



CENTER *for* HOMICIDE RESEARCH

Homicide Analysis of Flint Michigan

By: Dallas Drake, Jessica Proskin, and Charles Crain

December 28, 2010

Introduction

In early December of 2010, the city of Flint, Michigan passed a hair-raising benchmark. The city, which had already been ranked fourth most dangerous in the nation, surpassed its own previous record, of 61 homicides set in 1986. At this writing Flint now has 65 homicides with two weeks yet to go. Following up on a media inquiry, CHR staff set about analyzing what is happening in the city of Flint.

The city of Flint, once the home to automobile production, has since dwindled in size and economic power due to deindustrialization. This has led to hopelessness, joblessness, home foreclosures, resource deprivation, and other signs of poverty, not the least of which is a high rate of violent crime.¹ So far this year, the homicide rate in Flint is over 58¹ per 100,000, a figure that is higher than nearly every world country (not at war) except Swaziland and Columbia,² making it the fourth most dangerous city in the United States with populations of 50,000 or greater.³ As such, Flint is an excellent opportunity to learn about homicide since statistical outliers in social data provides the most opportunity for understanding and explanation.⁴

This report will outline several key concepts necessary to understanding this analysis and for communicating about it successfully with the community and the media. Key questions will be posed and then a report of the analysis of incident data will be presented, followed by several public policy proposals.

Homicide-free Zones

Across the United States cities, counties, precincts, and neighborhoods are recording their first homicide-free months or years in decades. This is due in large part to the overall reduction of homicides in the United States, otherwise known as the crime-drop.⁵ For example, Newark, NJ in 2010 experienced 37 days of being homicide-free. This marks the first time since 1966 that Newark has seen a calendar

¹ The homicide rate in Flint is calculated using a population estimate of 111,475, a Census Bureau estimate for 2009.

month go by without a homicide.⁶ In another instance in 2007, San Diego's longest stretch (39 days) of being homicide-free, ended. This had been the longest span of homicide-free periods that San Diego had experienced in five years⁷. Even in what we might consider dangerous cities homicide-free areas can sometimes be found. New York City, in 2008, had three precincts that ended the year with zero homicides that year.⁸

Up until now, homicide has always been measured by point measure, i.e., recording and counting the occurrences of homicide incidents. In a sense this is a negative way of perceiving the homicide problem. If we are to focus on our successes rather than our failures, we do this by looking at the spaces in-between homicide incidents, and use the new measure of the homicide incident *interval*. This is the temporal distance in days between two homicide incidents. When two killings occur in a single day, we say that the interval is zero. The larger numbers indicate a healthier community. When enough intervals link together successively, this space can then be referred to as a homicide-free space, or zone. This new measure of homicide is influenced by the FBI's time-clock which illustrates the point that, every few minutes, x number of crimes occur.⁹¹⁰ It provides a way of helping readers or viewers imagine the severity of various crime problems by grasping their temporal proximity. Intervals have also been studied on occasion in other serial crimes such as robbery, rape and serial homicide, though not in any depth. The purpose of such inquiry was uniformly investigative.¹¹ ¹²

Given the entrenchment of the homicide problem, it makes sense to focus increasingly on our successes rather than our failures. When jurisdictions experience a homicide-free period, this interval concept allows us to demonstrate that homicide is not a natural state, and that it is indeed preventable. It is possible to be homicide-free. If homicide is ever to be prevented, we have to change the way we think about the overall problem.

While not all homicide-free intervals are the result of what we might consider prevention, something indeed seems to be working. For smaller intervals, less than two weeks, the interval could simply be the result of a correction over time. For greater intervals, a homicide-free zone might be declared and subsequently analyzed for preventative clues.

Types of Homicide

There are many varieties or types of homicide.¹³ When considering increases, decreases, or prevention strategies, the first question is to inquire as to what type of homicide is being examined. These types can fit into what are called homicide syndromes. Many processes of violence can lead to a homicidal end, yet all are quite unique. Their only commonality is the death of one of the actors. When asked what to do about homicide, one should always respond: "Which kind?"

Similarly situated is the consideration to establish which types of homicides are the driving force in the homicide rate. Which variety of homicide is increasing or decreasing *most significantly*, or leading to the greatest change overall. For efficiency's sake, the most plentiful kind of homicide should be targeted first for intervention. The type of homicide under consideration will significantly impact the choice of preventative strategy to be undertaken.

