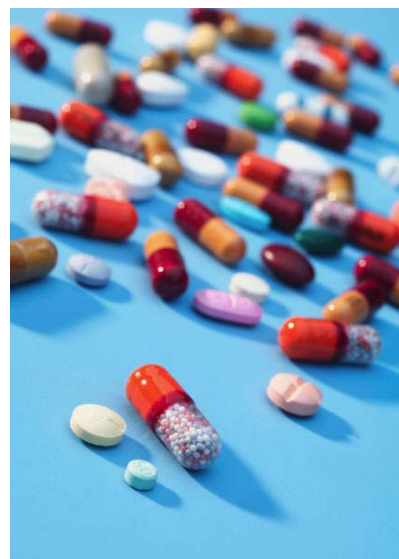


Suicide and Self-Injury in Kentucky, 2005-2014



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Kentucky Injury Prevention and Research Center

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Executive Summary

About suicide

1. There were 691 suicides among Kentucky residents in the year 2014 (Figure 1).
2. The Kentucky-resident age-adjusted suicide rate was 15.1 per 100,000 population in 2014, a slight decrease from 15.2 in 2013 (Figure 2).
3. Firearms were the primary means of completed suicide from 2005 to 2014 (Figure 5).
4. From 2008 to 2014, Kentucky residents aged 45-54 were the age group that completed suicide most frequently (Figure 6).
5. Suicides among Kentucky residents ages 55-64 have increased from 66 in 2005 to 134 in 2014 (Figure 6).
6. In 2014, 81% of completed suicides involved males, whereas 60% of inpatient hospital discharges and 57% of emergency department visits for self-injury involved females (Figures 3, 10 and 23).

About inpatient hospitalizations for self-injury

1. The age-adjusted rate of Kentucky-resident inpatient hospitalizations with mention of self-injury decreased 8.6% from 2013 to 2014, from 46.5 per 100,000 population in 2013 to 42.5 in 2014 (Figure 9).
2. From 2005 to 2014, Kentucky females were hospitalized for self-injury more frequently than males (Figure 10).
3. The most common mechanism of self-injury among hospital inpatients was poisoning (Figure 12).
4. The number of discharges listing Medicaid as expected primary payer increased from 470 in 2013 to 872 in 2014, whereas the number of discharges listing the patient as the primary expected payer (i.e. self-pay) decreased from 470 in 2013 to 130 in 2014 (Figure 17).

About emergency department visits for self-injury

1. The age-adjusted rate of emergency department (ED) visits with mention of self-injury involving Kentucky residents was 75.8 visits per 100,000 population in 2014. This is a slight increase from 73.6 in 2013 (Figure 22).
2. Kentucky-resident females visited the emergency department for self-injury more frequently than males from 2008 to 2014 (Figure 23).
3. Kentucky residents aged 15-24 were the age group that most frequently visited a Kentucky ED as a result of self-injury from 2008 to 2014, with an age-specific rate of 209.4 ED visits per 100,000 population in 2014. This is an increase from 188 per 100,000 in 2013 (Figures 25 and 26).
4. The number of ED visits for self-injury listing Medicaid as expected primary payer increased from 1,049 in 2013 to 1,802 in 2014, whereas the number listing the patient as the primary expected payer (i.e. self-pay) decreased from 764 in 2013 to 350 in 2014 (Figure 29).
5. Poisoning was the most common mechanism of self-injury among Kentucky-resident ED visitors in 2014; cutting was second (Figure 31).

SUICIDE 2005-2014, KENTUCKY

Figure 1: Deaths by Suicide, KY residents

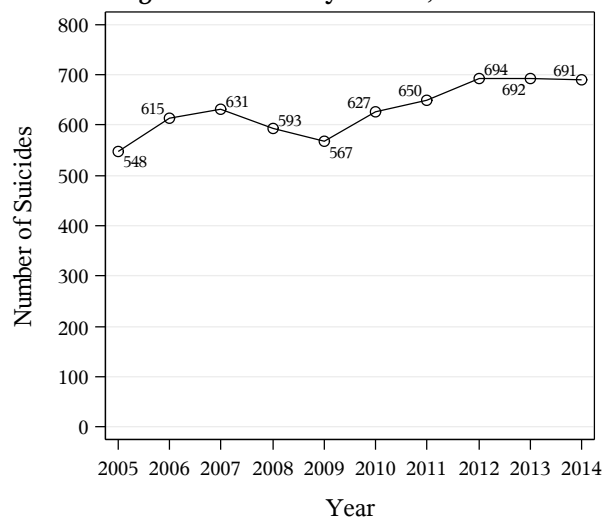


Figure 2: Age-Adjusted Rate for Suicide, KY residents

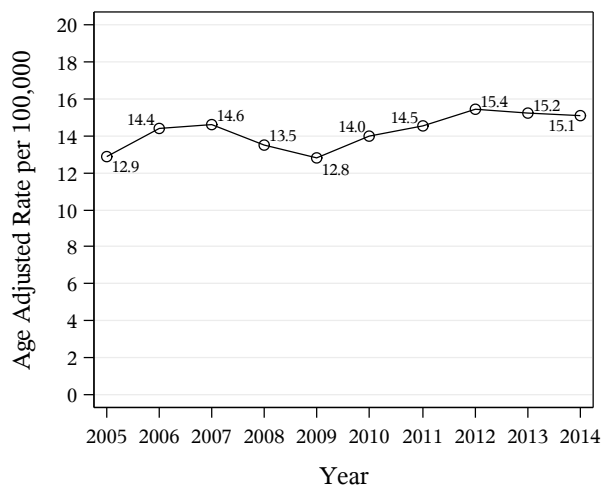


Figure 3: Suicide by Gender, KY residents

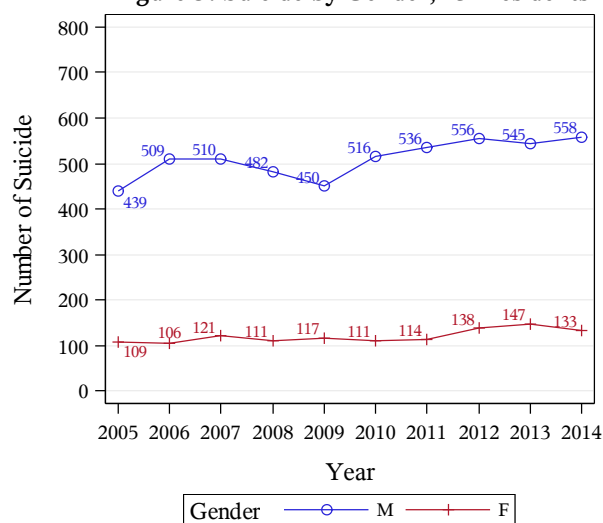


Figure 4: Age-Adjusted Rate by Gender, KY residents

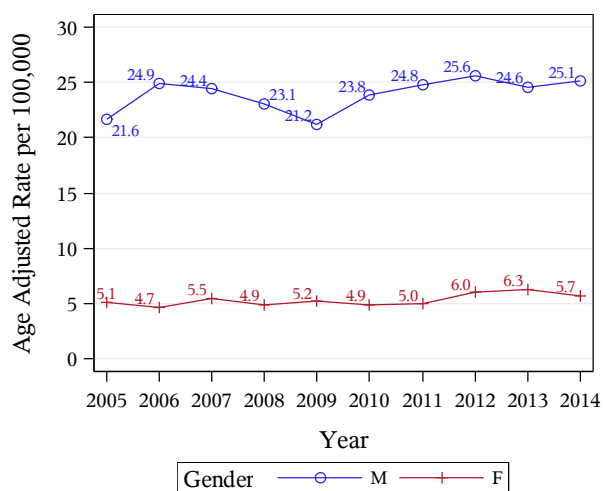
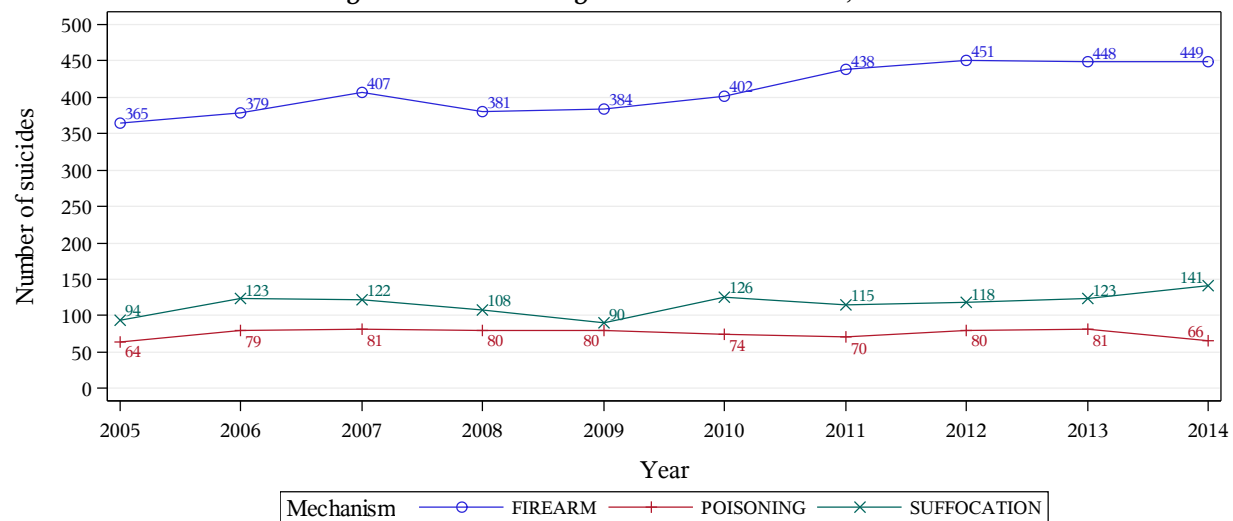


