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# COST OF VIOLENCE STUDY: SWITZERLAND

A HALVING GLOBAL  
VIOLENCE REPORT

**PATHFINDERS**

FOR PEACEFUL, JUST AND INCLUSIVE SOCIETIES

HOSTED BY THE NYU CENTER ON INTERNATIONAL COOPERATION

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## About the Grand Challenge on Halving Global Violence

The [Grand Challenge on Halving Global Violence \(HGV\)](#) is creating a movement to achieve the Sustainable Development Goals targets for peace. It brings together communities of practice working on different forms of violence in order to highlight interlinkages and amplify impact on the ground. While most international attention concentrates on armed conflicts, evidence shows that it is interpersonal violence, especially interpersonal violence occurring in urban zones, that has the most impact on people's daily lives and has a direct effect on other sustainable development indicators. For this reason, Halving Global Violence largely focuses on interpersonal violence and seeks to better understand how to address, in part through studies like this.

The movement is spearheaded by the high-level [Halving Global Violence Task Force](#), a coalition of world leaders and experts committed to leveraging their knowledge, expertise, and networks to identify and disseminate evidence-based solutions to significantly reduce global violence.

HGV is an initiative of the Pathfinders for Peaceful, Just and Inclusive Societies, a cross-regional impact hub of 46 member states, as well as partners across international organizations, civil society, and the private sector committed to advancing the Sustainable Development Goal targets for peace, justice, inclusion, and equality (SDG16+). The Pathfinders is hosted at New York University's Center on International Cooperation.

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## About this Publication

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# Executive Summary

**Background:** Switzerland is a high-income country with low rates of fatal and nonfatal violence. Possibly due to these low prevalence rates, the costs of violence to Swiss society have received relatively little attention.

**Objective:** This report aims to establish the prevalence rates of homicide and assaults (both physical and sexual) in Switzerland and assess their related tangible and intangible costs. Furthermore, it aims to estimate the economic cost of violence in Switzerland while specifically delving into the economic impact of domestic violence and intimate partner violence (IPV).

**Methods:** We employ a comprehensive approach to categorize violence-related costs into three categories: (1) tangible direct costs; (2) tangible indirect costs; and (3) intangible costs. Within each category, we further classify costs based on the outcome of injuries, distinguishing between fatal and nonfatal violence. To estimate these costs, we use official crime data from the Federal Statistical Office for homicide and assaults. Recognizing the issue of underreporting in physical and sexual assault offenses, victimization surveys are employed to estimate the number of unreported cases. In the absence of Swiss data on the cost of injuries, the Centers for Disease Control and Prevention (CDC) provides estimates on medical costs, work loss costs, and the value of a statistical life (VSL)/quality of life loss costs. To ensure comparability, violence types are mapped, and costs are adjusted for purchasing power parity between the US and Switzerland. We also make adjustments to reflect the relative size of medical spending between the two countries. For comparison, we use prevalence rates of physical assault from Gallup. Using the same methodology, we also estimate the costs of domestic violence and IPV.

**Results:** Our estimates suggest that the economic cost of violence in Switzerland is about USD 66.3 billion, equivalent to 8.3 percent of the country's GDP, according to Swiss data. However, the costs could be as high as USD 73.4 billion, representing 9.2 percent of GDP, based on the Gallup World Poll data. Further, domestic violence alone accounts for at least 4.4 percent of Swiss GDP, while IPV accounts for at least 3.2 percent.

**Conclusions:** Despite low Swiss prevalence rates of violence, the estimated costs of said violence are high. However, there is considerable uncertainty regarding our estimates due to missing Swiss data on medical and criminal justice costs, as well as the severity of injuries due to assault.

**Keywords:** violence, homicide, sexual assault, physical assault, cost of violence, Switzerland.

# 1 Introduction

The aim of this report is to document the prevalence of interpersonal violence and its associated costs in Switzerland, and to identify policies, programs, and recommendations to address the economic impact of violence in the country. Interpersonal violence is understood to be homicide, physical assault, and sexual assault, since much of these are perpetrated in the domestic sphere. We provide separate numbers for domestic violence, which includes intimate partner violence (IPV). Our report will contribute to the forthcoming Flagship Report of the Halving Global Violence Task Force, and aims to inform national and global discussions about the business case for investments in violence prevention.

While assigning monetary values to injuries and death may be seen as morally questionable, it is essential for understanding the magnitude of the issue and informing policy decisions. By quantifying these costs, we can better comprehend the burden of violence. In addition, the cost distribution of different forms of violence can help guide policymakers in allocating resources to tackle the most pressing issues, as well as devising effective violence reduction measures.

Our report is structured as follows:

In Section 2 we present the estimated prevalence rates of interpersonal violence in Switzerland. We then provide a categorization of the costs and present some cost estimates in Section 3. A review of Swiss policies, programs, and interventions to reduce violence follows (Section 4), and we provide some tentative policy recommendations (Section 5). Section 6 concludes the report.

## 2 Prevalence of Interpersonal Violence

The focus of our discussion of interpersonal violence is on homicide, and both physical and sexual assault. Since much of the violence happens in the domestic sphere, we provide separate estimates for domestic violence, including IPV. As assault tends to be underreported, we also present some estimates of these underreported categories of violence.

### 2.1 Homicide

Homicide is a costly crime with profound and enduring consequences that extend well beyond the immediate victim. Its impact can be felt in various domains of society, including economic, social, and governmental institutions. As per the United Nations Office on Drugs and Crime (UNODC) International Classification of Crime for Statistical Purposes, intentional homicide is characterized by three essential elements: the act of killing a person committed by another person; the perpetrator's intent; and the unlawfulness of the act.

The Swiss Criminal Code (Art. 111–117) distinguishes between several types of homicide, including intentional killing, negligent killing, manslaughter, and murder. Intentional killing refers to a deliberate act or omission resulting in the death of another person, while negligent killing is a result of carelessness or failure to exercise sufficient caution. Manslaughter involves an intentional killing where the perpetrator is not fully in control of their actions due to emotional distress. Murder, on the other hand, is an intentional killing that involves elements of cruelty or a nefarious motive.

Compared to both the global and European averages, Switzerland has a relatively low homicide rate. According to the latest available data in the UNODC's crime trend survey and police crime statistics by the Federal Statistical Office, there were 41 homicides (42 victims) recorded in the country in 2022, which corresponds to a rate of 0.48 per 100,000 inhabitants. Due to this small number of cases, it can be difficult to identify clear patterns, trends, or underlying factors. Results are further complicated by significant fluctuations in individual years.

While no strong trends in the overall prevalence of homicide have been observed in the last decade, examining a larger time frame from 1990–2022 reveals a significant reduction. However, during the same time span, there was an increase in attempted homicides. This development may be partially attributed to improvements in emergency care.

Furthermore, it is notable that the reduction in homicide rates is much more significant for male victims, whose homicide rates per 100,000 inhabitants declined by 0.2 compared to 10 years previously (from 0.71 in 2012 to 0.51 in 2022). By contrast, the homicide rate for female victims has fluctuated over the years. For instance, the female homicide rate was 0.44 in 2022 and 0.57 in 2021. In both 2012 and 2011, the rate was 0.57.<sup>1</sup>

A close look at police crime statistics between 2012 and 2022 reveals that on average, there were 171 attempted and 47 committed homicides recorded annually over the course of the last decade.<sup>2</sup> Most of these cases, around 95 percent, were successfully solved by law enforcement, implying a high standard of police investigations. A significant portion of these crimes occurred within the domestic sphere, with over half of the homicides and roughly 30 percent of attempted homicides taking place in this context.

In terms of weapons used, cutting or stabbing weapons were the most prevalent, employed in one-third of homicides and 55 percent of attempted homicides. Firearms were used in 26 percent of homicides and 11 percent of attempted homicides. For roughly 20 percent of cases, no weapons were used, and only physical force was applied (e.g., beating, kicking, or suffocation). For the remaining small portion of homicides, no further information is available to determine the specific means employed.

Comparing Switzerland to other European countries in this respect, 2013 data from the UNODC Homicide Statistics and 2012 data from the Institute for Health Metrics and Evaluation (IHME) reveals that firearms were involved in only 13 percent of homicides across Europe. This indicates that Switzerland has a significantly higher proportion of firearm-related homicides compared to the rest of the region.

