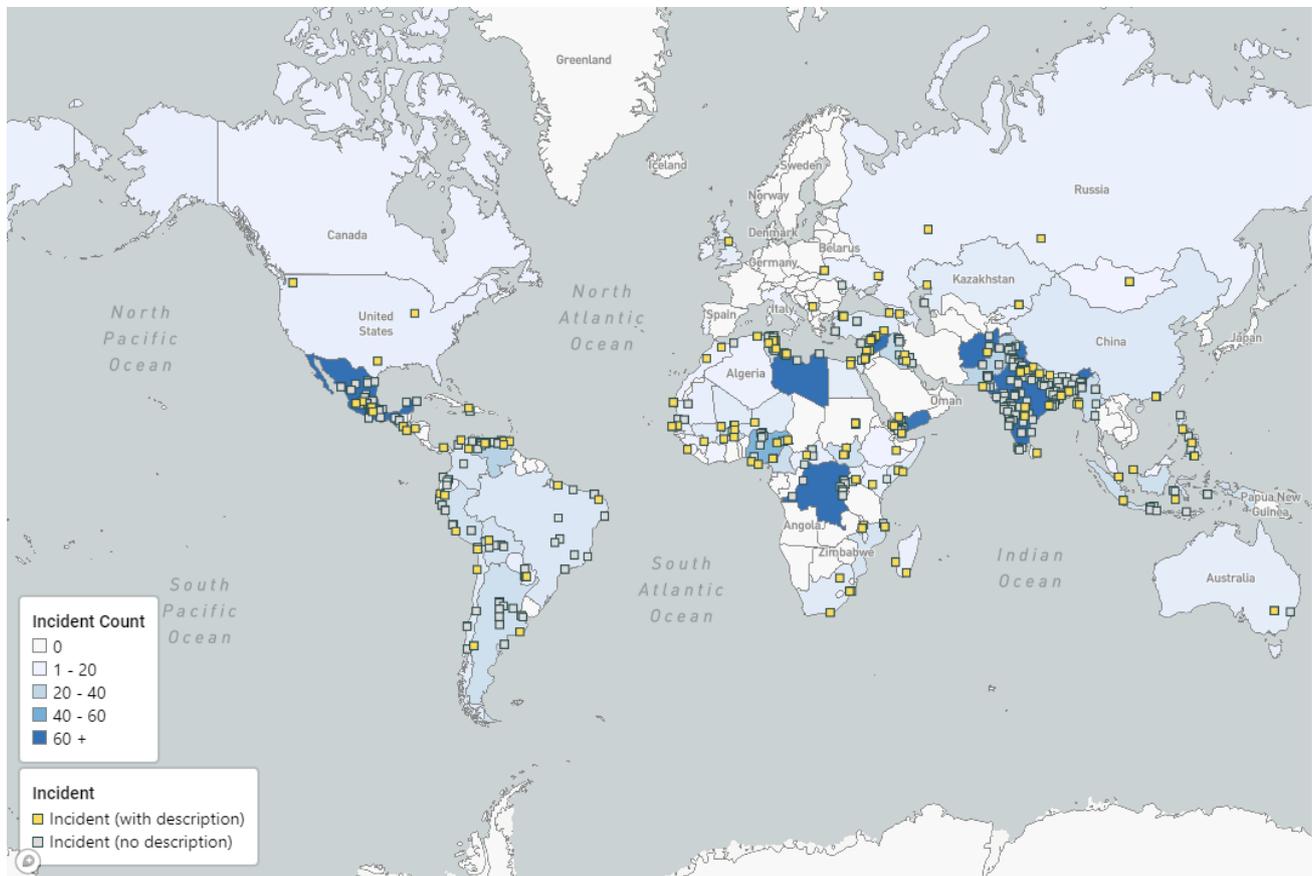


# Attacked and Threatened: Health care at risk

## Methodology



**SAFEGUARDING  
HEALTH  
IN CONFLICT**



Data: [Five-year review Violence Against or Obstruction of Health Care 2016-2020 Data](#) on [HDX Insecurity Insight](#)

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This document provides definitions for the data displayed on the Interactive Map '[Attacked and Threatened: Health care at risk](#)'.

## Key definitions: Incidents that affect the delivery of health care

**Definition of attacks on health care:** The WHO defines an attack on health care as: “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”; see the [WHO SSA website](#). In accordance with the WHO definition, incidents of violence against health care include: bombings, explosions, looting, robberies, hijackings, shootings, gunfire, the forced closure of facilities, the violent searching of facilities, fire, arson, military use and takeover of facilities, chemical attack, cyber attack, 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 conflict:

This dataset applies the [Uppsala Conflict Data Program](#) (UCDP) definitions of conflict and uses the information compiled by UCDP to determine if the perpetrator/s of an incident of violence against health care are listed as a conflict party in either 'state-based', 'non-state' or 'one-sided violence'. UCDP uses the threshold of 25 fatalities per calendar year attributable to a single perpetrator or during confrontations between two perpetrator groups before a perpetrator is added to the list.