Figure 5: Three leading mechanisms of suicide, KY residents



SUICIDE 2005-2014, KENTUCKY

Figure 6: Suicide by age group - counts, KY residents *

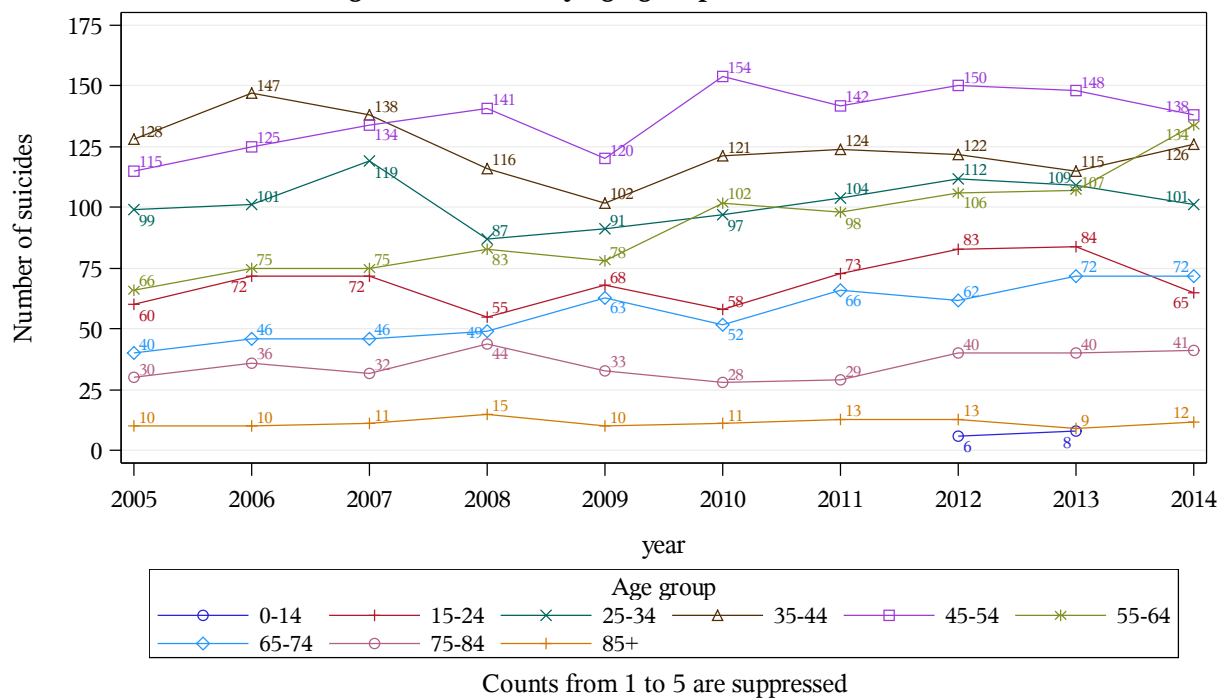
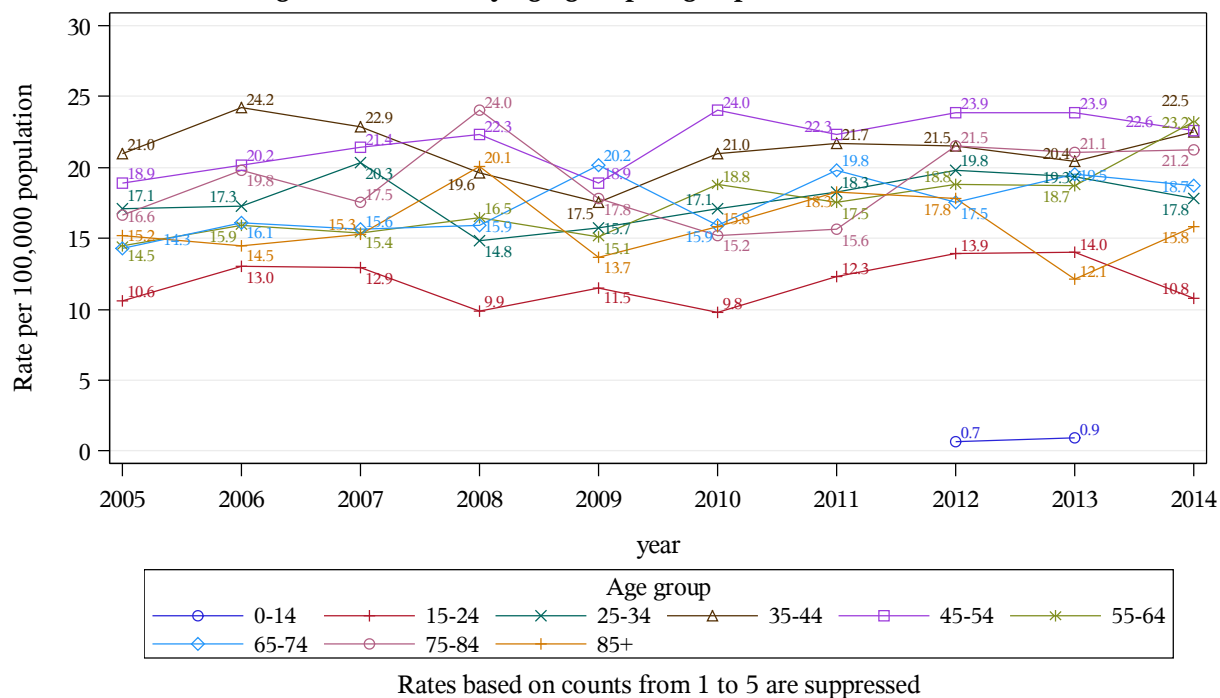


Figure 7: Suicide by age group - age-specific rates, KY residents



*Age group counts in Figure 6 may not sum to the annual totals in Figure 1 due to missing ages

