SUMMARY REPORT:
LATINO INTIMATE PARTNER HOMICIDE
GRANT NO: 2013-IJ-CX-0037

SUBMITTED BY:

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And

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PURPOSE

Within the past three decades, 16.3% of all homicides have been committed by intimate partners (Cooper & Smith, 2011). While Latinos are now the largest minority group, very little is known about intimate partner homicide (IPH) among this group. Thus, the purpose of this project was to determine the rates, characteristics, and trends of Latino IPH in comparison to White and African-American IPH. The four goals were:

1. Determine the rate of Latino, non-Latino White, and non-Latino Black IPH from 2005 to 2010 in 16 states.
2. Analyze the characteristics of Latino IPH and how they compare with characteristics of non-Latino White and non-Latino Black IPH.
3. Determine the unique characteristics of IPH compared to homicide in general by racial/ethnic group.
4. Determine how rates of Latino, non-Latino White, and non-Latino Black IPH changed from 2005 to 2010.

METHOD

The National Violent Death Reporting System (NVDRS) from the Centers for Disease Control and Prevention (CDC), overcomes some of the limitations present in other homicide data sources (e.g., Supplemental Homicide Reports) by compiling violent death information from death certificates, coroner/medical examiner records, police reports, and data abstractor input (Center for Disease Control and Prevention, 2010). Please see http://www.cdc.gov/violenceprevention/nvdrs/index.html for detailed information. The NVDRS is the first national surveillance system for violent deaths and aims to deliver systematic, accurate and timely data on violent death in order to assist with prevention (Center for Disease Control and Prevention, 2010). All violent deaths in participating states are included in the NVDRS and are defined as deaths "resulting from the intentional use of physical force or power against oneself, another person, or against a group or community; " including suicides, homicides, deaths from legal intervention, deaths of undetermined intent, and unintentional

firearm fatalities (Center for Disease Control and Prevention, 2010). For this project, homicides and homicide/suicides were included. By 2005, 16 states had begun the surveillance and these include: Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin. Ohio also started collecting data in 2011. The records include for the purposes of this project, incident variables, victim variables, suspect variables, death certificate variables, coroner/ medical examiner/ hospital variables, police and law enforcement variables, victim-suspect relationship variables, weapon type variables, and circumstances for homicide. Descriptive information from the NVDRS is available through the Web-based Injury Statistics Query and Reporting System (WISQARS; http://www.cdc.gov/injury/wisqars/); however, a restricted access version of the data was used for the current study to allow for imputation of missing data, examination of variables by racial/ethnic group and victim-offender relationship, and inclusion of additional variables.

Race and ethnicity information was gathered through death certificates, coroner/medical examiner reports, and police reports. We examined Whites, Latinos, African-Americans and all others races (including biracial). Immigrant status was determined by classifying all persons who were born outside of the US as immigrants. Place of birth was determined through the death certificates and coroner/medical examiner reports. History of abuse was marked if any record (coroner/medical examiner reports, police reports) indicated a documented history of abuse by the suspect.

DATA ANALYSIS

Missing Data. Missing data is an important concern in data analysis as missing data can produced biased coefficients and deflated standard errors leading to questionable results if not

handled appropriately (see Allison, 2002). The most common strategy for handling missing data is to assume that the data are Missing Completely at Random (MCAR); that the probability that a data element is missing is independent from the value of that data element and the value of all other variables. As discussed in Fox and Swatt (2008), this assumption that underlies common techniques such as listwise deletion is problematic for the Supplementary Homicide Reports and homicide data generally due to missing data resulting from unsolved cases. A more tenable assumption is that the data are Missing at Random (MAR), where the data can be treated as MCAR after adjusting for covariates that affect the probability of missingness. Following the strategy used by Fox and Swatt (2008), we used multiple imputation (MI) to adjust for missing data in the NVDRS dataset.