### Definition of political:

This dataset includes any reported act of verbal or physical violence, obstruction, or threat of violence committed during situations of political protest and civil unrest. When such violence is committed by state forces or organized opposition and is included on UCDP's list of '[One-side violence](#)' the incident is also included under conflict-related violence. Threats and violence against health workers during spontaneous civil unrest are only classified as political and not conflict related violence.

### Incidents of violence or threats of violence against health care in the context of the COVID-19, Ebola and vaccinations:

Threats and violence against healthcare are considered to be related to disease outbreaks when: (a) they can be considered as a reaction to a health measure implemented to contain COVID-19 or Ebola; (b) they directly affected a specific health programme to address COVID-19 or Ebola; or (c) they are in response to any vaccination roll out for any disease.

These categories are not mutually exclusive.

Note that many incidents reported via the WHO SSA website cannot be classified due to insufficient information.

## Data collection methods and sources

The aim of the interactive map '[Attacked and Threatened: Health care at risk](#)' is to bring together known information on violence or threats of violence against health care. To identify incidents that meet the inclusion criteria, we used four distinct sources.

The data combines media-reported incidents and incidents shared by partners and network organisations:

1. **Information included in Insecurity Insight's '[Attacks on Health Care Monthly News Brief](#)'.** This news brief collates media sources and publicly shared information from other sources, such as the [Aid Worker Security Database](#) (AWSD) for global data from international aid agencies coordinating health care programmes; [Airwars](#); the [Union of Medical Care and Relief Organisations](#) (UOSSM); the [Syrian Network for Human Rights](#) (SNHR) for data on Syria; the [Civilian Impact Monitoring Project](#) (CIMP) for data on Yemen; and the [Armed Conflict Location & Event Data Project](#) (ACLED). The 'News Brief' lists sources for each reported incident. These incidents have been geolocated based on information provided in the descriptions of the incidents.

2. **Information from the WHO's SSA website for all countries except Syria.** The WHO-reported incidents do not include information on either the perpetrator or the specific location of the incidents. All SSA reported events are coded as conflict-related. As the WHO-reported incidents do not provide geographic information apart from the country (they all appear in the middle of the country on the map).
3. **Aid in Danger partner agencies.** Where possible, these incidents have been accurately geolocated. Where this was not possible for security reasons, the incidents appear in the middle of the country on the map.
4. **The map includes results from an International Council of Nurses (ICN) survey.** The online survey was open from 30 July to 14 August 2020 and was distributed to National Nursing Associations (NNAs). It covered a range of issues related to nurses and other health workers during the COVID-19 pandemic. The summarised survey responses related to violence or threats of violence reported by NNAs in 32 countries (ten in the Americas, nine in Europe, four in the Western Pacific region, four in Africa, four in South-East Asia and one in the Eastern Mediterranean region) are included in the map. All reported incidents are grouped into a single event for the country from where they were reported.

## Key definitions

**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 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.

**Incidents that reported effects on health care are classified by:**

**Health facility affected:** This counts incidents in which at least one health facility was damaged or destroyed in an attack.

**Health worker affected:** This counts the number of health workers reportedly killed, injured or kidnapped.

## Incident inclusion

Only incidents that meet the following definition are included in the count of incidents that affected health care. Selected categories are displayed as unique categories on the map. The following incidents are included:

- Incidents that affected health facilities (recording whether they were destroyed, damaged, looted or occupied by armed groups). The count on the map only presents the number of incidents in which health facilities were damaged or destroyed and not the number of health facilities looted or occupied.
- Incidents that affected health workers (recording whether they were killed, kidnapped, injured, assaulted, arrested, threatened or experienced sexual violence), when available. The count for each country presents the number of health workers killed, kidnapped and injured. The other categories of incidents are available on demand.
- Incidents that affected health transport (recording ambulances or other official health vehicles destroyed, damaged, hijacked/stolen or stopped/delayed). No specific counts are displayed on the map for these incidents.
- Incidents from the WHO Surveillance System of Attacks on Health Care (SSA) for all countries but Syria are included regardless of whether the WHO confirmed them or not.
- Aggregate incident information reported by National Nursing Association members of the International Council of Nurses.

## Coding principles

The datasets are compiled using the principles of event-based coding. Care is taken not to enter the same incident more than once. The coding is based on reported information. However, some forms of violence such as psychological violence, blocking access to health care or threats of violence are rarely reported. When incidents of violence against health care facilities, health transport or health workers also included information on violence against patients, this is included in incident descriptions. However, incidents of violence against patients that did not affect health care infrastructure or health workers are not included.

## Perpetrator and motive

The group affiliation of the perpetrator determines the classification of conflict and political incidents. Incident are classified as conflict-related when the perpetrator was a member of a party to a conflict. Perpetrators are considered 'conflict actors' when they are included in the calendar year in question on one of the three UCDP conflicts lists of 'state-based', 'non-state' and '[one-sided conflict](#)' that resulted in more than 25 deaths per year.

Security forces who kill health workers during political protests are only coded as conflict actors when they are included on UCDP's list of 'one-sided conflict' because they have killed more than 25 civilians during that calendar year. Incidents perpetrated by private individuals or criminals in a territory or country that is experiencing conflict are not coded as conflict-related.