**Who are the victims and perpetrators of homicides in Switzerland?** In 2022, 52.4 percent of victims were male, and the median age was 43. Perpetrators of homicide were predominantly male (88.6 percent) and known to the victim. Child homicides were relatively rare: only six out of the 41 homicide victims were under the age of eighteen (15 percent). The Swiss Homicide Monitor provides a detailed account of homicides in Switzerland over a longer period (1990–2014).<sup>3</sup> Almost half of all homicides happened within the family, 36.3 percent of all homicide victims were intimate partners, and 13.5 percent of the victims were related to the perpetrator.<sup>4</sup> Killings of children by strangers were extremely rare; there was only one such case during this period in Switzerland. Children appear most likely to be killed by their parents or other family members. Organized crime accounted for 15.5 percent of all homicides. For any of these types of homicides, the proportion of foreign perpetrators is considerably higher than their proportion in the population. Almost half of all perpetrators were known to the police due to previous allegations (48 percent), and 37 percent had a previous conviction. Mass shootings are extremely rare; only two incidents in public spaces were recorded during 2000–2014. If there is more than one victim, it is typically a case of domestic violence.

About 12 percent of all homicides are homicide-suicides, and these can be categorized into four types: (1) In 65 percent of all cases, the suicide follows the homicide of the intimate partner; (2) nine percent of cases involve the killing of the intimate partner and her children; (3) in 10 percent of cases, the killing of children is followed by suicide; and (4) the suicide follows the killing of a different family member (6 percent) or a nonfamily member (10 percent). Men are the perpetrators of the second type of homicide-suicide. Women who commit suicide after a homicide often have also killed their children, accounting for 43 percent of all female homicide-suicides [for more discussion see Walser, Markwalder, and Killias (2022)].



## Box 1: Suicide

The World Health Organization (WHO) explicitly includes suicide in its definition of violence, and in Switzerland, the number of suicides is much higher than the number of homicides. In 2022, there were 1,005 registered suicides in Switzerland compared to 41 homicides. Note that these numbers do not include assisted suicides. Since 1941, Switzerland has permitted legalized assisted suicide, with the right such extending to individuals who are capable of rational thought, act without external influence, demonstrate a consistent desire to die, and do not act on impulse. The act leading to death must be carried out directly by the person seeking to end their life. Although there is no specific legal regulation regarding the permissible reasons for suicide, major organizations that provide assistance in this matter limit their support to individuals facing enduring severe prognoses, intolerable symptoms, disabling conditions, or older adults suffering due to aging. As of May 2022, the guidelines of the Swiss Medical Association also necessitate a valid diagnosis and prognosis to affirm the presence of an intolerable illness or functional impairment.

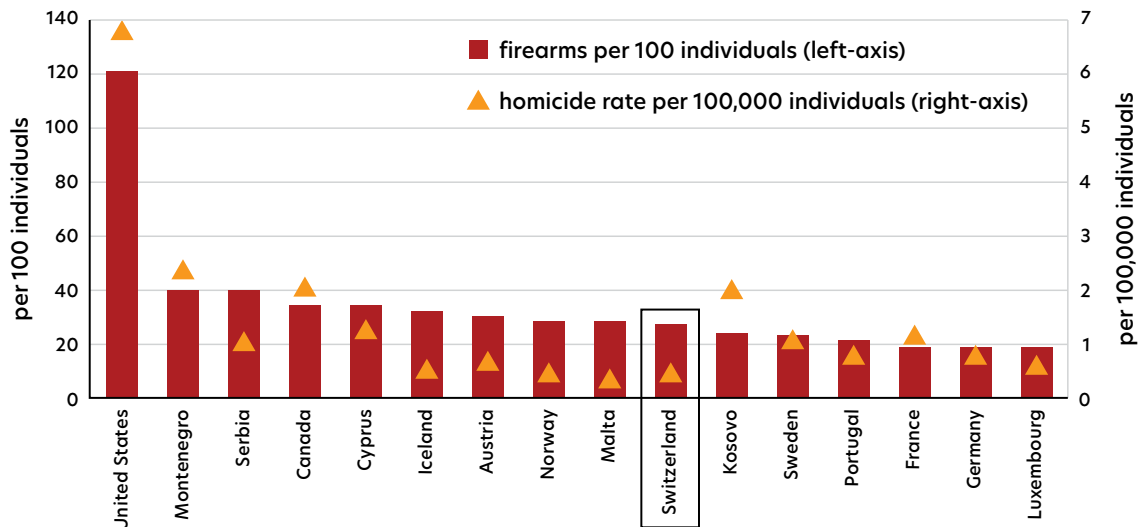
Sources: WHO, "WHO global consultation on violence and health violence: A public health priority," Document WHO/EHA/SPI.POA.2), Geneva, Switzerland: World Health Organization, 1996; Federal Office of Public Health, "Assistierte Suizide [Assisted Suicides]" Last modified March 17, 2022, <https://www.bag.admin.ch/bag/de/home/strategie-und-politik/politischeauftraege-und-aktionsplaene/aktionsplan-suizidpraevention/suizideund-suizidversuche/assistierte-suizide.html>.

Switzerland has a high number of civilian-owned firearms, with an estimated rate of 27.6 firearms per 100 individuals.<sup>5</sup> There are two main reasons. First, Switzerland has a so-called "militia army." Every Swiss man is obligated to serve in the army (or provide an alternative civilian service), while women can serve on a voluntary basis. After basic training of 18–23 weeks, the soldiers remain members of the armed forces for a further nine years and during this time typically must complete further training and refresher courses. During their time in the army, soldiers store their guns at home. After completion of their service, soldiers may buy their service weapon for a small fee. Second, compared to most other European countries, firearm laws in Switzerland are less restrictive. Generally, adult citizens in Switzerland are permitted to own firearms subject to meeting specific criteria. These typically include having no criminal record indicating a violent disposition, and demonstrating no reason to believe that the weapon would be used to cause harm. Certain firearms, like some rifles, must be declared but do not require a permit for ownership, while other types of firearms, such as pistols and self-loading or semi-automatic weapons, require authorization for ownership. Moreover, the popularity of sport shooting in Switzerland contributes to widespread firearm ownership.<sup>6</sup>

Despite the high ownership rate of firearms, Switzerland maintains a relatively low homicide rate. The comparison with other countries is instructive (See Figure 2.1). Globally, the US has by far the highest civilian gun ownership (120.5 per 100 individuals. Switzerland also ranks highly, at 16th. Nevertheless, several other European countries (e.g., Finland,

Austria, Norway, and Sweden) also have rates that are comparable to or higher than Switzerland's. However, when comparing homicide rates, Switzerland's rates are notably lower, approximately half of the average homicide rates in Western European countries (averaging at 0.91 per 100,000 population).<sup>7</sup> There is also a difference when examining suicides, where a reduction in gun ownership (due to a decrease in the size of the army) is associated with a decline in suicide rate.<sup>8</sup>

**Figure 2.1: Firearm ownership rate and homicide rate: selected countries**



Source: Karp, "Estimating Global Civilian-held Firearm Numbers;" International homicide," UNDOC, 2021, <https://dataunodc.un.org/dp-intentional-homicide-victims>.

## 2.2 Assault

In Art. 122-126, the Swiss criminal code differentiates between various forms of assault, including serious assault, common assault, assault through negligence, and acts of aggression. Serious assault involves the intentional infliction of life-threatening or serious injuries, causing an important organ or limb to be unusable, permanently unfitting someone for work, or inflicting disfigurement. Such acts can lead to a custodial sentence of at least six months and up to ten years. Common assault involves the willful injury of another person or their health and can lead to a custodial sentence of up to three years or a monetary penalty. Assault through negligence refers to causing injury to another person or their health through carelessness, leading to a custodial sentence of up to three years or a monetary penalty. Finally, acts of aggression that do not cause any injury to a person's health can lead to a fine, while repeated acts of aggression against certain individuals can lead to prosecution and a custodial sentence or a monetary penalty.

Sexual assault is defined as the act of forcing or attempting to force a partner to engage in a sex act, sexual touching, or nonphysical sexual event (such as sexting) without their consent or when they are unable to provide consent.

The problem with assault, particularly sexual assault, is significant underestimation of numbers due to a high rate of unreported cases. Survivors of sexual offenses may be

ashamed, embarrassed, or afraid to tell the police, friends, or family about the violence. Victims may also harbor a sense of skepticism or disillusionment toward the police and the justice system, doubting their capability to offer adequate help or to enforce sufficient punishment of the offender. Additionally, instances of less severe or minor violence are less likely to be reported to law enforcement. According to a 2022 study, only 22.1 percent of assaults and 7.3 percent of sexual offenses were officially reported in Switzerland.<sup>9</sup>

To investigate the extent of the issue, we analyzed the criminal statistics provided by the Federal Statistical Office and categorized all nonfatal crimes<sup>10</sup> into two categories: physical assault and sexual assault. In 2022, there were approximately 36,005 reported cases (41,015 injured persons) of physical assault and 1,578 reported cases (1,574 injured persons) of sexual assault. However, when considering these reporting rates, it is estimated that there may have been 162,919 cases (185,588 injured persons) of physical assault and 21,616 cases (21,562 injured persons) of sexual assault.

