

This seventh report of the Safeguarding Health in Conflict Coalition (SHCC) documents attacks on health care in 20 countries and territories in conflict in 2019. We referred to the [Uppsala Conflict Data Program](#) (UCDP) to determine if a country is considered to have experienced conflict in 2019, and of these countries, we included those that had experienced at least one incident of violence against or obstruction of health care in 2019. We discuss the 15 countries with the highest numbers of reported attacks in separate chapters.

The report uses an event-based approach to documenting attacks on health care, referred to as incidents throughout the report. To prepare this report, event-based information from multiple sources was cross-checked and consolidated into a single dataset of recorded incidents that were coded using standard definitions. The full 2019 data cited in this report can be accessed via [Attacks on Health Care in Countries in Conflict](#) on [Insecurity Insight's](#) page on the [Humanitarian Data Exchange](#) (HDX). The data for the 15 countries with the highest numbers of reported attacks are made available as individual datasets. The links are provided on the individual country profiles.

In accordance with the WHO's definition, incidents of violence against health care can include bombings, explosions, looting, robberies, hijackings, shootings, gunfire, the forced closure of facilities, the violent searching of facilities, fire, arson, military use, military takeover, chemical attack, cyberattack, abduction of health workers, denial or delay of health services, assault, forcing staff to act against their ethics, execution, torture, violent demonstrations, administrative harassment, obstruction, sexual violence, psychological violence, and the threat of violence.

DEFINITION OF ATTACKS ON HEALTH CARE

The report follows the WHO's definition of an attack on health care: "any act of verbal or physical violence, threat of violence or other psychological violence, or obstruction that interferes with the availability, access and delivery of curative and/or preventive health services." In this report, however, we do not use the word "attack" but rather "incident" or "incident of violence" because the word "attack" is often interpreted to convey intent, whereas many incidents reported are indiscriminate or reckless, but otherwise meet the WHO definition.

This report focuses on incidents of violence against health care in the context of conflict or in situations of severe political volatility and public health programs, including emergency responses, while the WHO focuses on attacks in emergencies.

These categories have been included as far as they were reported. However, some forms of violence, such as psychological violence, blockages of access, or threats of violence, are rarely reported. We also record incidents of violence against patients within health facilities when included in incident descriptions. However, the impact of incidents of violence against patients is much broader and complex than individual incidents and cannot be accurately documented through event-based monitoring.

KEY DEFINITIONS

HEALTH WORKER: Any person working in a professional or voluntary capacity in the provision of health services or who provides direct support to patients, including administrators, ambulance personnel, community health workers, dentists, doctors, government health officials, hospital staff, medical education staff, nurses, midwives, paramedics, physiotherapists, surgeons, vaccination workers, volunteers, or any other health personnel not named here.

HEALTH WORKER AFFECTED: Describes incidents in which at least one health worker was killed, injured, kidnapped, arrested, or experienced sexual violence, threats, or harassment.

HEALTH FACILITY: Any facility that provides direct support to patients, including clinics, hospitals, laboratories, makeshift hospitals, medical education facilities, mobile clinics, pharmacies, warehouses, or any other health facility not named here.

HEALTH FACILITY AFFECTED: Describes incidents in which at least one health facility was damaged, destroyed, or subjected to armed entry, military occupation, or looting.

HEALTH TRANSPORT: Any vehicle used to transport any injured or ill person, or woman in labor, to a health facility to receive medical care.

HEALTH TRANSPORT AFFECTED: Describes incidents in which at least one ambulance or other health transport was damaged, destroyed, hijacked, or delayed, with or without a person requiring medical assistance on board.

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CONFLICT DEFINITION

SHCC follows the [UCDP definitions](#) of conflict and has developed some adaptations specific to reflect the unique features of violence against health care in conflict. A country is included in the SHCC report if it is included on the [UCDP list](#) and if we identified at least one attack on health care perpetrated by a conflict actor, [defined as a person affiliated with organized actors in conflict](#). Interpersonal violence or violence by patients against health care providers are generally not included in this report, even when they occurred in conflict-affected countries. However, violence against specific public health programs, such as polio vaccinations or the Ebola response, are included even when the perpetrators may not be clearly affiliated with an organized group, but rather [members of a community opposed to these programs](#). Also included is violence against health workers in the context of demonstrations or public unrest, if these occur in countries that also experience conflict as defined by UCDP.