For the current study, 27 variables were imputed using the chained equations method developed by van Buuren, Boshuizen, & Knook (1999), and implemented by Royston and colleagues (2004; 2009; White et al. 2011) and implemented in Stata 13.0 (see StataCorp, 2014). Since nearly all of these variables were categorical, dichotomous and multinomial logit models were used for the prediction equations for all variables but the number of wounds (negative binomial). Because a large number of categorical variables appears in the models, it was necessary to augment the data with pseudo observations to avoid situations of quasi-complete separation or "perfect prediction" (see StataCorp, 2014 for discussion). Initial diagnostics suggested that iterations converged to a stable distribution after approximately 15 burn-in iterations. Based considerations relating to the fraction of missing information for key variables and the amount of computation time required (36 hours), 40 imputed data sets were created.

Data Analysis. In order to examine whether there were differences between race and ethnic groups for the covariates under Goals 1 and 2, we examined the proportion of IPHs out of the

total number of homicides. While this does not capture the differential risk of homicide (or IPH) for each group, this ratio can be used to discern whether patterns of IPH differ between groups with different rates of victimization. Because these data are multiply imputed, it is necessary to combine estimates using Rubin's rules (see Rubin, 1987; StataCorp, 2014). When examining the impact of these covariates simultaneously in Goal 3**,** we estimated separate logit models predicting whether a case would be an IPH compared to other homicide types, which is analogous to examining the proportion of IPH compared to total homicides examined previously. Again, the results were combined using Rubin's rules and the impact of the covariates were compared between race/ethnicity groups.

FINDINGS

Goal 1. Goal 1 (see Table 1) involved understanding the distribution of IPH for race and ethnic groups across all years and sites. One of the first questions was whether there were substantial differences in the proportion of IPH victimization when comparing Latino ancestry to non-Latino ancestry for each racial group and whether there were any differences between racial groups among Latino ethnicities. Results from these tests suggest that there were significant differences in the proportion of IPHs between Latinos and non-Latinos for each racial group (White, Black, and other), but that the differences were only substantial for Whites (diff = .117) and Other Race (diff = .088). When comparing IPH proportions across racial groups for Latinos, the observed differences in the proportions are not statistically significant. These results suggest that it is sensible to combine race/ethnicity into a single variable (White non-Latino, Black non-Latino, Latino, and Other non-Latino), which was done for the remainder of the comparisons. When examining the difference between the proportions of IPHs between the combined race/ethnicity groups, a very clear statistically significant difference was seen. Specifically, 22% of White

homicides were IPHs, 10% of Black homicides were IPHs, 10% of Latino homicides were IPHs, and 17% of Other race homicides were IPHs.

To further explore the differences between race/ethnicity groups, we also examined the proportions of IPH for victim sex and victim age by victim race/ethnicity. For both comparisons, there were very clear differences in sex and age groups across race/ethnicity. Interestingly, there were also observable differences in the proportions of IPH between race/ethnicity groups for both sex and age. The joint comparison of the proportion of IPH for sex indicated that there was significant heterogeneity in the proportions between race/ethnicity groups. After omitting the <1 year and 1 – 14 year age categories because the proportions of IPH are approximately zero, there are significant differences among race/ethnicity groups for all four remaining age groups. Specifically, Latino homicides were most likely to be IPHs for the 35-64 age group (15% of homicides during this age group are IPHs). Additionally, female homicides were much more likely to be IPHs than male homicides. IPH is a gendered phenomena and it is most gendered among Latinos. The proportion of IPHs relative to other homicides was 21 times higher among Latino women than among Latino men.

We also considered the differences between immigrant statuses of the victims between race/ethnicity groups. The joint test for the difference in proportions between immigrant/non-immigrant victims within racial groups was not statistically significant, but when comparing immigrants victims between race/ethnicity groups it appeared that the proportion of IPH for White and Other Race victims (.182 and .198) were significantly higher than the proportions for Blacks and Latinos victims (.010 and .099).

Goal 2. Results for Goal 2 are available in Table 2. Regarding the circumstances of the crime, we first examined suspect variables. The proportion of male suspects significantly varied by

racial/ethnic groups such that Whites and Other Race had higher proportions of male suspects. Female suspects were most common among Whites and Blacks. Due to the availability of data, it was not known if the suspect was formerly abused by the victim of IPH. Victims and offenders were likely to be of the same racial/ethnic group, except for the Other Race group. The ages of offenders also varied by racial/ethnic group, with most IPH suspects being 35-59 years old. With regard to suspect suicide, there was a considerable difference between males and females across racial/ethnic groups as the proportion of IPH where a suicide occurred was much higher when there was a female victim compared to a male victim. Notably, suicide by the suspect was least likely when the victim was a Latino male (3%) and most likely when the victim was a Latino female (79%).