In addition, data from the Gallup surveys<sup>11</sup> indicates that 3.11 percent of the Swiss population aged fifteen years and older reported having been assaulted or mugged. We assume that respondents likely perceive these assaults as incidents occurring outside of the home. It is also not possible to establish from the Gallup data how many of these assaults and muggings resulted in injuries. Using the Gallup data for assault is likely to result in an overestimate, in the Swiss context. This is because Swiss victimization surveys from 2009-2015 suggest that only 14-28 percent of all assaults involved the actual use of violence, implying that threats of violence were more prevalent. Moreover, only 3-5 percent of these reported incidents required medical attention.<sup>12</sup>

### **2.3 Domestic violence and intimate partner violence**

Domestic violence is violence that takes place in a domestic setting, such as in a marriage or cohabitation. Although domestic violence is often used as a synonym for IPV, we want to point out that for the purposes of this report, we understand domestic violence as a broader category than IPV. Victims of domestic violence not only can be intimate partners but also parents, children, or anybody living in the same household. In the context of Switzerland, data are available for both domestic violence and IPV. We discuss both in turn.

Since 2004, the Swiss Criminal Code allows for the prosecution of domestic violence cases involving individuals in relationships, regardless of whether the victim files a formal complaint. This includes the prosecution of offenses such as simple bodily harm, repeated assault, and threats between spouses or registered partners. However, penal leniency may still be applied for certain sexual offenses committed within marriage or registered partnerships. Art. 28b provides protective measures for victims, such as prohibiting the offender from approaching the victim, and courts may order the offender to be removed from a shared home for a specified period. However, the law contains a controversial provision that may require the victim to compensate the offender monetarily for their forced time away from home.

The Victim Support Act enacted in 2007 obliges Swiss cantons to establish counseling and information centers for victims. It also allows for family members of the victim to seek support and includes provisions for financial relief and long-term support. Residency rights for foreign victims of domestic violence, on the other hand, are regulated by the Foreign Nationals and Integration Act. However, while domestic violence committed by a spouse can be considered an important personal reason for granting or extending a residence permit, the threshold for this exception is high, requiring the relationship to be unbearable and the victim to be in serious danger. Furthermore, Switzerland has excluded specific provisions from the Istanbul Convention, such as Article 59, which protects domestic violence victims whose residence status depends on their partners.

Domestic violence encompasses various forms of abuse, including physical violence, sexual violence, stalking, and psychological aggression. According to the police crime data provided by the Federal Statistical Office,<sup>13</sup> 19,978 domestic violence offenses occurred in Switzerland in 2022, involving 11,388 victims. Among these victims, 77 percent of them were a result of IPV. Twenty-five domestic violence events resulted in homicide and sixteen of them were a result of IPV. The reported and registered domestic violence rate is 2.3 per 1,000 inhabitants. We acknowledge that this number is significantly underestimated due to underreporting, and address this in more detail below. Furthermore, the homicide rate in the domestic violence sphere is 0.29 per 100,000 inhabitants, which is almost 60 percent of the overall homicide rate (0.48).

To aid in estimating the cost of violence, we categorized these criminal offenses into physical assault, sexual assault, and others. We found approximately 10,100 physical assault cases and 818 sexual assault cases. It is important to note that these figures represent only reported cases.

The issue of underreporting is particularly pronounced when it comes to domestic violence. Baier, Biberstein, and Markwalder (2022) indicate that in domestic violence situations, only 9.5 percent reported assault/threat cases and 10.5 percent reported sexual assault cases in 2021. These reporting rates suggest that there may have been 106,316 incidents of physical assault offenses and 7,790 incidents of sexual assault in the context of domestic violence. Utilizing a similar approach, the total reported and unreported incidents of assault related to IPV amounts to 83,641. For assaults inside the home, a representative survey of Swiss women suggests that the IPV prevalence rate among the female Swiss population aged fifteen years and older is 1.2 percent.<sup>14</sup> Note that we have no data for male victims of IPV. As a result, we can only estimate a partial population of the IPV assault counts (8,034) based on this survey (specifically for female victims aged 15 years and older) instead of the overall population.

It is crucial to acknowledge that these figures still likely underestimate the true prevalence of domestic violence. Many survivors of domestic violence hesitate to report their experiences due to fear, shame, or concerns about retaliation. Cultural and societal factors may further contribute to the underreporting of these crimes.<sup>15</sup>

# 3 The Costs of Violence

Violence brings about a multitude of costs, both tangible and intangible, which affect not only individuals but also society as a whole. Tangible costs include direct expenses such as medical treatment, criminal justice costs, and reduced income due to lost productivity. Intangible costs, on the other hand, encompass pain, suffering, and psychological impact on victims and their families, as well as the erosion of social cohesion and overall well-being. Given the unique experiences and personal valuations of safety and physical integrity among individuals, quantifying these costs can be a daunting task.

## 3.1 Cost categories

Although there are many reports, books, and articles on the cost of violence, there is no agreement over which costs should be considered and how they should be measured.<sup>16</sup> Researchers from the fields of economics, public health, criminology, psychology, sociology, and political science all have different views. Their methods also depend on whether they analyze a specific country or region, or whether they consider global violence. To fix ideas, we present a simple framework in Table 3.1 where we distinguish three cost categories. This categorization is loosely based on “burden of disease” literature, where the burden of a disease is understood as the sum of all costs associated with a condition which would not have been incurred if that disease did not exist. Here, a common distinction is between tangible and intangible costs. Medical treatment is an example of the tangible costs of violence, while pain and suffering are intangible costs.<sup>17</sup> The analysis in this report is structured using this model.

Another possibility of costing violence is to think in terms of who bears these costs: (1) the individual victim; (2) their family; (3) the immediate community; and (4) society at large. This is similar to the four-level social-ecological model developed and used by global public health experts to examine violence as a public health issue.<sup>18</sup> In this report, due to data availability, we largely discuss the costs incurred by individual victims: for example, medical expenses, loss of productivity, and “Value of a Statistical Life,” or VSL (see below).

**Table 3.1: Categorizing the costs of violence**

	<b>Tangible Direct Cost</b>	<b>Tangible Indirect Cost</b>	<b>Intangible Cost</b>
<b>Concept</b>	consumption of goods & services	lost productivity	pain, suffering, quality of life, fear
<b>Interpersonal Violence</b>	medical treatment, care, criminal justice	income losses, reduced productive activity	VSL, values for injury

Notes: VSL stands for Value of a Statistical Life.

### 3.1.1 Tangible costs

Tangible costs can be broken down into direct and indirect costs (columns 1 and 2 of Table 3.1). The direct costs arise from the consumption of goods and services, for example the cost of care for victims. These costs are based on an exchange of money, as there are monetary costs even in cases when the treatment is free of charge to the victim (such as in the UK's National Health Service).

Indirect costs arise due to losses in productivity. Victimization results in lower individual income streams and, in the case of widespread organized violence, society's production will decrease. The violence-induced reduction in human and physical capital will result in lower future income streams. These losses can be monetized by calculating the net present value of reduced income streams. Put more simply, an injury will not only reduce productivity today but also in the future, and these future reductions can be discounted and added up. In addition to the public health literature, we also list anticipatory costs. These are resources spent in the attempt to reduce further violence, such as increased security measures.<sup>19</sup>

### 3.1.2 Intangible costs

The third big component of the costs of violence is intangible costs (Column 3 of Table 3.1). For violence that results in a fatal outcome, the loss of life is an intangible cost. For violence that results in nonfatal outcomes, intangible costs include pain, suffering, decreased quality of life, a change in norms, inequality, and fear. However, we do not directly observe the monetary equivalents of these intangible costs. We suggest instead employing the concept of the Value of a Statistical Life, and using a percentage of VSL to estimate the intangible costs of physical and sexual assault. We discuss these in turn.

#### *Cost of one life*

The loss of life is an intangible cost because we cannot directly observe the monetary value of a life. Instead, we can ask how much a society would be prepared to spend to avoid the loss of one life and then interpret this amount as the value of life. How can we establish how much Swiss citizens would be willing to spend on preventing the loss of life?

1. Life insurance data could give an indication of how people value their lives. However, this decision appears to be more often about providing funds in old age and leaving an optimal bequest rather than a valuation of life, because in many countries life insurance policies can be cashed in to provide a retirement fund.
2. Another approach to value lives is to use compensation payments and product liability data from courts and companies.
3. Labor market data provides information on wages and workers' demand for a wage premium to work in hazardous jobs, which can be used to calculate an industry or occupational-specific level of wage premiums. In turn, these can be used to calculate the value of a VSL. For example, a 1:1,000,000 risk of loss of life at work and a wage premium of USD 10 is equivalent to USD 10 million for certain death. This is then interpreted as society being willing to pay USD 10 million to avoid one death. This

concept goes back to Schelling (1968).

