

Weapon Injury Data

Notes from the Weapon-Related Injury Surveillance System

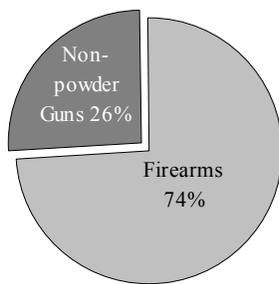
January 1998

Gunshot Wounds Decline for Massachusetts Residents

Gunshot wounds (GSWs) to Massachusetts residents have dropped for the third year in a row according to reports filed by hospital emergency departments with the Massachusetts Department of Public Health (MDPH). Most notably, violent gun assaults have declined dramatically.

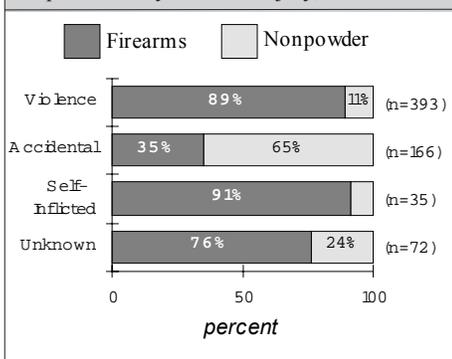
Hospitals reported 666 gunshot wounds to MDPH in 1996, compared with 828 in 1995 and 980 in 1994. Figure 1 shows that the majority of these injuries (74%) re-

Figure 1. Percentage of Firearm vs. Nonpowder GSW Cases Treated in Mass. Emergency Departments, 1996



sulted from firearms, which include handguns, shotguns, and rifles. However, 26% were attributed to nonpowder guns (such as BB guns), which use compressed air or gas or a mechanical spring action to propel ammunition. Airguns were associated

Figure 2. Firearm vs. Nonpowder GSW Cases Treated in Mass. Emergency Departments by Intent of Injury, 1996

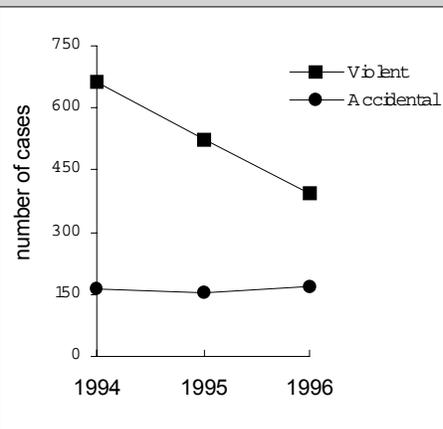


most often with accidental injuries (Figure 2), although 11% of violent GSWs resulted from airguns. Children between the ages of 12 and 17 were at highest risk for airgun injuries in 1996, accounting for 53% of such injuries.

Violence-related Gunshot Wounds

Among violent shootings, 393 cases

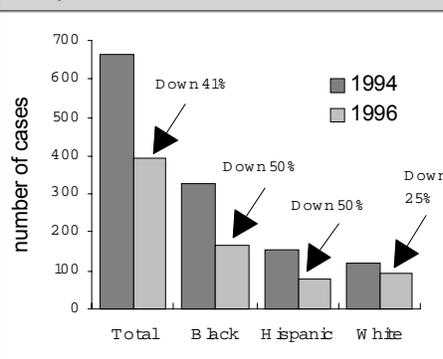
Figure 3. Number of Violent and Accidental GSW Cases Treated in Mass. Emergency Departments by Year, 1994-1996



were reported for 1996 compared with 526 in 1995 and 662 in 1994 (Figure 3). This represents an overall decline of 41%. Comparatively, accidental gun injuries remained stable over the three-year period.

Black and Hispanic residents experienced the largest declines. Gunshot wounds were down 50% for blacks and for Hispanics, compared with 25% for white,

Figure 4. Number of Violent GSW Cases Treated in Mass. Emergency Departments by Race, 1994 and 1996

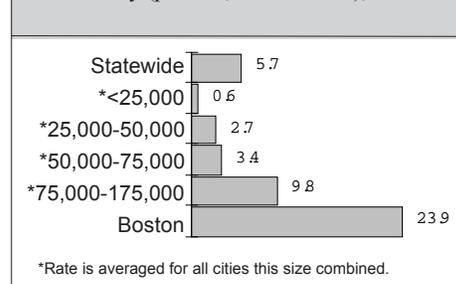


nonHispanics (Figure 4). Among teen-aged males, GSWs decreased most among black youths (56%), a notable development because this group has been at highest risk for gun assaults.

The decline in GSWs has occurred almost exclusively in the ten cities with the highest weapon injury rates in 1994. Between 1994 and 1996, gunshot wounds in Springfield declined by 61%, New Bedford 59%, Boston 47%, and Worcester 43%.

Rates have varied considerably by size of patient's city of residence. Figure 5 shows that in 1996, smaller cities (fewer than 25,000 residents) averaged less than 1 violent GSW per 100,000 residents; for Boston, the rate was 24 per 100,000.

Figure 5. Violent GSW Rates by Size of Patient's City (per 100,000 residents), 1996



*Rate is averaged for all cities this size combined.

1997 data are still preliminary, but initial data for the first six months (January-June) indicate a continuation of the downward trend in violent firearm injuries.

Method Notes

Project investigators assess reporting levels statewide by reviewing a sample of hospital emergency department records annually. Hospitals have consistently reported over 80% of gunshot wound cases from 1994 to 1996. Rates presented in this bulletin have not been adjusted for hospital underreporting. Rates for figure 5 were calculated using 1995 population data estimates developed by the Massachusetts Institute for Social and Economic Research.

Gunshot injuries not treated in an emergency department (i.e., pre-hospital deaths) are not captured by this system.