The Business of Violence — Understanding and Addressing Gun Violence as a Global Health Issue

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Applied Research Final Report

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Table of contents

Word Index

CDH — Commercial Determinant of Health

DALYs — Disability-Adjusted Life Years

FCTC — Framework Convention on Tobacco Control

FENSA — Framework of Engagement with Non-State Actors

GBV — Gender-Based Violence

HICs — High-Income Countries

IPV — Intimate Partner Violence

LMICs — Low- and Middle-Income Countries

MS — Member States

POA — Programme of Action to Prevent, Combat and Eradicate the Illicit Trade of Small Arms and Light Weapons in All its Aspects

UNAIDS — Joint United Nations Programme on HIV/AIDS

WHA — World Health Assembly

WHO — World Health Organization

Introduction

On 4th February, 2025, 11 people were killed during a mass shooting at an adult education centre in Orebro, Sweden. The event was described as "the worst mass shooting in the country's history" by the Swedish Prime Minister (BBC News, 2025). These were 11 out of the over 250,000 deaths caused worldwide by firearm violence (Peters et al, 2020, p.1963). Firearm violence is a global concern with far-reaching consequences on individuals and communities affected by armed violence and on public health systems burdened by firearm-related injuries and deaths. A public health approach which addresses access to firearms as well as underlying causes of armed violence is necessary to prevent gun violence. However, the World Health Organization (WHO) has failed to tackle and address gun violence as a distinct public health risk factor. This research is an attempt to illuminate this gap within the policy architecture. We begin by explaining the background and significance of firearm violence as a public health issue, then delving into academic literature on the subject and the effects of gun violence on vulnerable populations and the public health system. An analysis of WHO publications and World Health Assembly (WHA) resolutions has been conducted to trace a history of the WHO's work on gun violence, where and why it gradually reduced, and what barriers prevent the WHO from comprehensively addressing it now. The analysis is supplemented by interviews conducted with experts on the topic. We conclude by providing policy recommendations to build the political momentum necessary for gun violence to be addressed within the public health policy architecture.

Background and Significance

The original aim of this study was to identify strategies to reduce the gender-exploitative marketing of firearms, grounded in the recognition that such marketing practices contribute to widespread gun violence and reinforce harmful gender norms. Initially focused on assessing

media regulation, strategic litigation, and platform governance, the research has been shaped by the understanding that firearms are not merely symbols of masculinity or tools of violence, but are actively promoted through commercial narratives that normalise their presence in public and domestic life. However, as the project progressed, it became increasingly clear that these marketing practices - and the high rates of firearm-related violence they support - cannot be adequately addressed through advertising and broader legal regulations alone. Drawing inspiration from the trajectory of tobacco control, where marketing restrictions only became feasible after cigarettes were widely recognised as a public health hazard, we began to reconceptualise gun violence itself as a public health issue. The WHO has acknowledged firearms as a risk factor in its violence prevention strategies, but fails to treat injuries and deaths caused by gun violence as a distinct and preventable phenomenon. This project thus shifted its focus to advocating for a public health framing of firearm violence, arguing that such a perspective - rooted in prevention, epidemiology, and community well-being - is best equipped to address not only the marketing and demand for guns, but also the broader societal structures that sustain gun culture and normalise violence.

Definition of Guns

The Small Arms Survey states that there are over one billion firearms globally, with 84.6% held by civilians, 13.1% by state militaries, and 2.2% by law enforcement (Karp, 2018). Of the 857 million civilian-owned firearms, 393 million were in the United States alone (Karp, 2018). This paper focuses specifically on the health consequences of guns in the context of civilian violence, rather than in the context of armed conflict, and therefore limits its scope to small arms. According to the Small Arms Survey (Jenzen-Jones & Schroeder, 2018), small arms are defined as handheld, lethal weapons designed for individual use, including revolvers and self-loading pistols, rifles and carbines, submachine guns, assault rifles, and light machine guns.

This definition is important as it comprises a category of weapons most commonly associated with interpersonal gun violence in both public and private settings, and ensures analytical clarity by excluding larger military-grade equipment that is typically used in organised conflicts. For readability and writing fluency, this paper will use the terms *guns*, *firearms*, *small arms*, and *weapons* interchangeably. While these terms may carry different legal, political, or cultural meanings, this analysis focuses on the individual and interpersonal use of guns, not institutional or state-level armed engagement.

Scope of the Problem

Firearm violence presents a deep and persistent global crisis, claiming over 250,000 lives annually worldwide (Greenberg et al., 2024). The United States stands as an extreme outlier, possessing 46% of the world's civilian firearms while comprising only 4% of the global population (Young & Xiang, 2022). Moreover, it accounts for approximately 82-91% of all firearm deaths in high-income countries (HICs), with firearm homicide and suicide rates, respectively, 25 and 10 times higher than those in similar nations (Grinshteyn & Hemenway, 2019; Young & Xiang, 2022). While firearm-related fatalities represent a substantial loss of life, they only capture a portion of the overall burden imposed by gun violence, as many more individuals sustain non-lethal injuries that lead to significant long-term health and economic consequences borne by civilians and their governments. For instance, in 2017 alone, the U.S. recorded 23,854 suicides (51%), 15,095 homicides (75% of all homicides), and 75,000-85,000 nonfatal firearm injuries, generating at least $750 million in annual hospitalisation costs (Hemenway & Nelson, 2020). In addition, the broader societal costs - including lost productivity and criminal justice expenses - reach over $174 billion per year (Peters et al., 2020). These figures illustrate the far-reaching economic and health system impacts of firearm violence, many of which are replicated in varying forms across OECD countries. For instance,

firearm-related fatalities alone are projected to result in a cumulative GDP loss of $239 billion between 2018 and 2030 across the 36 OECD countries, demonstrating an increasing economic cost (Peters et al., 2020). Although the extent of economic losses varies by country, these losses, just like the lives and health compromised, are preventable. Despite limitations in global injury data, the scale of these consequences shows that gun violence is not a uniquely American issue - it represents a widespread public health and economic crisis that requires coordinated, international and national interventions. Prevention, as well as better support systems for the victims of gun-related negative health impacts, are necessary to lower the cases of the harmful health effects and subsequent socioeconomic costs.

Furthermore, individuals of different genders and age groups experience the negative consequences in distinct and varied ways. Adolescents are severely impacted as they account for nearly 30% of all global firearm deaths and 36.4% of firearm-related burdens of disease, with adolescent boys experiencing firearm mortality at 12 times higher rates than their female counterparts, with the issue being particularly present in Latin America, the Caribbean, and sub-Saharan Africa (Cullen et al., 2024). In addition, the disparities in impacts by gender are also concerning: when it comes to homicides involving the use of firearms, men - particularly young men - account for the majority of both victims and perpetrators, composing 81% of homicide victims and 90% of perpetrators globally (UNODC, 2023, p. 23). Simultaneously, women face disproportionate risk in domestic settings, accounting for approximately 54% of victims of killings in the home and 66% of victims of intimate partner killings (UNODC, 2023, p. 22). While global data disaggregating gun use in domestic or intimate partner violence (IPV) remains limited, the data show that firearms are a significant factor in lethal violence against women. In 2020 alone, 24% of all female victims of lethal violence worldwide were killed by a firearm, despite women comprising only 10% of all firearm-related homicide victims globally (Small Arms Survey, 2022). This highlights the dual reality of gun violence: while men bear

the brunt of public gun violence, women are acutely vulnerable to firearms in private, domestic spheres. Addressing this multifaceted crisis, therefore, requires a gender-responsive approach to firearm policy that reflects both public and private dimensions of harm.

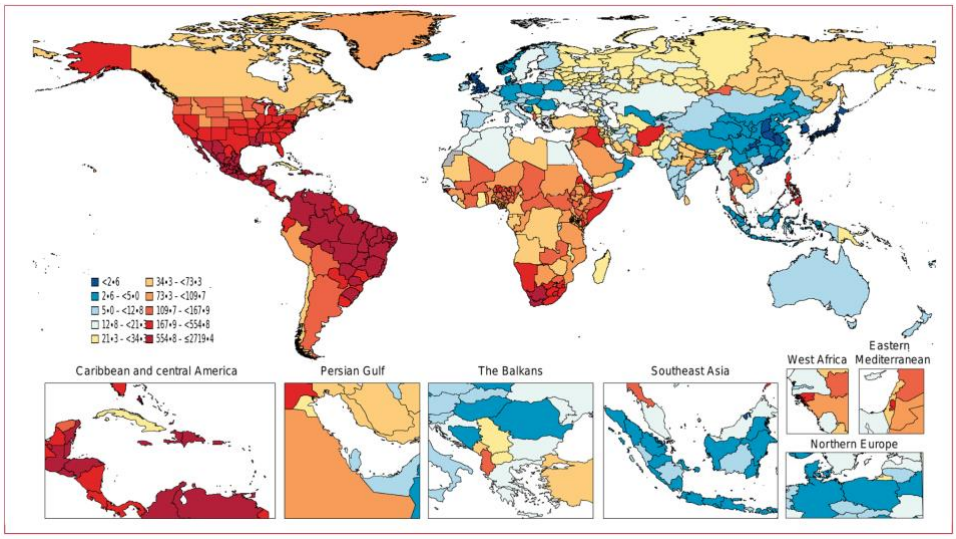

Figure 1. Age-standardised DALY rates (per 100,000 by location, both sexes combined (IHME, 2021).