SELF-INJURY INPATIENT HOSPITALIZATIONS 2005-2014, KENTUCKY

Figure 8: Self-injury hospitalizations, KY residents

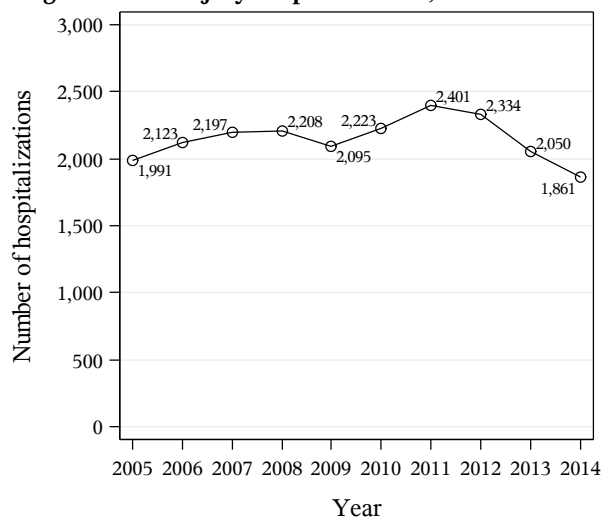


Figure 9: Age-adjusted rate for self-injury hospitalizations, KY residents

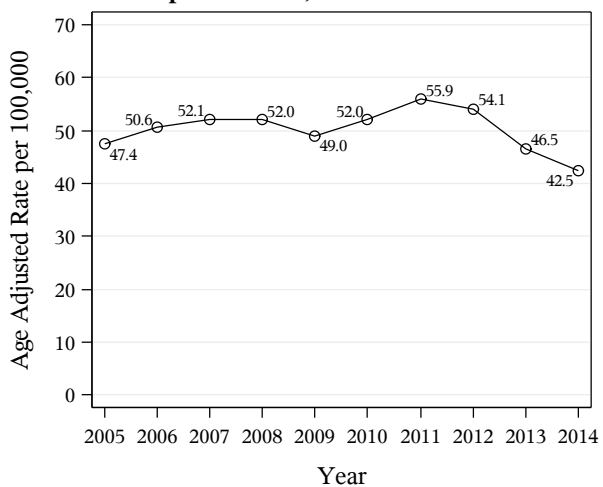


Figure 10: Self-injury hospitalizations by gender, KY residents