An incident is classified as COVID, Ebola or vaccination related when the perpetrator was reacting to such health measures or directly affected these health responses. In most cases perpetrators do not directly communicate their motive(s) for threat or violence. Incidents are coded as disease related when the context of the incidents suggests such a connection.

## Data limitations

The dataset is based on identified reported incidents of violence against health care. The data presented is neither complete nor comprehensive, and may differ from that given in other sources. The incidents suggest a minimum estimate of the number of violent incidents adversely affecting health care. The severity of the problem is likely much greater, because many incidents go unreported. Differences in definitions and biases among individual sources suggest that the identified contexts are also not representative of the contexts of all incidents.

This dataset suffers from limitations inherent in the information gathered in open sources and provided by contributors. Some countries have more contributors, thereby increasing their counts. Moreover, not all contributors provide access to the original sources, which affects the accuracy and consistency of the classification. Different contributors apply different methodologies and inclusion criteria.

**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 flows.**

**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 the looting of medical supplies. These incidents are likely to occur more frequently than reports indicate.

## Reporting and selection bias

The dataset suffers from reporting bias. While the process of data cleaning that is carried out focuses exclusively on selecting incidents based on the inclusion criteria, the pool of accessible information for this process depends on those reporting the incidents. Incidents 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 person/organisation compiling the information; or simple errors of omission. These biases mean that datasets may not be complete or representative and that only an (unknown) selection of incidents is

included. The dataset therefore only covers a fraction of relevant evidence, and covers certain countries and types of incidents better than others.

The International Council of Nurses incident information is based on the reporting received by the various National Nursing Associations (NNAs). The data is likely to have a reporting bias toward incidents affecting members of these NNAs. The incidents mainly focus on COVID-related incidents affecting nurses, and therefore may not represent violent incidents against all types of health care workers.

## Known reporting and selection biases in the sources used

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 the triangulation of sources. Many information providers use a combination of these methods. Three key reporting biases affect the information flow:

- In some countries, the media frequently report a wide range of violent incidents, while in others, media outlets report hardly any incidents.
- The extent to which the news network in a country uses English will further influence the number of reported incidents that are identified in this monitoring process.
- In some countries, active networks of partner organisations contribute information, while in others no such networks exist.
- In some countries, communities on the ground are closely connected to diaspora communities able to share information including on social media.

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-scale incidents and will provide more incidents from countries with active human rights monitoring and/or a free press. The more systematic use of local media sources by a range of actors has expanded the incidents covered over the past few years, but a bias toward larger-scale incidents still remains. 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 under-representation of incidents from places where these languages are not dominant. Some key sources do not specifically focus on attacks on health care.

ACLED, for example, monitors political violence and protests, which introduces a bias toward these incidents when combined with other sources. Many media outlets are biased towards current affairs, giving attacks on health care more attention when this kind of reporting is trending, 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 incidents of violence against health care from information provided to them by network partners. Some sources operate in only one or a few countries, and others concentrate on partners such as aid agencies whose interests extend beyond just health care. Their information-collection activities include incidents that are never publicly reported. However, these partner compilations are limited to the incidents experienced by the contributing partner organisations. They are therefore biased toward incidents that affect organisations with connections to international networks, and the experiences of health workers or health providers without such connections are likely to be missed. Moreover, networks of this kind report more incidents in countries or territories with a well-established international community presence and fewer incidents in those without such a presence. The use of information from partner networks and international NGOs means that attacks on health programmes run by these NGOs are more frequently reported than those run by local health care providers.

## Accuracy of information and differing definitions

Some organisations record only certain types of incidents, e.g. those involving health facilities or those affecting international aid agencies. There may be errors in the incident descriptions that are available. In addition, not all organisations that compile information on relevant incidents include all the details that would be necessary to systematically code incidents. In particular, information related to the perpetrator and the context of the incident is often missing. In other incidents, the source may be biased towards a particular party to a conflict in the country in question and may report inaccurate information related to perpetrators if they are members of that party.

In some cases, especially those involving robberies and abductions, it is difficult to ascertain from available information whether the act was committed by a party to a conflict or by criminals. We based our inclusion decisions on judgements about the most likely motivations for an incident based on the information included in the available data on the incident. For example, if the theft of drugs from a hospital was carried out by an armed group known to suffer from a disease outbreak (such as cholera) in their makeshift camp from which they attack government positions, the event is coded as conflict-related, based on the assumption that the drugs are needed to maintain the ability to fight of a conflict party. However, an ambush of a convoy of vehicles carrying health workers by armed individuals who steal money, mobile phones and the vehicles' spare tyres is coded as criminal-based on the assumption that the individuals carried out the act to enrich themselves rather than to further a conflict-related cause.

The data presented on this map therefore contains limitations associated with using pre-processed data without access to the original sources or additional detail, which would have allowed for potentially more comprehensive and consistent classification.

## Notes

The list of individual incidents can be downloaded from the [Humanitarian Data Exchange](#).

For questions or comments, please contact: [info@insecurityinsight.org](mailto:info@insecurityinsight.org)

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