



### 3. HOMICIDE MECHANISMS AND ENABLERS

As established in the previous chapter, homicide in all its types is the result of the specific internal motivations and objectives of its perpetrator(s). However, a number of intermediate factors that cut across all typologies can also play a role in the process that leads someone to commit homicide. To show how different homicide mechanisms, whether including a weapon or not, are used across the world, and to assess to what extent different types of homicide can be associated with different killing instruments, this chapter analyses how homicides are perpetrated. The role of psychoactive substances, such as illicit drugs and alcohol, as homicide “enablers” is also considered. A better understanding of the influence of such elements in facilitating homicide can be of great value for the development of homicide prevention policies, which, when appropriately targeted at such elements, can reduce violence before it becomes lethal.

#### Homicide mechanisms around the world

Not all homicides involve them, but weapons do play a significant role in homicide. With their high level of lethality,<sup>1</sup> firearms are the most widely used weapons, accounting for 177,000 (41 per cent) of the total 437,000 homicides globally in 2012. “Other means”, such as physical force and blunt objects, among others, killed just over a third of homicide victims, while sharp objects were responsible for just under a quarter (24 per cent).<sup>2</sup>

The type of mechanism used to commit homicide depends on a number of factors, including the will of the perpetrator(s), the socio-demographic characteristics of both perpetrator and victim, the accessibility of weapons and the legislation for controlling them, which tends to increase in severity according to the lethality of the weapon. This results in wide variations in the type of weapons used to commit homicide at the regional level (see figure 3.1). For example, in the Americas, firearms are the most prevalent killing mechanism, while in Oceania, sharp objects are the most widely used weapons in homicides. In both Asia and Europe, the “other” category of homicide mechanism, which includes blunt objects, poisoning, strangulation and physical assault,<sup>3</sup> amongst others, accounts for the largest share of homicides. In Africa, firearms and sharp objects account for almost equal proportions of homicides, but this should be interpreted with caution as the share of homicide by type of weapon is estimated on the basis of statistical models.

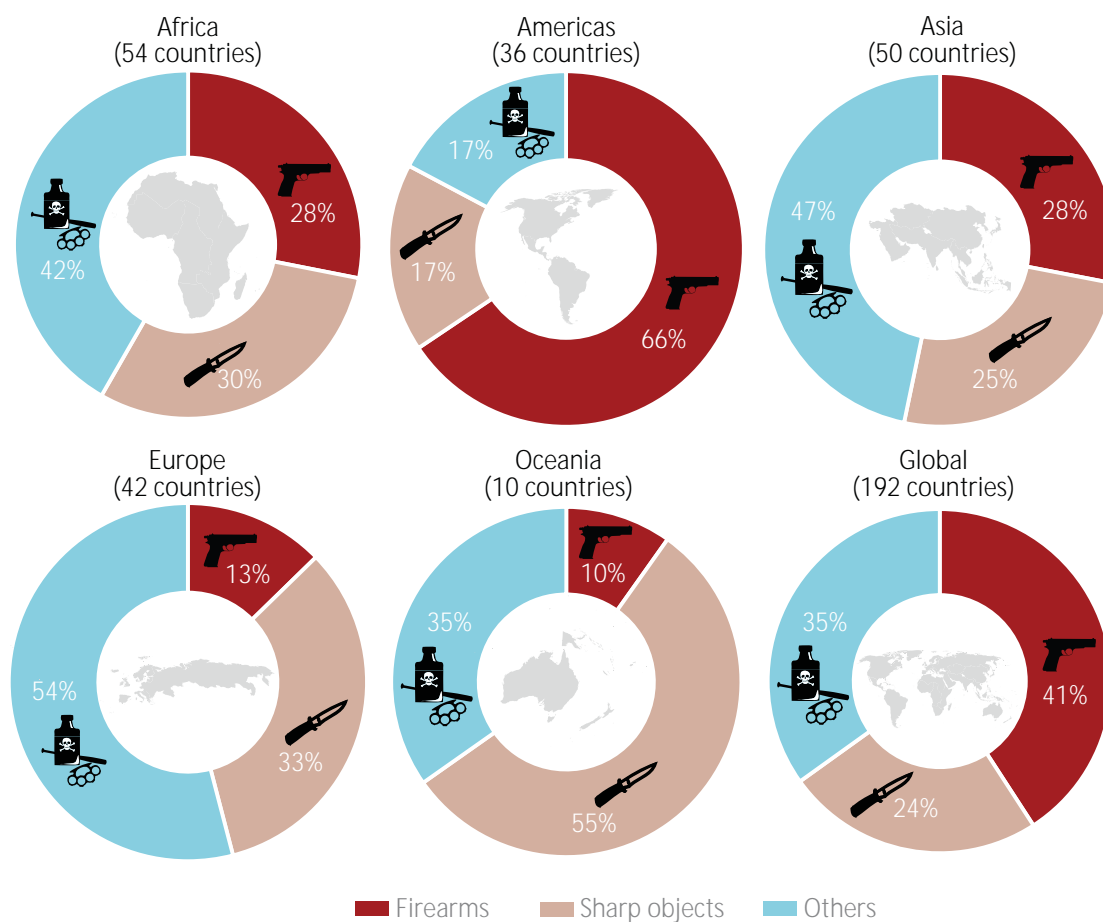
High levels of homicide are not always associated with high shares of killings by firearm. For example, although firearms are consistently used in a large proportion of homicides in the Americas, where countries with the highest homicide rates also record the highest share of homicides by firearm, the picture is more varied in other regions. Indeed, some sub-regions with relatively high homicide rates have a relatively low share of homicides by firearm, such as Eastern Europe and Southern Africa, while others have lower homicide rates but

1 Lethality of a firearm depends on the type and calibre of the weapon. Whether a victim survives a gunshot wound is often dependent on other factors, such as the availability and efficiency of health care systems. For more, see Alvazzi del Frate, A. (2012) *Small Arms Survey. Moving Targets, chapter 3*.

2 Data calculated on the basis of UNODC Homicide Statistics (2013). Whenever data on homicide mechanism were not

available from criminal justice sources, estimates of the share of homicide by mechanism were based on IHME (2012).