4. An alternative way to establish the value of life is to ask people directly how much they would be willing to pay to reduce risks to their life. This is also referred to as contingent valuation. Using this method, people state their willingness to pay for decreases in risks, while wage premiums *reveal* how employees value risks. It is therefore unsurprising that VSL estimates based on these different methods vary considerably.<sup>20</sup>

The Swiss Federal Office for Spatial Development suggests CHF 6.9 million as the VSL in 2021.<sup>21</sup>

### **Cost of one injury**

Each category of the costs of violence discussed in the last section (Table 3.1) can be divided by injury outcome: fatal and nonfatal. How can we value the cost of one nonfatal injury? One challenge is that violence can result in a wide range of injuries: gunshot wounds; broken bones from fights; vaginal or anal tears after rape; damaged blood vessels and windpipe from strangulation; or broken skin and bruises from beating. All these injuries are distinct, and it is therefore challenging to justify assigning a uniform price tag to each.

#### **As for the costs of one life, there are various ways to estimate the costs of injuries:**

1. Insurance data provides some information on payment in the event of injury. Some companies even offer the insurance of body parts (e.g., the legs of models or footballers).
2. Another approach is to use compensation payments and product liability data from courts and companies. This may fit in well with our approach to value lives using the VSL concept because compensation payments reflect a similar methodological approach.<sup>22</sup> The payments stipulated by the courts are meant to compensate the victim for losses which may include medical expenses, time off work, or loss of property, as well as pain and suffering. The purpose of the compensation is to make good the losses that the victim suffered.
3. In labor markets, workers demand a wage premium to work in hazardous jobs that might kill them or cause injuries. As discussed above, experts calculate the VSL for countries using such data.
4. Contingency valuation is another potential option, but few of these studies include questions over payments on the avoidance of injuries.
5. Public health has developed the concepts of Disability Adjusted Life Years (DALYs) and Quality Adjusted Life Years (QALYs).<sup>23</sup>

#### **Switzerland has little data that can be readily used to calculate the cost of one injury based on any of these five methods:**

1. We could not obtain insurance data, but we also do not believe that insurance premiums would be representative of the population.
2. We are unaware of a data set on compensation payments for injuries.

- 3 & 4. We could not locate labor market studies providing wage premiums for hazardous jobs, or contingency valuations for injuries. Based on a systematic review of the literature on the costs of injuries due to violence, Hoeffler and Fearon (2023) provide an approximation of the average global costs of one injury. Given that Switzerland is a high-income country, these average values are likely an underestimate of Swiss costs.
5. DALY estimates are provided in open-access databases by leading public health organizations; e.g., WHO and the Institute for Health Metrics and Evaluation at the University of Washington.<sup>24</sup> DALYs could be used to calculate the aggregate health burden of violence, but we would need to know in some detail the type of physical and mental injury a victim suffered. Current Swiss statistics are not sufficiently detailed. A further challenge is deciding how to value a DALY in monetary terms. Typically, one DALY is rather arbitrarily valued at the average per capita income or a multiple thereof.<sup>25</sup>

Given the challenges to value the intangible costs of one injury due to violence, we decided to apply the CDC estimates of quality-of-life loss. We discuss this application in more detail in Section 3.4.

### **Social costs**

Thus far, all the costs we have discussed are either attributable to the victim (medical treatment and earning losses) or to the offender (apprehension, trial, and correction). However, violent crime has an impact beyond these costs on the wider community. Although it may appear obvious to most readers that crime is bad for society, there are relatively few social science studies focusing on costs, because such costs are difficult to examine. There is good evidence that violent crime depresses legal economic activity, investment, and house prices. We term these “social costs,” but they can also be thought of as “externality costs” because they are incurred by third parties that have no control over their source. Literature on the economic cost of crime demonstrates a focus on the decrease of investment<sup>26</sup> and the depression of property prices.<sup>27</sup> To our knowledge, there are no studies for Switzerland.

Violent crime induces stress and fear. This stress impairs cognitive functioning, not only for the victims but also for individuals living in the vicinity.<sup>28</sup> This may have long-term consequences for the formation of human capital and labor market outcomes. However, we are unable to express these losses in monetary terms and we have no information on the impact of crime on cognitive functioning in Switzerland.

Victims of violence are afraid of further attacks, and others become more fearful that they may become victims of similar violence. This increased fear results in a higher demand for security. While there are data on police expenditures, it is unclear how much of this is in response to higher crime rates. The expenses for private security companies are also difficult to estimate for Switzerland.



Some studies provide estimates for the reduction in quality of life through crime or the fear of crime. For instance, this has been priced at GBP 19.50 per person per year in the UK.<sup>29</sup> The Institute for Economics and Peace (IEP) also incorporate this estimate of fear into their calculations when estimating the cost of violence containment and prevention.<sup>30</sup> The estimates of fear are typically based on the survey question “Do you feel safe walking alone at night in the city or area where you live?” However, this question is somewhat unspecific,<sup>31</sup> nor does it cover the fear of violence inside the home. As suggested above in Section 2, violence inside the home is more prevalent. Therefore, using this question alone would severely underestimate the level of fear in relation to domestic violence. Given these problems, we decided not to account for fear in our estimates.

### 3.2 Estimating tangible direct costs

We now turn to the question of which direct tangible costs arise from violence and how we could measure them. When a person is killed or injured, there are direct costs, such as health and criminal justice costs. In this section, we focus on estimating the costs associated with violence-related injuries.

**Health costs:** Violence often results in long-lasting health problems and permanent disabilities, resulting in costs for medical treatment and rehabilitation. Some of the cost of violence falls on victims’ families who must provide care. However, very few countries (including Switzerland) provide itemized healthcare costs that would enable us to estimate the medical and care costs for victims of violence.

Centers for Disease Control and Prevention (CDC) in the US, on the other hand, provides information regarding violence-related injuries, including detailed medical costs categorized by intent and injury outcomes. Specifically, they offer data on medical costs per injured person for fatal violence, such as homicide and suicide intents, as well as for nonfatal violence, including assault intent resulting in hospitalization or emergency department (ED) visits.

While conducting a direct comparison of medical costs between the US and Switzerland may not be feasible due to methodological differences and healthcare system variations, examining the CDC’s data on violence-related medical costs can still provide valuable insights into the economic impact of violence in Switzerland. This information can serve as a reference point for understanding the potential financial consequences of violence-related injuries within the Swiss context.

To estimate the medical costs, we mapped the injury numbers in Switzerland provided by the Federal Statistical Office to comparable types of violence categorized by the CDC. After adjusting for purchasing power parity (PPP)<sup>32</sup> and the relative size of medical spending in Switzerland<sup>33</sup> (See Table A.1), we estimated the associated medical costs.

**Table 3.2: Tangible direct cost: medical cost, USD**

Injury Outcome	Intent	Injured Count	Cost per Person	Total Cost	Percent of GDP
Fatal Violence	Homicide	42	7,260	0.3 M	0.00004 percent
Nonfatal Violence	Assault	42,589	64,576	2,750.2 M	0.34 percent

Source: Federal Statistical Office, "Polizeiliche Kriminalstatistik 2021 [Police crime statistics 2021]," Number 1116-2100 Neuchâtel, Switzerland: Federal Statistical Office, 2022, <https://www.bfs.admin.ch/bfs/de/home/aktuell/neueveroeffentlichungen.gnpsdetail.2022-0372.html>; Number of Injuries and Associated Costs, 2021," Centers on Disease Control and Prevention (CDC), 2021, <https://wisqars.cdc.gov/cost>; and "Health spending," OECD Data, 2021 <https://data.oecd.org/healthres/health-spending.htm>.

According to Table 3.2, for fatal violence injuries, the estimated medical cost is approximately USD 304,901. On the other hand, for nonfatal violence injuries, which include costs related to hospitalization and ED visits, the estimated medical cost is around USD 2.8 billion. These figures, when combined, result in a total violence-related medical cost equivalent to approximately 0.34 percent of Swiss GDP.

**Criminal justice costs:** In Switzerland, justice for the victims of violence is supplied through the formal justice system. The associated costs are policing (prosecution and prevention of crime), the provision of courts, and criminal correction (noncustodial sentences, incarceration, and rehabilitation). The costs for the Swiss criminal justice system can be obtained from Classification of the Functions of Government (COFOG), which provides detailed information on government expenditure by function. The two relevant items of interest are "courts and jurisprudence" and "incarceration."<sup>34</sup>

We do not want to simply add these two types of government expenditures, because "courts and jurisprudence" captures a broad spectrum of court system expenditures. Whether these expenditures are a good approximation of the cost of violence depends on the proportion spent on violent crime. Courts do not only deal with (violent) crime, but also with noncriminal matters such as constitutional issues, contract disputes in commercial law, and family courts deciding on divorce settlements and custody arrangements. Moreover, not all crime is violent. For Switzerland, we have no information on how much of the government's expenditures on "courts and jurisprudence" are due to violence. Using data from mainly Anglo-Saxon countries by Wickramasekera et al. (2015), we suggest that the cost associated with violent crime is on average 42 percent of the total. Therefore, the cost of violence resulting from the court system is about USD 1 million (see Table 3.3).