Lastly, the preexisting socio-demographic disparities also shape the number of firearm consequences and further the resulting burden. Low- and Middle-Income Countries (LMICS) bear the highest mortality and disability tolls, as countries with higher socio-demographic development, despite experiencing higher incidence of negative health impacts of guns, typically possess stronger health systems and firearm regulations (Ou et al., 2022). Nevertheless, as visualised in Figure 1, this pattern has notable exceptions: the United States, despite its high development status, exhibits disproportionately elevated age-standardised disability-adjusted life years (DALYs) rates due to firearm violence, standing out as a global outlier (IHME, 2021). However, despite the scale of the crisis, global firearm data remain severely limited, further impacting the national and international public. The WHO (2014) found that 60% of countries lacked usable homicide data from civil or vital registration systems, and less than half had conducted nationally representative surveys on most forms of

violence (WHO, 2014, pp. 21–22). These data gaps conceal the true extent of firearm-related harm and obstruct appropriate and effective policy responses.

WHO Gap in Addressing Gun Injuries and Deaths

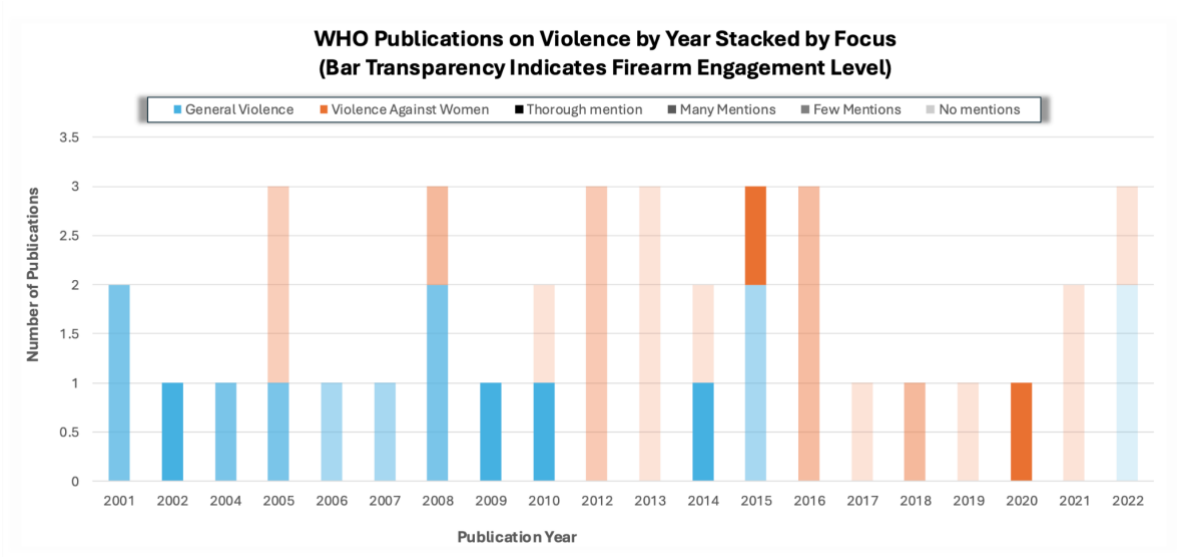

Figure 2. WHO Publications on Violence by Year Stacked by Focus

The early 2000s marked a critical moment in WHO's engagement with firearms. Figure 2 visualises WHO publications on violence by year, stacked by thematic focus - either General Violence or Violence Against Women and Children. The transparency of each bar represents the degree of firearm engagement within those publications: fully opaque bars indicate thorough mention of firearms; semi-opaque bars correspond to many or few mentions; and the most transparent bars signal publications where firearms are mentioned minimally or not at all. A complete table of all 38 WHO publications analysed, including their focus areas, mentions of firearms, and the extent of engagement, is provided in Annex III.

Small Arms and Global Health (2001) explicitly identified firearms as a major contributor to premature death, disability, and the global burden of disease, and framed gun violence as both a physical and mental health crisis. This framing was reinforced in the *World Report on*

Violence and Health (2002), which introduced an ecological model for violence prevention and situated firearm-related deaths as a preventable public health issue. At this stage, WHO publications treated firearms as distinct policy concerns requiring evidence-based, multisectoral responses. By 2008, WHO's work began to integrate violence, including that involving firearms, into development discourses. In *Preventing Violence and Reducing its Impact: How Development Agencies Can Help* (2008), the organisation acknowledged that weapon access, alongside poverty, inequality, and weak institutions, contributed to violence rates. While guns were not the focal point, the report reflected a structural understanding of the root conditions that enable gun violence.

Between 2009 and 2010, WHO returned briefly to firearm-specific policy engagement. *Guns, Knives, and Pesticides: Reducing Access to Lethal Means* (2009) called for concrete measures such as firearm bans, licensing regimes, amnesties, and safe storage laws. These recommendations were grounded in global evidence showing the efficacy of firearm control in preventing both homicides and suicides. *Policy Approaches to Engaging Men and Boys* (2010) added a gendered analysis, highlighting how harmful masculinities contribute to firearm misuse and interpersonal violence. Together, these reports exemplify a period of targeted policy attention to the public health dimensions of firearm access and violence.

However, from 2014 onward, a thematic shift became evident in WHO's agenda. Publications such as the *Global Status Report on Violence Prevention* (2014) and *Preventing Youth Violence: An Overview of the Evidence* (2015) began to embed firearm references within targeted violence prevention strategies, especially toward youth. While these documents acknowledged the legal and policy importance of regulating firearm access, they no longer framed firearms as a standalone public health issue. Instead, they were treated as one of many tools of violence, with limited follow-through on firearm-specific programming or monitoring.

More significantly, WHO's focus gradually shifted from "general violence" to *violence against women and children* (VAWC). By the mid-2010s, publications increasingly centred on gender-based violence (GBV), child protection, and household-level interventions, with less attention to community violence or gun-related harm outside domestic contexts.

Recent WHO publications from 2018 onward reflect this narrowed approach. The *INSPIRE Handbook* (2018), which serves as WHO's primary roadmap for implementing seven evidence-based strategies to prevent violence against children, mentions firearms only in passing, mostly as a method of suicide or one among several lethal means. Similarly, *Preventing Injuries and Violence: An Overview* (2022) adopts a broad framework that largely excludes firearms. The move toward generalised and multisectoral models of violence prevention has been accompanied by a dilution of firearm-specific interventions. Guns are mentioned less frequently, and when they are, it is typically in the context of youth suicide prevention rather than interpersonal, gender-based, or structural violence.

This evolution is particularly obvious when contrasted with WHO's formal recognition of the arms industry as incompatible with public health engagement under the Framework of Engagement with Non-State Actors (FENSA), adopted in 2016 (Seitz, 2016). Under FENSA, the WHO is explicitly prohibited from partnering with or receiving funding from both the tobacco and arms industries. Yet, the contrast in institutional response is profound. While tobacco control has been the subject of WHO's most robust and well-resourced treaty framework - the *Framework Convention on Tobacco Control* (FCTC) - firearm-related harm has not resulted in a comparable institutional investment or strategic clarity.

This disparity raises critical questions about how the WHO prioritises public health risks. Firearms, like pesticides or road traffic injuries, are noncommunicable yet have significant and often fatal health consequences. Notably, the WHO has adopted strong language and global

policy recommendations regarding pesticide-related suicides (*Preventing Suicide: A Resource for Pesticide Registrars and Regulators*, 2019), while remaining markedly more cautious in addressing firearms - despite the fact that they are the leading method of homicide and a major contributor to youth and GBV in many regions.

Furthermore, WHO's narrowing focus on VAWC, while essential, has contributed to the erasure of gun violence against men and boys, who make up the overwhelming majority of both firearm homicide victims and perpetrators globally. In prioritising domestic and GBV, WHO's recent publications have largely overlooked structural gun violence affecting men, particularly in socially marginalised communities. This omission reflects a blind spot in global health discourse - one that downplays how guns shape masculinity, male vulnerability, and community trauma.

Literature Review

I. The Measurable and Hidden Health Burdens of Firearms

Traditionally treated as a security or criminal justice issue, firearm violence has not received proportionate attention from global public health institutions, despite its massive burden on mortality, disability, mental health, and societal well-being. The majority of firearm violence deaths result from interpersonal violence rather than conflict, with particularly high rates in Central and South America. Countries such as El Salvador, Venezuela, and Brazil have firearm mortality rates as high as 40 per 100,000, compared to the global average of 6 per 100,000 (Werbick et al., 2021). In the United States, firearms are the leading cause of death among youth aged 1 to 19 (Patel et al., 2022). Beyond fatalities, firearms cause significant nonfatal injuries and disabilities, including chronic pain, physical impairment, and long-term trauma. Global estimates indicate that over 46,000 DALYs are lost annually due to firearm injuries

(Dahlberg et al., 2022). In Central America, DALYs from firearm violence exceed 2,400 per 100,000, far above the global average of 171 (Werbick et al., 2021).

Moreover, the mental health consequences of firearm violence are also acute and multifaceted, yet often omitted in the discussions surrounding the public health impacts of guns. Survivors often experience post-traumatic stress disorder, anxiety, depression, and substance use disorders (Anderson & Sidel, 2011; Dahlberg et al., 2022). Exposure to firearm violence in childhood or adolescence is strongly associated with suicidal ideation, self-harm, and future perpetration of violence (Butchart et al., 2019). Firearms play a significant role in IPV, particularly in increasing the lethality of domestic abuse (Patel et al., 2022). Although mental health outcomes are difficult to quantify, they can significantly impact individuals' ability to fully participate and enjoy their social and economic spheres of life. Recognising these health impacts is essential to fully understanding the societal burden of firearms and designing effective public and individual-level interventions. Evidence suggests that an isolated focus on psychiatric care is insufficient. Instead, holistic, preventative approaches that integrate mental health considerations within broader gun violence prevention strategies yield more effective results (Patel et al., 2022; Werbick et al., 2021). Therefore, both the WHO and national governments have an important role to play in addressing firearm violence as a public health issue and to recognise that comprehensive, health-based approaches are essential for reducing harm, promoting well-being, and advancing equitable societal participation for communities at risk.