3 WHO *International Statistical Classification of Diseases and Related Health Problems 10<sup>th</sup> Revision (ICD-10)*.

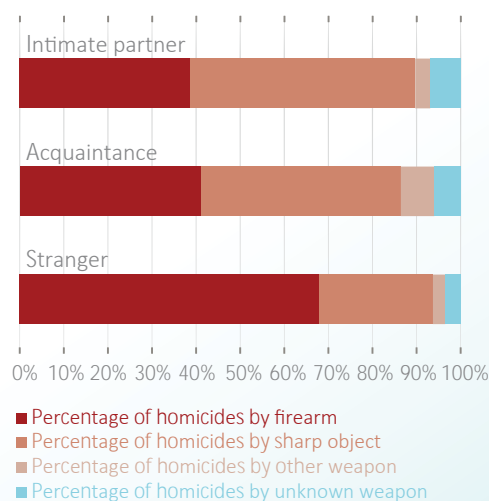
**Fig. 3.1: Homicide mechanism, by region (2012 or latest year)**

Source: UNODC Homicide Statistics (2013) and IHME (2012).

## Homicide typologies and mechanisms in South Africa

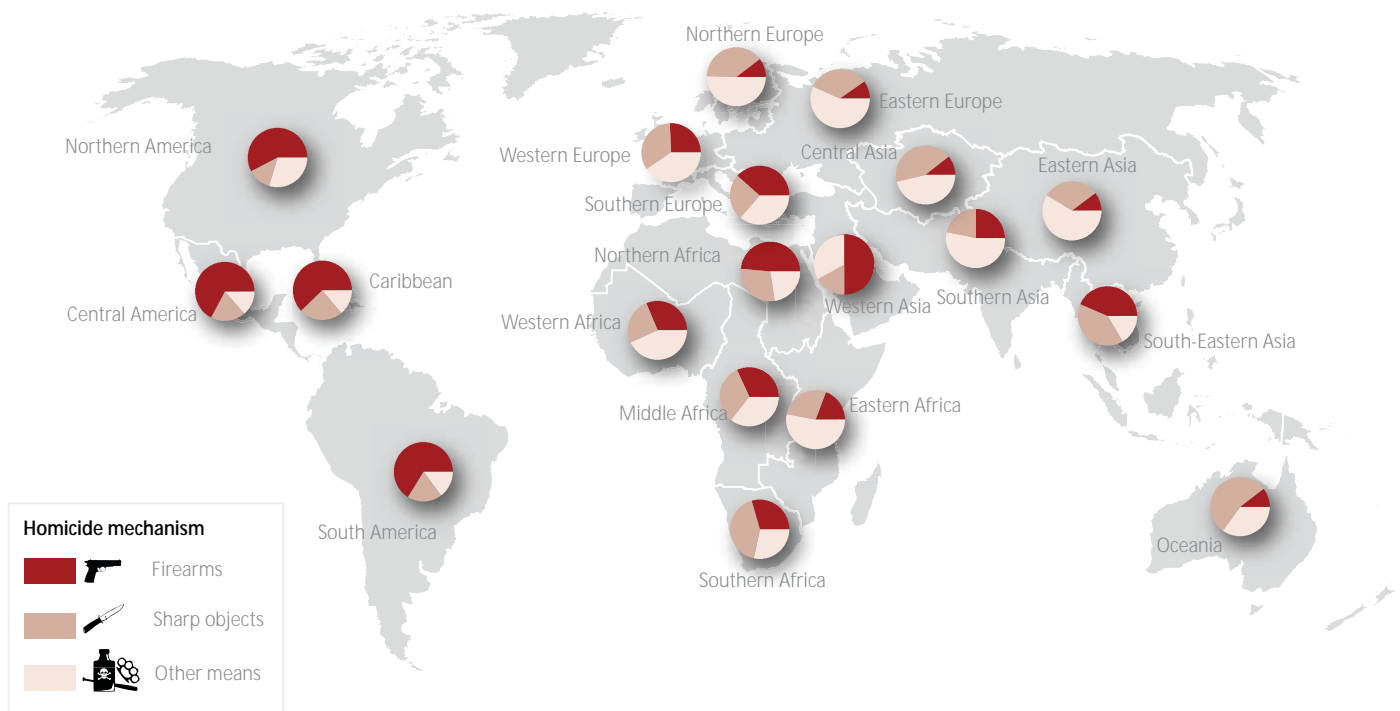
A South African study examined homicide incidents from 2001-2005 in parts of three cities that were experiencing high homicide rates.<sup>a</sup> Firearm homicide was more strongly associated with the killing of strangers, while sharp objects accounted for a higher share of homicides committed by intimate partners/family members and by acquaintances of the victims (see figure 3.2). In the same vein, a large majority (70 per cent) of homicides linked to interpersonal conflicts, such as those related to arguments or disputes, were committed with sharp objects. In another finding, firearm homicides outnumbered sharp object homicides by a factor of five in the case of homicides linked to other criminal activities.

<sup>a</sup> Centre for the Study of Violence and Reconciliation (CSVR), South Africa (2010).

**Fig. 3.2: Percentage distribution of homicides, by perpetrator and mechanism, three cities, South Africa (2001-2005)**

Note: the three cities included in the study are Cape Town, Durban and Gauteng.

Source: Centre for the Study of Violence and Reconciliation, South Africa (2010).

**Map 3.1: Percentage distribution of homicide mechanisms, by sub-region (2012 or latest year)**

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.  
Source: UNODC Homicide Statistics (2013).

higher shares of homicides by firearm, such as Southern Europe and Northern Africa (see map 3.1). This seems to confirm that a complex mixture of factors influences homicide levels, the homicide mechanism being only one of many elements that combine to determine homicide levels and trends.

### Homicide mechanism and typology

In the identification of patterns of association between types of homicide and weapons used, detailed and comprehensive statistical information is needed in order to disaggregate killing mechanism by type of homicide (or vice versa). However, from available information, it is not possible to derive a general understanding of patterns of association between homicide mechanisms and homicide typologies.