In Flint, Police Chief Alvern Locks indicates that most of the homicide in his city is the result of, "drugs and gangs".¹⁴ Drug or gang homicides are a motivational type of homicide. Data available to

Center researchers did not include this level of detail however. Analysis is of whether any other types of homicide are increasing or decreasing as well would be more important.

Strategies enacted by community leaders to address the homicide problem are likely to be targeted toward street-crime homicides. Researchers would not expect that these strategies would have much impact on child homicides, nor on intimate-partner homicides. But if street-crime homicides are a driving force, then increasing arrests makes sense.

Law enforcement's ability to *prevent* any form of street-crime might be limited due to the inherent nature of law enforcement as a reactive form of help, often measured in the form of response-times. *Police* strategies to reduce homicide can best be constructed wherein some form of arrest can be initiated which, is more within the domain of active policing. The remaining question rests on determining the probable cause for such arrests.

Role of Contagion

As is common with many instances of drug and gang homicide, one bad event often leads to another. This might occur through a motive of retribution or revenge.¹⁵ When this occurs, one could say it is an example of homicidal contagion, the connotations of which emerge when considering the epidemiology of violence. In the early discourses of homicide prevention, a model of medical epidemiology was used to envision how homicide might be prevented.¹⁶ It was here that the idea of epidemic and contagion were first introduced.

Epidemic is a term used to describe a larger than expected number of occurrences, often thought of as widespread. The process by which a behavior spreads and the speed of spread are both described by the term contagion.

Contagion as used in homicide parlance is the spread and rapid growth in the incidence of homicidal interactions. Homicide is facilitated by a “contagious process of contact or interaction” between its actors. An “infectious agent” spreads the behavior from one person to the next, and this occurs within the context of a social network.¹⁷ This network can easily be thought of as a criminal gang.

Two conditions increase the likelihood of contagion. Contagion is more likely to occur when there is low or absent social control, such as is commonly found in areas of concentrated poverty and resource deprivation.¹⁸ It is also more likely to occur when a third party is present during the homicide event.¹⁹ This is often due to the role of rival gang revenge. That third party might be an actor, a witness or a bystander.

Contagion can be recognized or diagnosed by searching for a sharp rise or fall in the number of homicides. This would result in “a rate far beyond what would be predicted by exposure to some external factor.” Secondly, “the phenomenon is endemic to the people and places where its occurrence is highest and that this behavior may be effectively passed from one person to another through some process of contact or interaction.”²⁰

Homicides in Flint, Michigan appear to match the definitions of homicide contagion. This is supported by the frequency increase, and speed of increase in the number of homicides but also, match

process markers of contagious homicide such as use of firearm weapons, youthful actors²¹ and a contextual factor of low social control.²²

Understanding the mechanisms of contagion and the various processes involved in weapon use can provide us with a clearer picture of where an intervention might be plied. For instance, gun behaviors (adapted)²³ include:

1. seeing someone or knowing someone with a gun
2. looking for a gun in one's own house
3. trying to obtain a gun
4. just flashing a gun when trying to threaten or scare
5. using the gun for pistol whipping
6. firing the gun to scare, without aiming to hit
7. firing the gun toward someone
8. firing to injure, but not to kill
9. firing to kill

Homicides Within Family Networks

"The family unit is the most powerful predictor of human behavior."²⁴ It is also a social network in which homicidal attitudes, beliefs and behaviors can be transmitted. "Analysis indicates that the family is a 'training ground for violence,' as violence and approval of violence are learned in early childhood."²⁵

Families have previously been identified as a particular place where violence occurs among its members (domestic and intimate-partner violence). However, while some families experience an increased level of *victimization*, others increase in homicide *offending*. In many cases criminal gangs overlap with family units.^{26 27}

Many families, impacted by homicide either as victim or offender, have experienced a violent impact previously.²⁸ In media reports of a homicide it will sometimes be mentioned that prior victimizations have occurred.^{29 30} This fits within the Cycle of Violence Hypothesis which states that each act of violence can be traced back to a previous violent act. This idea of a cycle can be identified in families as, psychological "approval of violence" and violence existing in family relationships. Some families too, maintain "violent norms",³¹ and these norms are amenable to change.