II. Firearm Violence and Global Health Governance

Gun violence clearly meets the criteria for a global health challenge: it transcends borders, provokes a large number of deaths and injuries, disproportionately affecting vulnerable populations, and requires coordinated, multisectoral responses. It also aligns with leading

conceptual frameworks of global health that emphasise equity, collective well-being, and shared transnational determinants (Werbick et al., 2021). Despite this alignment, global health institutions have not consistently treated firearm violence effects on health with the urgency and cohesion it requires, showcasing a critical governance gap that must be addressed.

Understanding firearm violence from a public health governance perspective requires attention to the multilevel risk factors driving its health impacts, as well as the broader structural forces such as globalisation and the firearms industry. At the individual level, risk factors include firearm accessibility, substance abuse, and untreated mental health conditions (Butchart et al., 2019). Community-level drivers, such as poverty, neighbourhood disorganisation, and alcohol outlet density, are shown to increase these risks (Butchart et al., 2019; Dahlberg et al., 2022). Moreover, at the societal level, firearm use is shaped by income inequality, cultural norms surrounding masculinity and self-defense, and widespread distrust in institutions (Patel et al., 2022; Werbick et al., 2021). Globally, the arms trade, dominated by HICs, increases violence in LMICs, particularly in Latin America, where many U.S.-exported firearms are trafficked and used in organised crime (Werbick et al., 2021). The firearms industry's political lobbying and marketing strategies bear a striking resemblance to those of other harmful industries like tobacco and alcohol, manipulating public discourse and delaying regulatory progress (Patel et al., 2022). Additionally, the cultural globalisation of *gun culture*, exported through media and commerce, has reconfigured gender roles and normalised firearm possession in diverse settings (Werbick et al., 2021). These dynamics underscore the need for global public health institutions to confront not only the outcomes of but also the structural and commercial contributors to firearm violence.

Addressing the health impact of firearms also requires evidence-based policy interventions at the national level, alongside greater global coordination to close existing governance gaps.

Research highlights several effective policies, including universal background checks, limits on ammunition sales, firearm tracing technologies, and child access prevention laws (Patel et al., 2022). Urban strategies, such as greening public spaces and regulating alcohol sales, have proven effective in reducing firearm-related injuries and deaths (Dahlberg et al., 2022). For instance, Colombia's gun-carrying restrictions in major cities resulted in a 22% reduction in firearm-related mortality (Werbick et al., 2021). However, despite these promising national efforts, there is no unified international framework for regulating civilian firearm ownership or use. The lack of binding global norms, coupled with weak data collection systems and resistance from powerful arms-exporting nations, continues to obstruct meaningful progress. The WHO is uniquely positioned to address this gap by integrating gun injuries and deaths into its broader mandate on violence and injury prevention strategies, and social and commercial determinants of health.

Across the literature, three critical gaps consistently emerge: (1) the need for greater attention to the social and commercial determinants of firearm harm; (2) the limited understanding of the indirect, cumulative, and long-term mental health impacts of firearm exposure; (3) and the underrepresentation of men and marginalised populations in firearm-related research. These gaps constrain the development of effective interventions and perpetuate blind spots in global policy frameworks. Prioritising these underexplored areas is crucial for designing context-sensitive and equitable prevention strategies, as well as for informing WHO's global action plan on violence prevention.

III. Why Firearm Violence Should be Addressed Through Public Health

Public health offers a uniquely interdisciplinary lens for understanding and responding to firearm violence, combining epidemiological, social, and behavioural sciences to study both its root causes and wide-ranging impacts. Unlike criminal justice or security frameworks that

focus primarily on deterrence and punishment, public health approaches enable the analysis of upstream socio-economic determinants - such as poverty, inequality, discrimination, and access to firearms - as well as the downstream physical, psychological, and economic harms that result from gun violence. As Davis and colleagues (2018) noted in their policy brief for the International Journal of Epidemiology, epidemiologists are equipped with quantitative, qualitative, and social methods that can be used to uncover patterns, evaluate interventions, and scale public health responses. Public health also provides a framework for multi-tiered prevention grounded in population-level data and geared toward systemic change (Davis et al, 2018). Despite the long-standing recognition of firearm violence as a major public health issue by the WHO, surveillance, research, and program evaluation remain critically underfunded, limiting evidence-based policymaking. This institutional neglect, magnified by political resistance and industry pressure, has allowed preventable firearm-related morbidity and mortality to persist. By restoring investment and political will in public health-led strategies, it is possible to address the complex social and structural drivers of firearm violence while improving long-term community safety and resilience.

Methodology

This study aims to interrogate how, and to what extent, firearm-related violence is addressed in global health governance discourse. We are investigating WHA resolutions and WHO corresponding reports, frameworks, and programs to better understand how (or if) health impacts of firearm violence are addressed in the global health agenda.

Adopting a qualitative, constructivist approach, we mainly focused on *how firearm violence is constructed in WHO narratives. How has it evolved? Are there competing definitions around the notion of firearm violence? What are the political, economic, and social consequences of such definitions?* Asking these questions allows us to understand the

narratives that have been developed within the context of the WHO. More specifically, it engages in the historicity of the notion of *firearm violence* - i.e., *weapons, guns,* and *small arms* violence. Over the years, different types of technical and normative knowledge have been produced, defining specific moments of issue-framing and "governance-production intensities". By that, we understand that there is an evolution of the number of occurrences of a certain topic in normative forums, depending on the salience of this issue.

Our research analyses this through an intensive data-scratch from WHO online publications. The goal was to understand *when, if ever, the role of firearm violence was recognised as a key determinant of health within WHO publications and commitments.* Therefore, we focused on finding technical reports addressing violence prevention, which you can find in Figure 2. WHA resolutions prompted the development of this technical documentation. This part is crucial, as shown by Didier Wernli (2023, p.2):

"Resolutions support the development of international norms and may result in the adoption of policy instruments such as global strategies which set out approaches, goals and recommendations to address health issues. […] They help build consensus among member states about the salience of certain issues and ways to address them."

Analysing the relationship between resolutions and technical publications sheds light on the extent to which gun violence is recognised as an infringement on bodily integrity, therefore health, within the WHO. To explore this, we examined the chronology, content, and citations of key documents. We noted whether firearm violence was mentioned, how frequently, and in what terms - including its framing as a risk factor, indicator, or type of violence outcome. We assessed any reference to protective factors, propagation mechanisms, and firearm-specific solutions. By understanding the evolving narratives, the research pointed out both progress and persistent challenges in framing gun violence as a public health issue.

Our work was further informed by the Science in Diplomacy Lab (SiDLab), whose comprehensive analysis of WHA resolutions from 1948 to 2024 (Wernli, 2023; Evrard & Rieckhoff, 2025) provided a solid foundation for identifying any mentions of guns (*firearms, small arms, light weapons*) during 76 years of global health governance. SiDLab and our team applied a word-match system to screen WHA resolutions using a pre-established list of keywords (see Annex I). We then manually cleaned and reviewed the dataset to ensure the accuracy and relevance of the results.

To complement our content analysis, we conducted six semi-structured interviews with members of civil society, academia, technical experts at the WHO, and Member State Representative or Delegation Representative at the WHA. We also interviewed a person who had directly experienced the consequences of firearm violence. The objective was to obtain a holistic view of the current state of knowledge, advocacy, and political stream (i.e., saliency of the issue and power relations) on the inclusion of gun violence prevention in the global health agenda. The semi-structured interviews allowed participants to make suggestions and spontaneously contribute their personal views and professional backgrounds. The overall structure of the interviews followed the steps described in Figure 3.

PHASES			
Themes	**Main research question**	**Corresponding hypothesis**	**Related concepts**
(A) The Various Contexts of Gun Violence	**(1) What are the multifaceted implications of gun violence on women, children and civil society and how do these impacts influence public health outcomes?** **(2) How can a public health framework for gun violence be achieved and what factors would it include?** **(3) Why is gun violence not incorporated into violence against women and children prevention frameworks?**	(a) Multifaceted linkages exist between the proliferation of arms and the prevalence of firearm violence. (b) Understanding the positionality of gun violence within the public health agenda and what a potential framework could look like.	➢ **Problem stream** — situation perceived as a deviation from the desired state of things, requiring public policy actions
(B) Advocacy and Strategies	**(1) Which are the most efficient advocacy tools to get guns in the global health agenda?** **(2) On which opportunity windows do the actors surf on?**	(a) Political and economic (dis)interests contribute to the gap in addressing guns within the WHO agenda. (b) The lessons taken from the FCTC and WHO's strategy to reduce alcohol are an opportunity for advocacy on gun regulation. (c) Coalition with other actors to pressure member states to bring this forward is the main entry point into the global health agenda.	➢ **Policy window** — institutional context, problem and their related politics/strategies, coupling logic
(C) Interactions between the Actors for Change	**(1) How can the actors for change build strong coalitions in order to weigh more on the international scene — both on the political scene and towards the public?** **(2) What does the advocacy coalition network currently look like, and how can it be leveraged?**	(a) Combined actions exert more intense pressure on the system. (b) Actors for change on a given issue choose to form advocacy coalitions, holding similar worldviews and perceptions on how to achieve a certain goal/desired state of things. (c) These advocacy coalitions have a potential for mid- to long-term coordination when they share i) deep core beliefs, ii) policy core, and iii) secondary aspects (like instruments, shared strategies).	➢ **Policy stream** — communities offering solutions perceived as ideologically admissible, technically operationable, and with the necessary resources available, focusing the attention
(D) Potential for Societal / Structural Change	**(1) What structural changes are necessary to more effectively address gun violence as a public health issue?** **(2) Who are the political entrepreneurs of the system?** **(3) What are the veto points?**	(a) High inhibitors of change within the society when it comes to regulating the access and use of firearms. (b) WHO's stance on gun violence as a preventable public health issue has been well-documented; however, it lacks actionable measures (stemming from WHA) to effectively reduce gun violence and mortality internationally. (c) Availability of guns is related to their perceived legitimacy and is condoned by permissive legislations as well as skepticism toward change exploited by the industries.	➢ **Political stream** — salient issues, 'fashionable' ideologies, power relations within the decision-making arenas ➢ **Policy outputs**

Figure 3. The methodology grid with our interview's implicit questions, corresponding analysis, and related theoretical analysis.