Studies conducted in high-income countries, which tend to have lower levels of homicide, have shown strong correlations between gun availability in the home and female homicide rates, but a slightly weaker correlation with male homicide rates.<sup>4</sup> As a

result, having a gun in the home places women at a higher risk of victimization, particularly in the home, where they are more likely to be killed by their intimate partners or family members.<sup>5</sup>

The hypothesis that firearm homicide is not only prevalent in homicide related to other criminal activities is further supported when considering the respective trends in gun homicides and other violent crime in the United States. All forms of violent crime have significantly decreased in the United States in the last 20 years, but while the respective trends in firearm homicide, non-fatal firearm victimization,<sup>6</sup> violent victimization and serious violent victimization<sup>7</sup> followed a similar path in the 1990s, the pace of decline in firearm homicide has slowed remarkably since 2000 (see figure 3.3).

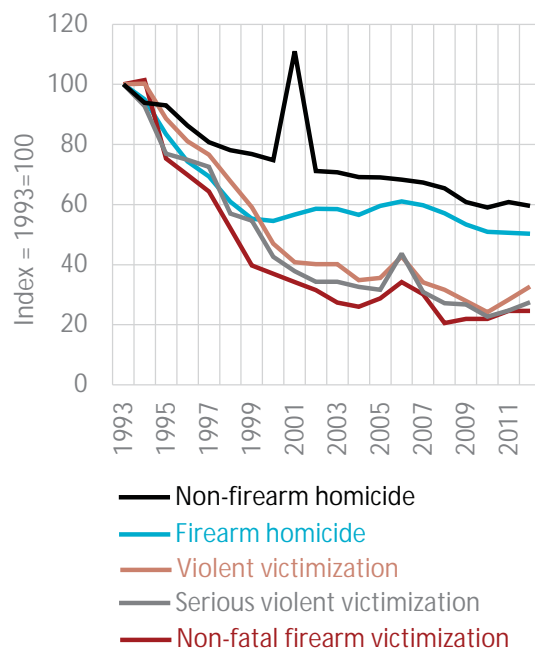
5 UNODC (2011). *Global Study on Homicide*. P. 58.

6 This refers to the victimization rate of people who have been the victim of violent crime (rape, sexual assault, robbery, aggravated and simple assault) during which the perpetrator(s) had showed or used a firearm (see Planty M. and J. Truman (2013), United States Bureau of Justice Statistics).

7 This refers to the victimization rate of people who have been the victim of serious violent crime, which includes rape, sexual assault, robbery and aggravated assault (see Lauritsen J.L. and M.L. Rezey (2013), United States Bureau of Justice Statistics; and Truman J., Langton L. and M. Planty M.(2013), United States Bureau of Justice Statistics).

4 See Hemenway, D., T. Shinoda-Tagawa and M. Miller (2002), in *Journal of the American Medical Women's Association* 57; Killias, M., J. van Kesteren, and M. Rindlisbacher (2001), in *Canadian Journal of Criminology* 43; Geneva Declaration Secretariat (2011). P. 131; Shaw, M. (2013). *Small Arms Survey. Everyday Dangers, chapter 2*.

**Fig. 3.3: Trends in firearm and non-firearm homicide rates, violent and serious violent victimization rates, and non-fatal firearm victimization rate, United States (1993-2012)**



Note: Due to methodological changes in the 2006 NCVS, caution should be used when comparing 2006 estimates to other years.

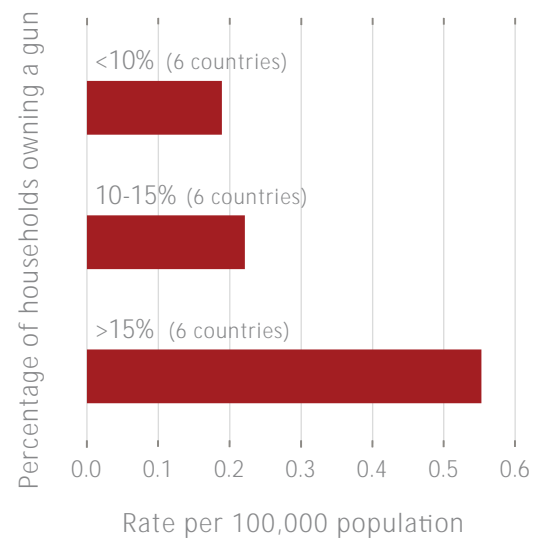
Source: Bureau of Justice Statistics, United States (2013); Truman, J. Langton L. and M. Planty (2013); Lauritsen, J.L. and M.L. Rezey (2013); and Planty, M. and J. Truman (2013).

The above data indicate that homicide trends (both firearm and non-firearm homicide) do not necessarily follow similar trends and patterns to those of other violent crime. The various homicide types, as presented in chapter 2 of this study, can follow different trends and the overall evolution of homicide levels combines the respective trends in all homicide types. The divergence between trends in homicide and other violent crime in the United States suggests that while homicide may share some of the drivers of other forms of violent crime, it may also have enablers that are specific to it.

The role that firearm availability, accessibility or ownership may play in affecting levels of firearm homicide is a heavily debated research and policy issue. Hypotheses about the impact of the prevalence of firearm ownership and, more generally, of gun availability<sup>8</sup> on homicide tend to fall into two

<sup>8</sup> Availability, accessibility and ownership of firearms are closely related terms but with different connotations. In this study, firearm availability refers to the overall stock of firearms directly available to civilians, military, armed groups, etc. independently of the type of entitlement; firearm accessibility reflects the overall availability but also the existence of possible limitations to access and use of firearms (for example, due

**Fig. 3.4: Firearm homicide rate and percentage of households owning at least one gun, selected European countries (2004 or 2005)**



Note: Firearm homicide rate is based on the median homicide by firearm rate for each country grouping.