Cyclic homicide victimization is due in part to the nature of a geography of homicide. Homicidal events tend to occur repeatedly in particular areas of a city³² and in particular environments. The cycle is also supported by a "perceived level of violence in the immediate community and the [a perceived] need to protect oneself from being victimized."³³ It seems unlikely that violent actors would only kill outside the family, but not within a family and vice versa. As a result we would expect to see cyclic violent patterns within homicide clusters, both inside and outside the family unit. The term family can and does include extended families such as aunts, uncles, cousins, boy friends, girl friends, etc.

Treatment programs have been developed in an attempt to reduce homicidal violence within the family by addressing situational factors.³⁴ If family violence is treatable, then perhaps violence focused outside the family can also be treated.³⁵ This treatment can occur within the family unit and might even

be facilitated using traditional routes of parenting intervention and education routinely employed by domestic violence advocates in many jurisdictions throughout the country.

Research Questions

The following research questions have been proffered for this investigation:

1. Why has Flint surpassed its 1986 record of 61 homicides?
2. What is the interval between homicides and are they increasing or decreasing?
3. What type of homicide is driving the high homicide rate?
4. Might the high homicide rate be the result (in part) of extenuating circumstances, such as multicides or serial homicides?
5. What can be done to reduce the current high homicide rate?
6. Are any homicide-free zones identified?

Methodology

The strategy for this analysis is descriptive statistics and pattern identification. This dataset is limited in that it only contains 10 variables, although it could easily be expanded at a later date.

The Center for Homicide Research obtained published data from The Flint Journal and used this data to construct a simple dataset. This data covers homicides in Flint, MI throughout the year 2010 up until November 17. Additional cases were identified and added to the dataset, using open source data collection.

Data was cleaned of errors. For instance, some cases were researched to determine the true date of the assaultive injury. This was necessary because homicide researchers routinely use the date of the incident, rather than the date the body was found. Three such cases were identified and corrected.

The level of analysis chosen for this evaluation is the victim. This was because the difference between victim and incident level results were barely perceptible. Only two double-homicides occurred during the period under investigation and these did not markedly impact the results either.

During 2010 a serial offender was discovered to be operating in the city of Flint and elsewhere. There was some initial concern that the serial killings might appreciably change the data, driving the homicide rate up. While it did impact the homicide-rate, it did not significantly impact the overall results.

Results

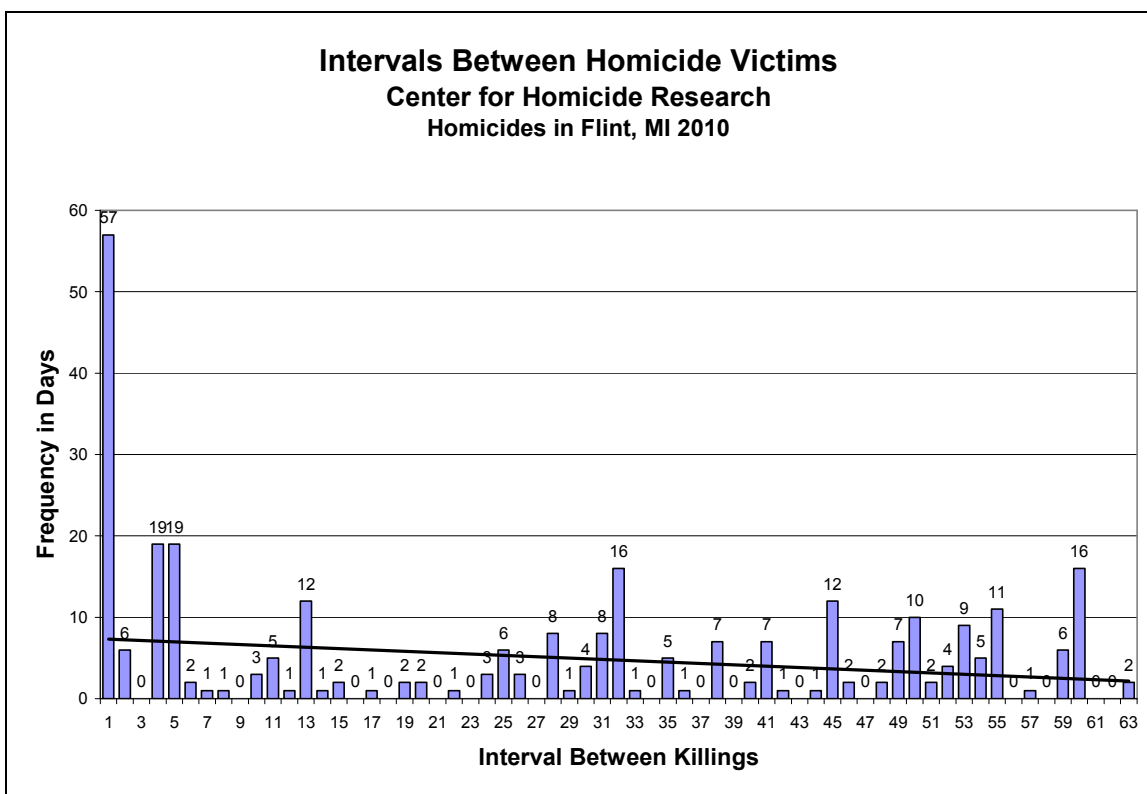
This study identified 65 homicides of which 63 were criminal and two were justifiable homicides, occurring in Flint. Justifiable homicides are routinely reported along with criminal homicides according to the FBI's Uniform Crime Reporting System. One correction made to the data was to add in a