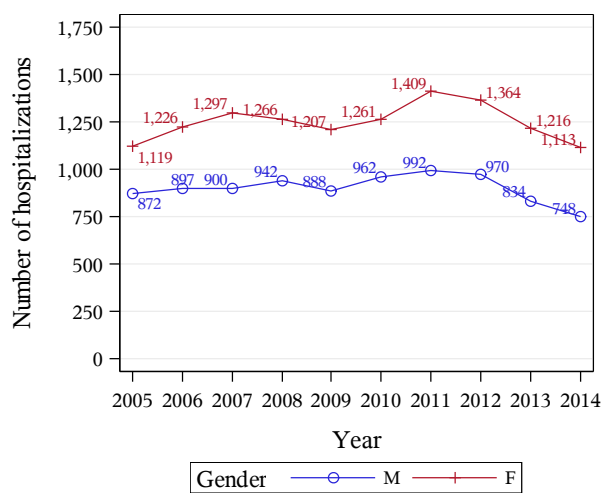


Figure 11: Age-adjusted rate self-injury hospitalizations by gender, KY residents

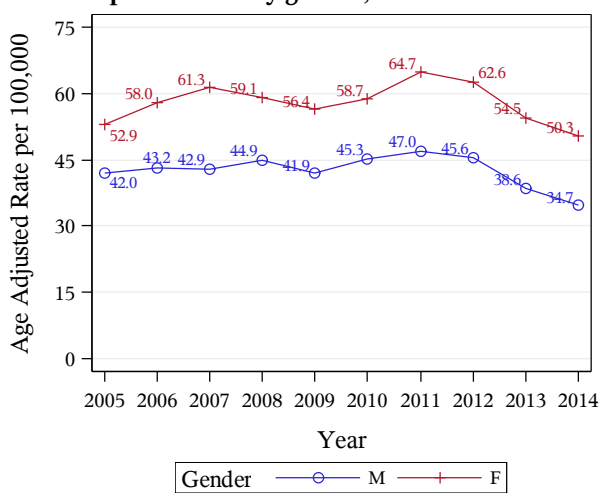
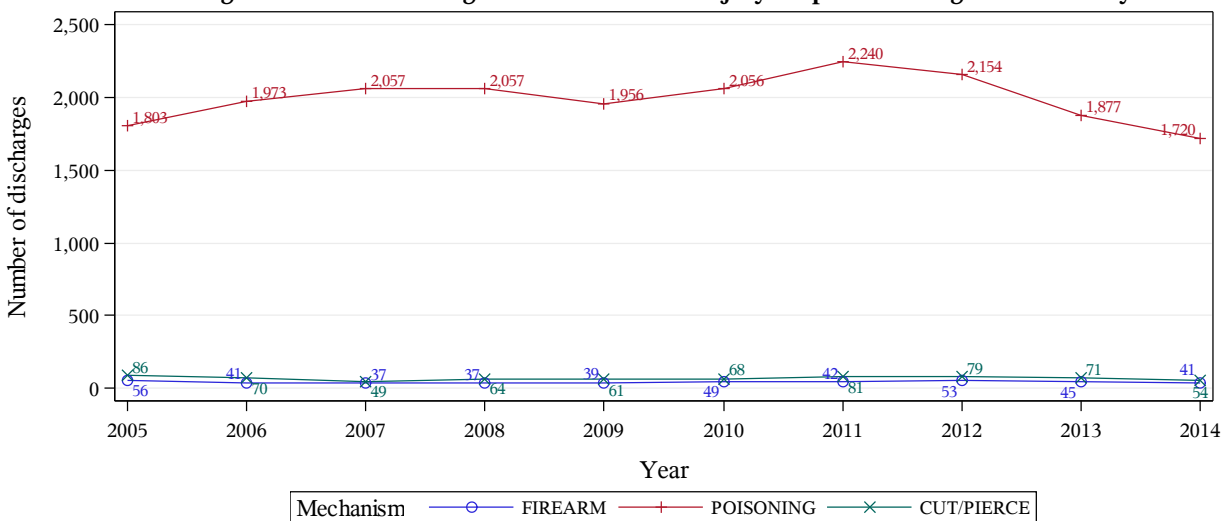
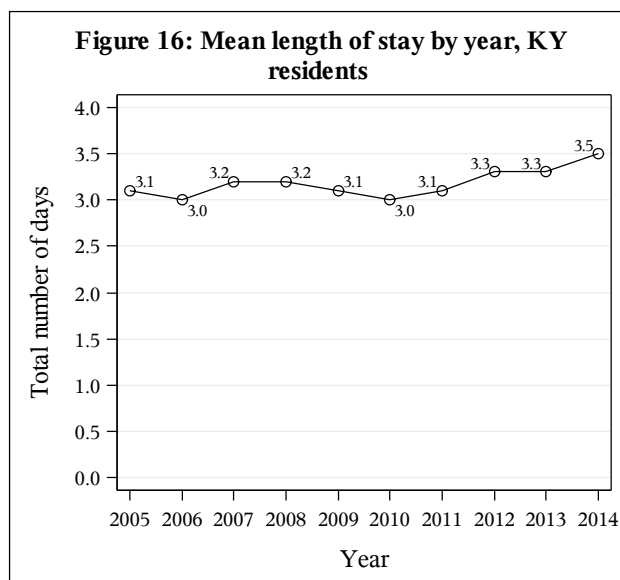
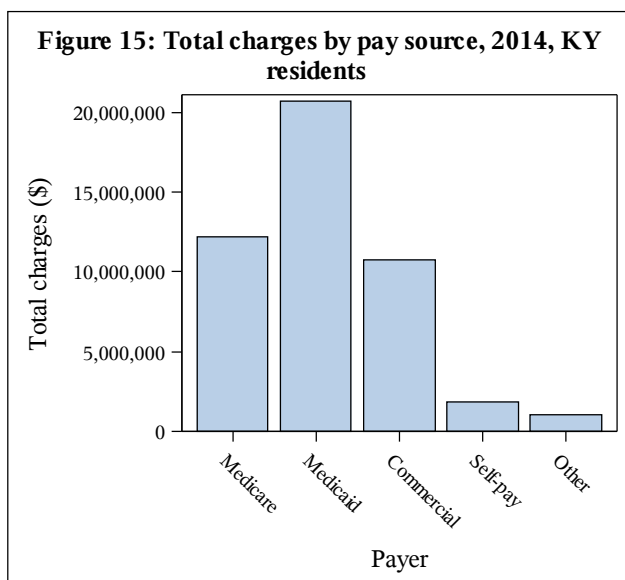
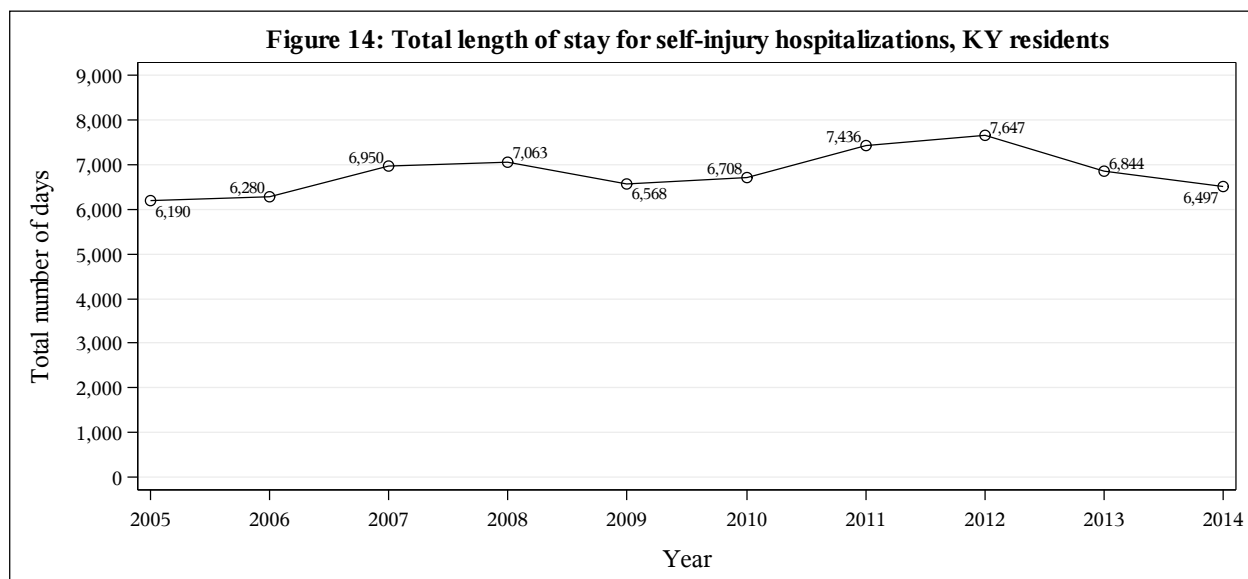
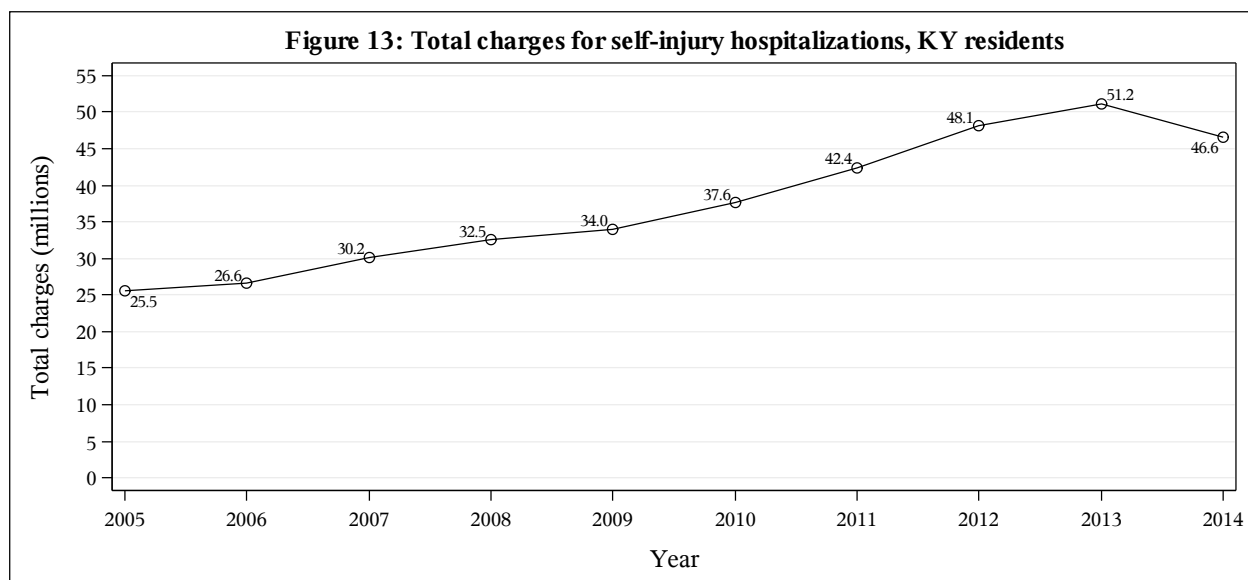