Source: European Crime and Safety Survey (EU ICS) and International Crime Victimization Survey (ICVS).

categories. One suggests that easy access to firearms may facilitate the commission of homicide in a variety of ways, including by fostering violent confrontations and by increasing their lethality, as well as, on a different note, by facilitating the commission of crimes and the execution of targeted killings. The second hypothesis suggests, on the other hand, that widespread availability of firearms may be a deterrent to assault and aggressions, in that it may reduce the leverage and motivation of an armed perpetrator. A number of methodological challenges, starting with the shortage of data on firearm availability, make it difficult to provide definitive answers in either direction.<sup>9</sup>

In some countries, available quantitative evidence points to the prevalence of firearm ownership as being positively related to the level of firearm violence. For example, the experience of several European countries, all of them characterized by

to prescriptions on storage or carrying of weapons); firearm (private) ownership refers to the percentage of households in a country owning at least one gun. Gun ownership is often measured through the permanent presence of a gun in the household.

<sup>9</sup> There is a lack of specific data on how many firearms used in homicides were obtained legally and how many were obtained illegally. For more on these hypotheses and related methodological challenges, see UNODC (2011). *Global Study on Homicide*. P. 43.

## International firearm control: the Arms Trade Treaty

The illicit trade in small arms is a serious problem that requires global action. Around the world, civilian populations are trapped in situations of violence, from conflict and crime, and they are often the ones suffering the misuse of arms by armed groups, including organized criminal groups.

The Arms Trade Treaty (ATT), adopted by the United Nations General Assembly in April 2013,<sup>a</sup> is designed to regulate and improve the regulation of the international trade in conventional arms, with the intention of preventing, disrupting and eradicating the illicit trade in such arms and thwarting their diversion. The ATT will be closely linked to the successful implementation and provisions of the United Nations Convention against Transnational Organized Crime and its protocols, notably the Firearms Protocol, which obliges countries to establish strict transfer control measures and enforcement provisions, as well as to criminalize the illicit manufacturing and trafficking of firearms, their parts, components and ammunition, among several other measures.<sup>b</sup>

The ATT introduces a set of measures designed to prevent diversions of conventional arms by prohibiting the authorization of arms transfers under certain circumstances, including where there is knowledge that arms would be used to perpetrate war crimes, genocide, attacks against civilians, and other grave breaches of the Geneva Conventions. Where the prohibitions do not apply, States must perform a comprehensive risk assessment and examine possible risk mitigation measures. The assessment explicitly requires States to evaluate whether there is a risk of serious violations of international human rights or humanitarian law, or of contravening conventions relating to terrorism and organized crime.

International cooperation and assistance are emphasized throughout the ATT as means to ensure that all States can effectively implement and enforce its provisions. All relevant United Nations entities, international and regional organizations have made commitments to support the ATT's implementation and contribute to the achievement of its ultimate objectives: the eradication of violence and preservation of peace.

<sup>a</sup> United Nations General Assembly (2013). A/CONF.217/2013/L.3.

<sup>b</sup> For more on the Firearms Protocol, see United Nations General Assembly (2001). Resolution 55/255 *Annex*; and UNODC (2011). *Global Study on Homicide*. P. 42.

low firearm homicide rates, points to a certain level of association between firearm ownership and firearm homicide. When grouping the countries into low, medium and high levels of household gun ownership, results indicate that countries with higher levels of firearm ownership also have higher firearm homicide rates (see figure 3.4).

### *Homicide by sharp object*

Instruments with sharp edges account for 24 per cent of all homicides globally. Many homicides result from cuts or slashes caused by sharp objects, such as knives, machetes, razors, swords and bayonets, as well as broken glass, but sharp objects, including less conventional examples such as screwdrivers, ice picks or stilettos, can also be used to stab or puncture. Such instruments are relatively easy to obtain and to conceal.

In some countries, especially those with low levels of homicide, sharp objects significantly outweigh other mechanisms of killing. For example, in Australia, the number of homicide victims who die

from stab wounds has been consistently higher than the number of victims killed by firearms,<sup>10</sup> (see figure 3.5) and knife homicide also affects young people aged 18-24 more than firearm homicide.<sup>11</sup> In terms of homicide typologies, sharp objects account for the largest share of homicides in Australia committed by intimate partners/family members or by acquaintances, while beatings and physical violence accounts for the dominant share of homicides committed by strangers (see figure 3.6).

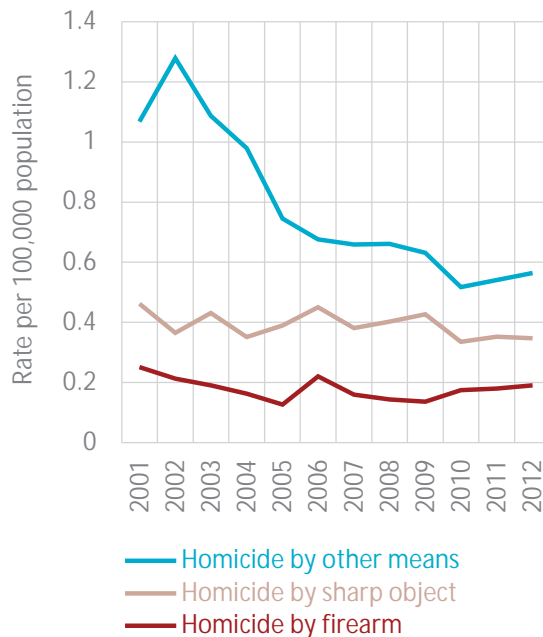
In the United Kingdom, sharp objects are the most common method of killing. In England and Wales they accounted for two out of every five homicides in 2011/2012<sup>12</sup> (see figure 3.7) and, similarly, sharp objects have been the most common method

<sup>10</sup> Australian Bureau of Statistics (2013).

