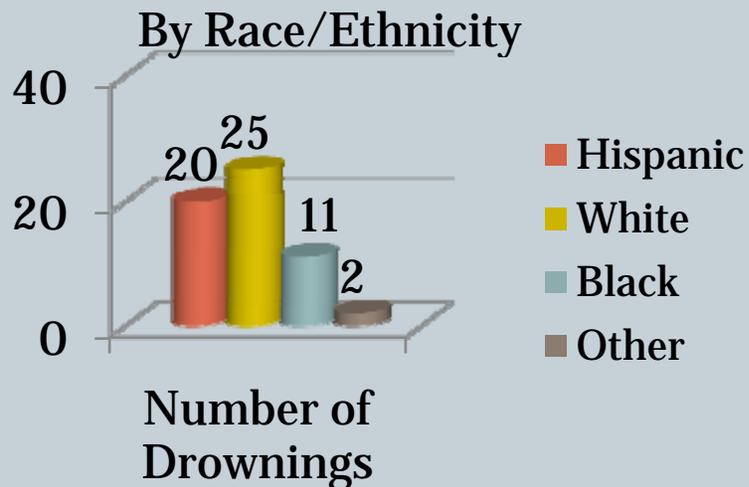
Drugs may be combined. These data do not reflect discrete ML cases

Commonly Combined Drugs of Abuse



Accidental Drowning in 2008

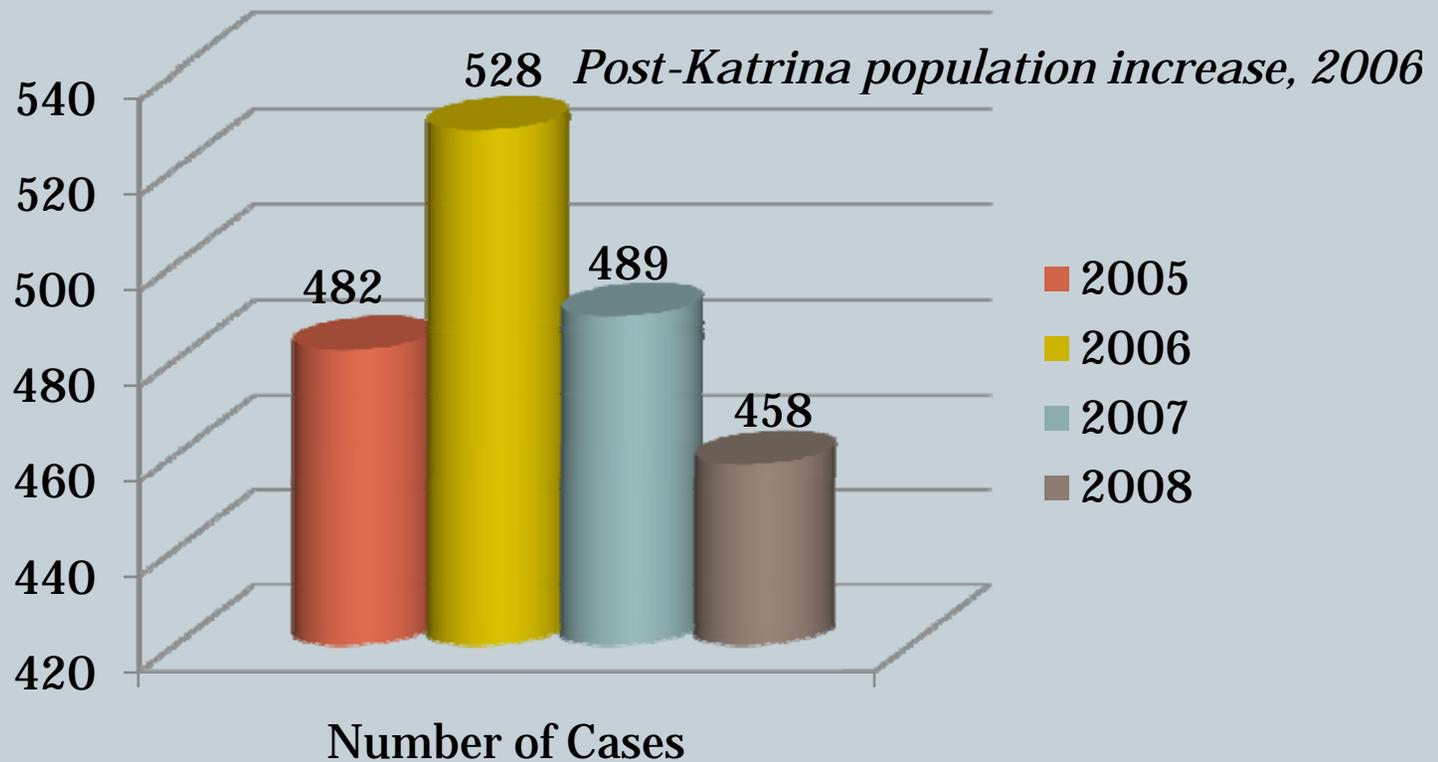
- Total Drowning Cases = 58
- Age Range is 14 months to 84 years
 - 17 young children ages 14 months to 4 years
- The majority of drowning victims are male (41)