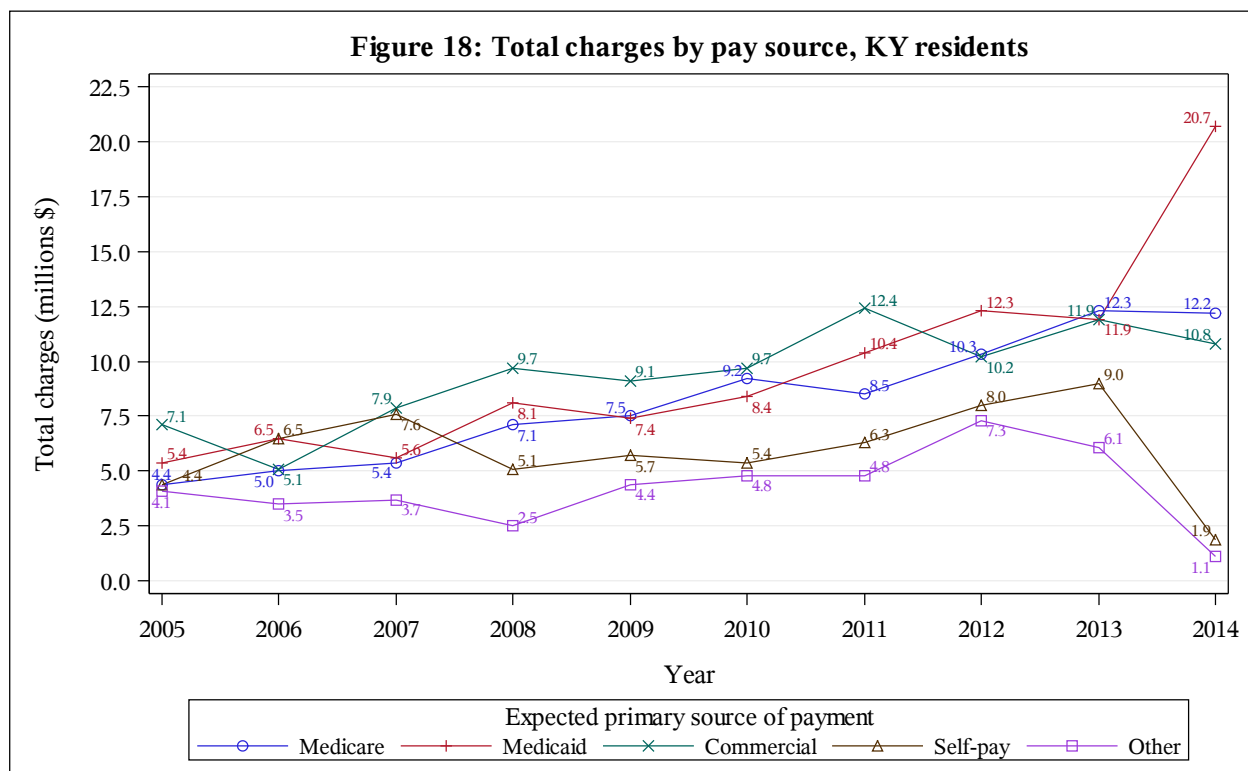
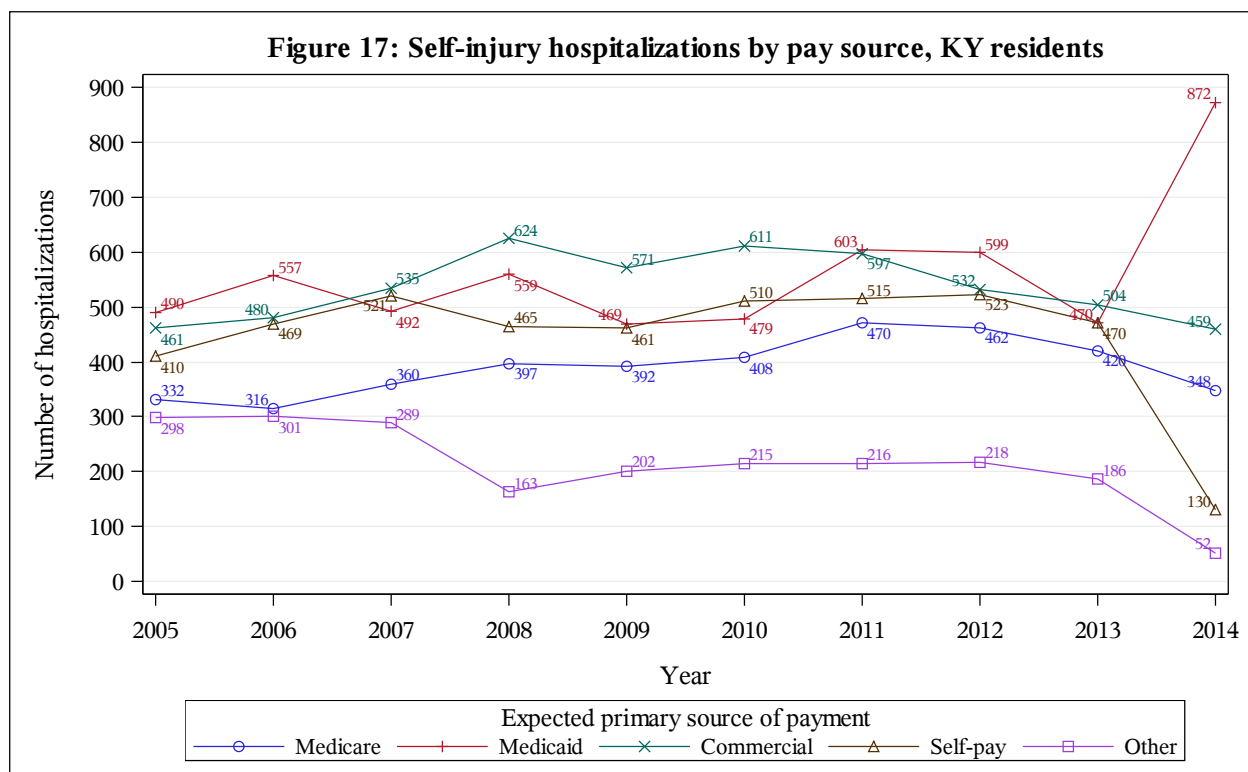
Figure 12: Three leading mechanisms in self-injury hospital discharges in Kentucky



