

Analyzing Murder in Philadelphia

Adama Traore, Giovanni Marrero, Andrew Tauskey

Are there trends in motives or murder weapon that are tied to the murder rate?

1. What is the motive behind most murders in Philadelphia?
2. Are certain weapons used more often in some murders than others?
(weapons/motive)
3. How has the murder rate changed over time, and are there any common motives/
weapons during these times?
 - During spikes or lulls, are the decreases or increases of motives, or weapons used?
4. During what time of year do most murders occur?

Analyzing motives, directing crime prevention initiatives and social support as a City to lower the murder rate

Data

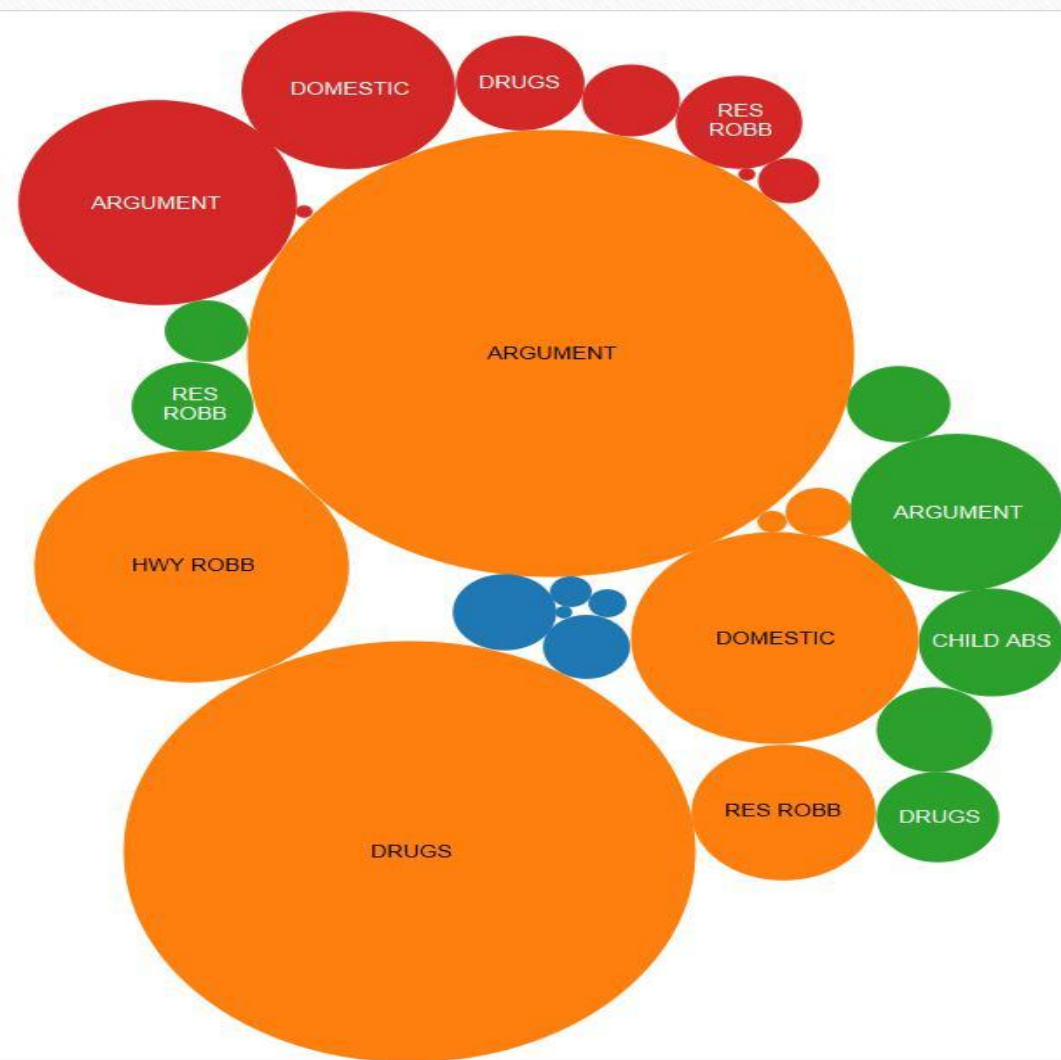
- We used a data set from OpenDataPhilly.org which shows us murders in the city from 1988-2012. The data shows the victim's names, race, sex and age along with the date of their murder and how they were murdered.

Errors:

- No motives for years 2006-2012
- Time of murder listed only for years 2006-2012
- This limited the comparisons we could make.

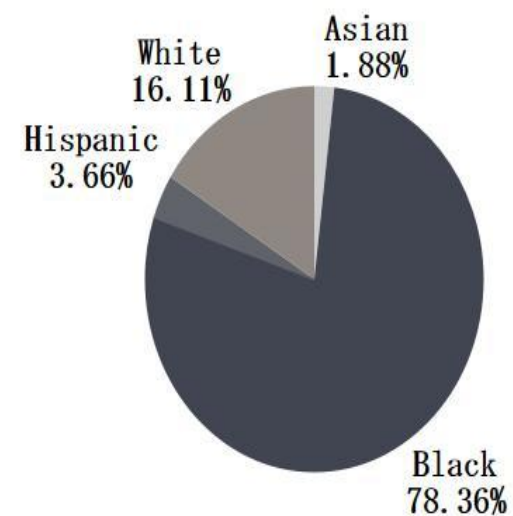
Analyzing Murder: What weapons are associated with what crimes?

What groups of people does murder most affect?



Weapon Used

- ARSON
- FIREARM
- HANDS
- KNIFE



Murder Statistics

Summary Statistics

Average Age of Victim: *30*

Most Common Weapons:



77%



10%



7%

Deadliest Month:  *June*

Deadliest Time: *11 PM*

What have we learned, and what can be done?

- **The Black Community is overwhelmingly most affected by murders**
 - Social support should be directed towards the Black community from the whole Philadelphia community to help prevent violence
- **Firearms are the most common weapon used for homicides in the city.**
 - More initiatives should be launched to prevent illegal firearms getting in the hands of criminals
- **Violence over drugs has caused the most murders**
 - The late reduce of murder rate in the past years is due to the new data-driven strategy used by the police, which allows them to target offenders and steer high risk youth in the right direction.

Sources

1. Philadelphia Police Department. 2012. *Murders in Philadelphia County 1988-2011* [Data File]. Retrieved from <https://www.opendataphilly.org/dataset/murders-in-philadelphia-county-1988-2011>
2. Whelan, A., & Purcell, D. (2015, January 4). Phila.'s murder rate at historic low: A look at why. Retrieved April 20, 2015, from http://articles.philly.com/2015-01-04/news/57637352_1_south-philadelphia-murder-rate-alfred-blumstein