Homicide Numbers 2005-2008



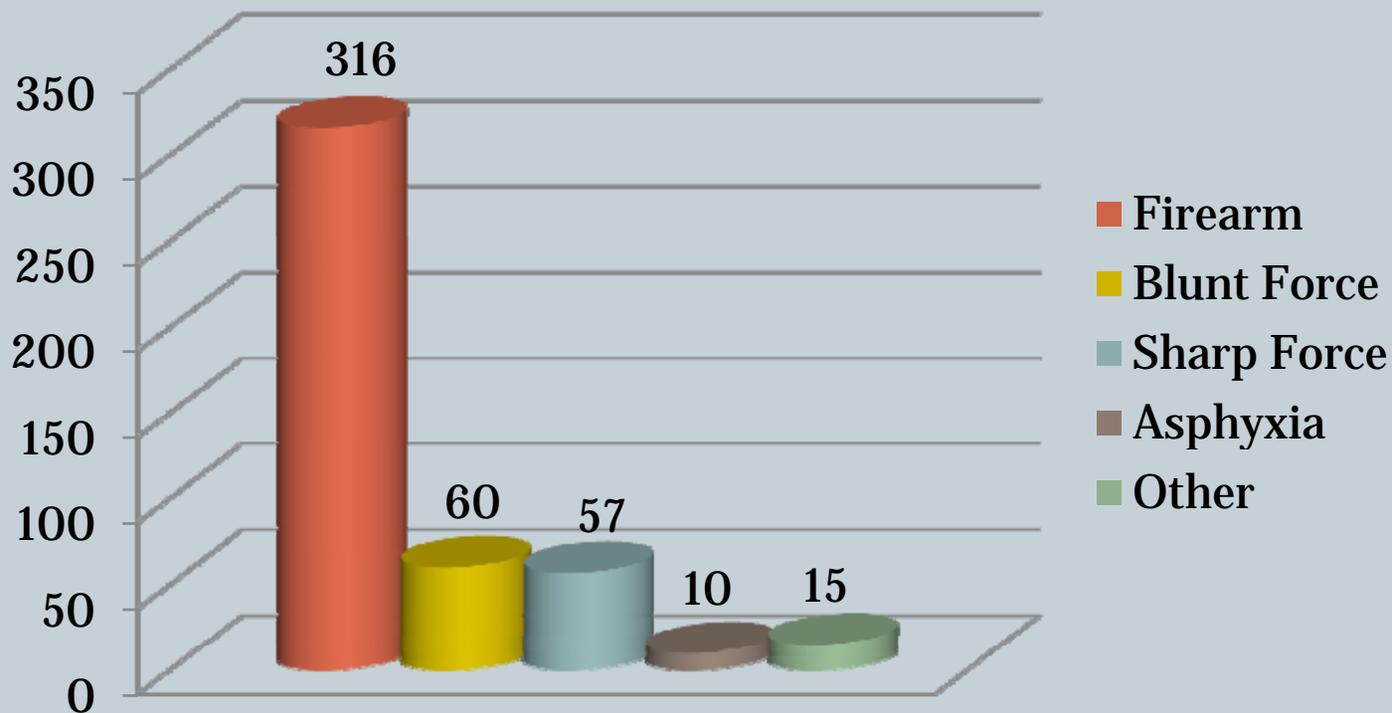
- The number of Homicide cases has steadily declined from 2006 to 2008