We further examined whether alcohol or drugs were found in the toxicology report of the vicitm. For both alcohol use and drug use we observed differences in the proportion of IPHs between race/ethnicity groups. Latino male victims were least likely to have alcohol or drugs in the toxicology reports (2%) and female victims overall were more likely to have alcohol and drugs in the toxicology reports. Unfortunately, toxicology information was only available for the victim, not the suspect.

There were no statistically significant differences observed between racial/ethnic groups in regard to the proportion of IPHs with female victims where there was a prior history of abuse by the suspect. Whites had a slightly larger proportion of IPHs where the homicide incident was precipitated by another crime (7%) compared to other race/ethnic groups ($F(3, 2174) = 16.58$; $p < .001$). There also evidence to suggest that there is racial/ethnic heterogeneity in regard to the weapon used in the homicide- specifically with regard to firearms and knifes for men and

firearms and personal weapons for women. Latinos appear to incur slightly more wounds in IPH (4.5) than other groups and least likely to be killed at home (19%).

Goal 3. Results for Goal 3 are available in Table 3. While examining the proportions are informative, these comparisons are limited because it is not possible to control for multiple variables and some of the significant findings may be spurious. Under Goal 3, we estimated separate logit models for White non-Latino, Black non-Latino, and Latino victims in order to address this issue. For each of these models, the dependent variable was a dichotomous indicator of whether the homicide was an IPH or a different type of homicide – analogous to examining the proportion of IPH as done previously. Covariates included victim sex, victim age, victim marital status, victim education, victim immigrant status, whether alcohol was detected in the toxicology report, whether illegal drugs were detected in the toxicology report, primary suspect sex, primary suspect race/ethnicity, weapon type, number of wounds, whether the victim was killed at home, whether there was an indication that the primary suspect had a history of abusing the victim, and whether the homicide was precipitated by another crime. Unfortunately, age of the primary suspect proved unwieldy due to the number of zero categories for Latinos (young and old) and this variable was left out of all three models. Further, victims with ages less than 1 and 1 to 14 were omitted from models as they have a zero or near zero probability of being an IPH victim.

Some of the differences between White, Black, and Latino IPH can be observed when considering characteristics of the victims. Not surprisingly, victim sex was a significant predictor of IPH across all three models, with women at increased risk of IPH. When the victim was female the odds that a homicide would be an IPH increased by 27.0 times for White victims, 32.7 times for Black victims, and 70.5 times for Latino victims respectively. Victim age,