Each interview was transcribed and analysed individually. All interviews were compared to identify recurring themes and divergent perspectives. This comparative analysis allowed to pinpoint the main policy streams influencing the advancement of the gun violence prevention agenda within the WHO.

In terms of limitations, our multi-scalar interviews did not include members of the gun industry, pro-gun groups, or individuals who have used firearms to commit violence. To a

certain extent, these perspectives could have informed us about: i) the motivations and worldviews behind small arms use, ii) industry strategies to promote firearm sales, and iii) how pro-gun narratives are constructed. However, interviewing perpetrators poses serious ethical and safety concerns, while pro-gun voices are already highly visible, particularly on social media. Nonetheless, the firearm industry constitutes a black box. Like other powerful sectors, such as tobacco or oil, it remains largely opaque, often revealing its influence only after deeply embedding itself in society. Gaining access for independent academic research represents a significant challenge in this context. Our work was also limited by the unavailability of a key informant in the field. Their insights could have notably deepened our understanding of current expertise and advocacy efforts at the WHO level. Finally, our analysis of WHA resolutions was limited to the main text of the resolutions themselves and did not include their annexes, which may also contain relevant information on our topic of concern.

Our methodology followed a qualitative approach, informed by existing quantitative research. Given the politicised nature of the WHO and the firearm violence prevention agenda, we aimed for objectivity while remaining conscious of the researchers' social positioning. Growing up in a world where violence is normalised, even glorified, requires critical reflection to challenge ingrained assumptions before engaging in academic work. This research was conducted through a gender-sensitive and feminist lens, not only seeking to understand the dynamics of the gun violence prevention agenda but also to help drive transformative change. Examining the years of gaps around firearm violence, particularly its gendered dimensions, sheds light on how governance intersects with larger power structures such as militarism and patriarchy.

Analysis

I. Gun Violence and its Impacts on Health

Firearm violence produces far-reaching physical, social, and economic consequences for women, men, children, and entire communities. These impacts will be examined in detail in the following sections, which focus, respectively, on community health, gendered dimensions, and the specific effects on children.

I.I The Health Impact on the Communities

Gun violence victimisation occurs not just at the individual and interpersonal level but also affects communities as a whole. Exposure to gun violence, both directly and indirectly, can lead to various adverse health effects, most notably physical injuries, mental health and substance abuse disorders and increased health spending as a whole within communities (Semenza & Kravitz-Wirst, 2025). Gun violence also has more severe effects on communities which have been structurally marginalised, as many of these communities are also more policed, leading to greater incidences of violence. Semenza and Kravitz theorise that gun violence trauma occurs through a three-tiered system: direct exposure or personal victimisation, secondary exposure or witnessing a peer or family member be hurt by gun violence, and community-level exposure which entails hearing about gun violence incidents within your neighbourhood and community (Semenza & Kravitz-Wirst, 2025). While the effects of gun violence are generally more pronounced with greater levels of exposure, community exposure cannot be ignored. Incidences of crime within neighbourhoods have psychological effects, especially on women, by restricting their movement.

Incidences such as school shootings, mass shootings and police violence lead to mental health problems such as depression, anxiety and post-traumatic stress disorder at scale. People

who have been exposed to gun violence also report higher instances of substance abuse and drug use disorders (Abba-Aji et al., 2024).

Firearm violence has also caused a substantial public health burden, especially on LICs (Werbick et al., 2021). It is also exacerbated by globalisation and skewed supply chains with HICs, such as the United States exporting arms and thus fueling armed violence in LICs, such as Mexico (Werbick et al., 2021). Firearm violence is a global issue which is causing significant financial and social burdens on countries all over the world.

Evidently, the effects of gun violence extend beyond those who are directly victimised by it and thus comprehensive interventions which target whole communities are imperative to addressing the effects of gun violence.

I.II The Health Impact by Gender

Firearms exacerbate violence against women who are often already in vulnerable socioeconomic conditions (Buggs et al., 2023). A direct correlation between the availability of weapons and levels of violence cannot be neatly drawn. However, firearms amplify the connections between violence and power as the ownership of a firearm tilts the balance in favour of the firearm owner. Therefore, it facilitates the occurrence of violence, especially domestic violence: “In families and relationships in which perpetrators have access to firearms, the risk of misusing the weapon and the risk of violence escalation is increased up to five times and the consequences of the misuse are severe” (Stevanović Govedarica, 2021, p.5).

Gender based armed violence generally manifests through interpersonal violence, which is considered a private ‘issue’. However, interpersonal violence can be the precursor to mass or community violence, which is further cause for gender based armed violence as a site of intervention (Geller et al., 2021). It is also vital to note that legally held firearms can be just as dangerous as illegal firearms in perpetuating violence. According to the International Action

Network on Small Arms, “women are just as or more likely to be killed by a legally-owned firearm than an illegal one. Although law enforcement in most countries focuses on illegal handguns and crime, legal firearms are the primary weapons used in domestic homicides” (IANSA 2021).

According to an expert interviewed on the subject, while violence exists in all societies, some common contexts surround gender based armed violence, such as substance abuse, alcohol consumption, and harmful ideas about masculinity, which socialise young men into committing violence against men and women. Firearms in particular are attached to a set of masculinist stereotypes exacerbated by targeted marketing which glorifies violence and domination (WILPF, 2024). These contexts create a constellation of risk factors which interact with broader social factors to exacerbate gender based armed violence. It is also important to note that men are the primary victims and perpetrators of armed violence, with the majority of deaths occurring in homicides. However, women are at greater risk of sexual violence involving firearms (Werbick et al., 2021).

‘Gun culture’ manifests differently across regions. For example, firearms are associated with social status amongst poor and marginalised men in certain Latin American contexts with limited social mobility and prevalence of armed violence; they represent membership within a (masculinist) group (Erazo et al., 2025). In other contexts, such as in Ukraine, fear of external aggression may create a social expectation for men to own firearms. Women, in these contexts, are aware of the tradeoffs between the firearm being used to protect against external aggression *versus* it being used against themselves, but the social expectations remain. Fear of crime and violence in the public space is also a powerful motivator for women in particular to possess a gun (Tandogan & Ilhan, 2016). The fear of being harmed by guns in the streets significantly restricts women’s freedom of movement and limits their agency, as they avoid certain public spaces. The WHA considers violence against women to be a public and clinical health issue

(WHA69.5, 2016). Thus, a comprehensive public health approach to gun violence is necessary to reduce the lethality, injuries and social implications of GBV.

I.III The Health Impact on Children

Firearms are also implicated in the violence and mortality of children and young people. According to the *Gun Violence in the United States 2022* report, "guns were the leading cause of death among children and teens accounting for more deaths than car crashes, overdoses, or cancers" (Villarreal et al., 2024). The deaths of children and young people especially reverberate through entire communities due to the potential lives lost.

Exposure to gun violence also inflicts psychological harm most acutely on children and adolescents, regardless of whether they are direct victims or gun violence witnesses. For instance, exposure to gun violence during childhood can result in developmental issues and anxiety disorders (Semenza & Kravitz-Wirst, 2025). For young men already desensitised to violence, repeated exposure can shape their perception of firearms, equating them with power and security (Garbarino et al., 2002). This may induce them to harm themselves, further perpetuating cycles of violence (Garbarino et al., 2002). Childhood and adolescence are important periods for cognitive and social development, making health interventions imperative during these periods. Public health interventions have improved children's health in the past, such as with social programs aimed at stopping smoking during pregnancy, which reduced low birth weights and preterm births. Localised interventions aimed at children in the United States have already found some success (Clark et al., 2020). Thus, approaching firearms violence towards children is key for both child well-being and overall community health.

Violence prevention is one of the tenets of the WHO and is considered a social determinant of health. The WHO has already pioneered preventative frameworks such as *INSPIRE* (2016) and *RESPECT* (2019). These frameworks are specifically centred around violence against women and children. As detailed above, small arms exacerbate the scale of injuries and lethality

of violence, affecting not only individuals but entire communities. Gun violence perpetuates itself by causing fear, trauma, injuries, and deaths, putting even more pressure on public health systems. Therefore, the regulation of small arms and the development of specific prevention strategies to tackle armed violence constitute a public health concern.

II. Gun Violence Impact on WHO: the (Non-)Existent Problem Stream

The historical background of WHO demonstrates that violence was globally recognised as a public health issue in 1996, when the WHA adopted the Resolution 49.25. The Assembly declared the prevention of violence as a public health priority and recognised (WHA49.25, 1996):

I. The serious, immediate, and future long-term implications for health, and psychological and social development that violence represents for individuals, families, communities and countries;

II. The growing consequences of violence for health care services everywhere and its detrimental effect on scarce health care resources for countries and communities;

III. That health workers are frequently among the first to see the victims of violence, having a unique technical capacity and benefiting from a special position in the community to help those at risk; and,

IV. The WHO, the major agency for coordination of international work in public health, has the responsibility to provide leadership and guidance to Member States in developing public health programmes to prevent self-inflicted violence and violence against others.