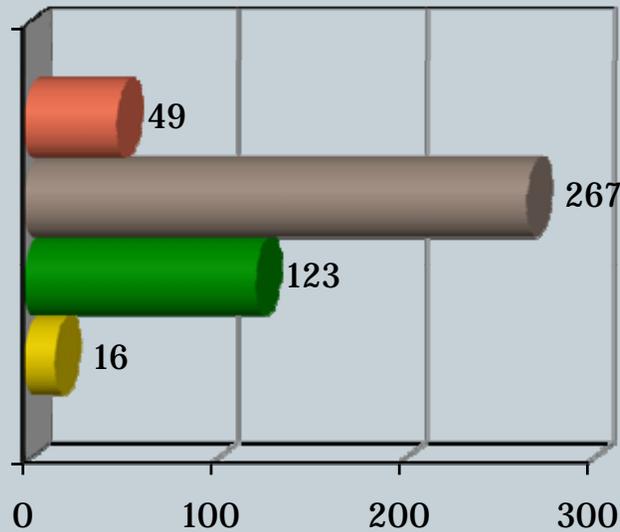
Causes of Death in Homicide Cases



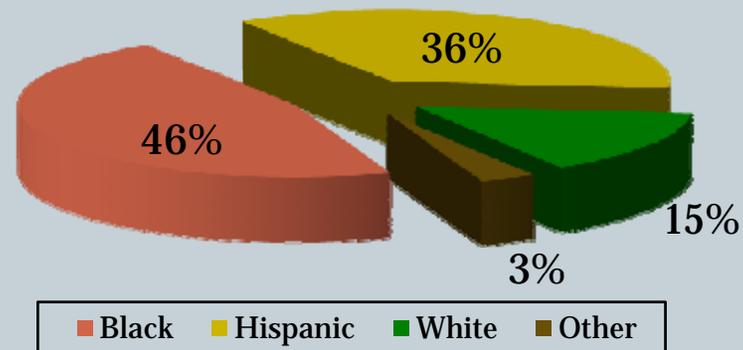
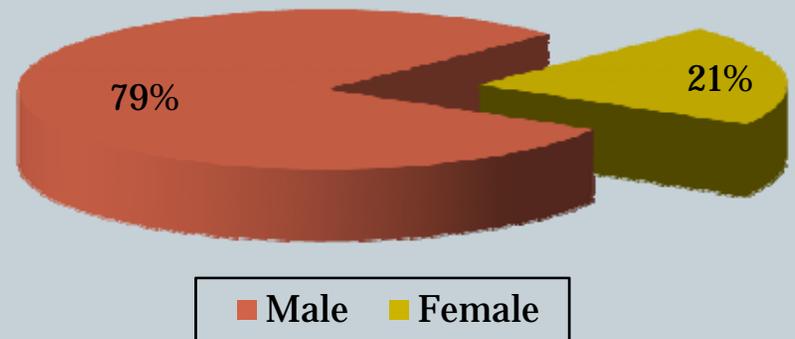
- 53 Homicide cases are associated with domestic violence
- 32 cases are companions to at least one other ML case