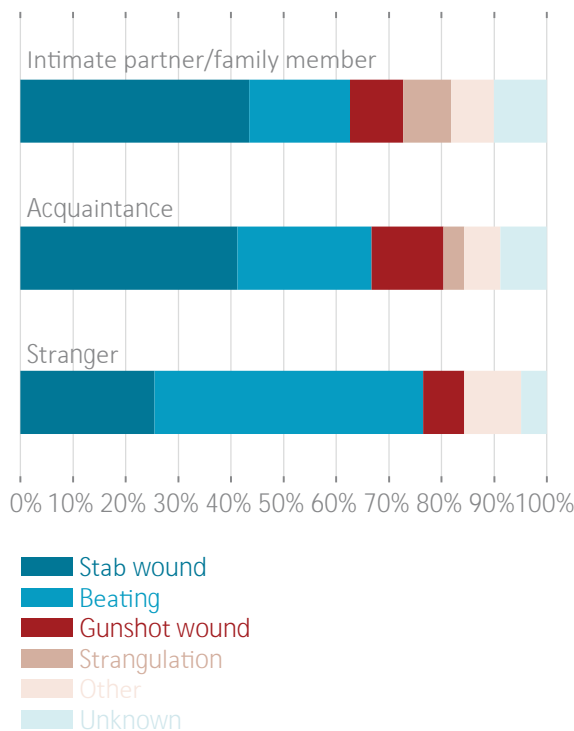
<sup>11</sup> Bartels, L. (2011a), in *Trends and Issues in Crime and Criminal Justice*, Australian Institute of Criminology.

<sup>12</sup> Government of the United Kingdom. (2012). *Home Office Statistical Bulletin* 02/12.

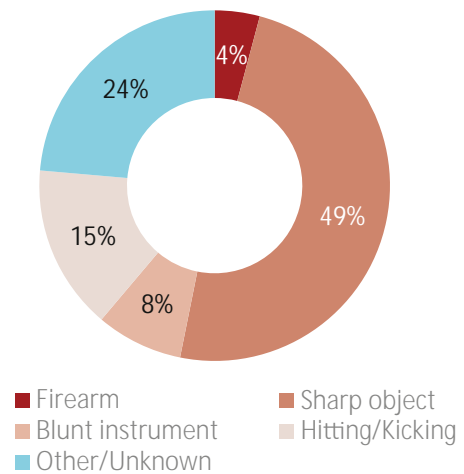


**Fig. 3.5: Homicide rates, by homicide mechanism, Australia (2001-2012)**

Source: Australian Bureau of Statistics (2012a).

**Fig. 3.6: Homicide mechanism, by homicide perpetrator, Australia (2008-2010)**

Source: Australian Bureau of Statistics (2012b); and Australian Institute of Criminology (2013).

**Fig. 3.7: Average percentage of homicides, by homicide mechanism, England and Wales (2001-2012)**

Source: Home Office, Office for National Statistics, United Kingdom (2013).

of killing in Scotland for the last ten years (see figure 3.8).<sup>13</sup> In the United Kingdom overall, firearms account for a very small percentage of all homicides, with victims being twice as likely to be killed by a blunt instrument, almost four times as likely to be punched or kicked to death, and more than ten times as likely to be stabbed or killed with a sharp object than with a firearm.<sup>14</sup>

Several small-scale studies on the phenomenon of knife-carrying by young people,<sup>15</sup> indicate that its associated factors are similar to those relating to why people own firearms. For example, out of fear, a sense of vulnerability, and for self-defence. Other factors that influence knife-carrying include a history of victimization, exposure to violence, engaging in risky behaviour such as drug use or gang membership, socio-economic disadvantage, lack of employment and/or opportunities. A sense of fear, particularly regarding being in public spaces and at night, influence knife carrying in young people in Australia.<sup>16</sup> In Scotland and Australia, the most common age at which youth begin to carry knives is 13-14, and this has a strong influence on youth carrying knives throughout their teens.<sup>17</sup> Such

<sup>13</sup> Scottish Government (2011).

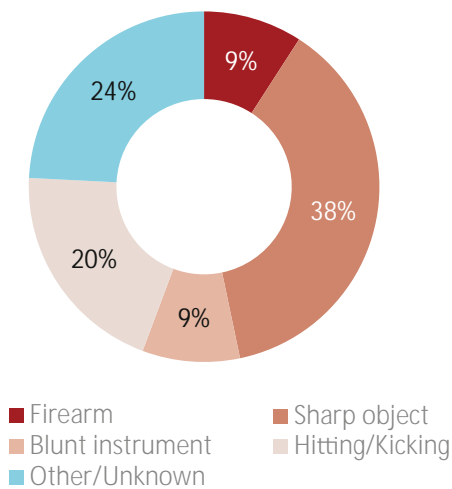
<sup>14</sup> Home Office, Office for National Statistics, United Kingdom (2013).

<sup>15</sup> See for example Bannister, J. et al. (2010); and Phillips, A. and V. Chamberlain (2006).

<sup>16</sup> Brown, J. and J. Sutton (2007), in *Australian Journal of Guidance and Counselling* 17.

<sup>17</sup> McVie, S. (2010), in Scottish Government Social Research; Australian Institute of Criminology (2009).

**Fig. 3.8: Average percentage of homicides, by homicide mechanism, Scotland (2003–2013)**



Source: Scottish Government (2013).

results suggest that early intervention targeted at young people carrying weapons could have a strong preventative impact, as could crime prevention strategies that enhance the perception of safety of young people.<sup>18</sup>

### Psychoactive substances

From death to chronic illness and addiction, the consumption of psychoactive substances outside of medical control can have a plethora of negative health effects. Moreover, the use of intoxicants can have consequences beyond the impact on the individual consumer, as the consumption of alcohol and illicit drugs are cross-cutting facilitators for all types of violence. Both can increase the risk of becoming a victim or perpetrator of violence, and several links exist between the consumption of psychoactive substances and interpersonal violence. The first of those is “psychopharmacological”: as a result of the ingestion of specific substances, such as illicit drugs or alcohol, individuals may experience changes in their physiological functioning that typically restrain behaviour. The second is “economic-compulsive”: addicted or dependent individuals commit crimes in order to fund their alcohol or illicit drug use.<sup>19</sup> The illicit trafficking of drugs has an additional element that links violence with drugs, as “systemic” or “structural” violence is an inherent component of the

### Measures to control knife-carrying in the United Kingdom

Noting the severity of knife-related homicide, particularly among young people, the United Kingdom enacted the *Violent Crime Reduction Act* in 2006. Among its many provisions, it included raising the minimum age for buying a knife from 16 to 18 years of age, and increasing the maximum sentence for carrying a knife without good reason from two to four years<sup>a</sup>. In addition, the United Kingdom launched the “Tackling Knives Action Programme (TKAP)” in 2008, in response to a number of knife homicides involving teenage victims. Police in areas of greatest concern introduced a range of enforcement, education and prevention initiatives aimed at reducing youth knife violence. The programme ran from June 2008 to March 2010 and demonstrated positive reductions in the number of homicide victims and suspects in the areas in which it was implemented, though the reductions were not proportionately higher in programme areas than elsewhere, as reductions of serious youth violence were noted across the country from 2007 to 2010.<sup>b</sup>

<sup>a</sup> Government of the United Kingdom (2006). *Violent Crime Reduction Act*.