This recognition situated violence prevention in the public health agenda, followed by systemic and integrated operations, department creation in WHO's regional offices,

publications, and statements issued at international meetings on violence. The popularity of the topic saw its peak in the early 2000s, especially after the paradigmatic *World Report on Violence and Health* was published in 2002. The report provided evidence to support the link between violence and health, and developed policy recommendations that influenced several MS (WHO, 2005, p. 16)[1]. One of the major contributions of this report is qualifying firearms as a risk factor for many types of violence and the need for governments to work on primary prevention responses (WHO, 2002, pp. 248-249).

A year before the publication of this report, in 2001, WHO was already engaged in the prevention of gun violence and contributed to the United Nations Conference on the Illicit Trade in Small Arms and Light Weapons in All Its Aspects that adopted the *Programme of Action to Prevent, Combat and Eradicate the Illicit Trade of Small Arms and Light Weapons in All its Aspects* (PoA). The WHO's contribution, published under the title of *Small Arms and Global Health,* exposed the long-term injuries of firearms and their public health importance (WHO, 2001, p.1). This document highlights the necessity of WHO's involvement in the eradication of the small arms illicit trade, asserting that: "*the burden of death and injury related to firearms, explains why the World Health Organization (WHO), as the directing and coordinating authority on international health is concerned about the illicit trade in small arms*" (WHO, 2001, p.1). This active participation of the WHO demonstrated its position on situating health at the heart of the matter when drafting strategies to prevent gun violence.

After the creation of the PoA, MS held regular meetings to review the progress in implementing the programme, as well as Review Conferences for a more comprehensive

[1] Dr. Olive Kobusingye, the Regional Adviser for Disability and Injury Prevention and Rehabilitation for WHO's Regional Office for Africa (WHO-AFRO), shared in 2005 one of the greatest successes in WHO-AFRO to support violence prevention activities: *"almost all countries have multi-sectoral groups working at national and community levels to raise awareness about the importance of gun violence and to advocate for comprehensive measures to address this problem. The focus for much of these efforts has been on bringing in laws for gun control, establishing or improving information systems and providing appropriate care for those who suffer firearm injuries."*

analysis of its application. In 2003, during the first Biennial Meeting, WHO issued the following statement (UNGA, 2003):

> 37. The World Health Organization stressed that, just as it is important to collect and destroy illicit small arms and light weapons, it is equally important to understand and prevent violence as a social phenomenon. Violence within communities has consistently been shown to be a major, and often the major, driver of demand for weapons. Preventing violence is therefore the most direct way of driving down demand for small arms.

Figure 4. WHO Statement at the First Biennial Meeting at the UN General Assembly, 2003.

Despite its clear position on the weapons' impact on health, after the *World Report on Violence and Health* (2002), the topic of gun violence started to gradually fade away from WHO's discourses and documents. The next documents and frameworks designed for violence prevention strategies were published in 2006, 2010, 2014, 2015, 2016 and 2019 (see Annex III), and failed to address the deaths and injuries caused by firearms. By only mentioning guns as a risk factor for violence, without corresponding protective factors, the WHO failed to propose public health measures to prevent gun injuries and deaths. The silence coming from the WHA and consequently in the WHO over the years raised several questions that led us to investigate the factors influencing this gap.

From our interviews conducted with academics, UN Representative in WHO, NGOs, and experts, it can be inferred that cultural, political, economic factors, and even the very nature of the issue of gun violence could be influencing this gap. First, it is important to mention that WHO is a 'country-club', meaning that the organisation is *made* and *decided* by MS, notably by the most influential. Second, WHO is a highly operational body, unlike other UN agencies, which focus more on the issuing of political statements. Instead, at the WHO, work begins with its political commitment, through the WHA Resolutions that will give birth to corresponding operations and technical support to countries to design and implement public policies. Below is a timeline of how violence became a health topic at the WHO:

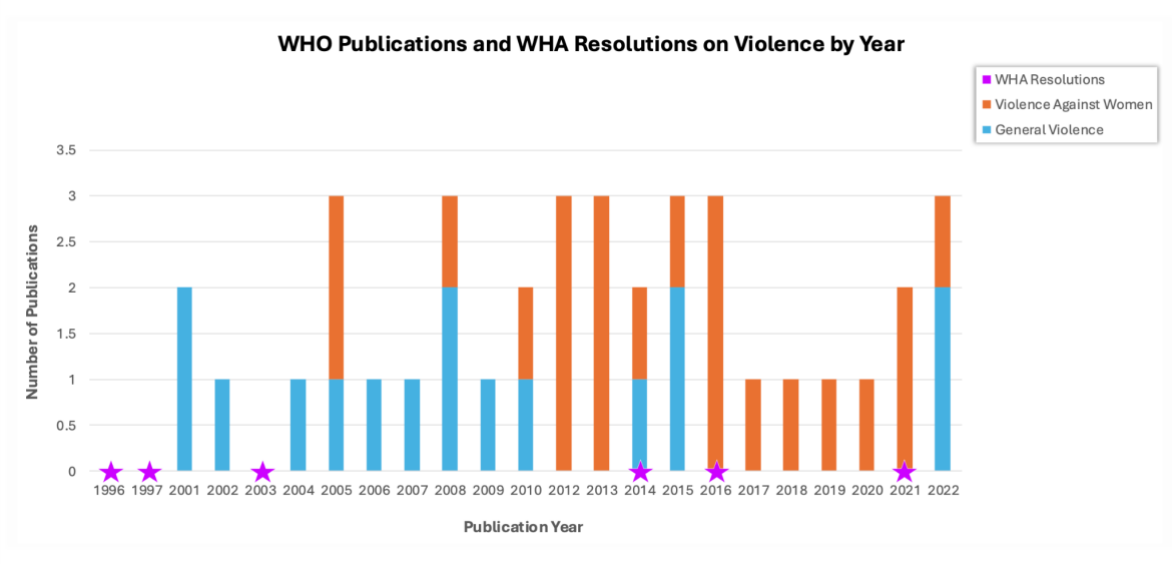

Figure 5. WHO Publications and WHA Resolutions on Violence by Year

WHO's commitment to preventing violence from a public health approach is clear. However, the growing silence around firearms in official documents is what this research attempts to understand. What could have been happening since the early 2000s, when guns were addressed as part of their violence prevention strategies and then gradually disappeared? What contributed to this gradual decrease over time, almost to the point of silence from the WHO? The interviews revealed a range of interconnected factors potentially contributing to the gap.

The WHO is political. The inclusion of a topic, their prioritisation and all the decisions within the WHA agenda are decided by MS, pursuant to Article 18 of the WHO Constitution. Countries' interests, based on their own domestic agenda, play a huge role in the determination of the WHA's agenda. What could be happening is that for some countries, to potentially have a WHA Resolution tackling firearms may be against their political interests, as it points out directly to their domestic rules on gun control. The internal political polarisation and influence of the arms industry in countries like Brazil and the United States (but not exclusively) reveals the challenge to scale-up this topic and build alliances internationally. An essential step for passing resolutions is the coalition-building between MS (Irwin & Smith, 2019, p. 168). Often,

in order to have support from other MS, the proposing country might have to commit to vote in favour of other countries' resolutions (Irwin & Smith, 2019, p. 168). This is what one of the experts interviewed described as the 'horse trading' of international politics: mutual concessions and advantages for anticipated future returns on favours (Irwin & Smith, 2019).

Linked to political factors are the financial and budgetary aspects. As a multilateral organisation that depends on countries' contributions and donations from MS and other partners, the budgetary aspect plays a huge role in the inclusion and prioritisation of certain issues. For a long time, due to funding constraints by the United States, one of the largest financial supporters of WHO, countries had to justify the necessity and prioritisation of a new resolution. In terms of internal politics, setting a topic as the priority highly depends on the importance and meaning that it has within its cultural context, which therefore influences its politics and allocation of budget. For some countries, the influence that the arms industry has in the political arena and civil society could be influencing the inclusion of the health consequences of guns within their health agenda. It goes the same way in the multilateral arena: how countries perceive the issue of guns affects the negotiations on the inclusion of guns in a WHA resolution. However, cultural differences have always shaped multilateral negotiations. Yet, history shows that progress is possible when health is placed above, for instance, with Resolution WHA69.5 on preventing violence against women. Despite diverse cultural norms and differing views on gender roles, countries reached a consensus to recognise GBV as a global health issue. The staggering toll of deaths, injuries, suicides, traumas and mental health issues caused by guns must be recognised as a public health crisis too.

Despite all the political, economic, and cultural barriers exposed above, a recurrent factor arose from our interviews. What seems to be preventing the inclusion of guns as a health topic is the very cross-cutting nature of the issue. Its multifaceted dimension and emphasis on the security aspect could be preventing actors from acknowledging the severe health

consequences that gun violence represents to all human beings and communities. Firearms are mainly seen as a security and trade issue because of the salience of discussions around wars, civil, and interstate conflict; health often being in their shadows.

However, the fact that one topic is crossed by many themes does not mean that the health angle should not be addressed. The long-term injuries and mental health consequences of guns, widely demonstrated in the first part of this research, showcase a reality that by discussing firearm violence, we are looking at one of the major causes of deaths, especially amongst young people.