The majority of expenditures on "incarceration" are most likely due to violent crimes, as most nonviolent criminals only receive noncustodial sentences in Switzerland. We therefore use these expenditures as an approximation of the costs related to violence. Such criminal justice costs account for USD 1.6 million (See Table 3.3). By totaling the costs of "courts and jurisprudence" and "incarceration," the estimation of criminal justice costs on violence yields to USD 2.6 million, equivalent of 0.33 percent of Swiss GDP.

**Table 3.3: Tangible direct cost: criminal justice**

Function	Spending in CHF	Spending in USD	Percent of GDP
Courts and Jurisprudence	896 M	1,003 M	0.13 percent
Incarceration	1,445 M	1,618 M	0.20 percent

Notes: CHF/USD exchange rate of 1.12 is used for currency conversion as of June 2023. Source: Classification of the Functions of Government (COFOG) 2021, via "Expenditure of general government by function (COFOG) 2021," Federal Statistical Office, 2021, accessed June 2023, <https://www.bfs.admin.ch/bfs/en/home.assetdetail.23908141.html> and own calculations.

### 3.3 Estimating tangible indirect costs

**Reduced income:** Homicide and other forms of violence lead to a loss of income. These are tangible but indirect costs as set out in Table 3.1. In principle, the loss or reduction of the lifetime income stream can be estimated. In the case of homicide and suicide, knowledge of the average age of the victim and their life expectancy provides the number of years lost. In the case of assault, knowledge of the victim's age and the severity of the injury can be used to determine the impact on the number of healthy years ahead. Since individuals do not value the future as they do the present, the losses are discounted. These discounted future losses are added up to provide the net present value of lost healthy life.<sup>35</sup>

These are the losses due to victimization, but there are also costs due to incarceration of the perpetrators. While in prison they earn minimal or no income.

In addition, family members of victims may incur income losses. Caring for a family member after an assault takes time and has an impact on caregivers' opportunities to earn an income. In the case of homicide, family members may have to care for the victim's dependents, also constraining earning opportunities. Similarly, the family members of incarcerated perpetrators may have to shoulder more family responsibilities. We are not aware of any attempts to estimate these losses, so we also do not quantify them in this report.

**Table 3.4: Tangible indirect cost: work loss cost, USD**

Injury Outcome	Intent	Injured Count	Annual Wage	Years Lost	NPV	Total Cost	Percent of GDP
Fatal	Homicide victim	42	92,404	40	3.6 M	151.0 M	0.02 percent
	Homicide perpetrator	44	92,404	11.6	1.1 M	47.5 M	0.01 percent
Intent		Injured Count			Cost per Person	Total Cost	Percent of GDP
Non-fatal	Assault	42,589			10,637	453.0 M	0.06 percent

Source: Federal Statistical Office, "Polizeiliche Kriminalstatistik 2021," World Bank, "Inflation rate," World Bank, 2022, accessed June 2023, <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?locations=CH>; and Walser, Markwalder, and Killias, "Tötungsdelikte in der."

In the context of Switzerland, life expectancy is estimated at eighty-three years<sup>36</sup> and the inflation rate of 2.8 percent<sup>37</sup> is applied as the discount rate. The median age of homicide victims is forty-three, and thirty-six for accused homicide perpetrators.<sup>38</sup> According to Walser, Markwalder, and Killias (2022, p.104), the average length of sentencing for homicide perpetrators is eleven years and seven months. We assumed that this group of people will

resume their lifetime income stream after prison, and that victims and perpetrators lose an average annual income of USD 92,404.<sup>39</sup> An inflation rate of 2.8 percent<sup>40</sup> is applied each year to account for salary increases. Based on these assumptions, we calculated the net present values of lost incomes of both victims and perpetrators of fatal violence. These estimates are presented in Table 3.4.

The total income loss for victims and perpetrators amounts to approximately USD 198.5 million. This figure represents approximately 0.03 percent of Swiss GDP. We are aware that these calculations are based on rather general assumptions; e.g., perpetrators of homicide may be able to leave prison after about 11.6 years and rejoin the labor market. However, it is unlikely that they will earn the average wage due to their previous conviction. The assumption that victims earn the average Swiss wage may also be incorrect. Given that poorer individuals are more likely to experience violent crimes, our assumptions may cause an upward bias. However, we have no way of assessing the size of this bias.

We likewise have no information on the number of days of work lost due to violence in Switzerland. In our estimation of the work loss costs resulting from nonfatal violence, we therefore utilized the existing CDC estimates for assault and self-harm intents. We applied the same methodology used to calculate the medical costs in the Swiss setting.<sup>41</sup> This methodology is explained in Section 3.1. Table 3.4 shows that the total work loss cost is about USD 651.5 million, equivalent to approximately 0.08 percent of Swiss GDP.

### 3.4 Estimating intangible costs

In Section 3.1 we detailed approaches to estimate the cost of one life as well as the cost of one injury. To estimate the intangible costs of violence, we adopted the VSL approach. Based on this methodology, we utilized the VSL estimates provided by the CDC for homicide, as well as the quality-of-life loss costs for assault.

**Table 3.5: Intangible cost: VSL or quality of life loss, in USD**

Injury Outcome	Cost Category	Intent	Injured Count	Cost per Person	Total Cost	Percent of GDP
Fatal	VSL	Homicide	42	12.2 M	514.2 M	0.06 percent
Nonfatal	QoLL	Assault	42,589	228,953	9,750.9 M	1.22 percent

Source: Federal Statistical Office (2022); CDC, "Number of Injuries and Associated Costs, 2021"; "Health spending," OECD Data, 2021 <https://data.oecd.org/healthres/health-spending.htm>.

After mapping the reported injury numbers<sup>42</sup> in Switzerland to comparable types of violence categorized by the CDC, we then adjusted the cost estimates to account for PPP (as discussed in Section 3.2). The sum of the VSL estimates for homicide is approximately USD 514.2 million. Additionally, the quality-of-life loss cost for assault is calculated to be USD 9.8 billion. Combining these figures, the total cost of VSL and quality of life loss resulting from violence amounts to approximately USD 10.3 billion. This represents approximately 1.28 percent of Swiss GDP (see Table 3.5).

Alternatively, we can use the VSL introduced in Subsection *Cost of One Life* under Section 3. The VSL value in Switzerland is CHF 6.9 million. We multiplied this by forty-two fatally injured persons (i.e., homicide victims). After converting the value to USD, the total intangible costs attributed to fatal violence amounted to approximately USD 304.3 million. Comparing this to the earlier estimate of USD 514.2 million based on the CDC's estimated costs (see Table 3.5), the figures are within a comparable range.

### 3.5 Estimating total costs

In Section 2.2 of this report, the issue of underreporting in estimating the magnitude of assaults is discussed, highlighting its significance. Table 3.6 provides an overview of the estimated cost of violence, including tangible direct costs, tangible indirect costs, and intangible costs, specifically for reported violence cases. The total reported cost of violence is nearly USD 16.3 billion, which amounts to 2.03 percent of Swiss GDP.<sup>43</sup>

**Table 3.6: Cost of violence by cost type, in USD**

	Category	Reported		Unreported	
		Total Cost	Percent of GDP	Total Cost	Percent of GDP
<b>Tangible Direct</b>	Medical	2,750.5 M	0.34 percent	10,626.6 M	1.33 percent
	Criminal Justice	2,621.8 M	0.33 percent		
<b>Tangible Indirect</b>	Work Loss Cost	651.5 M	0.08 percent	1,750.4 M	0.22 percent
<b>Intangible</b>	VSL/QoLL	10,265.0 M	1.28 percent	37,676.6 M	4.71 percent
<b>Total</b>		16,288.8 M	2.03 percent	50,053.6 M	6.25 percent

Source: Federal Statistical Office (2022); Centers for Disease Control and Prevention (2021); COFOG (2021); and Walser, Markwalder and Killias (2022).

Considering the underreporting rates suggested by Baier, Biberstein, and Markwalder—77.9 percent for assault/threat and 92.7 percent for sexual assault—we further estimated the medical costs, work loss costs, and quality of life loss costs (or VSL) associated with unreported cases.<sup>44</sup> Based on this estimate, the total medical costs for unreported cases amount to approximately USD 10.6 billion. The work loss costs are estimated to be around USD 1.8 billion, while the quality-of-life loss costs or VSL are estimated to be approximately USD 37.7 billion (see Table 3.7). Combining reported and unreported costs of violence, the total cost of violence approximates USD 66.3 billion, which accounts for about 8.29 percent of Swiss GDP.