INCIDENT INCLUSION

We included only the incidents that met our definition in the report dataset. We included the following types of incidents and details in the report dataset:

- Incidents affecting health facilities (recording whether they were destroyed, damaged, looted, or occupied by armed bodies).
- Incidents affecting health workers (recording whether they were killed, kidnapped, injured, assaulted, arrested, threatened, or experienced sexual violence); when available, we recorded the number of affected patients, though we acknowledge the likely serious underreporting of these figures.
- Incidents affecting health transport (recording whether ambulances or other official health vehicles were destroyed, damaged, hijacked / stolen, or stopped/delayed).
- Incidents from the WHO Surveillance System of Attacks on Healthcare (SSA) for the ten countries included in the system if the WHO confirmed the incidents.

SOURCES

The aim of this report is to bring together known information on attacks on health care from multiple sources. Access to sources differs between countries. Each source has its own strengths and weaknesses, and the definition of attack on health care used to compile information varies in some cases. Each source introduces unique reporting and selection biases, which are discussed below.

To identify incidents that meet the inclusion criteria, we used seven distinct sources that provide a combination of media-reported incidents and incidents shared by partners and network organizations:

1. Information included in Insecurity Insight's [Attacks on Health Care Monthly News Briefs](#), which provide a combination of media sources and publicly shared information from partner networks, such as the [Aid Worker Security Database](#) (AWSD) for global data from international aid agencies coordinating health programs; [Airwars](#), the [Union of Medical Care and Relief Organizations](#) (UOSSM), and the [Syrian Network for Human Rights](#) (SNHR) for data on Syria; the [Civilian Impact Monitoring Project](#) (CIMP) for data on Yemen; as well as databases, such as the [Armed Conflict Location & Event Data Project](#) (ACLED).
2. Information provided by [Medical Aid for Palestinians](#) (MAP) for incidents in the oPt.
3. Information provided by Coalition member [Physicians for Human Rights](#) (PHR) for incidents in Syria.
4. Research conducted by a small team of Coalition members to identify additional incidents reported by UN agencies, the media, and other sources.
5. Information from the [WHO's SSA](#) for ten countries: Afghanistan, Burkina Faso, the CAR, the DRC, Libya, Mali, Nigeria, the oPt, Sudan, and Yemen. Information from the SSA represents approximately two-thirds of the data gathered for this report.

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CODING PRINCIPLES

The general theory and principles of event-based coding were followed, and care was taken not to enter the same incident more than once. The standard coding principles are set out in the [SHCC Codebook](#).

Coding the perpetrator and context of health care attacks can inform the development of preventive strategies and mitigation measures that reduce the impact of attacks, as well as support accountability processes. As it is rarely possible to know a perpetrator's motive, we relied on the context identified in the incident descriptions and coded the intentionality of the attacks from those descriptions, in as much as this was possible.

CONTEXT OF ATTACKS

We coded the assumed context of the incidents based on available information on the conflict and specific information included in reports.

CONTEXT CODING

The available context information about each incident as well the reported action by the perpetrator, the health worker or patient at the time the effect on health care occurred is used to code the context.

ACCESS DENIAL: Incidents of violence against health care in the form of access denial: incidents in which the perpetrator denied patients or health workers access to health care or to the sick and wounded, respectively, or where perpetrators significantly delayed access, including by denying permits or by using roadblocks or checkpoints. This category also includes incidents in which a perpetrator stopped health workers who were trying to reach the wounded or sick or stopped patients trying to reach health care.

ATTACKS ON CIVILIANS: Incidents of violence against health care in the context of violence against civilians: incidents in which the perpetrator committed one-sided violence against other civilians or civilian objects in the same location. This category also includes incidents in which it was reported that a health worker was among the affected people or a health facility was among the damaged or looted civilian objects.

DEMONSTRATIONS: Incidents of violence against health care in the context of demonstrations: incidents in which the perpetrator targeted health workers or first responders during periods of public unrest and incidents in which health workers assisted injured demonstrators or took part in demonstrations wearing medical clothing/insignia.

FIGHTING: Incidents of violence against health care in the context of armed conflict: incidents in which the perpetrator damaged, destroyed, or occupied health facilities or injured or killed health workers within health facilities during military operations, including those involving air and surfaced-launched bombs or missiles or military take-overs of facilities. All such incidents are included regardless of whether health workers or patients were in the health facility at the time.

HEALTH PROGRAMS: Incidents of violence against health care in the context of implementing specific health programs: incidents in which available information suggests that a perpetrator targeted health workers or health facilities in the context of health programs, where community concerns about these health programs are widespread. These include, for example, polio vaccination campaigns or Ebola emergency responses. In these incidents, the affected health worker or health support worker worked directly on a particular public health program.