SELF-INJURY INPATIENT HOSPITALIZATIONS 2005-2014, KENTUCKY



SELF-INJURY INPATIENT HOSPITALIZATIONS 2005-2014, KENTUCKY



SELF-INJURY INPATIENT HOSPITALIZATIONS 2005-2014, KENTUCKY

Figure 19: Self-injury hospitalizations by age group - counts, KY residents *

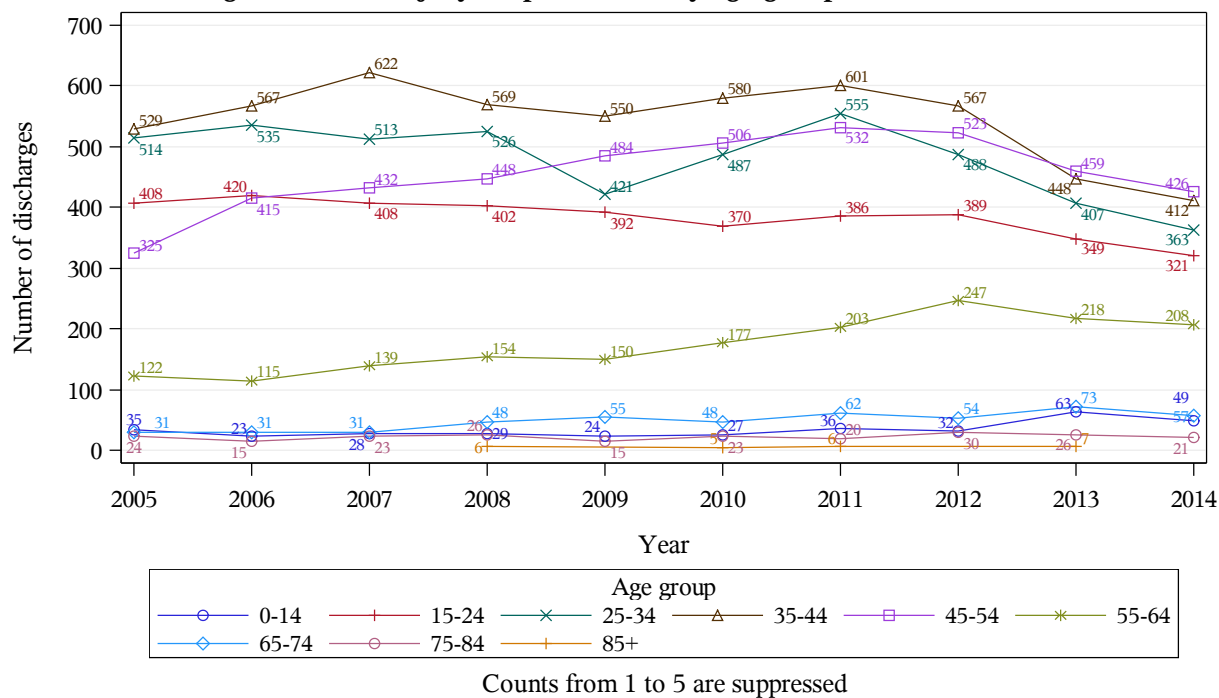
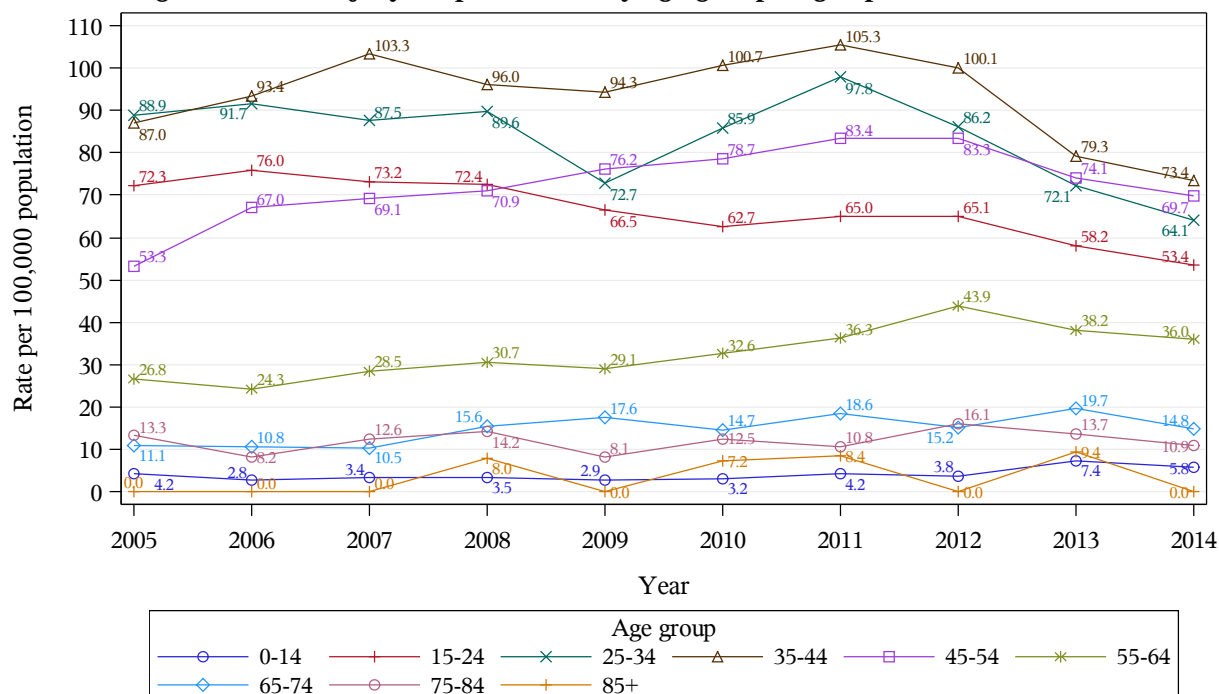
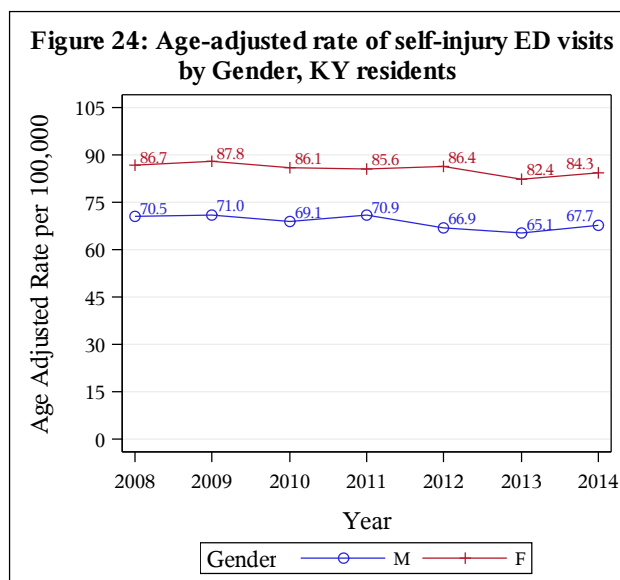
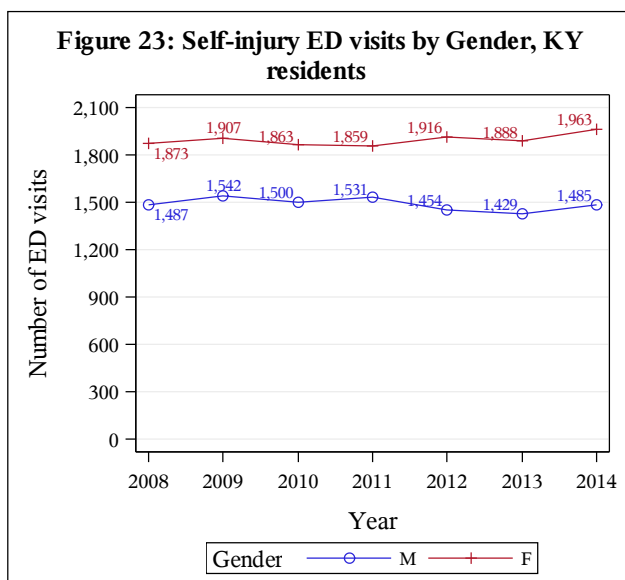
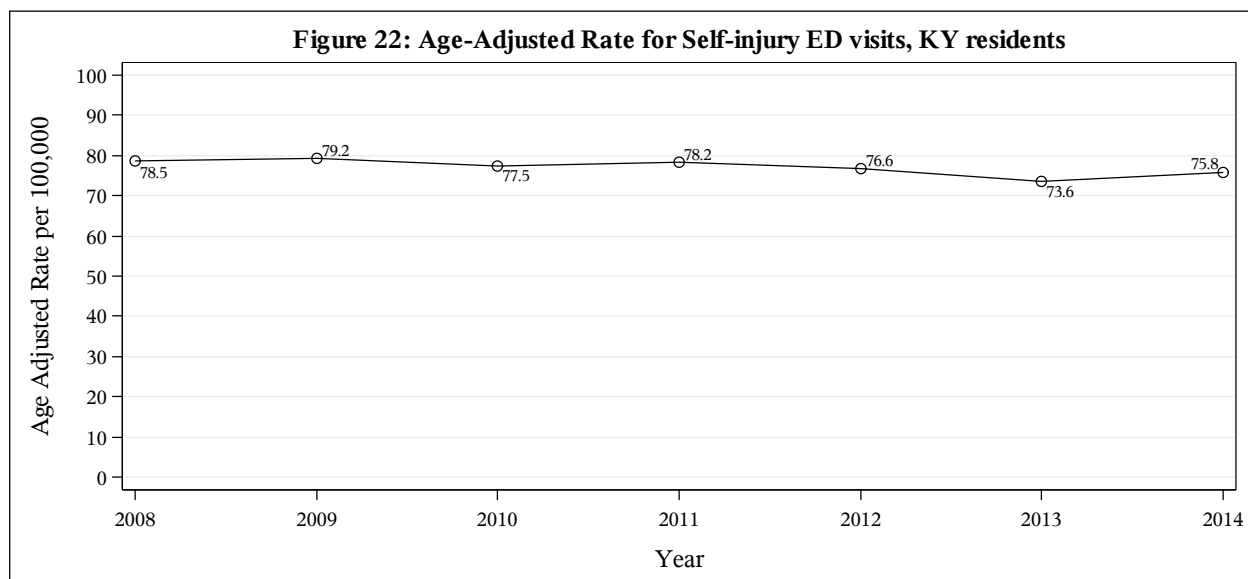
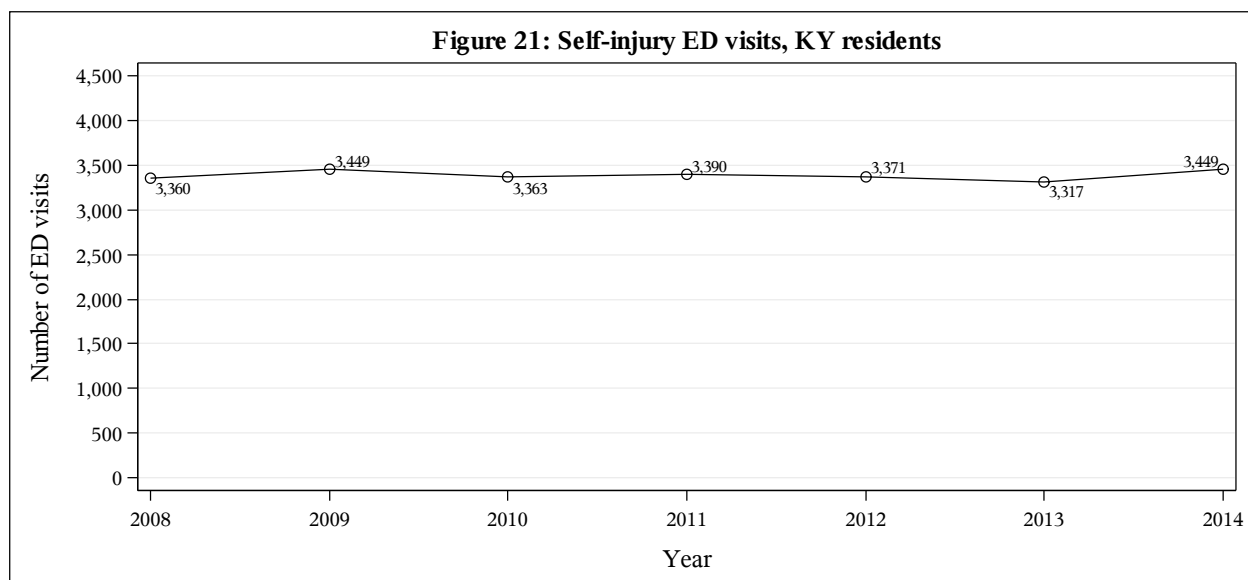


Figure 20: Self-injury hospitalizations by age group - age-specific rates, KY residents