As discussed in Section 2.2, Gallup indicates that 3.11 percent of the Swiss population reported being assaulted<sup>45</sup> and this figure may be subject to potential overestimation. In Table A.2, we incorporated this figure in our cost calculation algorithm, substituting the assault statistics from the Federal Statistical Office with 230,466 injured persons, as the high-end of the cost estimation. The total cost amounts to USD 73.4 billion, or 9.17 percent of Swiss GDP.

Therefore, our analysis indicates that the economic cost of violence in Switzerland lies between USD 66.3 billion–73.4 billion, accounting for 8.29 percent to 9.17 percent of the country's GDP. Estimates (8.29 percent) derived from Swiss criminal reports and victimization surveys are more reliable and context-specific, providing a stronger basis for understanding the economic impact of violence in Switzerland.

### **3.6 Estimating costs of domestic violence and intimate partner violence**

As highlighted in Section 2.3, domestic violence is a prevalent issue in Switzerland. There were around 2.3 victims of domestic violence for every 100,000 inhabitants in Switzerland in 2022, based on reported and registered criminal reports. Understanding the cost and impact of violence on the country's economy is therefore crucial. In this analysis, we apply the same methods used for calculating the cost of violence, as discussed in Sections 3.2, 3.3, 3.4, and 3.5.

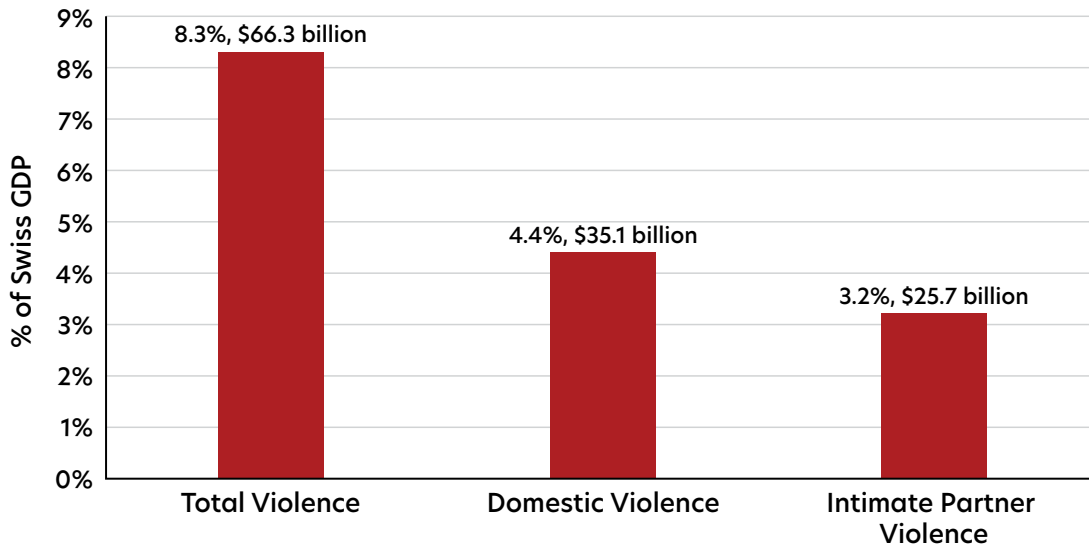
Based on domestic violence offenses reported in the police crime statistics,<sup>46</sup> there were twenty-one victims of fatal homicide. Additionally, there were a total of 10,1918 injured persons resulting from assault, of which 10,100 were from physical assault and 818 from sexual assault. Incorporating these domestic violence numbers into the algorithm, Table 3.8 provides a breakdown of the estimated costs.

The analysis reveals that the total tangible direct cost is USD 705.2 million, while the tangible indirect cost is USD 206.0 million. The intangible cost is estimated at USD 2.8 billion. Therefore, the total cost of reported domestic violence is approximately USD 3.7 billion, equivalent to 0.46 percent of Swiss GDP. It is important to note that these estimates did not account for criminal justice costs.

Moreover, as discussed in Section 2.3, underreporting is a concerning issue. Baier, Biberstein, and Markwalder suggest that in domestic violence situations, only 9.5 percent of assault/threat cases and 10.5 percent of sexual assault cases were reported in 2021.<sup>47</sup> Applying these rates, we estimate that the unreported cost of domestic violence accounts for 3.92 percent of Swiss GDP (see Table 3.8). Consequently, the total cost of domestic violence, including both reported and unreported cases, amounts to at least 4.38 percent of the Swiss GDP. It is believed that this number is likely an underrepresentation of the actual magnitude of the problem.<sup>48</sup>

We then calculated the cost of IPV. According to the Federal Statistical Office, there were sixteen homicide victims and 7,986 assault victims.<sup>49</sup> After accounting for unreported cases, the total number of assault victims due to IPV is about 83,641, which accounts for 3.18 percent of the Swiss GDP. Applying the same methodology on cost calculation, the cost of IPV arrives at USD 25.7 billion, nearly 3.21 percent of the country's GDP (see Figure 3.1).<sup>50</sup>

**Figure 3.1: Cost of violence-by-violence type**



According to the United Nations Sustainable Development Group (UNSDG), the prevalence rate of IPV among the female Swiss population aged fifteen years and older is reported to be 1.2 percent.<sup>51</sup> As this prevalence rate is specific to the female population, the total cost of assault for this group is estimated to be 0.03 percent of Swiss GDP. In the absence of comprehensive prevalence data, our analysis relies on information from criminal reports and victimization surveys; thus, we are confident with the 3.21 percent.

### 3.7 Strengths and limitations

In this report, we have presented estimates of unreported assault cases. However, these estimates come with a considerable margin of error. Since less severe assaults are less likely to be reported, these assaults are not as likely to incur the same costs as more severe (reported) assaults. To be more specific, the figure of 207,150 for reported and unreported assaults may still be underestimated. Conversely, when estimating the total cost of assault (which includes both reported and under-reported cases), it appears that the overall figure of 7.87 percent of Switzerland's GDP could be overestimated. This is because the current calculation assumes the same cost for all forms of assault, ranging from severe cases to threats. In reality, minor acts of violence, such as threats and blackmailing, may incur lower costs compared to more severe forms of assault or grievous bodily harm. Hence, this standardized approach could lead to an overestimation of the total economic impact.

We provide a comprehensive account of tangible direct costs, tangible indirect costs, and intangible costs. However, there are many costs that we are not able to estimate, such as the externality costs of violent crime (also referred to as social costs).

Violence against children is reported in the National Statistical Office figures. However, it is likely that this is underreported, since much of it is parental violence (mostly in the form of physical punishment). We have so far been unable to find reliable data for Switzerland on this form of domestic violence.

## 4 Policies, Programs, and Interventions

One of the primary limitations of this study stems from a lack of sufficiently detailed data in Switzerland. To begin with, we were unable to obtain the medical cost of injuries resulting from violence in Switzerland and had to rely on figures from the CDC in the US as a proxy. We also have no way of distinguishing major and minor injuries, and therefore had to assume an average unit cost for all types of injuries. We may also have overestimated the cost of injuries due to assault because many assaults in Switzerland do not result in serious injury: victimization surveys spanning 2009–2015 suggest that only 3–5 percent of those that experienced either assault or threats required medical care.<sup>52</sup>

Further, we were unable to obtain information on the length of prison sentences for perpetrators of different types of violent crimes. We also had no information on the earnings of either victims or perpetrators; as a result, we relied on the assumption of average gross Swiss earnings, which may be too high.

### 4.1 Programs

In Switzerland, the topic of crime prevention has become increasingly important in recent decades and a multitude of prevention services have emerged, especially in the field of youth violence.<sup>53</sup> Significant efforts have also been made in the reduction of domestic violence. There are several organizations such as *Schweizerische Kriminalprävention*, which offers easily accessible information for citizens, or the Violence Prevention Special Interest Group (SIG), which organizes courses for schools. The Swiss government is also involved in crime prevention, dedicating funding for violence reduction projects, and most cantons also have their own contact points for issues related to violence prevention.

However, detailed financial information concerning these initiatives is challenging to obtain. The exact cost of individual programs, as well as the overall budget allocated to violence prevention and reduction by the Swiss government, remains unclear. This opacity may be due in part to the complex distribution of responsibilities between different levels of government (federal, cantonal, and municipal) and the various organizations involved.