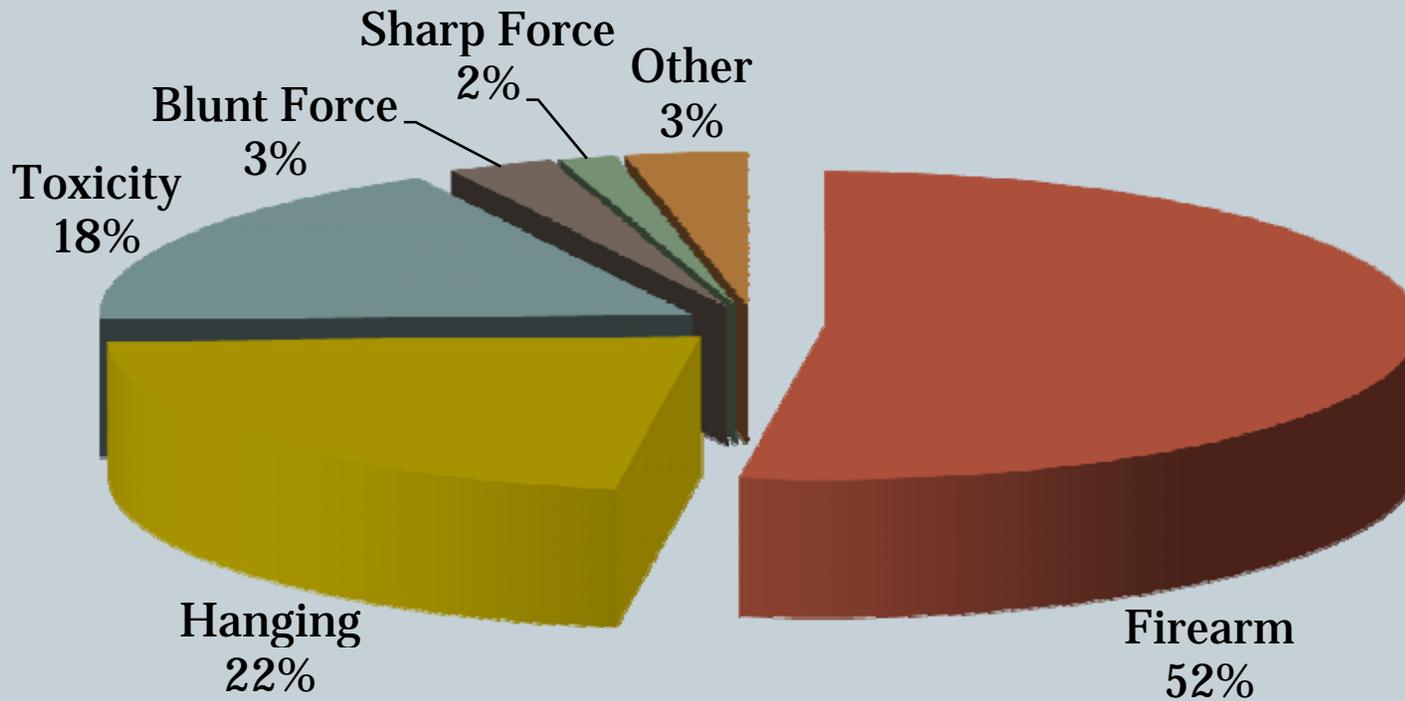
Homicide Deaths by Demographic Category



Three Homicide Case decedents are of unknown age



Causes of Death in Suicide Cases