INCIDENTS OF VIOLENCE AGAINST INDIVIDUALS: Incidents of violence against individual health professionals, with uncertain motive: incidents in which individual health workers were kidnapped or killed and where the perpetrator, the context, and motive are unclear, e.g., a robbery during which a health worker was assaulted that may have had economic or political motivations or an incident where a health workers was attacked outside of a health care context including incidents that occurred during off-duty hours.

INCIDENTS OF VIOLENCE AGAINST HEALTH FACILITIES AND TRANSPORT: Incidents of violence against health facilities or ambulances, with uncertain motive: incidents in which health facilities were damaged, destroyed, raided, subjected to armed entry, or occupied, and in which the context and motive are unclear.

STEALING: Incidents of violence against health care in the form of looting and common theft: incidents in which the conflict actor took medical equipment or supplies—including key communication equipment, such as phones or computers, or cash—from health facilities or individual health workers traveling between locations.

UNCLASSIFIED: Incidents of violence against health care that cannot be classified: incidents without the necessary details to classify the incidents into any of the above categories.

INDISCRIMINATE AND INTENTIONAL INCIDENTS

We coded incidents as suspected “indiscriminate,” suspected “intentional,” or “other or unknown” based on available information on the conflict and information included in reports.

Coding the intention was carried out in three separate coding steps. First, we coded the conflict category using the UCDP conflict classifications and the SHCC-specific classifications. Second, we coded the targeting categories using strategic logic categories. Third, we use the combination of the conflict and strategic logic classification of the first two processes to determine the final classification on intention.

CONFLICT CATEGORIZATION

First, incidents were coded based on the UCDP’s conflict classification, which distinguishes armed conflict between state or non-state actors from one-sided violence against unarmed civilians. In addition, we used the additional SHCC-specific categories of administrative force events (such as the denial of permits), takeover events involving the occupation of health facilities or the hijacking of ambulances, and threat and intimidation events.

STRATEGIC LOGIC CATEGORIZATION

In a second step, we coded the strategic logic of the perpetrators using the concepts of selective and indiscriminate violence: the former refers to targeted attacks on selected individual health workers, selected health providers, or specific programs (e.g., vaccination campaigns), while the latter refers to indiscriminate attacks against civilians among a larger population group (such as bombings or shootings on markets or concerts halls) that included health workers among the victims.¹

INTENTIONALITY CLASSIFICATION

In a final step, we combined the classification on conflict and strategic logic into a final coding on intentionality. The WHO dataset does not contain enough information on context, therefore all SSA-reported incidents were always coded as “unknown.” Further details on the coding process are available in the [SHCC Suspected Intentional and Indiscriminate Codebook](#).

In coding the assumed intention, we distinguished between indiscriminate and intentional effects on health care. Intention is distinct from motive and describes the intent to cause harm. Indiscriminate and intentional effects can be motivated by a wide range of ideological, economic, personal or strategic concerns, an aspect that is not taken into account in this coding. Intention was coded based on the available information on the context in as far as this allowed us to judge whether the effects on health care were likely to have been intended or were a side effect of some other intention.

Indiscriminate attack: incidents without evidence that the perpetrator intended to harm a health worker or health facility. These incidents include military operations in the vicinity of health facilities or indiscriminate attacks on civilians that also affected health workers (such as a bomb in a public place).

Intentional attack: incidents where the mode of operation or the effect on the health worker or facility strongly suggests that the perpetrator must have intended to cause at least a degree of harm to a health worker or health facility. These incidents include the targeted injury, killing, arrests, or kidnappings of health workers; entry or occupation of a health facility; and theft or robbery of health supplies.

| THE CONFLICT CLASSIFICATION | + | THE TARGETING BASED ON STRATEGIC LOGIC CODING | = | INTENTION CLASSIFICATION |
|-----------------------------|---|---|---|--------------------------|
| Active Conflict | + | Indiscriminate | = | Indiscriminate |
| Direct One Side Violence | + | Indiscriminate | = | Indiscriminate |
| Administrative Force | + | Indiscriminate | = | Indiscriminate |
| Threats and Intimidation | + | Indiscriminate | = | Indiscriminate |
| Direct One Side Violence | + | Selective Other | = | Indiscriminate |
| Administrative Force | + | Assumed Selective | = | Intentional |
| Administrative Force | + | Selective Program | = | Intentional |
| Administrative Force | + | Selective Provider | = | Intentional |
| Direct One Side Violence | + | Assumed Selective | = | Intentional |
| Direct One Side Violence | + | Selective Program | = | Intentional |
| Direct One Side Violence | + | Selective Provider | = | Intentional Attack |
| Takeover Attack | + | Selective Assets | = | Intentional Attack |
| Threats and Intimidation | + | Assumed Selective | = | Intentional Attack |

¹ Kalyvas, Stathis N. 2006. *The Logic of Violence in Civil Wars*. Cambridge: Cambridge University Press.