### 4.2 Policies: focus on violence against women

Since domestic violence makes up a considerable proportion of the total cost (amounting to an estimated 4.38 percent of GDP), we specifically consider which policies Switzerland has implemented to reduce violence in the domestic sphere. According to the Swiss Criminal Code, domestic acts of violence are prohibited and are subject to criminal penalties. There is a distinction between offenses prosecuted *ex officio* and those that require the victim to file a complaint. *Ex officio* offenses—e.g., murder, serious bodily harm, coercion, and forced marriage—are pursued as soon as a criminal investigation authority becomes aware of them. On the other hand, offenses requiring a complaint from the victim—e.g., simple assault and misuse of a telecommunication system—need to be reported within three months of identifying the offender.



Swiss policies regarding domestic violence are contained within various federal laws including the Swiss Criminal Code, Swiss Civil Code, and the Federal Act on Assistance to Victims of Crime. There is no specific national domestic violence protection act, however, as such a proposal was rejected in 2009. Article 28b of the Civil Code mandates cantons to offer civil protection for victims of domestic violence, threats, and stalking, if requested. Its implementation has resulted in variations in protective measures across regions, but all cantons have now incorporated protection standards into their police legislation or have passed specific laws to address domestic violence.

Victims are entitled to various supportive measures. They can receive assistance from specialized victim counseling centers as well as women's shelters, and even those uncertain of their victim status can seek free confidential advice. Unfortunately, we were unable to obtain information concerning how much is spent on efforts to prevent, reduce, and treat domestic violence.

One important tool in combating violence against women is the implementation of the Istanbul Convention, a human rights treaty of the Council of Europe that aims to prevent and combat violence against women, particularly in the domestic sphere.<sup>54</sup> Implementation is monitored by the Council of Europe's Group of Experts on Action against Violence against Women and Domestic Violence (GREVIO). In 2022, GREVIO released their first report on Switzerland ("Group of Experts on Action against Violence against Women and Domestic Violence 2022"), praising the country for its largely satisfactory implementation of the Istanbul Convention. Factors cited including early involvement of all levels of authority; the adoption of a national action plan for the period 2022–2026; raising awareness and informing the public; and improving the care and protection of women victims of violence.

However, the group also highlighted areas of concern. First and foremost, the Swiss legal definition of rape did not comply with the international standard requiring explicit consent, which led to an update being agreed upon by both chambers of the Swiss parliament in June of 2023. In addition, GREVIO condemned the persistent gender stereotypes within the Swiss judiciary, which can result in victim-blaming and downplaying the severity of gender-based violence. Switzerland was also criticized for the lack of definitions and a common national-level approach to violence against women and domestic violence. Furthermore, funding for policies, programs, and measures to prevent and combat violence against women was deemed insufficient. It was also noted that women victims of violence in Switzerland do not have equal access to shelter accommodation and high-quality assistance throughout the country.

The current legislative landscape is also characterized by significant disparities at the cantonal levels. These disparities often translate into uneven application of the Istanbul Convention across the country, resulting in varied treatment of victims and inconsistent effectiveness of prevention and punitive measures. Furthermore, the existence of various terminologies and definitions pertaining to violence against women compounds the inconsistencies in policy implementation.

# 5 Recommendations for Policymakers

A lack of collaboration and coordination in the drafting and application of policies is similarly apparent. All levels of authority and nongovernmental organizations need to be more substantially engaged in this process. This would help to create a more consistent and effective approach across all regions and sectors, fostering a more robust system of domestic violence prevention and response. Consolidating the diverse range of legislation into a coherent, unified national policy is crucial.

There is also a need for a more gender-sensitive and intersectional approach. GREVIO has accordingly urged Swiss authorities to integrate the gender dimension fully into their laws, policies, and initiatives. Such an approach would allow for a more nuanced understanding and handling of the multiple intersecting factors contributing to violence against women.

In response, the Swiss government has indicated it is working on improving the situation for women. Examples include establishing a 24-hour hotline for victims of violence, and implementing the country's 2030 Equality Strategy. Switzerland also provides detailed statistics on domestic violence, which includes IPV.

## 5.1 Priority areas

Given the problems with obtaining reliable data on physical and sexual assault (see 2.2), we focus our discussion on fatal violence. Since fatal and nonfatal violence tend to be highly correlated, much of the discussion will therefore also be relevant to the reduction of nonfatal violence. As previously stated, Switzerland has a low homicide rate (0.48 per 100,000 people) and has very few cases of serial killers or mass murders (defined as more than three victims). As Walser, Markwalder, and Killias discuss, homicides can be divided into three main groups: (1) Domestic violence homicides; (2) organized crime; and (3) altercations resulting in homicides. We discuss these three types of homicides in turn.<sup>55</sup>

### *Domestic violence*

Homicide rates were almost halved between the early 1990s and.<sup>56</sup> However, as our analysis documents, 59.5 percent of all homicides are committed by an intimate partner. According to Staubli, Markwalder, and Walser, this is unusual in the international comparison.<sup>57</sup>

In about 41 percent of all domestic homicides, there had been prior threats or actual use of violence. In 20 percent of cases, the police recorded at least one incident of domestic violence.<sup>58</sup> When police are called to such situations, they should continue to systematically monitor these cases. Swiss authorities should identify best practice examples, possibly within the country, as some cantons may have developed better strategies than others. Examples outside the country include the UK's Domestic Abuse, Stalking and Honour Based Violence Risk Identification, Assessment and Management Model (DASH). The DASH model is a multiagency tool with a focus on keeping victims and their children safe and ensuring perpetrators are proactively identified and managed.<sup>59</sup>

Given the relatively high number of intimate partner (IP) homicides, it is important to prevent and reduce violence in the domestic sphere. Many IP deaths were preceded by incidents of domestic violence and the perpetrators were already known to the police. According to Staubli, Markwalder, and Walser, there are already several legal and prevention measures against perpetrators of domestic violence and stalking.<sup>60</sup> Courts can prohibit contact with the victim, but infringements are often not prosecuted. Anti-violence programs have been offered for the past twenty years, and since 2021 courts can mandate participation in such programs. To our knowledge, there are no rigorous studies that evaluate the many different Swiss anti-violence programs.<sup>61</sup>

### **Organized crime**

The general reduction in homicides is due to a number of changes. One is that the use of firearms in homicides (as well as nonfatal violence) has seen a significant decrease following the introduction of the weapons act that came into force in 1998.<sup>62</sup> This act has contributed considerably to the reduction in gun-related deaths, which have halved over the past two decades.<sup>63</sup> Since many homicide victims of organized crime are killed by guns, this reduction is of importance for this type of violence.

The reduction in homicide rates is also partly due to the reduction of organized crime, often involving the drugs trade.<sup>64</sup> Swiss efforts to fight organized crime include a 1994 law penalizing membership in and support of a criminal organization. In 2021 the maximum sentence for such crimes was also increased, enhancing their prosecutorial priority and simplifying litigation. Despite these improvements, significant potential still exists for further advancements in organized crime prevention. Notably, mafia organizations such as the 'Ndrangheta, Camorra, Cosa Nostra, and Sacra Corona Unita are responsible for the illicit drugs and weapons trade, as well as human trafficking. Other criminal organizations originate in the Balkans or in drug-producing countries like Columbia. Neighboring countries, in particular Italy, have long been urging Switzerland to take more decisive action against these criminal networks, and Switzerland's federal police (Fedpol) has accordingly intensified collaboration with the Italian authorities.<sup>65</sup>

Switzerland is also attempting to combat human trafficking and modern slavery. Many migrants are attracted by the high wages and standard of living in Switzerland, but criminal organizations often lure them through job offers that turn out to be exploitative and not what was promised. Swiss efforts to combat human trafficking include enforcement of Article 182, which prescribes penalties for trafficking crimes. This has led to many investigations and a number of convictions.<sup>66</sup> The government also enhanced victim protection measures with a federal law implemented in 2008 and is providing antitrafficking training for troops deployed abroad as UN peacekeepers, in addition to funding NGOs and prevention campaigns. However, in 2022 the advocacy group FIZ, which provides support for migrant women and victims of trafficking, reported a surge in such victims seeking assistance in Switzerland, blaming the increase on European migration policies and Swiss foreigner laws.<sup>67</sup> The group emphasized that safer legal migration routes could significantly reduce human trafficking, as evidenced by the experience of individuals displaced by the invasion of Ukraine. FIZ also highlighted inadequate protections under

current regulations, with a concerning number of victims falling into labor exploitation and domestic violence. Experts have urged Switzerland to ensure specialized and adequately financed support structures in all cantons, emphasizing that an effective reduction in human trafficking can only be achieved through collaboration between victim protection organizations and law enforcement agencies.<sup>68</sup>