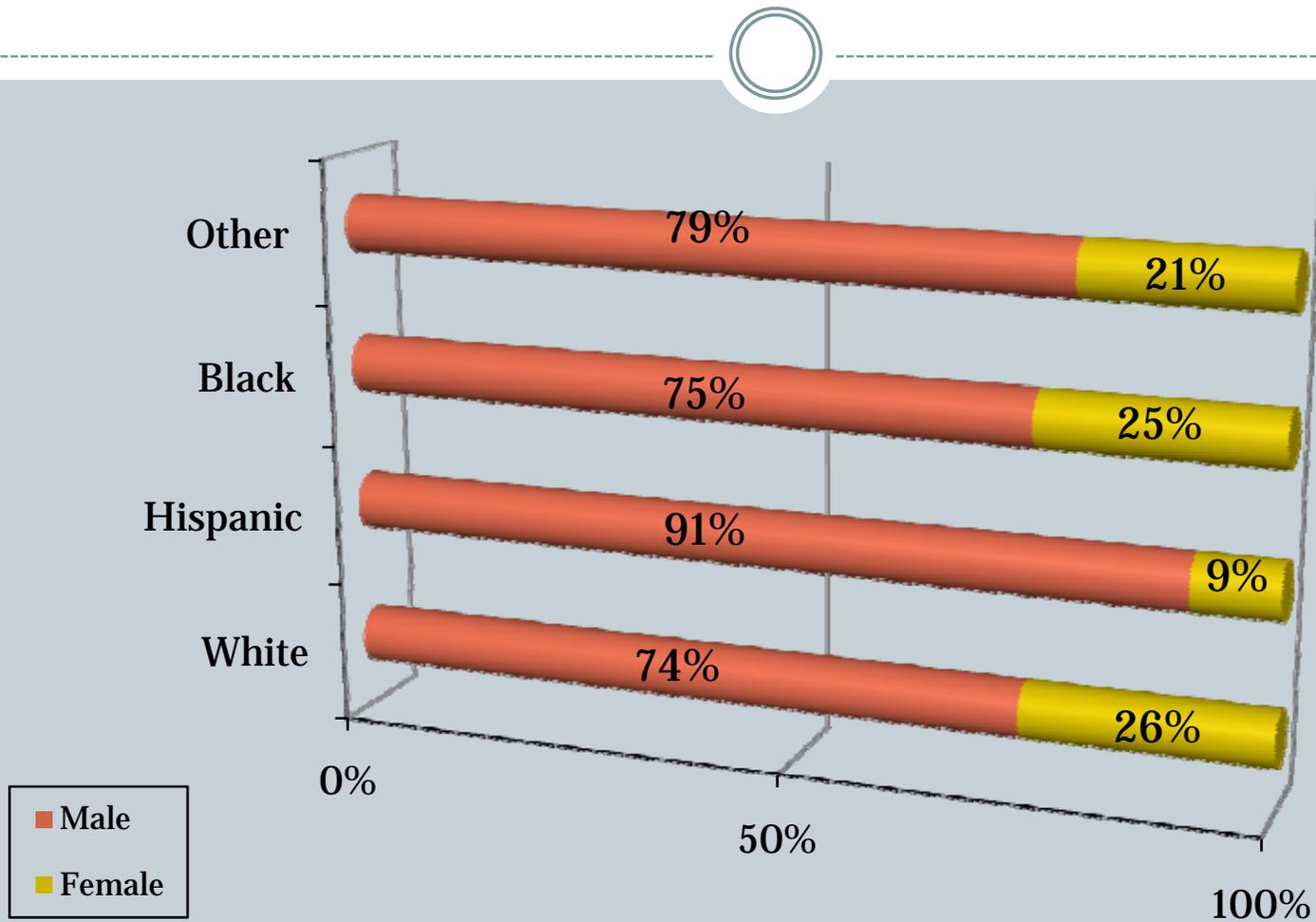


Demographic Data for Suicide

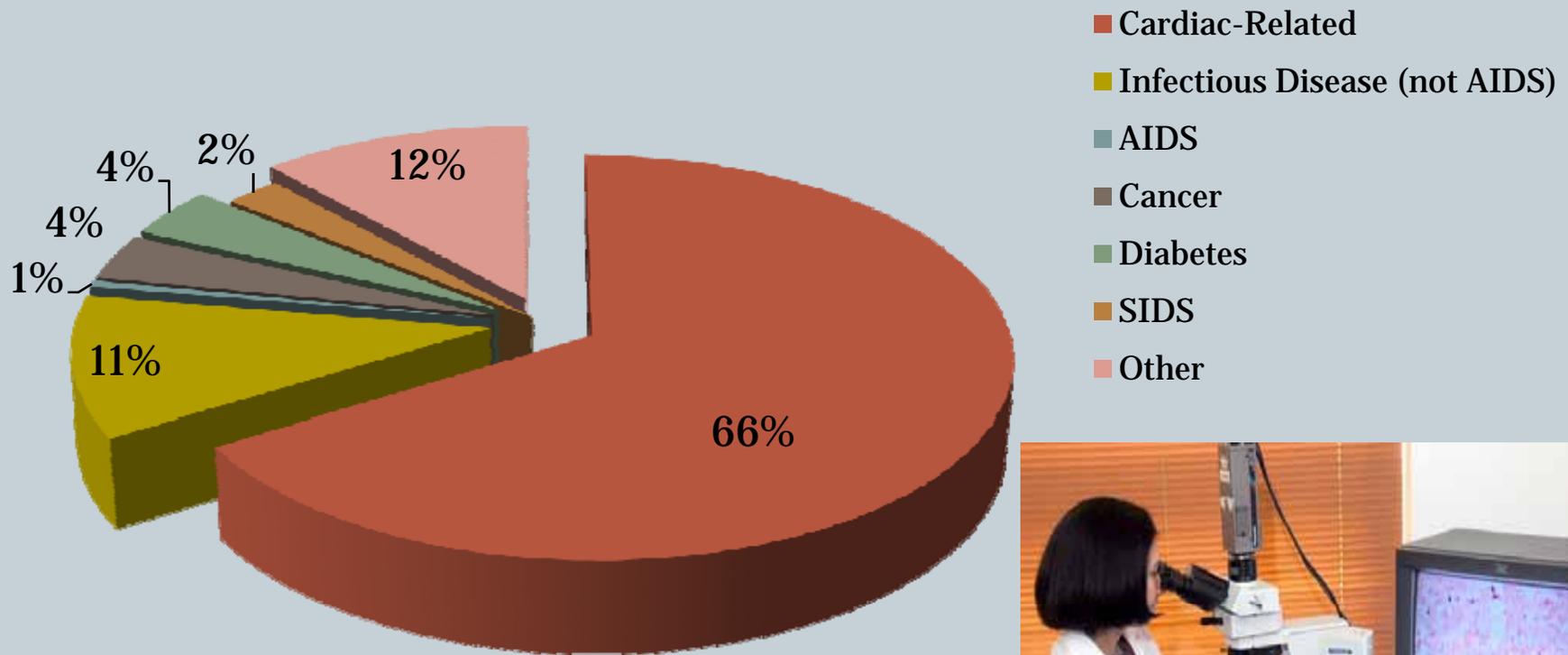


- Male to Female ratio is greater than 3:1
- Age range is 13-90 years
- The number of White suicide cases is almost double the other ethnicities combined (298 compared to 157)
- Murder suicides:
 - 2006: 9, 2007: 9, 2008: 13