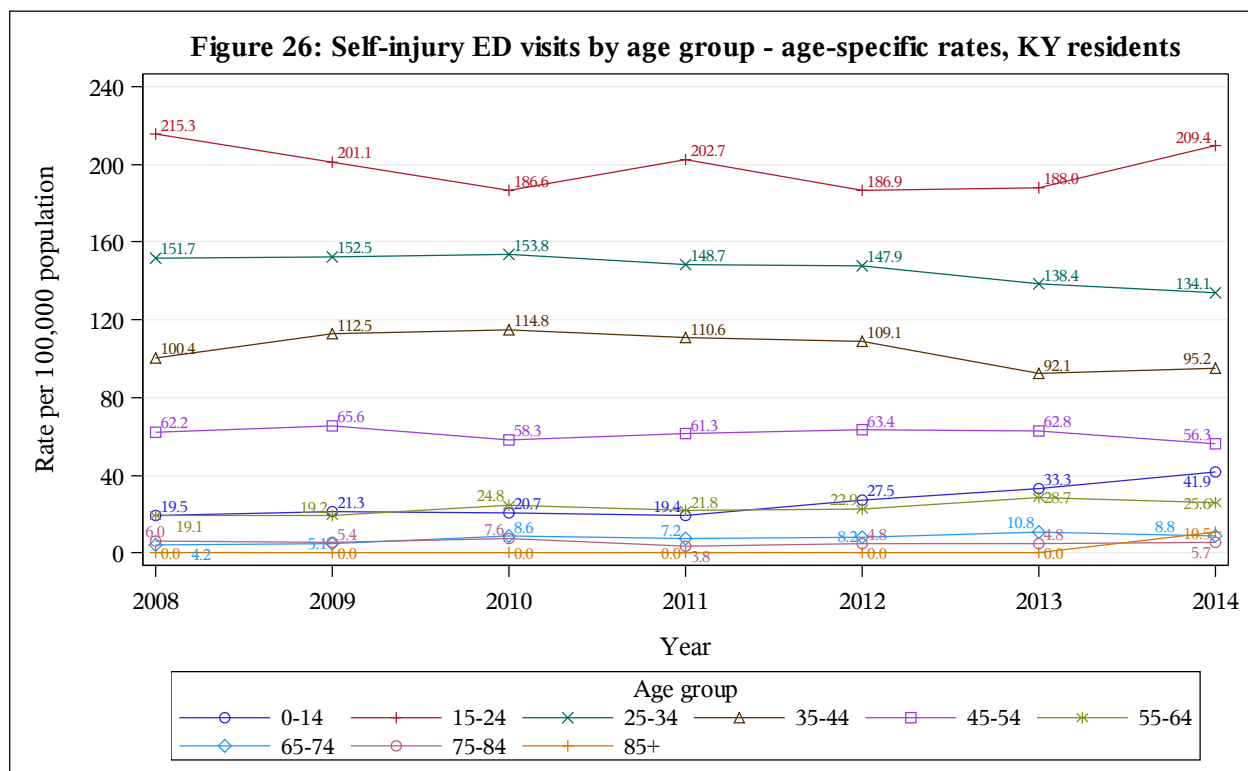
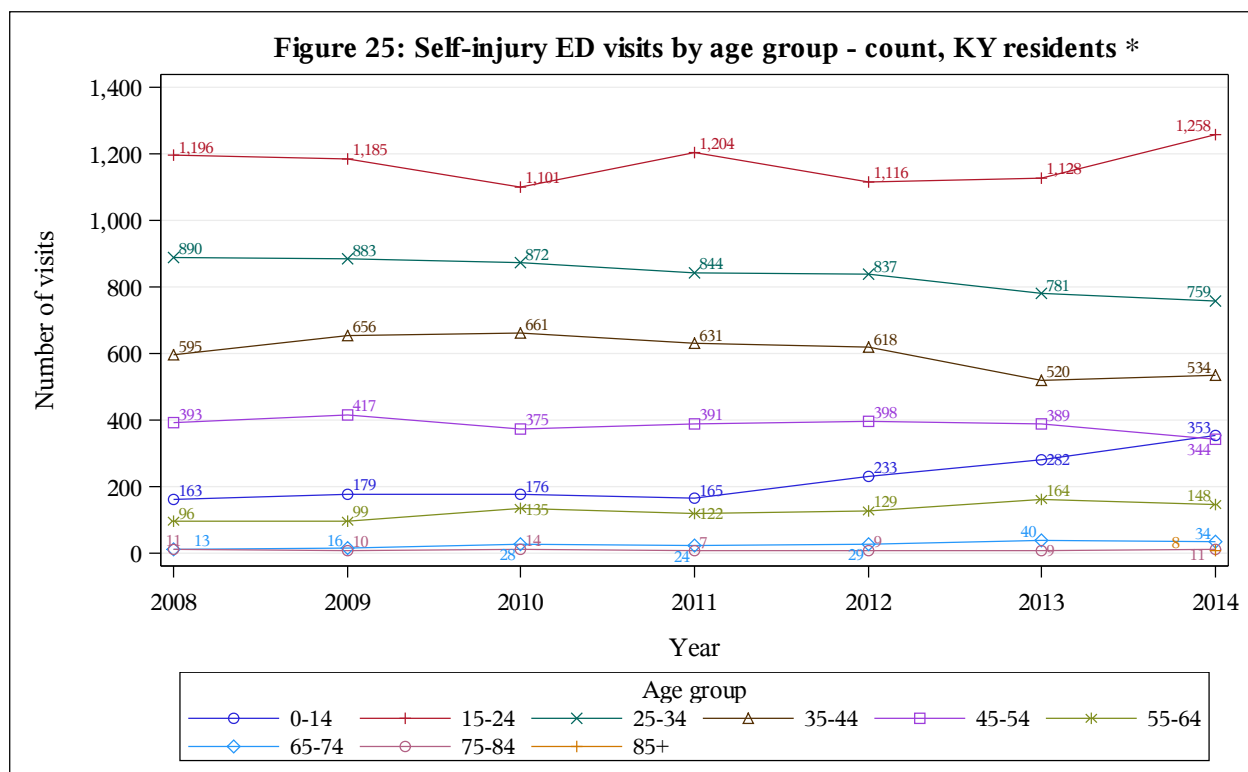


* Age group counts in Figure 19 may not sum to the annual totals in Figure 8 due to missing ages

SELF-INJURY ED VISITS 2005-2014, KENTUCKY



SELF-INJURY ED VISITS 2005-2014, KENTUCKY



* Age group counts in Figure 25 may not sum to the annual totals in Figure 21 due to missing ages