homicide that occurred in Flint, but whose abduction began in an adjoining township.

Most of the homicide victims (83%) were male. Seventeen percent of victims were female, with none missing. Race is not a variable for which we collected data though with police reports or department cooperation, this might be possible at a later date.

Because of the limitation of our data we choose to focus on geographic and temporal characteristics of the homicides. To do this a homicide free interval was used as the measurement, as outlined earlier in this report. The homicide points were plotted on a calendar and then the days between homicide victimizations were computed. The result is pictured in chart 1.1 below. A trend line was added to illustrate the rolling average from the beginning of the year to the end.

Chart 1.1 Intervals Between Homicide Victims



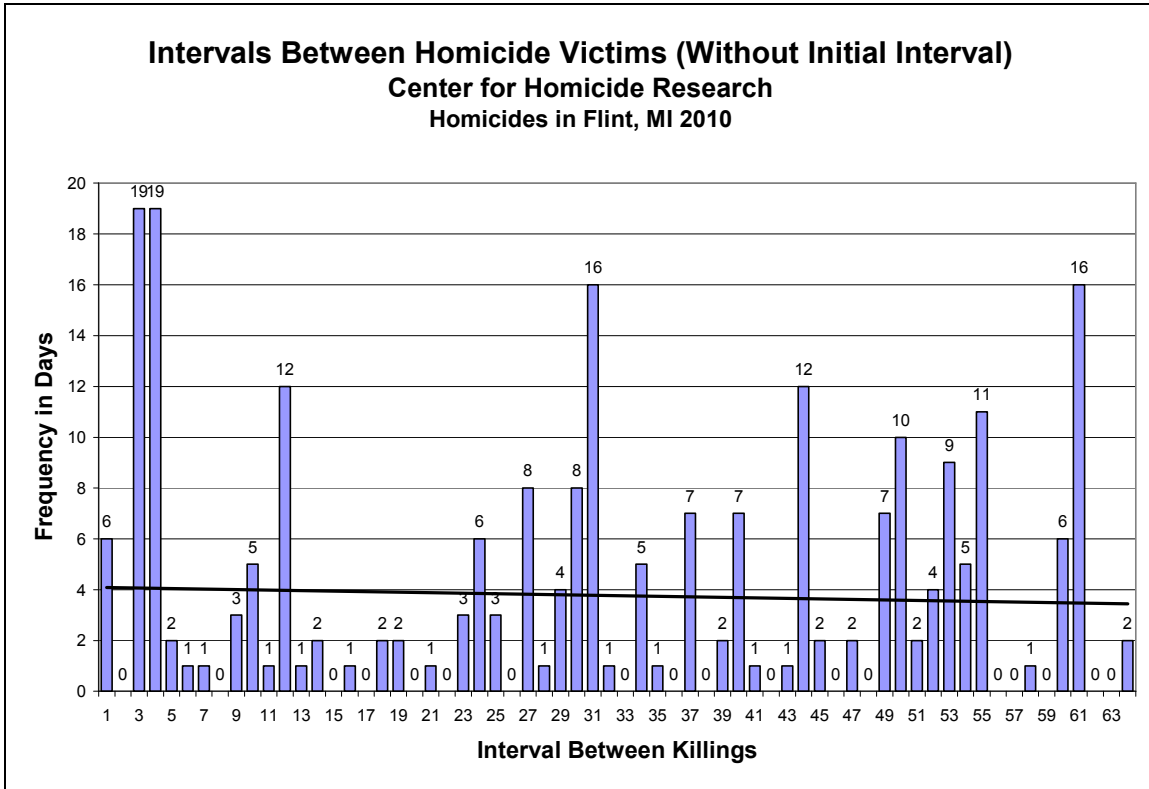
In the calendar year 2010, no homicides occurred until February 19, 2010. For this analysis we used an initial incident which occurred December 22, 2009. We started on this date in order to show that a significant period of time occurred wherein Flint was homicide-free. The results can be seen on Chart 1.1 above.