Suicide Stratified by Sex and Race/Ethnicity



Natural Deaths



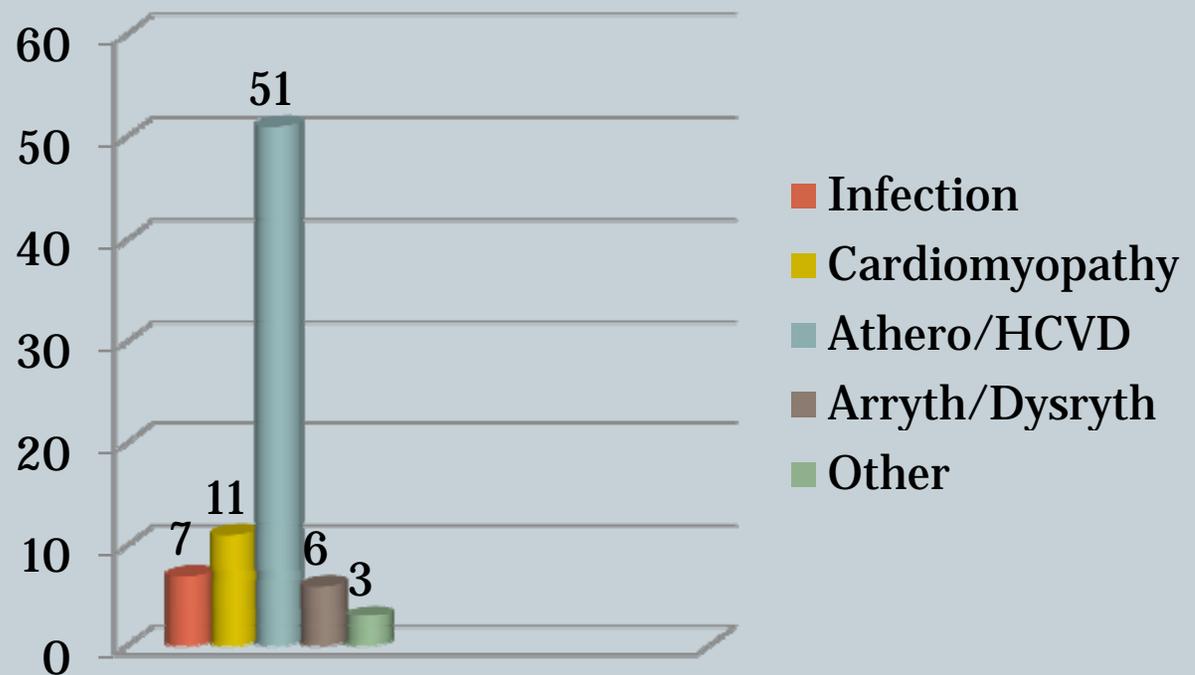
Diabetes and Obesity



- The primary or contributing cause of death for 268 decedents was diabetes.
 - 65% of these decedents were either overweight or obese (BMI= 25+)
- BMI calculated for 3705 decedents 13 years or older and at least 59” tall:
 - 1075 (29%) are obese with a BMI greater than 30
 - 1054 (28%) are overweight with a BMI between 25 and 29
 - The greatest BMI is 78
 - The largest person is 618 lbs./76”
 - 1322 (36%) decedents are of normal weight

Cardiac Death in Young People

- 78 cases of sudden cardiac death occurred in people aged 11 to 40 years
- Causes of Death:



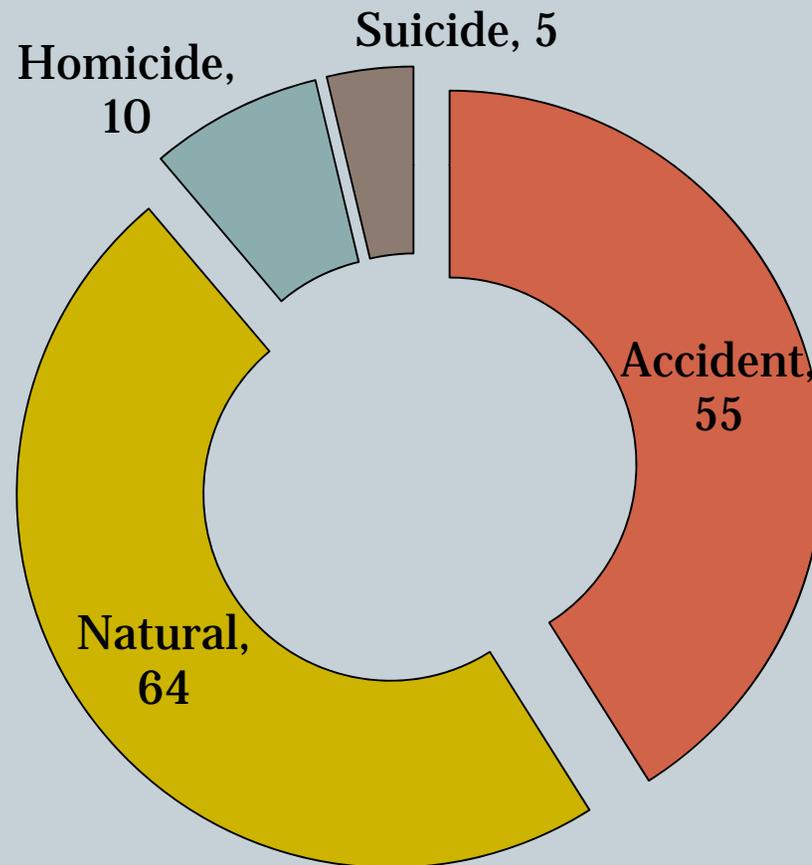
Hurricane Ike-Related Deaths



- 14 cases from 2008 are related to Hurricane Ike
- The ages of the decedents range from 4-61 years
- Manner
 - Accident (12)
 - Natural (1)
 - Suicide (1)
- Carbon Monoxide Toxicity is the Cause of Death in 5 of the 15 cases
- Two people died in residential fires
- One person drowned