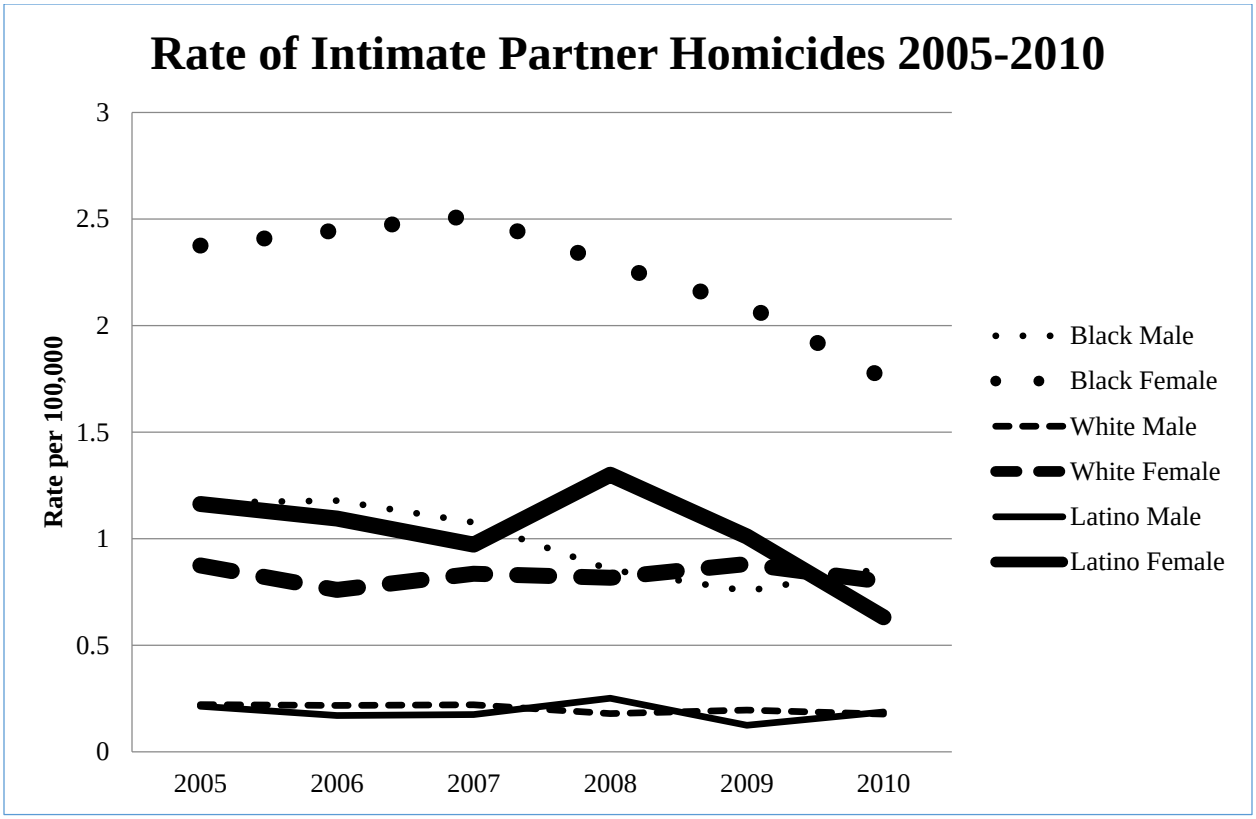
however, was only statistically significant in the model for Black victims as victims aged 25 to 34 and 35 to 64. For Blacks victims aged 25 to 34, the odds that a homicide was an IPH was 1.9 times higher compared to Black victims aged 15 to 24. Similarly, for Black victims aged 35 to 64, the odds that a given homicide was an IPH was 1.5 times higher compared to Black victims aged 15 to 24. For all models, a married victim had a higher probability of being an IPH victim compared to another type of homicide. If the victim was married, the odds that a homicide was an IPH was 2.8 times higher for White victims, 2.2 times higher for Black victims, and 1.9 times higher for Latino victims compared to when the victim was single. Victim immigrant status was statistically significant in the White and Black model, and was associated with decreased odds of IPH, but was non-significant in the model for Latinos. The odds that a homicide would be an IPH were 1.8 times lower for White victims identified as an immigrant and 1.7 times lower for Black victims who were identified as an immigrant. Drug use was also significant in the White and Black model, and was associated with decreased likelihood of IPH, but was non-significant in the Latino model. When drugs were present in the victim's body, the odds that a homicide would be an IPH were 1.3 times lower for Whites victims and 1.4 times lower for Black victims respectively.

Additional differences between IPH for White, Black, and Latino victims can be observed when considering characteristics of the suspects and the circumstances of the homicide. Victims with females as the primary suspect had increased odds of being an IPH for all models, with the odds being 17.6 times higher for White victims, 16.6 times higher for Black victims, and 20.5 times higher for Latino victims. Suspect race was only statistically significant in the model for White victims – the odds that a homicide was an IPH was 1.5 times lower when the primary suspect was Black and 1.7 times lower when the primary suspect was identified as other race.

For White victims, if personal weapons (like fists) were used compared to firearms, the odds that a homicide was an IPH were 2.7 times lower; whereas for Black victims, if a knife was used compared to a firearm, the odds that a homicide was an IPH was 2.0 times higher.