Flint experienced a period of time where the city was homicide-free. Given the record number of homicides in 2010 this homicide free zone demonstrates that being homicide free is possible. It also is a starting point for the next wave of homicides. Although this was a significant event, it appears as an outlier when we consider the rest of the year. Once this outlier is removed, we see that the period

between homicides remains relatively constant with only a slight decrease. The results can be seen on chart 1.2 below.

If we fail to exclude it as an outlier, it appears that the city is becoming more dangerous as the year progresses, with shorter and shorter intervals emerging between homicides.

Chart 1.2 Interval Between Homicide Victims, Without Initial Interval

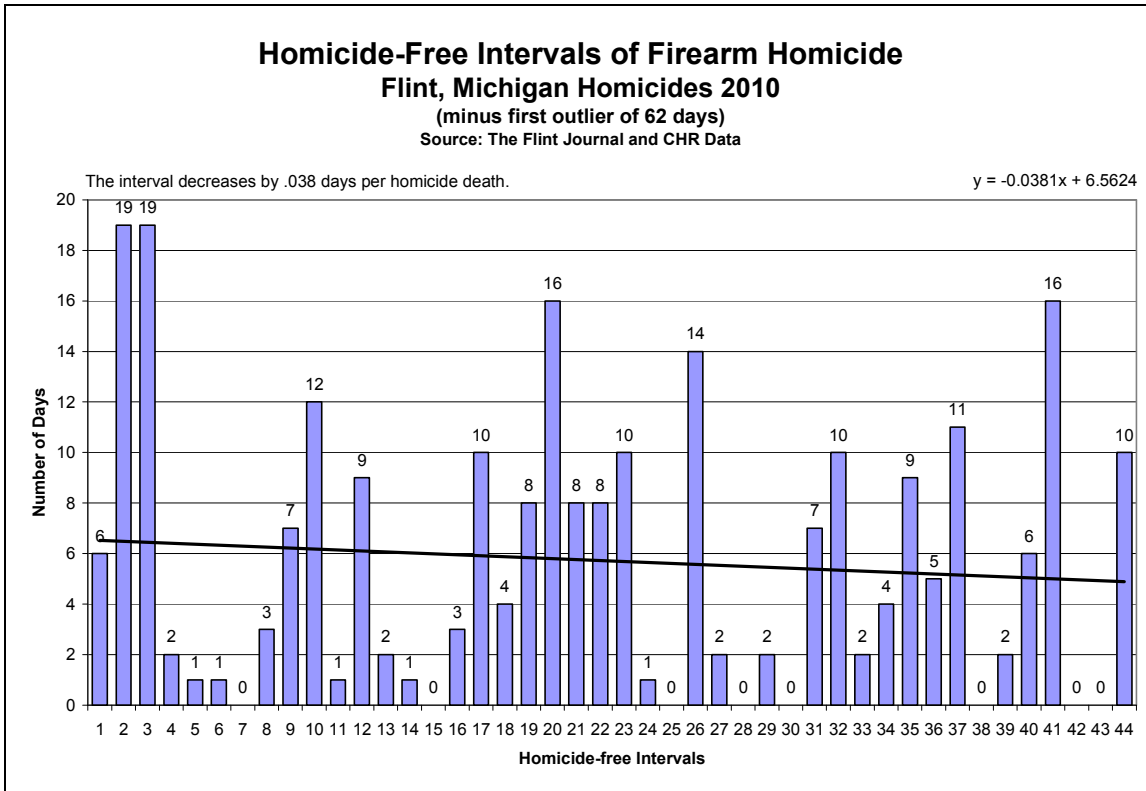


Concerning the inclusion or exclusion of the victims of the serial killer, the results between the two options were nearly imperceptible. Incidents that were the result of serial offending did not appear to impact our analysis significantly. The reason for this is that the serial offender struck in several instances on days when a homicide had already occurred.

When evaluating the data for patterns, and given the constraints of the data at our disposal, it appears that the wave of homicides beginning on February 19, clearly illustrates the concept of contagion. Identifying contagion is useful in that it specifies an opportunity for prevention.