<sup>b</sup> For more on the TKAP, see Ward, L, Nicholas S. and M. Willoughby (2011).

illicit drug market and is used to enforce payment, resolve competition and to punish.<sup>20</sup>

The psychopharmacological explanation relates directly to the interpersonal homicide typology, but economic-compulsive and systemic or structural violence are more closely tied to the typology of homicidal violence linked to other criminal activities. But it is often difficult to disentangle the relationship between these different explanations for spikes or drops in violence, as the use of psychoactive substances is commonly associated with other risk-taking behaviours and social conditions (such as poverty), making associations challenging to isolate. Individual, situational and socio-cultural factors also come into play, and very few countries have available data on the nature of the crimes committed while under the influence of alcohol or illicit drugs.

<sup>18</sup> Bartels, L. (2011b), Australian Institute of Criminology.

<sup>19</sup> These explanations are based on WHO (2009). *Interpersonal violence and illicit drug use*; and WHO (2006). *Interpersonal violence and alcohol*.

<sup>20</sup> Goldstein, P. (1985), in *Journal of Drug Issues* 14.

## Alcohol

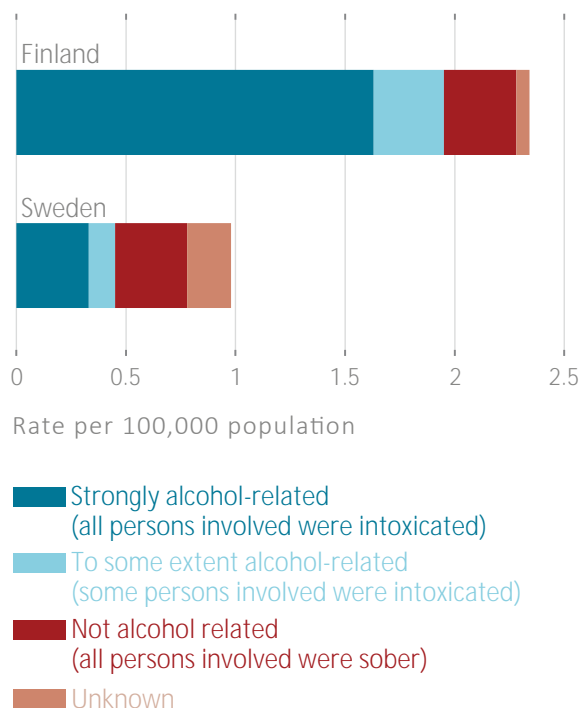
A serious threat to public health in many countries, alcohol can affect different types of interpersonal violence, including various types of interpersonal homicide. The link between alcohol and violence involves a causal chain that binds together alcohol consumption and other aforementioned factors to form a relationship that may be more conditional than deterministic.<sup>21</sup> While violence levels, including homicide rates, are influenced by the volume of alcohol consumption, they are even more influenced by patterns of alcohol consumption, with a number of studies indicating, for example, that hazardous drinking patterns are strongly associated with homicide rates.<sup>22</sup>

Findings made by the European Homicide Monitor suggest that 82 per cent of homicide offenders in Finland in 2003-2006 were intoxicated with alcohol when they committed murder, whereas that was the case for slightly more than half of homicide offenders in Sweden.<sup>23</sup> This research also suggests that the difference between total homicide rates in Finland and Sweden can to a large extent be attributed to alcohol-related homicides (see figure 3.9).<sup>24</sup>

Australia also has available data on the consumption of alcohol by homicide victims and offenders. In 2008-2010, nearly half of all homicide incidents were preceded by alcohol consumption by the victim or the perpetrator, or both.<sup>25</sup> Elsewhere, in cases reviewed in the southern Indian State of Odisha from 2006-2011, 30.2 per cent of homicide victims were found to have a positive blood alcohol content.<sup>26</sup>

The consumption of alcohol, particularly at “harmful” levels, is a major risk factor for homicides between partners. As an example, a Finnish study on intimate partner homicides between

**Fig. 3.9: Annual victimization rates of alcohol-related and non-alcohol-related homicides, Finland and Sweden (2003-2006)**



Source: European Homicide Monitor.

2002 and 2010 showed that 73 per cent of all male offenders and 77 per cent of all female offenders were under the influence of alcohol at the time of the homicide. The study also noted that 62 per cent of the victims of male offenders and 77 per cent of the victims of female offenders were also intoxicated with alcohol.<sup>27</sup>

Links between these phenomena are manifold and research has suggested that the use of alcohol increases both the occurrence and severity of intimate partner violence for the following reasons: alcohol use has a direct effect on both cognitive and physical function, reducing inhibition and leaving people less capable of negotiating a non-violent resolution to conflicts within relationships; excessive drinking by one partner can exacerbate financial difficulties, childcare problems, infidelity or other family stressors, resulting in increased tensions in a relationships and the potential risk of violence between partners; and individual and societal beliefs that alcohol causes aggression can excuse or condone violent behaviour after drinking, and the use of alcohol can be an excuse for violent behaviour.

<sup>21</sup> For a review of the many elements involved in the relationship between alcohol and violence, see Bye, E.K. (2012), in *Handbook of European Homicide Research: Patterns, explanations and country studies*.

<sup>22</sup> See Rossow, I. (2000), National Institute for Alcohol and Drug Research, Norway; Bye, E. K. (2008), in *Homicide Studies* 12(1); Rehm, J., et al. (2004), World Health Organization.

<sup>23</sup> *Homicide in Finland, the Netherlands and Sweden: A first study on the European Homicide Monitor data* (2011).

<sup>24</sup> Lehti, M. and J. Kivivuori, (2005), in *Nordisk alkohol- och narko-tikatidskrift*, 22. Pp. 5-18.