Despite the observed differences, there is considerable similarity in the circumstances of IPH between White, Black, and Latino victims. If the primary suspect committed suicide after the homicide, the odds that the homicide was an IPH was 3.9 times higher for White victims, 7.9 times higher for Black victims, and 7.2 times higher for Latino victims. For homicides where the victim was killed at home, the odds that the homicide was an IPH were 2.2 times higher for White victims, 2.3 times higher for Black victims, and 2.4 times higher for Latino victims. Homicides that were precipitated by another crime were significantly less likely to be IPHs as the odds were 6.1 times lower for White victims, 5.9 times lower for Black victims, and 4.7 times lower for Latino victims. Finally, when a prior abuse history of the victim was identified, the odds that the homicide was an IPH was 11.2 times higher for White victims, 20.8 times higher for Black victims, and 25.0 times higher for Latino victims.

Goal 4. The number of IPHs per 100,000 was calculated by racial/ethnic group and gender for each time point available in the data. Population numbers by group were garnered through the American Community Survey. Across the six-year period, Black females has the highest rate of IPH (2.24 per 100,000) followed by Latino females (1.01 per 100,000), Black males (.98 per 100,000), White females (.83 per 100,000), White males (.20 per 100,000) and Latino males (.19 per 100,000). The rate of IPH from 2005 to 2010 was .57 per 100,000 for Latinos compared to 1.64 per 100,00 for African-Americans and .52 per 100,000 for Whites.



IMPLICATIONS

The current project offers novel contributions in the understanding of Latino IPH. First, the rate of Latino IPH (.57 per 100,000) was between that of Whites (.52 per 100,000) and African-Americans (1.64 per 100,000), showing that there are racial/ethnic differences with regard to IPH. Taking into account gender, the rate of IPH was higher among Latinos women (1.01 per 100,000) and African-American women (2.24 per 100,000) than among White women (.83 per 100,000) over the six-year period from 2005-2010. Latino males, however, had the lowest rate of IPH (.19 per 100,000) among the groups compared. IPH is a gendered phenomenon, and this is pronounced among Latinos, reflecting the brutal and life-threatening violence that some women endure. These figures, which are the most comprehensive available, underscore the need to examine ethnicity as well as race, which has been largely excluded in national level analyses. The findings here also shed light on the previous mixed results that were found in geographic

specific studies of IPH; namely whether Latinos were are heightened risk of IPH compared to Whites (see Azziz-Baumgartner, McKeown, Melvni, Dang, & Reed, 2011; Block, 2003). These findings show Latino women, but not Latino men are at heightend risk of IPH compared to Whites.

Results from the bivariate comparisons and logit models show that there are unique characteristics of IPH among Latinos. While Latino IPH was associated with some of the same variables as White and Black IPH (e.g., victim sex, marital status, suicide, abuse history), some of the variables important for White and Blacks, were not associated with Latino IPH such as immigrant status, drugs, and weapon type. While immigrant status has been associated with lower levels of victimization in studies of interpersonal violence (Sabina, Cuevas, & Schally, 2013), the protective effect of immigrant status does not extend to the domain of IPH. Latino non-immigrants were as likely as Latino immigrants to have been murdered by a partner. Moreover, drugs were equally as likely to be part of IPHs or other homicides among Latinos, while drugs were less likely to be part of White and Black IPH than other homicides.

Other unique characteristics of Latino IPH include a diminished proportion of IPHs that that result in suspect suicide if the victim is a Latino male. In most cases, this means that Latino women are unlikely to commit suicide after murdering their intimates. While this is true of all racial ethnic groups relative to men, it is especially true for Latino women. The number of wounds were also higher among Latinos, potentially implying that the circumstances of the homicides were aggravated. Of specific note, the proportion of IPHs at home was lowest among Latinos, meaning that Latinos were least likely to murder their partners at home. There is a clear need to continue to examine these trends as well as qualitatively understand the dynamics of Latino IPH. For example, where do Latino IPHs take place?