### **Altercations**

Homicides can happen in public places, often when altercations become physical. The consumption of alcohol is often a contributing factor in these types of homicides: over one quarter of recorded perpetrators and victims were drunk.<sup>69</sup> Restricting alcohol consumption could be a suitable instrument to reduce this type of violence. According to the WHO, the average Swiss consumes about 10.4 liters of pure alcohol per year, which is slightly higher than the European and US averages of 9.2 and 9.6 liters respectively.<sup>70</sup> Switzerland has a number of laws regulating the consumption, advertisement, and pricing of alcohol. Juveniles under the age of sixteen are not allowed to consume alcohol, and those between sixteen and eighteen are only allowed to consume drinks with a maximum of 15 percent alcohol, mainly wine and beer. Advertisement of spirits is prohibited, and ads for other alcoholic drinks are strictly regulated and cannot be aimed at children.<sup>71</sup> Alcoholic drinks are taxed due to their alcohol content, which is conjectured to combat some of the more adverse effects of alcohol consumption. So-called "alcopops," alcoholic mixed drinks that appeal in particular to young drinkers, have the highest tax rate.<sup>72</sup> Curtailing drinking among young people in tandem with the reduction of spirit consumption is likely to decrease violence. Most violent perpetrators are young men, and episodic heavy drinking (of spirits) is associated with higher levels of violence.<sup>73</sup> Further measures could be considered; e.g., to our knowledge, there is currently no minimum unit pricing policy in Switzerland, a policy that has significantly reduced alcohol consumption in other contexts.<sup>74</sup>

## **5.2 Data collection and research needs**

There are several challenges and limitations when it comes to accessing and analyzing data on violent crime in Switzerland. The Federal Statistical Office provides detailed data on violent crime. However, even in official statistics, several categories of violence fall along legal definitions and often lump actual violence and threatened violence into one category (e.g., *Gewaltund, Drohunggegen, Behördenund, Beamte* [violence and threats against authorities and officials]). This made it difficult to distinguish threats from injurious assault. Since the latter category engenders higher costs, we flagged this as problematic.

Victimization surveys provide additional information on physical and sexual assault. We used these data to estimate unreported assaults. However, we had insufficient information to distinguish between cases where violence was threatened versus actually committed. In addition, we were not able to distinguish between sexual assault and rape.

Furthermore, while comprehensive studies on homicides exist, a comparable level of investigation into nonfatal violent incidents is noticeably absent, representing a significant gap in our understanding of violence as a whole.

## 6 Conclusion

In general, there seems to be considerable data collected, but accessing it is challenging. Typically, data can be obtained by request, but this is time-consuming and hinders timely analysis. This may be due to concerns over the identification of victims since there are so few cases of serious violence in (cantons of) Switzerland.

Cost data were similarly scant. Criminal justice system expenditures are available, which includes the budgets for police, courts, and prisons. However, there is no information on the proportion of these line items spent on the prevention, reduction, or treatment of violent crime. For example, we know how many inmates there are in Swiss prisons, but we do not know how many are incarcerated due to violent crime or how many months/years they serve on average for their various violent offenses.

The Swiss health budget is available but there is likewise no information on how much is spent on injuries due to violence. The legal situation varies by canton, and not all hospitals and doctors are required to report injuries due to violence. To our knowledge, the information exists but is not available in an aggregate data set. This may be due to the Swiss health insurance system: information could be held by insurance companies, but not added across different insurers.

In the international comparison, levels of violence are low in Switzerland; however, even this low level of violence is associated with considerable costs. Our analysis suggests that the economic cost of violence in Switzerland ranges from USD 66.3 billion to USD 73.4 billion, which represents 8.29 percent to 9.17 percent of the country's GDP. We are more comfortable with the 8.29 percent (USD 66.3 billion) estimate due to more reliable data sources. We want to highlight three issues:

1. Domestic violence alone accounts for at least 4.38 percent of Swiss GDP.
2. Assault, in particular sexual assault, is underreported. We utilized a Swiss victimization survey to estimate the prevalence of physical and sexual assault. These estimated costs, including reported and unreported cases, account for 7.87 percent of Swiss GDP.
3. Although the international survey data from Gallup shows a 3.11 percent prevalence rate for assault, we consider this rate to be an overestimate when compared to the detailed, albeit slightly dated, Swiss victimization statistics.

By quantifying the economic impact in terms of the value of life and quality of life loss, our analysis provides a comprehensive understanding of the broader societal consequences of violence. Our findings also underscore the significant impact of underreported cases on the overall costs of violence, factoring in both tangible and intangible costs. By including these estimates, the report provides a more comprehensive understanding of the true economic and societal burden associated with violence.

# Appendix

**Table A.1: Healthcare expenditure in the US vs. Switzerland**

Country	GDP \$	Healthcare percent of GDP	Calculated Spending, USD	Reporting, USD
United States	23,320 B	17.8 percent	4,145.8 B	4,300 B
Switzerland	800.6 B	11.8 percent	94.4 B	94.5 B

Source: "Health spending," OECD Data, 2021 <https://data.oecd.org/healthres/health-spending.htm>

**Table A.2: High-end cost of violence by cost type, USD**

	Category	Intent	Injured count	Total cost	Percentage of GDP
<b>Tangible direct Cost</b>	Medical	Fatal	304,901	14.9 B	1.86 percent
		Non-fatal	14.9 B		
	Criminal Justice			2.6 B	0.33 percent
<b>Tangible indirect Cost</b>	Work Loss Cost	Fatal	198.5 M	2.6 B	0.33 percent
		Non-fatal	2.5 B		
<b>Intangible cost</b>	VSL	Fatal	514.2 M	53.3 B	6.66 percent
	QoLL	Non-fatal	52.8 M		
<b>Total</b>				73.4 B	9.17 percent

Source: Federal Statistical Office, "Domestic Violence: Offenses in the police crime statistics, 2022.," Number of Injuries and Associated Costs, 2021., COFOG, "Expenditure of general government by function.," Gallup's World Poll database (accessed 2023) and Walser et al., "Tötungsdelikte in der Schweiz."

**Table A.3: Cost of violence: suicide, USD**

Cost type	Category	Total cost	Percentage of GDP
<b>Tangible direct cost</b>	Medical	3.9 M	0.0005 percent
<b>Tangible indirect cost</b>	Work Loss Cost	2.5 B	0.32 percent
<b>Intangible cost</b>	QoLL	10.9 B	1.36 percent
<b>Total</b>		13.4 B	1.68 percent

Source: Federal Statistical Office, "Polizeiliche Kriminalstatistik 2021," Swiss Health Observatory; Peter, Claudio and Alexandre Tuch. "Suizidgedanken und Suizidversuche in der Schweizer Bevölkerung [Suicidal thoughts and suicide attempts in the Swiss population]," Swiss Health Observatory, Obsan Bulletin (7), September 2019.; CDC, "Number of Injuries and Associated Costs, 2021."

**Table 3.7 Unreported tangible direct costs on non-fatal violence**

Intent	Injured count	Percentage of under-reporting	Medical cost		Work loss cost		Quality-of-life loss cost	
			Total cost	Percentage of GDP	Total Cost	Percentage of GDP	Total Cost	Percentage of GDP
Sexual assault	1,574	90.7 percent	1,290.7 M	0.16 percent	212.6 M	0.03 percent	4,576.2 M	0.57 percent
Physical assault	41,015	77.9 percent	9,335.9 M	1.17 percent	1,537.7 M	0.19 percent	33,100.4 M	4.13 percent

Source: Baier, Biberstein and Markwalder, "Kriminalitätsopfererfahrungen der Schweizer" and Federal Statistical Office, "Polizeiliche Kriminalstatistik 2022."

**Table 3.8 Cost of domestic violence, USD**

	Category	Injury outcome	Cost	Reported		Unreported	
				Total cost	Percentage of GDP	Total cost	Percentage of GDP
<b>Tangible direct cost</b>	Medical	Fatal	181,488	705.2 M	0.09 percent	6,663.5 M	0.83 percent
	Criminal justice	Non-fatal	705.0 M				
<b>Tangible indirect cost</b>	Work loss	Fatal	89.9 M	206.0 M	0.03 percent	1,097.6 M	0.14 percent
		Non-fatal	116.1 M				
<b>Intangible cost</b>	VSL	Fatal	306.1 M	2805.8 M	0.35 percent	23,625.2 M	2.95 percent
	QoLL	Non-fatal	2,499.7 M				
<b>Total</b>				3,717.0 M	0.46 percent	31,386.2 M	3.92 percent

Source: Federal Statistical Office, "Polizeiliche Kriminalstatistik 2022" and Centers for Disease and Prevention (CDC), "Adverse Childhood Experiences Prevention Strategy," Technical Report, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 2021, [https://www.cdc.gov/injury/pdfs/priority/ACEs-Strategic-Plan\\_Final\\_508.pdf](https://www.cdc.gov/injury/pdfs/priority/ACEs-Strategic-Plan_Final_508.pdf).

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