SELF-INJURY ED VISITS 2005-2014, KENTUCKY

Figure 27: Total charges for self-injury ED visits, KY residents

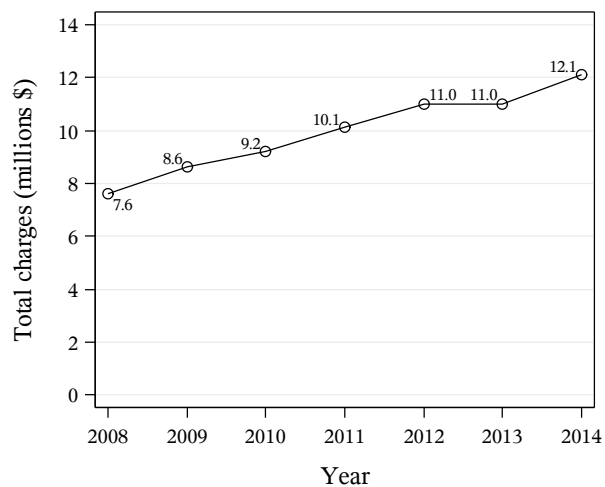


Figure 28: Total charges by pay source, 2014, KY residents

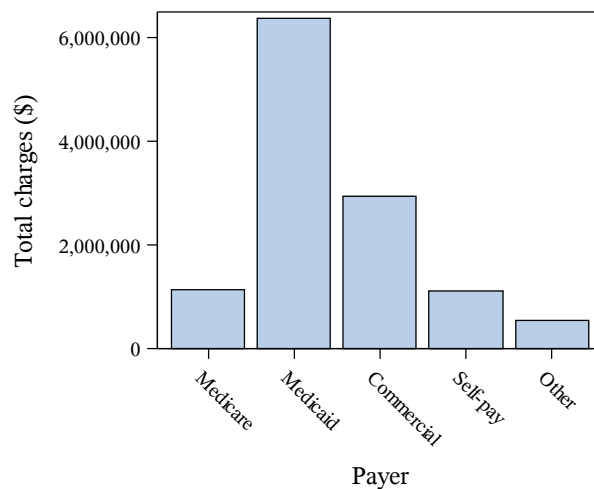


Figure 29: Self-injury ED visits by pay source, KY residents

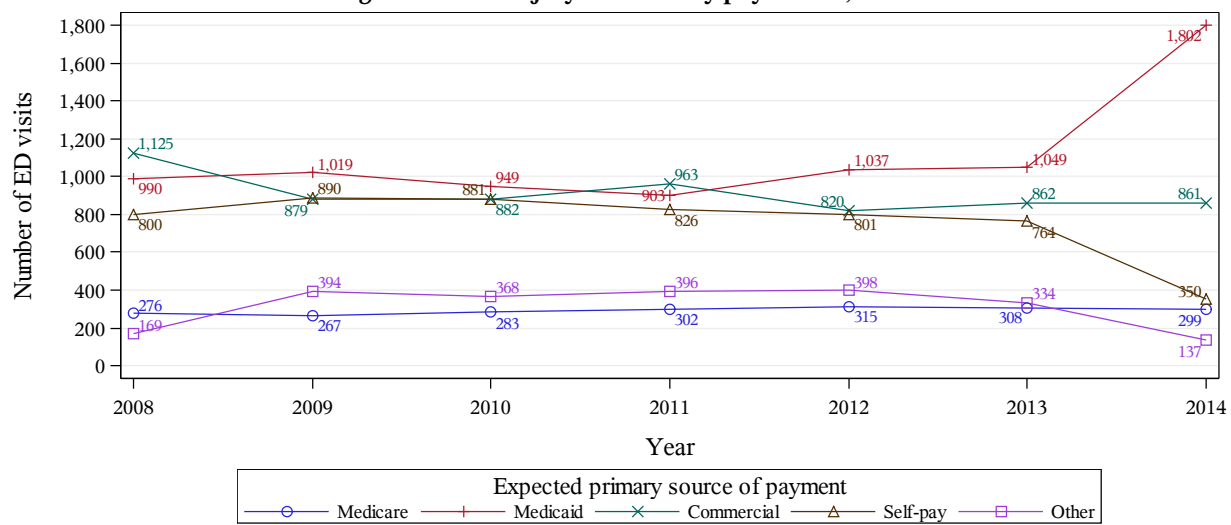
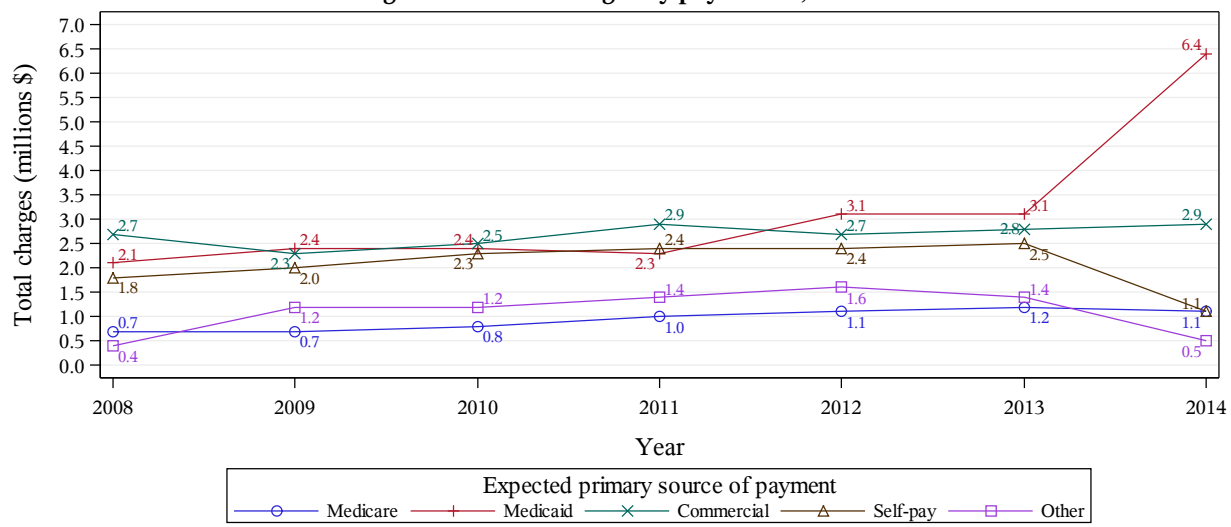
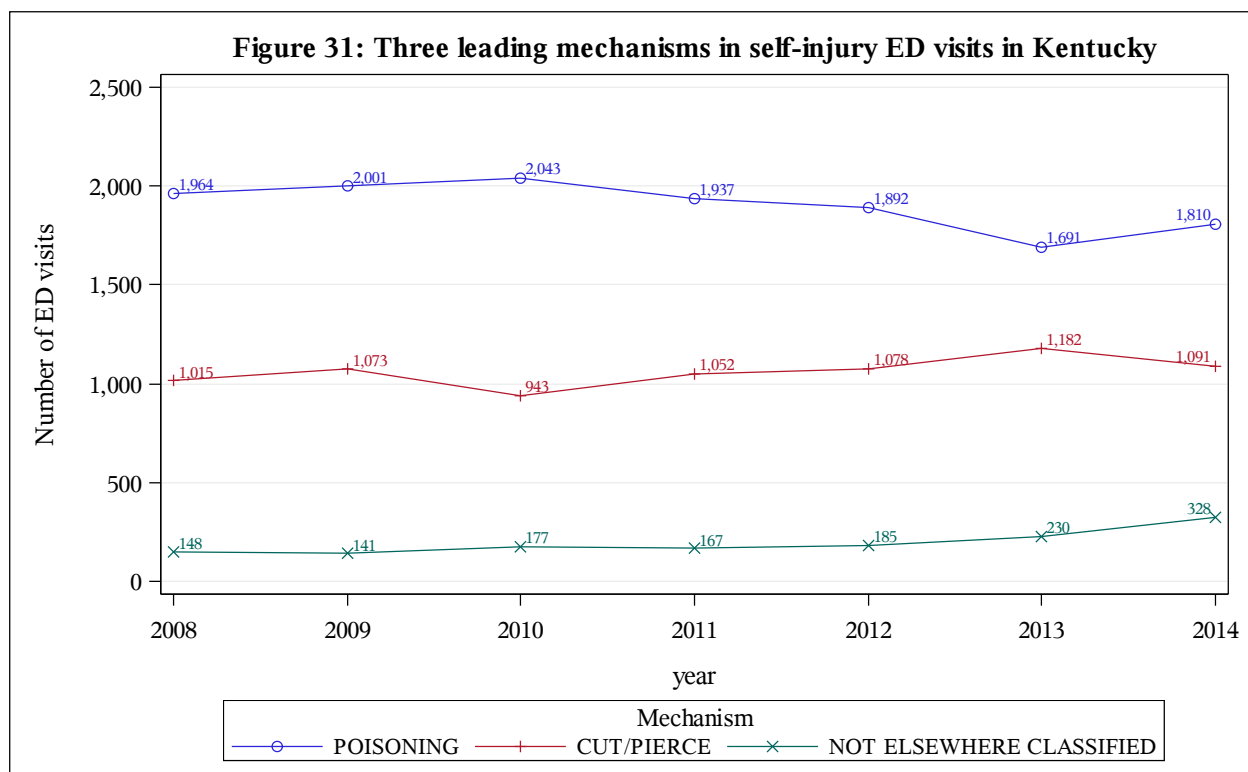


Figure 30: Total charges by pay source, KY residents



SELF-INJURY ED VISITS 2005-2014, KENTUCKY



Data Sources, Methods, and Definitions

The data sources, methods, and definitions used in this report are based on the *State Injury Indicators report: Instructions for Preparing 2011 Data, Atlanta, Georgia, March 2013*, a publication of the National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Suicide

The source for mortality data is the Kentucky Vital Statistics death certificates for Kentucky residents, 2005-2014. Data for years 2009-2014 are preliminary and subject to change. The underlying cause of death is coded according to the International Classification of Diseases, 10th revision. Suicide deaths were identified as deaths with any of the following ICD-10 codes as an underlying cause of death: *X60-X84 Intentional self-harm; Y87.0 Sequelae of intentional self-harm*.

Self-Injury

The sources for morbidity data were the Kentucky inpatient hospital discharge (HD) uniform billing electronic records, 2005-2014, and the electronic emergency department (ED) visit records, 2008-2013. Data for years 2010-2014 are preliminary and subject to change. The HD and ED data are coded according to the International Classification of Diseases, 9th revision, Clinical Modification. The principal diagnosis code is the diagnosis established to be the main reason for the hospitalization/ED visit. Other conditions/diagnoses that exist and affect the diagnosis, treatment, or length of stay in the health facility, are also coded and called secondary diagnoses. Injury diagnoses (especially principal injury diagnosis) should be supplemented (when circumstances of the injury are known) with an external-cause-of-injury code that describes the external cause and the intent of injury (e.g., unintentional, assault, self-harm, or undetermined).

For the purpose of this report an injury subset for hospitalizations was created first by selecting discharges having a principal diagnosis code of injury in the following ranges: *800–909.2, 909.4, 909.9, 910–994.9, 995.5–995.59, 995.80–995.85*. An injury subset for emergency department visits was created similarly, but also included visits having a valid external cause of injury code regardless of the principal diagnosis. Episodes of self-injury were then identified as records in the hospital or ED injury subsets with first valid external-cause-of-injury code in the range *E950-E959*.

Data for Kentucky residents treated in the neighboring states were not available and not included; therefore, the presented counts and rates may underestimate the extent of the problem in the state. Age-adjusted mortality and morbidity rates were based on 2000 U.S. standard population.

For detailed information on how the state suicide indicators compare to other injury indicators like motor-vehicle crashes, poisonings, traumatic brain injuries, homicides, and other, please review the Kentucky Injury Indicators reports available on the Kentucky Injury Prevention and Research Center website <http://www.mc.uky.edu/kiprc/>.