With regard to prevention, the most malleable variable examined was abuse history. In order to prevent IPH, options are needed for both partners to mitigate the levels of violence. In about 60% of homicides of women by intimates, there was a **documented** history of abuse. Thus, these cases largely came into contact with police and could have been potentially thwarted, if appropriate interventions were in place. From these data, it appears that improved police interventions, along with adequate, effective, and available services for women who are abused and services for men who abuse, are the best approaches to reaching abusive couples. It is also important to consider that culturally-responsive services may be especially pertinent here, as there are unique trends among this group with regard to IPH and police interventions.

Overall, this project demonstrates the utility of the NVDRS and the examination of ethnicity. The level of detail and precision in the dataset allows for nuanced inspection of homicide cases. Surely future work should continue to monitor and disentangle trends of Latino IPH.

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Table 1. Comparisons between Race/Ethnic Groups for Goal 1.

Variable	Race/Ethnic Group White	Black	Latino	Other	F-test df	F-value
Victim Latino Ethnicity						
Latino						
Ave Count of IPH	340.625	17.175	--	33.525		
Ave Proportion of IPH	0.102	0.090	--	0.172	2, 1917	0.61
Non-Latino						
Ave Count of IPH	2431.325	1715.325	--	217.850	x	x
Ave Proportion of IPH	0.219	0.097	--	0.085		
Difference NH v H	0.117	0.007	--	0.088	3, 3447	96.31***
Intimate Partner Homicide						
Ave Count of IPH	2431.325	1715.325	391.325	217.850		
Ave Proportion of IPH	0.219	0.097	0.099	0.172	3, 4595	221.63***
Victim Age						
15 to 24						
Ave Count of IPH	278.300	325.750	80.575	32.550		
Ave Proportion of IPH	0.157	0.052	0.066	0.115	3, 4469	40.37***
25 to 34						
Ave Count of IPH	488.200	537.375	141.450	59.950		
Ave Proportion of IPH	0.257	0.103	0.116	0.201	3, 6430	62.78***
35 to 64						
Ave Count of IPH	1424.075	811.800	163.650	116.975		
Ave Proportion of IPH	0.265	0.167	0.148	0.222	3, 4771	50.77***
65+						
Ave Count of IPH	240.225	37.975	4.400	8.300		
Ave Proportion of IPH	0.207	0.101	0.081	0.135	3, 2578	9.27***
Victim Sex						
Male						
Ave Count of IPH	460.600	494.225	70.375	41.775		
Ave Proportion of IPH	0.065	0.033	0.022	0.046	3, 2089	34.42***
Female						
Ave Count of IPH	1970.725	1221.100	320.950	176.075		
Ave Proportion of IPH	0.495	0.434	0.454	0.489	3, 3530	7.15***
Victim Immigrant Status						
Non-Immigrant						
Ave Count of IPH	2342.700	1664.000	206.350	141.900		
Ave Proportion of IPH	0.221	0.097	0.099	0.161	x	x

Immigrant						
Ave Count of IPH	88.625	51.325	184.975	75.950		
Ave Proportion of IPH	0.182	0.100	0.099	0.198	3, 4209	10.62***
Difference NI v I	0.039	-0.002	0.000	-0.037	4, 4899	1.50

x = Not tested

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 2. Comparisons between Race/Ethnic Groups for Goal 2.

