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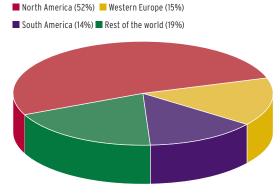
# Firearm suicides

ublic perception generally associates firearms with interpersonal violence rather than suicide. In Europe and North America, however, firearm suicides outnumber firearm homicides. US data for 2011 shows that 60 per cent of firearm-related deaths were caused by 'intentional discharge in self-harm', i.e. suicide (Alvazzi del Frate, 2012, p. 84). Firearm suicide ranked first among the injury-related causes of death for males, comprising more than 39 per cent of cases (CDC, 2014).

The Small Arms Survey yearbooks have dealt with the issue of firearm suicide on several occasions, starting in 2001 with the 'Effects' chapter of its first issue (Muggah, 2001), then in various chapters dealing with the impact of firearm use (Alvazzi del Frate, 2012; Florquin and Wille, 2004; Shaw, 2013; Small Arms Survey, 2007). Further analysis, especially focusing on gender aspects, derives from the Global Burden of Armed Violence (Alvazzi del Frate, 2011). This Research Note summarizes key research issues related to the topic and includes data from the Small Arms Survey Multisource Database on Armed Violence (Small Arms Survey, 2014).

Firearm suicides in North America account for more than half of the global total (52 per cent; see Figure 1), while 15 per cent occur in Western Europe, 14 per cent in South America, and 19 per cent in the rest of the world. Firearm suicide is a major health problem in Western cultures and an emerging issue in low-income countries (Florquin and Wille, 2004, p. 177; Small Arms Survey, 2014).

Figure 1 Distribution of firearm suicides by world regions (latest year available)



Source: Small Arms Survey (2014)

## More guns, more firearm suicides

While many factors can contribute to suicide patterns, opportunity, the availability of technical means, and their social acceptability appear to be the most important (Ajdacic-Gross et al., 2008, p. 726). Firearms are lethal instruments requiring relatively little expert knowledge to operate them, so they may be the instrument of choice to those acting on impulse who are seeking a certain and rapid death. For this reason, easy access to a gun in the home is significantly associated with a higher risk of firearm suicide (Dahlberg, Ikeda, and Kresnow, 2004, p. 933).

While there is no firm evidence of a general connection between the availability of firearms and homicides, the correlation holds between access to guns and suicide by firearm (Florquin and Wille, 2004, p. 187; Muggah, 2001, p. 203; Shaw, 2013, p. 27). Furthermore, a risk factor is associated with the possession of guns for professional reasons (Shaw, 2013, p. 32).

Stricter access to guns would reduce opportunities for firearm suicides, in particular when the suicide is impulsive. This has been observed, for example, in Australia, where a marked decrease in firearm-related deaths, including homicides, suicides, unintentional shootings, and justifiable homicides, occurred parallel to a reduction in private gun ownership between 1996 and 2002 (Florquin and Wille, 2004, p. 184).

# **Gender aspects**

According to a 2004 study, men account for fewer than 65 per cent of overall suicide victims, but close to 90 per cent of firearm suicide victims (Florquin and Wille, 2004, p. 179). More recently, 2004–12 statistics indicate that the proportion of male suicide victims increased to 78 per cent, with an even more skewed prevalence (96 per cent) in terms of firearm suicides (Small Arms Survey, 2014). Suicidal women tend to resort to other means, such as poisoning or drowning, as documented by a study for WHO (Ajdacic-Gross et al., 2008, p. 728). Because substances take time to be effective, people using drugs or poison to commit suicide are often rescued, thus resulting in only a 2-3 per cent chance of such suicide attempts being fatal (Boehlert, 2013; Drexler, 2013). On the other hand, suicide

attempts with a gun are usually fatal (Drexler, 2013; Florquin and Wille, 2004, p. 187).

Evidence suggests that women use firearms more rarely than men, but firearms play a predominant role in murder-suicide cases when the perpetrator kills the partner or even other family members and children and subsequently commits suicide. Men are primarily the perpetrators of such crimes (Liem and Oberwittler, 2012; Shaw, 2013, p. 17).