Lyall, Jason. 2009. “Does Indiscriminate Violence Incite Insurgent Attacks? Evidence from Chechnya.” *Journal of Conflict Resolution* 53 (3): 331–62.

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INCLUSION AND CODING OF SSA-REPORTED INCIDENTS

Information from the WHO's SSA was included for ten countries and territories: Afghanistan, Burkina Faso, the DRC, the CAR, Libya, Mali, Nigeria, Sudan, the oPt, and Yemen. We accessed the SSA on January 15, 2020 and included the information for incidents reported in 2019 available on that date. Any changes to the SSA system after that date are not reflected in the SHCC dataset but may be noted in the country profiles (as of 18 May, the figures reported in the SSA increased for Afghanistan, Burkina Faso, DRC, Libya, Mali, Nigeria, oPt and Yemen).

We coded 707 SSA incidents from the ten countries and territories based on the information included on the online SSA dashboard. Since the SSA does not provide information on perpetrators, we assumed that all of the SSA incidents we included were carried out by conflict actors (rather than private individuals) and therefore fulfilled the SHCC inclusion criteria. The SSA also does not provide any information on location beyond the country. The SSA-reported incidents could therefore not be included in the maps showing the affected regions or provinces in the individual country profiles.

The lack of detail in the 85 SSA-reported incidents from Syria made it too difficult to determine which of these incidents overlapped with the 147 Syrian incidents collected by Coalition members. Thus, the 85 SSA-reported incidents from Syria were not incorporated into the report.

The SSA includes the fields of "Affected Health Resource," "Type of Attack," and "Affected Personnel," with standard categories for each incident. However, these fields were not consistently filled in, and for 34 of the 707 incidents, only one or two of the fields provided information. When one or more fields were left empty, it was usually not possible to grasp the nature of the incident from the information reported. Therefore, 34 SSA incidents appear as recorded incidents without much further detail in the SHCC dataset, and 673 incidents from the SSA are included with more details. Please contact [Insecurity Insight](#) if you would like more details on the process of including SSA incidents into the SHCC datasheet.

LIMITATIONS OF THE RESEARCH

The report is based on a dataset of incidents of violence against health care that has been systemically compiled from a range of trusted sources and carefully coded. The figures presented in this report can be cited as the total number of incidents of attacks on health care in 2019 reported or identified by SHCC. These numbers provide a minimum estimate of the damage to health care from violence and threat of violence that occurred in 2019. However, the severity of the problem is likely much greater, as many incidents likely go unreported and are thus not counted here. Moreover, differences in definitions and certain biases within individual sources suggest that the identified contexts are also not representative of the contexts of all incidents.

The SHCC dataset suffers from limitations inherent in the information provided by contributors to the Coalition and the fact that there are more contributors from some countries than others. Moreover, not all contributors provided access to their original sources and many details were lost in the process, affecting the ability to provide more accurate and consistent classification.

As a result, reported numbers of incidents by country should not be compared to those of other countries without considering the factors that affect information flow. For example, the information flows from Syria and the oPt are well established, while those from Libya, the Far North Region of Cameroon, and the CAR, for example, are not.

Reported context categories should not be read as describing the full range of particular incidents or how frequently they occur. For example, the killings and kidnappings of doctors or bombings of hospitals are more likely to be captured by reporting systems than the harassment of health workers or looting of medical supplies. These incidents are likely to occur more frequently than reports indicate.

REPORTING AND SELECTION BIAS

The SHCC dataset suffers from reporting bias the technical term for selective reporting. While the process of data cleaning carried out by SHCC focuses exclusively on selecting incidents based on the inclusion criteria, the pool of information accessible for this process depends on the work done by those who first reported the incidents. Events may be selected or ignored for a range of reasons, including: editorial choices, when the source is a media outlet; lack of knowledge because the affected communities had no connection to the body compiling the information in the first place; or simple errors of omission.