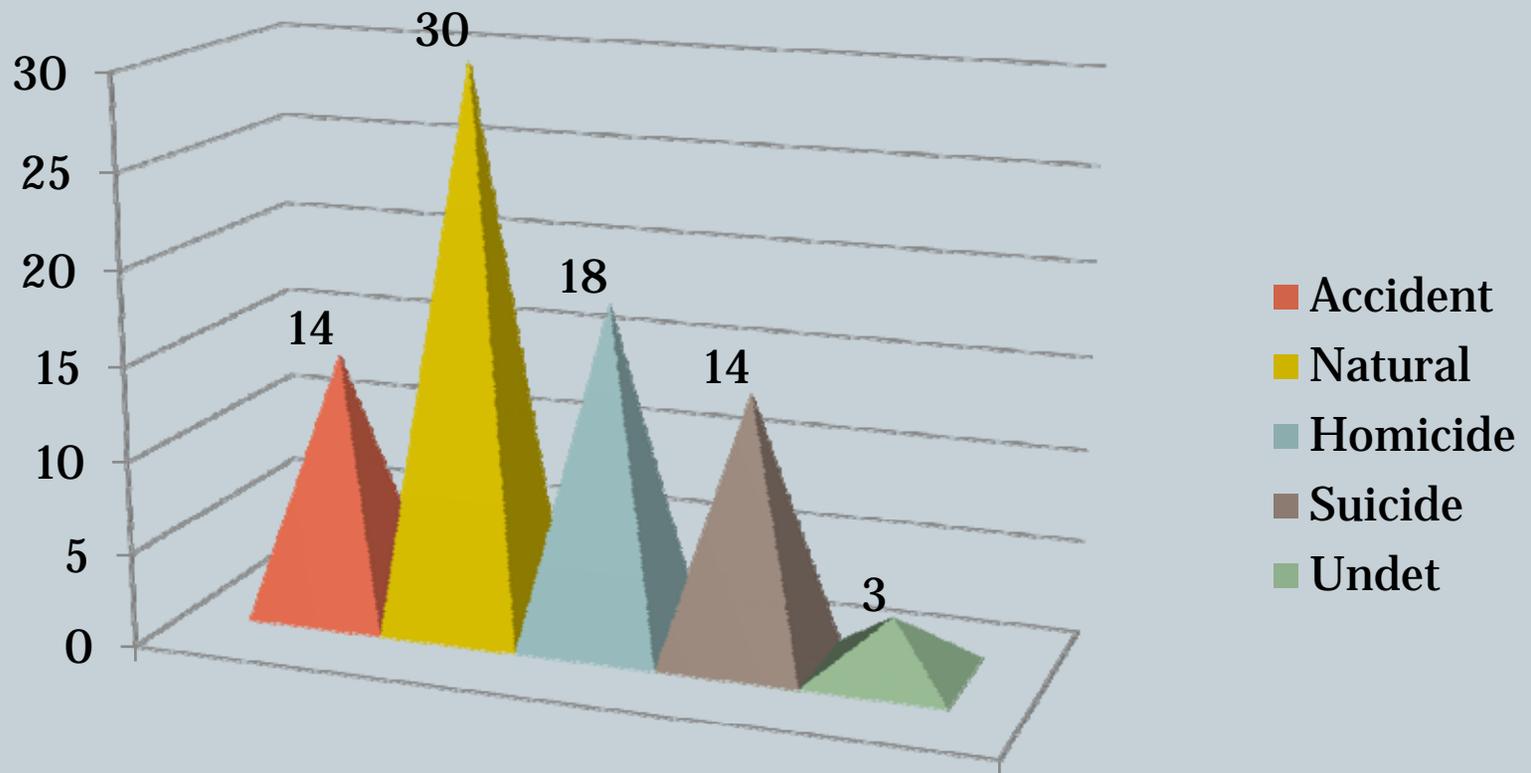
Deaths While at Work

- 134 “at work” deaths were investigated



Deaths While “In Custody”

- 79 “in custody” deaths were investigated



Summary Statements

- 16,454 Harris County deaths and 30 out of county deaths were reported to HCME in 2008.
- The medical examiners performed 3,246 full autopsies and 950 external exams
 - 60% of these cases were injury deaths classified as Accident, Homicide, or Suicide
 - Natural deaths comprised 36% of the medical-legal case load
 - Only 3% of cases were classified as Undetermined in Cause and Manner
 - 1% of cases were fetal deaths