The following reasons are offered to support the assertion that contagion is present. First, the contagious wave was preceded by a homicide free interval that was large in scope and evident of a steady state. Second, the increase in homicide incidents was greater than expected, signaling an epidemic, or incidents that built up rapidly over time. Third, the driving force behind the homicide-rate is firearm homicide as identified in the mechanism of contagion.³⁶ (see comparison between charts 1.3 and 1.4)

Chart 1.3 Firearm Homicide-free Intervals (Without Initial Interval)

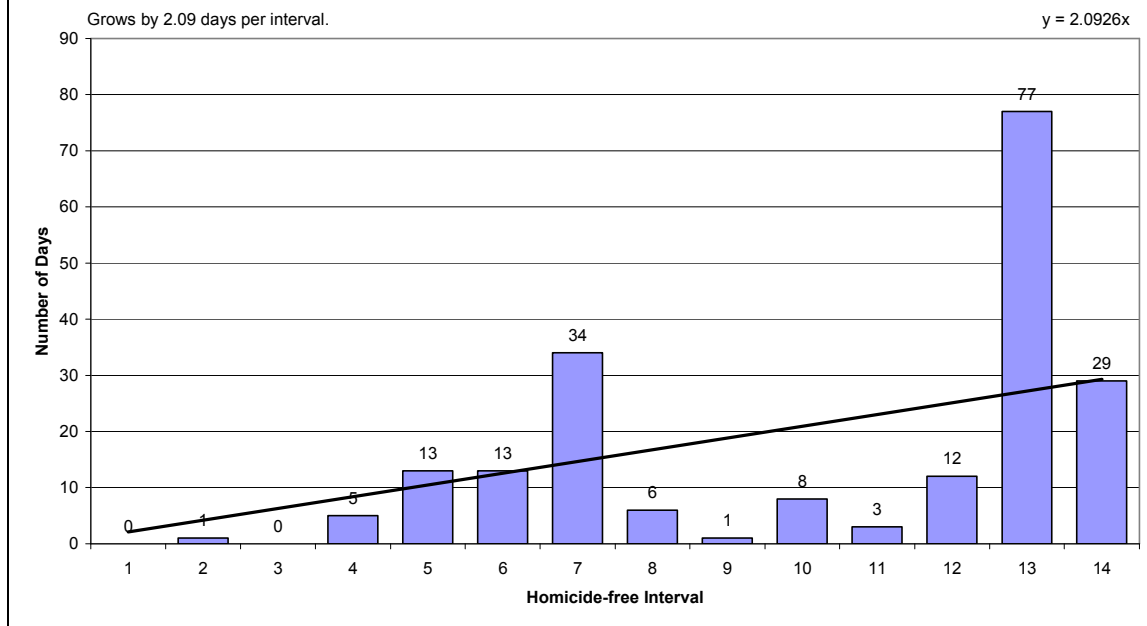


One of the defining characteristics of homicide contagion is the identification and presence of a contagious agent. Researchers have identified this agent to be a firearm weapon.³⁷ Chart 1.3 shows that firearm homicides contain the bulk of the contagious distribution and bulk of the homicides in total (51). Firearm homicides over the course of the year are occurring with fewer homicide-free days between events, while non-firearm homicides (see chart 1.4 below) are showing an increase in the number of days between events over the time-series of 2.09 days per interval. This means that there are not simply more firearm homicides, but they are increasing in prevalence as time passes.²