These biases mean that SHCC's collection of incidents may not be complete or representative and that only a selection of incidents is included in the first lists that are used to compile the final SHCC dataset. The SHCC dataset therefore only covers a fraction of relevant evidence and covers incidents in certain countries and certain types of incidents more widely than others.

ACCURACY OF INFORMATION AND DIFFERING DEFINITIONS

Some organizations record only certain types of incidents, e.g., those involving health facilities or those affecting international aid agencies. There may be some errors in the incident descriptions available. In addition, not all organizations that compile information on relevant incidents include all the details that would be necessary to systematically code all incidents. In particular, information related to the perpetrator and the context of the incident is often missing or may be biased in the original source. Additionally, in some cases, especially those involving robberies and abductions, it is often difficult to ascertain from available information whether the act was committed by a party to the conflict or by criminals. We based our inclusion decisions on judgments about the most likely motivations.

The nature of the SSA dataset and the extent to which SHCC relies on contributions from the SSA for specific countries influences the overall dataset. As the SSA does not report information on the perpetrator, the SHCC dataset could not provide information on the perpetrator in 681 incidents. The missing perpetrator information has knock-on effects for coding conflict context and intention, as these factors are largely based on information regarding the perpetrator. As a consequence, the coding is much more limited for those countries for which a significant proportion of incidents came from the SSA. In addition, the SSA reported 34 incidents that did not contain enough precise information to include the events in the SHCC dataset beyond the incident count.

The SHCC dataset therefore contains limitations associated with using preprocessed data without access to the original sources or additional detail, which would have allowed for potentially more comprehensive and consistent classification.

KNOWN REPORTING AND SELECTION BIASES IN SHCC SOURCES

The report dataset suffers from the limitations inherent in the contributors' data sources used to compile the dataset. Some data sources use media reports, while others collect and collate reports through a network of partners, direct observation, or triangulation of sources. Many information providers use a combination of these methods. Two key reporting biases affect the information flow:

- In some countries, the media frequently report a wide range of attacks on health care, while in others, hardly any incidents are reported by media outlets.
- In some countries, there are very active networks of partner organizations who contribute information, while in others, no such networks exist.

Two principal sources, the [Armed Conflict Location & Event Data Project](#) (ACLED) database and a significant proportion of Insecurity Insight's [Monthly News Briefs](#), are based on media reports. These are likely to have a selection bias toward larger incidents and will provide more incidents from countries with more active human rights monitoring and/or a free press. Increasingly systematic use of local media sources by a range of actors has expanded the range of incidents covered over the past years, but a bias toward larger incidents will remain, and human rights monitoring and press freedom continue to influence where information is reported. Insecurity Insight uses mainly English- and French-language sources, which leads to an underrepresentation of incidents from a number of countries and communities. Some key sources do not specifically focus on attacks on health care. ACLED, for example, focuses its monitoring on political violence and protests¹ and thus introduces a bias toward incidents that occur in that context. Many media outlets also have a current affairs selection bias, giving attacks on health care more attention when it is trendy, but less so when other topics dominate the news.

A series of sources, such as [Aid in Danger](#), the [Aid Worker Security Database](#) (AWSD), [MAP](#), [PHR](#), and the [WHO's SSA](#), compile lists of incidents of violence against health care from information provided to them by a number of selected network partners. Some sources operate in only one or a few countries, and others concentrate on partners whose interests extend beyond just health care. Their information collection includes incidents that are never publicly reported. However, these partner compilations are limited to the incidents experienced by the contributing partner organizations. They are therefore biased toward incidents that affect organizations with connections to international networks, and the experience of health workers without such connections are likely to be missed. Moreover, such networks work well in countries or territories with a well-established international community presence and less well in those without such structures. The use of information from partner networks and international NGOs means that attacks on health programs run by international NGOs are more frequently reported than those operated by local health care providers.

The reliance on the SSA data influenced the overall numbers of incidents within our report dataset and comparisons between SSA countries and non-SSA countries. The SSA data form a significant proportion of all information for Afghanistan, where 74% of all included incidents are from the SSA. The SSA provided 81% of all included incidents for the DRC, 81% for Libya, 68% for Nigeria, 63% for the oPt, 50% for Mali, 38% for the CAR, 37% for Yemen, 19% for Sudan, and 7% for Burkina Faso. It is likely that there is a selection bias in favor of Afghanistan and the oPt due to the operation of in-country reporting mechanisms. In some countries where the SSA is in operation, the system of reporting is less developed.