Variable	Race/Ethnic Group White	Black	Latino	Other	F-test df	F-value
Primary Suspect Sex						
Male						
Ave Count of IPH	1988.675	1273.000	340.950	181.425		
Ave Proportion of IPH	0.200	0.078	0.092	0.159	3, 4239	213.73***
Female						
Ave Count of IPH	442.650	442.325	50.375	36.425		
Ave Proportion of IPH	0.383	0.327	0.223	0.302	3, 2731	7.65***
Primary Suspect Race						
White						
Ave Count of IPH	1750.375	67.075	64.325	57.075		
Ave Proportion of IPH	0.720	0.039	0.164	0.262	x	x
Black						
Ave Count of IPH	200.500	1335.600	32.550	15.000		
Ave Proportion of IPH	0.082	0.779	0.083	0.069	x	x
Latino						
Ave Count of IPH	183.075	98.950	277.900	19.200		
Ave Proportion of IPH	0.075	0.058	0.710	0.088	x	x
Other						
Ave Count of IPH	297.375	213.700	16.550	126.575		
Ave Proportion of IPH	0.122	0.125	0.042	0.581	x	x
Proportion VO Same Race	0.720	0.779	0.710	0.581	3, 1112	10.59***
Primary Suspect Age						
Under 15 (omitted)					x	x
15 to 24						
Ave Count of IPH	213.075	263.425	56.600	32.725		
Ave Proportion of IPH	0.066	0.031	0.030	0.067	3, 1614	15.78***
24 to 34						
Ave Count of IPH	477.875	525.550	141.800	50.525		
Ave Proportion of IPH	0.177	0.105	0.116	0.136	3, 1992	18.85***
35 to 59						
Ave Count of IPH	1398.975	833.900	175.225	121.700		
Ave Proportion of IPH	0.321	0.239	0.246	0.340	3, 2183	20.02***
60 + (omitted)					x	x

Primary Suspect Committed Suicide						
Male Victim						
Ave Count of IPH	34.550	10.200	1.025	4.175		
Ave Proportion of IPH	0.113	0.155	0.029	0.191	3, 26364	3.01*
Female Victim						
Ave Count of IPH	602.050	189.500	82.900	45.350		
Ave Proportion of IPH	0.770	0.784	0.793	0.775	3, 14675	0.14
Difference Male Vic - Female Vic	-0.656	-0.629	-0.764	-0.584	4, 22926	284.81***
Alcohol in Victim Toxicology Report						
Male Victim						
Ave Count of IPH	200.100	258.725	42.100	29.250		
Ave Proportion of IPH	0.074	0.050	0.028	0.069	3, 2163	13.23***
Female Victim						
Ave Count of IPH	555.025	315.300	79.950	54.750		
Ave Proportion of IPH	0.594	0.484	0.527	0.539	3, 1385	4.56**
Drugs in Victim Toxicology Report						
Male Victim						
Ave Count of IPH	130.400	180.825	28.050	11.725		
Ave Proportion of IPH	0.051	0.033	0.024	0.045	3, 1230	4.81**
Female Victim						
Ave Count of IPH	470.200	327.050	63.375	25.900		
Ave Proportion of IPH	0.470	0.403	0.453	0.455	3, 1149	1.91
Primary Susp History of Abuse of Victim						
Male Victim (omitted)					x	x
Female Victim						
Ave Count of IPH	1795.075	1166.300	311.600	170.650		
Ave Proportion of IPH	0.630	0.580	0.597	0.612	3, 572	2.43
Weapon Type						
Male Victims						
Firearm						
Ave Count of IPH	272.575	201.850	26.850	15.450		
Ave Proportion of IPH	0.069	0.017	0.013	0.031	3, 1779	41.59***
Knife						
Ave Count of IPH	105.575	254.575	33.325	18.275		
Ave Proportion of IPH	0.094	0.173	0.054	0.114	3, 3341	22.28***
Personal Weapon (omitted)						

Other Weapon						
	Ave Count of IPH	71.625	35.275	9.975	7.825	
	Ave Proportion of IPH	0.052	0.039	0.026	0.053	3, 2080	1.78
Female Victims						
Firearm						
	Ave Count of IPH	1120.225	654.825	145.250	67.800	
	Ave Proportion of IPH	0.593	0.452	0.523	0.541	3, 2977	18.78***
Knife						
	Ave Count of IPH	338.550	294.750	97.100	45.575	
	Ave Proportion of IPH	0.517	0.537	0.643	0.526	3, 2746	2.37
Personal Weapon						
	Ave Count of IPH	70.250	33.600	10.200	15.950	
	Ave Proportion of IPH	0.223	0.209	0.126	0.408	3, 4999	3.52*
Other Weapon						
	Ave Count of IPH	441.700	237.925	68.400	46.750	
	Ave Proportion of IPH	0.394	0.364	0.348	0.427	3, 1712	0.9
Number of Wounds						
	Average for IPH	3.292	3.697	4.528	3.592	3, 5004	2.64*
Victim Killed at Home						
	Ave Count of IPH	1776.275	1081.275	257.675	141.550	
	Ave Proportion of IPH	0.311	0.228	0.189	0.297	3, 3906	40.59***
Precipitate by Another Crime						
	Ave Count of IPH	211.975	136.350	33.550	21.550	
	Ave Proportion of IPH	0.066	0.028	0.031	0.053	3, 2174	16.58***

x = Not tested

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 3. Results from Logit Models for White, Black, and Hispanic