<sup>25</sup> Australian Institute of Criminology (2013).

<sup>26</sup> Mohanty, S. et al. (2013), in *Forensic Medicine and Anatomy Research* 1(2).

<sup>27</sup> Kivivuori, J. and M. Lehti (2012), in *Homicide Studies* 16 (1): P.60.



## Alcohol-related policy strategies

Policy strategies that involve limiting the availability of alcohol have proved effective in reducing violence. Studies have demonstrated that licensed premises can become “hot spots” for violent behaviour, and strategies to prevent heavy consumption in bars and pubs are particularly relevant for the reduction of violence. This has proved to be the case in cities that have experienced high levels of violence. Starting with Bogota, in 1995, several cities in Colombia that were experiencing high levels of violence adopted so-called “dry laws” that restrict the sale of alcohol in bars and restaurants during certain hours. For example, Cali had a very high homicide rate, with alcohol being associated with an increase in the number of homicides.<sup>a</sup> A variety of policies, from relatively lax to very restrictive, limiting the sale of alcohol in public places were enacted over several different periods throughout 2004–2008. Research demonstrated an increased risk of homicide during periods when the less restrictive policies were in effect, which was consistent across all homicides, including those by firearm and by sharp object.<sup>b</sup>

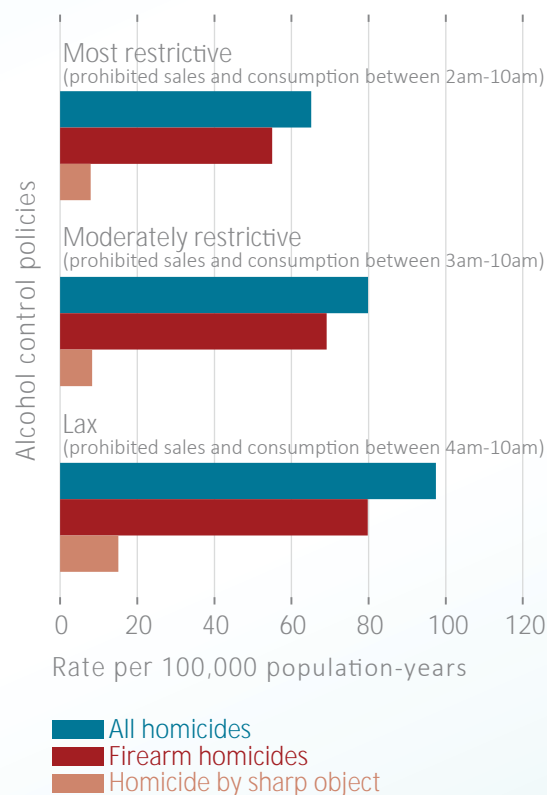
Similar policies in the Americas and Europe have had similar effects,<sup>c</sup> suggesting that longer alcohol sales hours may lead to increased levels of alcohol consumption and subsequently to more violence.

<sup>a</sup> Concha-Eastman, A. et al. (2002), in *Pan American Journal of Public Health* 12.

<sup>b</sup> Sanchez, A. I. et al. (2011), in *International Journal of Epidemiology* 2011.

<sup>c</sup> Biderman, C., J. M.P. de Mello and A. A. Schneider (2006), in *The Economic Journal* 120 (543); Duailibi, S. et al. (2007), in *American Journal of Public Health* 97(12); Pacific Institute

**Fig. 3.10: Homicide rates during various time restrictions on alcohol sales, Cali, Colombia (2004–2008)**



Source: Sanchez, A.I. et al. (2011).

for Research and Evaluation (2004); Rossow, I. and T. Norstrom (2011), in *Addiction* 107.

## Illicit drugs

As with alcohol consumption, the use of illicit drugs can increase the risk of becoming a victim or a perpetrator of violence. However, different drugs have different psychopharmacological effects, with some, such as cocaine and amphetamines, being more related to violence than others.<sup>28</sup> In addition, in contrast to alcohol, the production and distribution of illicit drugs can also generate a great deal of violence.

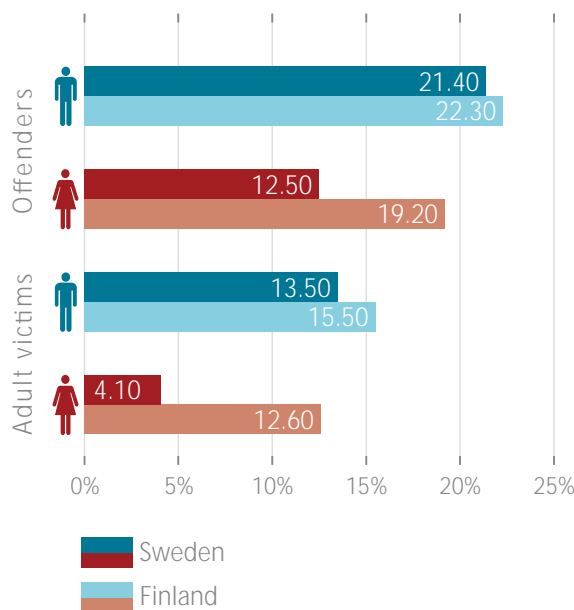
It is particularly challenging to disentangle the various components of illicit drug-related homicide, as this type of violence is the product of the

interaction of a variety of different complex causes and underlying factors. The mechanisms linking illicit drugs to homicide are not universal and they vary, not only from one drug type to another but also across nations and communities. Efforts to intervene will often also affect other components of the interactive system (supply and demand),<sup>29</sup> but a review of all aspects of the drug-related illicit economy (cultivation, production, distribution, transit and sale) would be necessary for a comprehensive assessment, as these components also trigger other crimes and violence in connection with the safeguarding of criminal activities, including disputes between rival criminal factions.

<sup>28</sup> WHO (2009). *Interpersonal violence and illicit drug use*.

<sup>29</sup> Office of National Drug Control Policy, United States (2013). P. 31.