Chart 1.4 Homicide-free Intervals of Non-Firearm Homicide

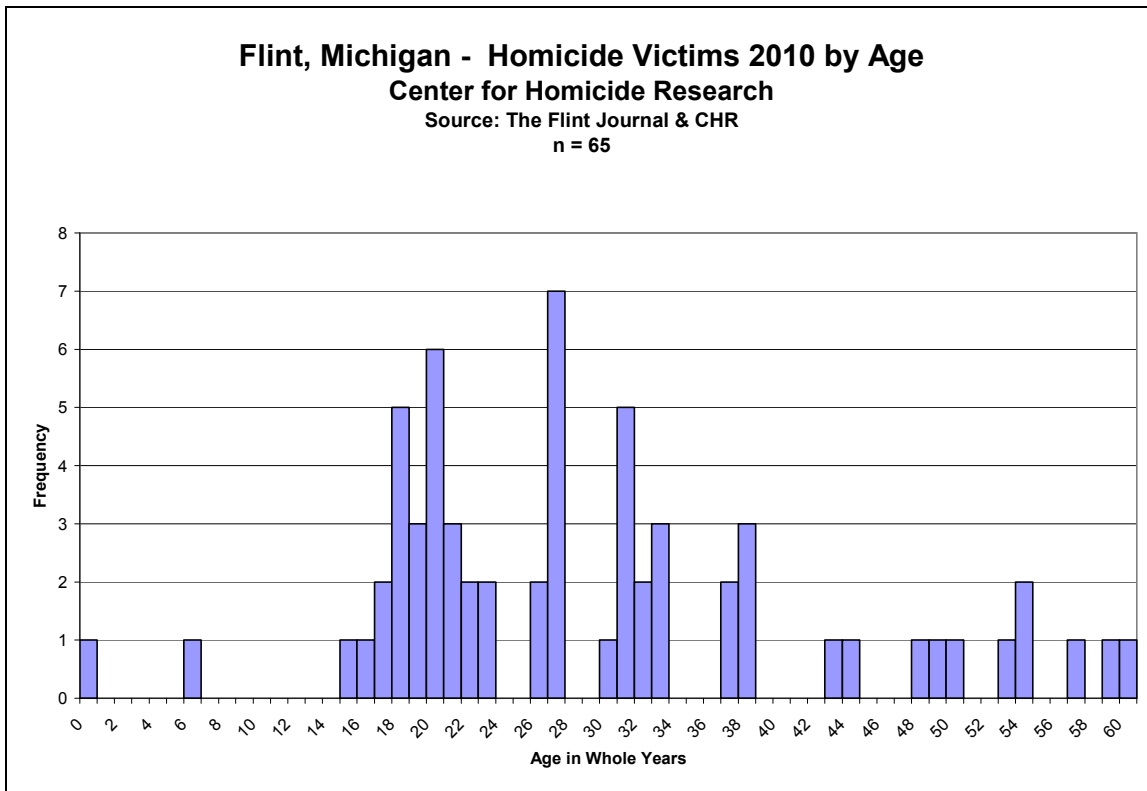
² The non-firearm data contains three firearm homicides that appeared to not be street-crime homicides.

**Homicide-free Intervals of Non-Firearm Homicide
Flint, Michigan Homicides 2010**
(minus both beginning outliers)
Source: The Flint Journal and CHR Data



Fourth, the predominate age distribution of these victims is heavily weighted by juveniles and young adults (see chart 1.5 below). These are the same individuals who are vulnerable to the social influence of peers as they struggle to forge their adult identity and seek to elevate their social statuses. The average age of victim is 19.9 years and the median is 32 years. Although the age band is not as narrow as that specified by Rowe and Rogers (1984),³⁸ age is only one diagnostic factor to consider. Victim data was used as a proxy for offender data since so many offenders remain at-large and offender age was difficult to obtain. This can be done since victims and offenders tend to come from the same social group. An analysis of the FBI's Supplemental Homicide Reports reveal that homicide offenders are on average of 5.9 years younger than their victims. The median age difference (resistant to outliers) shows that offenders are five years younger than victims. An analysis of identified offenders will be attempted as time permits.