The field of international firearm regulations has also been professionalised. While in the early 2000s, experts from diverse backgrounds, including public health, were involved in the discussion, this is not the case anymore. Our interviews demonstrated that nowadays, one must be an expert in the field of small arms, security, or violence to discuss. This may be putting off the current generation of WHO's working groups, who do not consider small arms as part of their prerogatives. Still, the 2000s health perspective should be brought back, as there is a clear causal relation between small arms, deaths, long-term injuries, and mental health consequences, all topics belonging to WHO's mandate.

A cross-cutting issue must have a cross-cutting response: it should be tackled from a multisectoral approach, including security, human rights and health. Any form of violence has health and human rights impacts, as it violates fundamental rights of human dignity and well-being. Therefore, to effectively prevent it, a holistic approach is needed.

III. Policy Window and Stream at the WHO

Health is deeply intertwined with other subjects, such as trade, investment, security, human rights, environment, agriculture, and others. WHO's responses to complex health issues often involve a multifaceted approach. This section will explore lessons learned from key initiatives

(Road Safety, HIV/AIDS, and Tobacco Control) to identify opportunities for WHO to engage more proactively in the prevention of gun injuries and deaths, and propose a coalition between actors for change.

The Road Safety is an example of how an issue of a cross-cutting nature was addressed by the WHO. The extensive and serious individual and public health effects of road traffic accidents were recognised as a health topic by WHA and developed into a WHO's response for supporting road safety evaluation, implementation and planning (WHO, n.d.). It is precisely because deaths and injuries from road traffic crashes are framed and addressed as a public health issue that deaths and injuries caused by firearms should receive the same policy recognition. For example, automobiles, small arms are commercial determinants of health, being a product of the private sector that affect people's health, directly or indirectly (WHO, 2023). In both, alcohol increases the risk of traffic accidents and gun violence (Butchart et al., 2019; Dahlberg et al., 2022; WHO, n.d.).

Another successful cross-sectoral model is UNAIDS. Initially, WHO launched the Global Programme on AIDS (GPA), which was widely criticised for its limited scope and failure to coordinate effectively with other UN agencies (UNAIDS, 2008, p.20). In response, strong global coalitions (including MS, civil society, and international organisations) advocated for a more integrated and multisectoral approach (Merson et al., 2008, p.483). This led to the establishment of the Joint United Nations Programme on HIV/AIDS (UNAIDS) in 1996, designed to coordinate efforts across multiple UN agencies to address the complex, cross-cutting nature of the epidemic (UNAIDS, 2008, p. 20). The success of UNAIDS illustrates how global advocacy, global coalition and collaboration can reshape global health governance. This model offers valuable lessons for advancing a public health approach to the consequences of gun violence by the WHO, which, like HIV/AIDS, is a multifaceted crisis requiring coordinated and cross-sectoral engagement.

The third case study is the FCTC. Our interviews show that initially, tobacco was seen as a trade and agricultural matter. However, because of the power of advocacy and global coalitions, the issue was reframed as a health topic. The FCTC was a big victory for the NGOs, eventually receiving support from MS, such as Australia and Norway, who added political weight to the topic. As automobiles, tobacco and firearms are commercial determinants of health: the activities by the private sector provoke health outcomes, ranging from noncommunicable diseases, to injuries and deaths (WHO, 2023). The FCTC example shows how NGOs and civil society can be mobilised to expose the health angle of an issue. The same must be applied to the discussions around gun violence, in order to push for a consensus between member states.

These examples inform how the multisectoral strategies were leveraged within the WHO. These precedents open a window of opportunity for advocacy and coalitions to be built between civil society, NGOs, international organisations and MS. There is a need for a global recognition of the health consequences of gun violence to further elaborate a plan of action to prevent gun injuries, deaths and communities' well-being.

IV. Political stream: Why Firearm Violence Remains Marginal in the WHO

The WHO is a key arena for change, given its mandate under Article 2 of its Constitution to develop international norms. While WHO's influence has largely manifested through soft law rather than binding treaties, the resolutions adopted by the WHA since 1948 have contributed to emerging *systems of norms* in various health domains (Wernli et al., 2023). In turn, these resolutions formed a "global health complex of interlinked issues" through interconnected policy communities (Wernli et al., 2023; Evrard & Rieckhoff, 2025, p.105). As observed by Evrard, Rieckhoff and colleagues, the number and diversity of topics addressed by WHA resolutions have expanded over time (Evrard & Rieckhoff, 2025, p.103). This suggests a certain adaptability within the WHO, which, despite state-driven priorities and funding constraints,

has shown an ability to expand its agenda and "promote what they see as good policy" (Littoz-Monnet, 2017, p.5).

This institutional flexibility is evident in the realm of violence and injury prevention. Our analysis of WHA resolutions confirms that violence is recognised as a public health issue, not only for its direct physical and psychological harms, but also for its impact on years of life spent in good health. Importantly, violence exposure is recognised to be unevenly distributed along socio-economic and demographic lines.

Out of 3,230 WHA resolutions produced between 1948 and 2024, we identified 39 resolutions (see Annex II), including[2]:

I. Violence-specific resolutions (n=6): these focus explicitly on violence as their core subject (WHA49.25, WHA50.19, WHA56.24, WHA67.15, WHA69.5, WHA74.17).
II. Violence-related resolutions (n=16): these address violence more indirectly, by citing violence-specific resolutions or proposing actions that engage with violence as part of broader issues (e.g., WHA60.22, WHA61.16, WHA64.28, WHA68.15, WHA72.16, WHA68.20).
III. Incidental mentions of violence (n=17): these resolutions reference "violence" peripherally or rhetorically, without contributing substantively to violence prevention or understanding (e.g., WHA16.25, WHA38.27, WHA60.12).

The WHO has had multiple opportunities to integrate firearms into its violence prevention agenda. As early as WHA49.25 (1996), which declared violence a global public health priority, the organisation called for a classification of types of violence and their

[2] We excluded resolutions related to geopolitical conflicts (occupied Palestinian territory, Latin America, and Ukraine), anti-personnel mines, or disease-specific violence (poliomyelitis, dengue) as these fall outside the scope of this analysis.

consequences. While intentional injuries to women and children received early and sustained attention, this framing has tended to overlook the high rates of firearm violence affecting men and boys, who, though often the perpetrators, are also the primary victims, both through direct violence and through aggressive marketing by the firearms industry.

Despite a growing focus on interpersonal and domestic violence, none of the resolutions explicitly mentioned *firearms*, *guns*, *small arms*, or *light weapons*. WHA56.24 (2003) includes, in its annex, a recommendation from the *World Report on Violence and Health* to "seek practical, internationally agreed responses to the global drugs trade and the global arms trade" (WHA56.24). However, this merely suggests that states seek guidance from other forums, rather than recognising the WHO's own regulatory potential, as demonstrated by the FCTC in the context of tobacco control.

This absence is not due to a lack of evidence or urgency. Instead, it reflects deeper political and institutional bottlenecks that constrain the WHO's ability to confront firearms as a public health issue, despite clear implications for women, children, and men alike.

Within international organisations, expertise plays a central role in generating relevant data and producing technical standards, guidelines, and treaties, as well as in legitimising and depoliticising institutional actions (Littoz-Monnet, 2017, pp.7-8). This process, referred to as *coproduction*, involves a dynamic interplay between politics and expertise, where each influences the other in complex, nonlinear ways (Littoz-Monnet, 2017, p.11). The WHO is no exception. Scholars have demonstrated the critical role of expert-policy interactions in both knowledge production and policy formulation (Evrard & Rieckhoff, 2025; Demortain, 2017; Gruszczynski & Melillo, 2022). With these nonlinear interconnections, policy communities may form around a particular idea (e.g. firearm violence), while also sustaining and propagating that same idea - a mutual reinforcement seen in the development of concepts such as firearm

violence prevention (Demortain, 2017). For an issue to enter the global health agenda, it typically must originate from MS initiatives. However, the WHO Secretariat can also influence MS by signalling the significance of (emerging) issues. Therefore, the relationship between governance and expertise at the WHO is key to advancing agendas such as firearm violence prevention. Despite this potential, our findings suggest that governance-production intensity around gun violence has decreased over time due to political, cultural and economic factors. If WHO's political and technical debates were water flowing from a tap, the central question becomes: who controls the flow?

This brings us back to one of the WHO's major successes: the adoption of the FCTC in 2003. The tobacco control case illustrates what Kickbusch and Liu describe as the years of *expansion of health diplomacy*, from 1998 to 2008 (2022, p.2160). The FCTC's success strengthened the WHO Secretariat's political authority to advocate for health across a wide range of social, economic and political domains (Kickbusch & Liu, 2022). Importantly, this period coincided with a surge in knowledge production and resolution adoption related to violence prevention - including firearm access, ownership, and use in technical documents. The 1998–2008 decade represents a particularly fertile moment for global health diplomacy, which might have operated as a virtuous cycle of advocacy, evidence, and policy development.

Viewing firearm violence through the same lens as tobacco (i.e., as a preventable health issue and a commercial determinant of health) opens the possibility for regulatory frameworks at both national and international levels. In terms of potential interventions, many parallels can be drawn between tobacco and firearms. For instance, FCTC Part III addresses demand reduction (e.g. through price and tax measures, but also the regulation of advertising, promotion and sponsorship), and Part IV targets supply reduction (e.g. by targeting illicit trade or sales to minors). In addition, the FCTC's strong language on marketing and sponsorship bans (see

Article 13, FCTC) offers an interesting model for regulating firearm advertising and industry influence on gun violence prevalence.