**Fig. 3.11: Percentage of adult homicide victims and offenders under the influence of drugs at time of crime (2003-2006)**



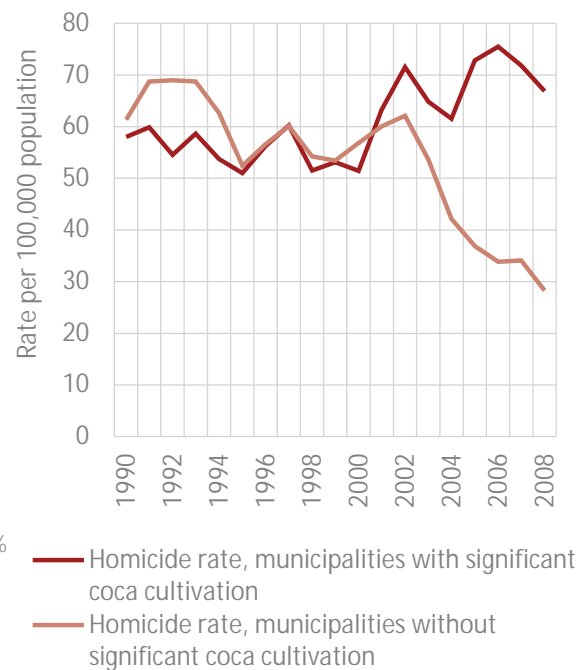
Source: European Homicide Monitor.

Very few countries produce data on the nature of crimes committed while under the influence of illicit drugs. But when looking specifically at the influence of drug intoxication on homicide, about 20 per cent of male homicide offenders in Finland and Sweden in 2003-2006 were under the influence of illicit or psychosomatic drugs, often combined with alcohol, when they committed homicide (see figure 3.11),<sup>30</sup> whereas the percentages of female perpetrators intoxicated with illicit drugs were lower. Moreover, the fact that significant percentages of homicide victims were under the influence of illicit drugs is indicative of the multiple effects that illicit drugs can have on violence.

In addition to the pharmacological link between illicit drug consumption and homicide, significant violence is also associated with crimes motivated by the need for drug users to purchase often expensive drugs. As mentioned earlier, a third distinct source of violence arises from illicit drug markets (a systemic, or structural relationship), in which violence is used as a tool. The relationship between drug markets, trafficking routes, organized criminal groups, anti-drug efforts and violence is being increasingly studied in an attempt to identify pat-

<sup>30</sup> *Homicide in Finland, the Netherlands and Sweden: A first study on the European Homicide Monitor data* (2011).

**Fig. 3.12: Homicide rates, by type of municipality, Colombia (1990-2008)**



Source: Mejia, D. and P. Restrepo (2013b).

terns of association and/or causality links, including reverse causality (i.e. more violence in a given region reduces opportunities for legal activities). Another objective is to underline the reality that lethal violence and drug trafficking often share underlying causes, such as weak rule of law and fragile institutions that can both enable illicit activities and provide impunity for violence.

The systemic effect of drugs on violence can take many forms at different levels, from the cultivation and production of illicit drugs through the trafficking process to the retail level. The violence associated with the production of drugs in some countries appears to be considerable. Recent studies have found, for example, that drug production activities in Colombia accounted for a significant share of the country's homicides in 2010.<sup>31</sup> Competition between illegal armed groups, and with the Government, over control of territories suitable for coca cultivation and cocaine production can result in lethal violence. For example, as cocaine cultivation shifted from Peru and Bolivia to Colombia in the early 1990s, surges in violence occurred between competing factions involved in coca cultivation and cocaine production, and violence increased after 2000, particularly in

<sup>31</sup> Mejia, D. and P. Restrepo (2013a).

municipalities with significant coca cultivation<sup>32</sup> (see figure 3.12).<sup>33</sup>

The transit phase of transnational drug trafficking also generates a significant amount of crime and violence, as homicides are frequently associated with organizations involved in the movement of drugs.<sup>34</sup> It has been widely speculated that drug trafficking is responsible for the high levels of violence in Central America, but while there has been research into that particular nexus, no evidence can prove a direct link between the two crimes. For every area that has high levels of both drug trafficking and homicide, there are others with low levels of trafficking and high homicide, and yet others with low levels of homicide and high levels of trafficking.<sup>35</sup>

As discussed in the *Global Study on Homicide 2011*,<sup>36</sup> it is likely that changes in drug markets drive lethal violence, rather than violence being driven by overall levels of trafficking flows. A recent study, giving a slightly different perspective, found that while interdiction efforts in Colombia (based on increased seizures starting in 2007) had an immediate effect on drug trafficking activities in Mexico, creating a negative supply shock, competition in drug trafficking activities in Mexico had an extended effect on violence, with a strong relationship between homicide rates and the number of cartels in a given municipality in 2007-2010. One of the key findings of the study is that the presence of each additional cartel in a particular location results in a doubling of the homicide rate, which suggests that the main channel relating the drug trade to violence is competition between cartels over the control of territory, as there was a milder effect on fighting between authorities and traffickers due to the supply shocks from Colombian seizures.<sup>37</sup>

With regard to retail markets for illicit drugs, the literature on drug-related violence focuses largely on the Americas and suggests that there is strong

evidence that cocaine (including crack cocaine) was associated with homicide, particularly gun homicides related to drug retail markets in the 1980s and 1990s, in the United States.<sup>38</sup> This serves as a reminder of how specific such phenomena are to their particular context: in Western Europe, for example, the emergence of crack cocaine (such as in Spain and the United Kingdom) has not generated a similar upturn in violence.

32 Municipalities dedicated to coca cultivation with at least 10 hectares (on average) between 1990-2008 (using only the years for which cultivation figures are available). (Mejia, D. and P. Restrepo (2013b).

33 Mejia, D. and P. Restrepo (2013b). Pp. 4-5.

34 UNODC (2013). *World Drug Report*. P. 48; Organization of American States (2013). P. 75; UNODC (2011). *Global Study on Homicide*. Pp. 51-53.

35 Organization of American States (2013). P. 78.

36 UNODC (2011). *Global Study on Homicide*. Pp. 51-52.

37 Castillo, J.C., Mejia, D. and P. Restrepo (2013).

38 Fryer, R.G. et al. (2013), in *Economic Inquiry* 51.