Chart 1.5 Homicide Victims by Age of Victim



Conclusion

The citizens are experiencing an epidemic of homicide that has surpassed its 1986 record of 61 homicides due in large part to a process of contagion. The mechanism of that process is the presence of a firearm weapon within a dangerous ecological environment. It is also clear that the 1986 record might not have been breached if not for the simultaneous operation of a predatory serial homicide offender within the Flint area. These killings exacerbated the already high homicide rate. It is also true that this offender capitalized on a symbiotic relationship³⁹ between himself and an already elevated homicide rate. It provided him a certain degree of cover for his criminal activities.

Secondly, data shows the temporal interval between homicides is decreasing slightly, but with an already high rate of killing. This means that the killings are becoming slightly more frequent while the rate of killing is quite high and lends support for the claim that an intervention, or interventions, is called for and should occur quickly. Leaders should take heart from the identification of various homicide-free intervals, and use those to their advantage in addressing the problem.

The type of homicide that appears to be driving the high homicide rate is firearm homicides. This is typical in many American cities and comes with an already identified promising intervention which will be mentioned in a moment.

The high homicide rate is only slightly the result of extenuating circumstances (such as outliers), such as multicides or serial homicides. The serial homicide is being dealt with. An arrest has been made, the offender charged and a trial scheduled. Homicide-free zones have been identified. These are the quiet times preceding outbreaks of contagious violence and one was detected at the start of the year of 57 days. The next section will deal recommendations of what can be done to reduce the currently high homicide rate in Flint.

Policy Suggestions

The movement from problem identification to policy intervention is not an easy one. There is still much we do not know about the extent and nature of the homicide problem in Flint and its surrounding metropolitan areas. The extent of Flint's homicide problem calls for swift action by leaders in the public sphere, while considering the time and resources available. It has been noted by CHR research staff that many efforts are already underway within the city, by police and the community in an attempt to address the problem. The current efforts to implement Operation Ceasefire are a vital component. With this in mind, several additional suggestions are now listed.

If funds were available (which it appears there is not as the city is cash-strapped), three interventions might be proposed, including Shot-Spotter technology (to detect the occurrence of gunfire); plate-reader technology (documents license plates passing a detector, recording and denoting time for later action); and the introduction of stationary street-corner cameras that might either record action before, during, or after the commission of a homicide. Because homicides cluster within certain areas, a few cameras might be all that's needed, with particular attention to areas conducive to flight, such as bridges or freeway on-ramps.

With limited funds, and given the identification of violence contagion, the introduction of Project Exile (otherwise known as Face-Five) might be beneficial. This program is essentially a networking between agencies and a prior uniform agreement to apprehend, prosecute and incarcerate any of the top 25 most chronic and dangerous offenders caught in possession of a firearm, the weapon identified as the contagious agent in street-crime homicides. This program has shown remarkable success in many cities and focuses on enforcing existing felon gun laws. The costs involved exists mostly at the federal level in the form of necessary court proceedings and incarceration. Minneapolis, MN is experiencing remarkable success, as is, Richmond, VA, where it first was implemented.

A final recommendation would be to implement a program of family-based intervention. This would be a voluntary program offered to any family violence has already impacted. The most likely agency for service delivery of the intervention would be local domestic violence advocates or parenting education specialists. It is possible that federal money is available for such a project. Intervention would focus on behaviors and psychological issues such as "communication, addictions, thinking errors, ...relationships, anger management and empathy."⁴⁰ The Center for Homicide Research can provide information and referral about the particulars of such an intervention strategy.

The foregoing is a cursory analysis of Flint's homicides. Leadership within the city including the Mayor and Chief of Police are right on target. The Center for Homicide Research is interested in further evaluating Flint's homicide problem and could better do so with access to official police data. It seems that researchers could then better answer a number of pressing questions in support of the city's mission to address their crime problem.

Dallas Drake is Principal Researcher of the Center for Homicide Research. He is a member of the Homicide Research Working Group and the International Homicide Investigator's Association. He can be reached at dallas.drake@mindspring.com.

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