### Conclusion

Suicide is a serious consequence of firearm proliferation, an aspect of armed violence, and a major health issue in some regions of the world. Males are more likely to use a firearm to commit suicide than females. Making the access to firearms more difficult may result in impulsive attempts to commit suicide being less frequently lethal.

Further research at the Small Arms Survey will focus on increasing the availability and quality of data from all regions of the world and exploring the connections among firearm suicide, the availability of firearms, and gun control legislation. ■

### References

Ajdacic-Gross, Vladeta et al. 2008. 'Methods of Suicide: International Suicide Patterns Derived from the WHO Mortality Database.' Bulletin of the World Health Organization, Vol. 86, No. 9. September, pp. 726-32. Geneva: World Health Organization. <a href="http://www.who.int/bulletin/volumes/">http://www.who.int/bulletin/volumes/</a> 86/9/07-043489/en/>

Alvazzi del Frate, Anna. 2011. 'When the Victim Is a Woman.' In Geneva Declaration Secretariat. Global Burden of Armed Violence: Lethal Encounters. Cambridge: Cambridge University Press, pp. 113-44.

-. 2012. 'A Matter of Survival: Non-lethal Firearm Violence.' In Small Arms Survey. Small Arms Survey 2012: Moving Targets. Cambridge: Cambridge University Press, pp. 78-105.

Boehlert, Eric. 2013. 'Reporting on Surging U.S. Suicide Rate, Press Downplays Gun Deaths.' Media Matters. 6 May. <a href="http://mediamatters.org/blog/2013/05/06/">http://mediamatters.org/blog/2013/05/06/</a> reporting-on-surging-us-suicide-ratepress-down/193914>

CDC (Centers for Disease Control and Prevention). 2014. 'Leading Causes of

Death, National or Regional, 1999-2011.' <a href="http://webappa.cdc.gov/sasweb/ncipc/">http://webappa.cdc.gov/sasweb/ncipc/</a> leadcaus10\_us.html>

Dahlberg, Linda L., Robin M. Ikeda, and Marcie-Jo Kresnow. 2004. 'Guns in the Home and Risk of a Violent Death in the Home: Findings from a National Study.' American Journal of Epidemiology, Vol. 160, No. 10, pp. 929-36.

Drexler, Madeline. 2013. Guns and Suicides: The Hidden Toll. Special Report. Boston: Harvard School of Public Health. Spring. <a href="http://www.hsph.harvard.edu/news/">http://www.hsph.harvard.edu/news/</a> magazine/guns-suicide-the-hidden-toll/>

Florquin, Nicolas and Christina Wille. 2004. 'A Common Tool: Firearms, Violence, and Crime.' In Small Arms Survey. Small Arms Survey 2004: Rights at Risk. Oxford: Oxford University Press, pp. 173–211.

Liem, Marieke and Dietrich Oberwittler. 2012. 'Homicide Followed by Suicide in Europe.' In Marieke Liem and W. A. Pridemore, eds. Handbook of European Homicide Research: Patterns, Explanations and Countries Studies. New York: Springer, pp. 197-215.

Muggah, Robert. 2001. 'After the Smoke Clears: Assessing the Effects of Small Arms Availability.' In Small Arms Survey. Small Arms Survey 2001: Profiling the Problem. Oxford: Oxford University Press, pp. 197-249.

Shaw, Margaret. 2013. 'Too Close to Home: Guns and Intimate Partner Violence.' In Small Arms Survey. Small Arms Survey 2013: Everyday Dangers. Cambridge: Cambridge University Press, pp. 17–45.

Small Arms Survey. 2007. Small Arms Survey 2007: Guns and the City. Cambridge: Cambridge University Press.

-. 2014. Multisource Database on Armed Violence. Geneva: Small Arms Survey.

For more information about non-conflict armed violence, please visit: <a href="http://www.">http://www.</a> smallarmssurvey.org/?non-conflict-deaths>

The Small Arms Survey serves as the principal international source of public information on all aspects of small arms and armed violence, and as a resource centre for governments, policy-makers, researchers, and activists. The Small Arms Survey, a project of the Graduate Institute of International and Development Studies, Geneva, hosts the Geneva Declaration Secretariat. For more information, please visit: www.smallarmssurvey.org

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