Variable	White b		SE	OR	Black b		SE	OR	Latino b		SE	OR
Victim Sex												
Male[1]												
Female	3.296	***	(.113)	27.009	3.488	***	(.136)	32.731	4.255	***	(.267)	70.461
Vicim Age												
15 to 24 yr[1]												
25 to 34 yr	0.404		(.212)	1.497	0.636	**	(.222)	1.888	0.431		(.319)	1.539
35 to 64 yr	-0.117		(.179)	0.889	0.380	*	(.186)	1.462	0.094		(.315)	1.098
65+ yr	-0.273		(.236)	0.761	-0.450		(.38)	0.638	-1.191		(.981)	0.304
Victim Marital Status												
Single[1]												
Married	1.028	***	(.141)	2.795	0.771	***	(.152)	2.161	0.626	*	(.259)	1.870
Divorced	0.298		(.193)	1.347	0.044		(.229)	1.045	0.301		(.359)	1.351
Victim Education												
Less than HS Degree[1]												
HS Degree or More	0.256		(.143)	1.292	0.210		(.163)	1.234	0.216		(.265)	1.241
Victim Immigrant Status												
Not Immigrant[1]												
Immigrant	-0.576	*	(.234)	0.562	-0.526	*	(.259)	0.591	0.040		(.259)	1.040
Alcohol in Victim Toxicology												
No[1]												
Yes	0.203		(.136)	1.225	0.055		(.136)	1.057	0.018		(.24)	1.018
Drugs in Victim Toxicology												
No[1]												
Yes	-0.299	*	(.132)	0.741	-0.315	*	(.145)	0.730	0.049		(.283)	1.050
Primary Suspect Sex												
Male[1]												
Female	2.869	***	(.139)	17.626	2.810	***	(.163)	16.616	3.020	***	(.348)	20.501

Primary Suspect Race											
White[1]											
Black	-0.436	**	(.143)	0.647	-0.193		(.279)	0.824	-0.756		(.459)	0.470
Hispanic	-0.086		(.193)	0.917	-0.377		(.34)	0.686	-0.181		(.329)	0.834
Other	-0.532	***	(.131)	0.587	-0.421		(.299)	0.656	-0.834		(.615)	0.434
Weapon Type											
Firearm[1]											
Knife	-0.182		(.146)	0.833	0.670	***	(.169)	1.953	0.485		(.279)	1.625
Personal Weapon	-0.982	***	(.204)	0.374	-0.124		(.318)	0.883	-0.218		(.559)	0.804
Other	-0.254		(.13)	0.775	0.260		(.165)	1.297	-0.085		(.325)	0.918
Number of Wounds	-0.006		(.009)	0.994	-0.011		(.01)	0.989	0.002		(.016)	1.002
Suspect Committed Suicide											
No[1]											
Yes	1.369	***	(.138)	3.933	2.071	***	(.237)	7.931	1.975	***	(.386)	7.210
Victim Killed at Home											
No[1]											
Yes	0.799	***	(.095)	2.224	0.849	***	(.119)	2.338	0.875	***	(.22)	2.399
Precipitated by Another Crime											
No[1]											
Yes	-1.801	***	(.138)	0.165	-1.773	***	(.167)	0.170	-1.558	***	(.297)	0.211
Primary Suspect Abuse History											
No[1]											
Yes	2.419	***	(.336)	11.238	3.034	***	(.412)	20.771	3.220	***	(.853)	25.039
Constant	-5.692	***	(.304)	0.003	-6.891	***	(.474)	0.001	-7.702	***	(.921)	0.000

[1] Reference group

* $p < .05$; ** $p < .01$; *** $p < .001$