Still, global health experts often describe the FCTC as a unique and perhaps non-repeatable event, a rare "alignment of stars." These include:

I. Strong alliances;
II. Irrefutable scientific evidence;
III. Clear and measurable national gains; and,
IV. Reputational advantage for key actors.

While this constellation of factors was specific to the context of tobacco control, it nonetheless offers transferable insights. Understanding how alliances, evidence, and reputational incentives aligned can help identify similar conditions for advancing firearm violence prevention today. Regarding the tobacco case, scholars note that the WHO Secretariat strategically aligned its anti-tobacco efforts with dominant neoliberal paradigms, facilitating broader coalition-building (Kickbusch & Liu, 2022, pp. 2160–2161). NGOs and academic institutions gathered extensive, systematic evidence, revealing not only the health harms of tobacco but also industry efforts to distort science, sow doubt, and manipulate policy (Vasselin & Cuveillier, 2020). The scientific case was clear, and the public health benefits, especially in terms of reduced mortality and morbidity, were undeniable. Finally, the leadership of the then–Director-General Gro Harlem Brundtland, backed by Norway's diplomatic priorities, gave the campaign additional momentum. For Norway, tobacco control was also a reputational investment on the global stage.

However, could we assume that this success was a non-repeatable, one-time opportunity? This exceptional momentum exposed the tobacco industry's failures and, importantly, set a precedent for confronting other harmful industries, including the firearms manufacturers.

Unlike in 2003, the WHO can rely on additional legal and normative tools such as the UN Guiding Principles on Business and Human Rights (GP-BHR), the Arms Trade Treaty (ATT), and relevant Human Rights Council resolutions on civilian firearm access (e.g. A/HRC/RES/29/10; A/HRC/RES/45/13). These instruments can offer institutional leverage and political pressure to support firearm regulation as a global health issue.

The following decade (2008-2018) marked a growing *politicisation* of health issues, in particular after the 2014 Ebola outbreak (Kickbusch & Liu, 2022, p.2161). Nowadays, scholars describe a new phase of global health diplomacy. The COVID-19 pandemic significantly impacted WHO's authority and collaborative mechanisms, introducing new dynamics such as anti-establishment sentiments, lack of traction for a strong transnational civil society mobilisation, absence of a hegemon championing health, and intensifying geopolitical tensions (Kickbusch & Liu, 2022, p.2162).

Following the *expansion* (1998-2008) and *politicisation* (2008-2018) phases, the current *polarisation* era (2018-present day) has reinforced the siloed treatment of firearm violence. It is often relegated to the domains of security or justice, or counted as one indicator among many within broad violence prevention frameworks (see ICD-11, e.g. codes XE04A, PG70, ND56.Y). Despite its clear public health consequences, firearm violence is rarely addressed through a health-first lens. Instead, health is often treated as a downstream victim of firearm violence, and not as the foundation for preventive policy responses.

Firearms are uniquely politicised objects. They embody tensions around individual rights, sovereignty, security, and gender norms, making them especially difficult to address under the umbrella of evidence-based health concerns. Thus, firearm violence is often treated as *peripheral* to health, while other violence-related issues have successfully been framed as health issues, despite also being multisectoral. For instance, the WHO recognised domestic

violence as a legitimate area for intervention, as exemplified by WHA67.15 (2014), WHA69.5 (2016), and the RESPECT Framework (WHO, 2019). In contrast, firearm violence receives no direct attention in the RESPECT Framework, a significant omission given its health impacts. This divergence is not a reflection of differential severity or data scarcity but rather of institutional priorities, political narratives and constraints.

To break from this pattern, firearm violence must be addressed as a cross-sectoral issue both nationally and globally. In the wake of pandemics like Ebola and COVID-19, public health has increasingly intersected with security and human rights. However, we suggest caution in framing firearm violence purely as a security issue. Instead, the more productive path lies in framing it as a commercial determinant of health, one shaped by industry practices, regulatory gaps, and socio-economic vulnerabilities. Gun violence is not solely a reflection of cultural or gender norms. It is also driven by industry practices that exploit and reinforce these norms. As highlighted by WILPF (2024), marketing strategies intentionally deploy gendered, militarized messaging to normalise and glamorise firearm use, especially among young men. In this light, WHO's past leadership on tobacco control offers a powerful precedent, as it has already shown how to regulate harmful industries using evidence-based health standards.

A public health response to firearm violence should extend beyond hospitals. Our interviews demonstrated that this type of violence requires interventions across education, justice reform, media and community engagement, including innovative strategies such as "surrender-tainment". Nonetheless, health systems play a central role in data collection, early detection of risk factors, and post-violence physical and psychological care. These are key components for building national databases and identifying prevention opportunities.

However, a major barrier to integrating firearm violence into global health lies in how the issue is *framed,* and *who holds the power to shape that framing*. Unlike tobacco, which was

ultimately framed as offering no health benefit, firearms are still defended by some researchers and industry actors as beneficial for public safety, thus health. The industry not only fuels but also glorifies this dynamic, turning firearms into symbols of power, control, and status. This diverts attention from systemic regulation to individual responsibility. As with tobacco, WHO should reassert the primacy of health in shaping the policy agenda and build a coherent, preventive framework for firearm violence.

Still, the very notion of a *firearm* (or *gun*, *small arm*, *light weapon*) contradicts how societies usually understand human security. Health is fundamentally a *collective* good enhanced by shared knowledge, access, and prevention. Firearms, by contrast, invoke a logic of *individual* security through dominance. This contradiction parallels the classic prisoner's dilemma: industry marketing inflames perceptions of insecurity, which compels individuals to arm themselves, thereby amplifying the broader sense of threat. The notion of security is not neutral: it is gendered, classed, and violently exclusionary.

In parallel, personal safety is actively shaped by the political economy of fear. As highlighted in our interviews, pro-gun politicians and gun manufacturers strategically exploit anxieties to consolidate power and profit. This tactic is embedded in capitalist market logics that treat firearm production as a legitimate industry rather than a public health threat. Luis Armona (cited in O'Neill, 2025) estimates that a modest tax on firearm purchases could prevent around 60 firearm-related deaths annually in the U.S. However, the power of industrial lobbying is a key inhibitor to reform. This is worsened by geographic asymmetries between production and harm. The majority of gun manufacturers are based in high- and middle-income countries (SIPRI, 2023), with the U.S. being the largest arms exporter (Buchholz, 2024). Yet the greatest burden falls on LMICs, where downstream effects include illicit arms flows, health system strain, and community trauma. In 2022, Brazil recorded over 17,000 hospitalisations

from gunshot wounds, costing the health system approximately 7 million USD. One gunshot hospitalisation costs over three times the Brazilian federal health spending per person, and over five times for a severe gunshot wound (Instituto Sou da Paz, 2023). The global gun economy mirrors broader inequalities by profiting from systemic violence while externalising its costs. This is not only a matter of production and trade, as it is also driven by strategic marketing practices that exploit fear, reinforce masculinity, and normalise guns as aspirational consumer products.

These structural contradictions help explain why firearm violence remains marginal within global health governance, despite growing technical engagement in specialized working groups. While scientific consensus is emerging on the health consequences of firearm violence, governance structures continue to act as a bottleneck. The issue is not a lack of evidence, but the persistence of siloed visions, the difficulties in building a FCTC-equivalent momentum, and the dominance of polarised framings. In this context, health-based arguments are *acknowledged* but not translated into action. Global health governance selectively legitimises which forms of violence are rendered visible, actionable, and ultimately, preventable. Without confronting the commercial roots of firearm violence, its public health framing will remain insufficient to drive change within the violence prevention agenda.

Conclusion & Policy Recommendations

Gun violence is a pressing public health issue, causing deaths, lasting physical, psychological and social harm across continents. It generates widespread fear, trauma and chronic insecurity, differently affecting vulnerable groups. Yet, in some countries, firearms are actively embedded in commercial marketing practices that normalises their use. Inspired by public health approaches to Tobacco Control and Road Safety, this study reframed firearm

violence as a commercially driven epidemic - one that cannot be addressed solely through regulation of advertising, but demands a broader, prevention-oriented, public health response.

This research project shows how gun violence endangers the health and well-being of communities and how it increases violence against women and children. It is crucial to develop a global health response and prevention strategies that position guns at the source of direct and indirect effects on health and well-being. The research also reveals a troubling inconsistency in the WHO's engagement with this topic. Although early efforts acknowledged firearm violence as a health issue and integrated it into broader violence prevention efforts, small arms and light weapons have never been mentioned in any WHA resolutions. In recent decades, this omission has been compounded by a decline in governance attention to the health impacts of firearms in other violence prevention frameworks.

In line with its own principles, the only two industries that WHO excludes collaboration are the tobacco and arms industries. Yet, it has failed to consistently apply this standard by not addressing firearms as a health topic. Many of the interviews highlighted that political, cultural, and economic factors are preventing the appropriate treatment of gun injuries and deaths as a preventable health issue.

Lessons from other health governance regimes, such as Road Safety, UNAIDS and FCTC, underscore the need for a multisectoral approach and a global coalition to tackle the cross-cutting nature of gun violence. The FCTC, in particular, demonstrates the power of regulating both demand and supply, and offers a model for limiting firearm promotion and industry interference under the commercial determinants of health framework.

The current geopolitical context creates both setbacks and opportunities for progress. The U.S. withdrawal of funding and its distancing from the WHO, while creating more limitations for certain budgetary aspects, has also opened a political space to advance issues that are traditionally pushed against - firearms violence prevention among them. The upcoming

negotiations on the WHO pandemic agreement (to be discussed on 19 May, 2025) suggest shifting grounds in global health diplomacy, where new coalitions and priorities may emerge.

We argue that firearm violence must be reframed: not as an external threat to health, but as a **commercially driven epidemic**; one that demands integrated, preventive, and multisectoral global health action. To this end, we recommend the following to policymakers:

1. **All stakeholders must recognise firearm injuries, deaths and psychological harm as a global health issue.** Positioning the harmful consequences of firearm violence within international frameworks broadens accountability (Sadat & George, 2019; Davis et al., 2018; Snowdon et al., 2014).
2. **The WHO should re-establish institutional leadership on the issue.** The long-term physical and psychological harm, and substantial economic burdens on health systems, demonstrate that firearms constitute a public health crisis. It affects men, women, and children differently and is a major cause of mortality, particularly among young people. The WHO has the mandate, the tools and the precedent to lead on firearm violence.
3. **National governments must prioritise the implementation of complex violence prevention strategies**. Firearm violence is not just a crime or security issue. As demonstrated in this research project, it is a deeply cross-cutting public health crisis intersecting with other disciplines. The nature of the issue means that no single sector can address firearm violence effectively.
4. **Civil society and academia must scrutinize the firearm industry's marketing and lobbying practices.** The firearm industry's activities harm directly and indirectly public health. Their marketing practices on social media, video games, and other platforms, normalise gun ownership and reinforce harmful gender norms. Civil society and academia have an important role in exposing these tactics, just as they did with the tobacco industry.

5. **Building momentum in order for gun injuries, deaths and psychological harm to hold political sway over MS at the WHA.** Without pressuring MS to scale-up this issue, the preventable physical and psychological harms caused by guns will remain in the margins of public health. Elevating the health impacts requires political will, coalition-building, and advocacy - so that firearm violence is recognised as a global health priority, demanding coordinated and multisectoral actions.
6. **This issue should be enshrined in a WHA Resolution**. A WHA Resolution is essential to trigger action and legitimise the issue as a health topic within the global health agenda. A formal recognition ensures the WHO's commitment to mobilising resources and developing technical guidance, supporting MS in the planning and implementation of violence prevention frameworks, and closing the existing policy gap on guns.

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Annex I

WHA resolutions word-match method's keywords	Light weapon; firearm; small arm; gun; lethal means; violence; interpersonal violence; gender-based violence; domestic violence; youth violence; suicide; homicide; femicide; coercion; commercial determinant of health.
Terms excluded for production of unrelated references, skewing the dataset away from violence-specific content	Women; girls; men; boys; children; injury.
Considered but excluded terms	Mental health; shooting; intimate partner violence; child abuse; sexual violence; trauma; post-traumatic stress disorder; disability; militarization; disarmament.

Annex II

Type of resolution	Reference	Number
Violence-specific	WHA49.25 (1996) Prevention of violence: public health priority; WHA50.19 (1997) Prevention of violence; WHA56.24 (2003) Implementing the recommendations of the World Report on Violence and Health; WHA67.15 (2014) Strengthening the role of the health system in addressing violence, in particular against women and girls, and against children; WHA69.5 (2016) WHO global plan of action to strengthen the role of the health system within a national multisectoral response to address interpersonal violence, in particular against women and girls, and against children; WHA74.17 (2021) Ending violence against children through health systems strengthening and multisectoral approaches.	6
Violence-related	WHA55.19 (2002) WHO's contribution to achievement of the development goals of the United Nations Millennium Declaration; WHA57.11 (2004) Family health in the context of the tenth anniversary of the International Year of the Family; WHA58.1 (2005) Health action in relation to crises and disasters, with particular emphasis on the earthquakes and tsunamis of 26 December 2004; WHA58.23 (2005) Disability, including prevention, management and rehabilitation; WHA58.26 (2005) Public-health problems caused by harmful use of alcohol; WHA60.22 (2007) Health	16

	systems: emergency-care systems; WHA61.16 (2008) Female genital mutilation; WHA61.4 (2008) Strategies to reduce the harmful use of alcohol; WHA64.28 (2011) Youth and health risks; WHA66.9 (2013) Disability; WHA68.15 (2015) Strengthening emergency and essential surgical care and anesthesia as a component of universal health coverage; WHA68.20 (2015) Global burden of epilepsy and the need for coordinated action at the country level to address its health, social and public knowledge implications; WHA72.16 (2019) Emergency care systems for universal health coverage: ensuring timely care for the acutely ill and injured; WHA73.1 (2020) COVID-19 response; WHA76.2 (2023) Integrated emergency, critical and operative care for universal health coverage and protection from health emergencies; WHA77.3 (2024) Strengthening mental health and psychological support before, during and after armed conflicts, natural and human-caused disasters and health and other emergencies.	
Incidental mentions of violence	WHA16.25 (1963) Television influence on Youth; WHA38.27 (1985) Collaboration within the United Nations System: Women, Health and Development; WHA45.24 (1992) Collaboration within the United Nations System: General Matters - Health and Development; WHA46.27 (1993) Collaboration within the United Nations System: International Year of the Family (1994); WHA46.18 (1993) Maternal and child health and family planning for health; WHA55.21 (2003) Strategy for child and adolescent health and development; WHA57.14 (2004) Scaling up treatment and care within a coordinated and comprehensive response to HIV/AIDS; WHA60.12 (2007) Appropriation resolution for the financial period 2008-2009; WHA62.9 (2009) Appropriation resolution for the financial period 2010-2011; WHA64.3 (2011) Appropriation resolution for the financial period 2012-2013; WHA65.4 (2012) The global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level; WHA74.14 (2021) Protecting, safeguarding and investing in the health and care workforce; WHA74.15 (2021) Strengthening nursing and midwifery: investments in education, jobs, leadership and service delivery; WHA74.7 (2021) Strengthening WHO preparedness for and response to health emergencies; WHA76.16 (2023) The health of Indigenous Peoples; WHA77.12 (2024) Strengthening health and well-being through sport events; WHA77.8 (2024) Strengthening health emergency preparedness for disasters resulting from natural hazards.	17
Total	**All**	**39**

Annex III

Publication Title	Publication Year	Focus	Mention of Guns - yes/no	Extent of mentions
Small Arms and Global Health	2001	General Violence	yes	thoroughly
Injury surveillance guidelines	2001	General Violence	yes	few times
World report on violence and health	2002	General Violence	yes	thoroughly
Preventing violence: a guide to implementing the recommendations of the World report on violence and health	2004	General Violence	yes	many times
Milestones of a global campaign for violence prevention 2005: Changing the face of violence prevention	2005	General Violence	yes	many times
Researching violence against women: a practical guide for researchers and activists	2005	Violence Against Women and Children	yes	few times
WHO multi-country study on women's health and domestic violence against women	2005	Violence Against Women and Children	yes	once

Developing policies to prevent injuries and violence : guidelines for policy-makers and planners	2006	General Violence	yes	few times
Preventing injuries and violence : a guide for ministries of health	2007	General Violence	yes	few times
Preventing violence and reducing its impact: How development agencies can help	2008	General Violence	yes	few times
World report on child injury prevention	2008	Violence Against Women and Children	yes	few times
Manual for estimating the economic costs of injuries due to interpersonal and self-directed violence	2008	General Violence	yes	thoroughly
Guns, knives, and pesticides: reducing access to lethal means	2009	General Violence	yes	thoroughly
Violence prevention: the evidence	2010	General Violence	yes	thoroughly
Preventing intimate partner and sexual violence against women	2010	Violence Against Women and Children	yes	once
Understanding and addressing violence	2012	Violence Against Women and Children	yes	many times

against women: femicide				
Understanding and addressing violence against women: intimate partner violence	2012	Violence Against Women and Children	no	no
Understanding and addressing violence against women: sexual violence	2012	Violence Against Women and Children	no	no
Global and regional estimates of violence against women	2013	Violence Against Women and Children	yes	once
Responding to intimate partner violence and sexual violence against women	2013	Violence Against Women and Children	no	no
Preconception care to reduce maternal and childhood mortality and morbidity	2013	Violence Against Women and Children	no	no
Global status report on violence prevention 2014	2014	General Violence	yes	thoroughly
Improving efforts to prevent children's exposure to violence: a handbook to support the evaluation of child maltreatment	2014	Violence Against Women and Children	no	no

prevention programme				
Preventing youth violence: an overview of the evidence	2015	Violence Against Women and Children	yes	thoroughly
Violence in the Western Pacific region 2014	2015	General Violence	yes	few times
Injuries and violence: the facts 2014	2015	General Violence	yes	few times
Ethical and safety recommendations for intervention research on violence against women	2016	Violence Against Women and Children	no	no
INSPIRE: Seven strategies for Ending Violence Against Children	2016	Violence Against Women and Children	yes	many times
Global plan of action to strengthen the role of the health system within a national multisectoral response to address interpersonal violence, in particular against women and girls, and against childre	2016	Violence Against Women and Children	yes	few times
Leading the realization of human rights to health and through health	2017	Violence Against Women and Children	no	no

INSPIRE handbook: Action for implementing the seven strategies for ending violence against children	2018	Violence Against Women and Children	yes	few times
School-based violence prevention: a practical handbook	2019	Violence Against Women and Children	yes	once
Global status report on preventing violence against children 2020	2020	Violence Against Women and Children	yes	thoroughly
Addressing violence against women in health and multisectoral policies: a global status report	2021	Violence Against Women and Children	no	no
Violence Against Women Prevalence Estimates, 2018	2021	Violence Against Women and Children	yes	once
Preventing injuries and violence: an overview	2022	General Violence	yes	once
Improving the collection and use of administrative data on violence against women: global technical guidance	2022	Violence Against Women and Children	no	no

WHO Violence Prevention Unit: approach, objectives and activities, 2022-2026	2022	General Violence	no	no