

Methodology

COVID-19 pandemic: Attacks on health care in 2020

This document provides the definitions for the data used in the '[COVID-19 pandemic: Attacks on health care in 2020](#)' data by Insecurity Insight and information on the methodology used to generate the data. Insecurity Insight's HDX Aid Security and COVID-19 page contains two separate data sheets from the same dataset:

1. COVID-19 pandemic: Attacks on health care in 2020

This coded dataset contains data on two different types of COVID-19 related events that affect aid security:

- **COVID-19 Event:** Event in response to COVID-19 health measures, events that affect the delivery of COVID-19 health measures, and events where health workers working during the COVID-19 pandemic were harmed.
- **Conflict Event:** Conflict-related event affecting health care.

The events are coded based on available information about the event. Events are added to this datasheet after a cleaning and verification process. Insecurity Insight is receiving help for this work from John Hopkins University (USA), Drexel University (USA) and the Berkeley Human Rights Lab, (USA).

2. Conflict Events Affecting Health Care in 2020

This dataset contains only the Conflict Events from the above dataset. It contains only events that are perpetrated by conflict actors, defined as state security forces or non-state actors engaged in armed conflict or who carry out one-sided violence against civilians. It provides details on the perpetrator and the weapon use. This dataset follows the definition and methodology of the [Safeguarding Health in Conflict Coalition](#) (SHCC)

The datasets can be viewed at: www.data.humdata.org/dataset/aid-security-and-covid-19.

Visit our website: www.insecurityinsight.org/projects/aid-in-danger/aid-security-and-covid-19

Key definitions

COVID-19 pandemic: Attacks on health care in 2020

Any act of verbal or physical violence, obstruction, or threat of violence that interferes with the availability of, access to, and delivery of health services in the context of the COVID-19 pandemic.

Attacks on health care

The dataset is based on 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 accordance with the WHO's definition, events 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.

COVID-19 Event: Events directly related to the COVID-19 pandemic

Any act of verbal or physical violence, obstruction or threat of violence that is motivated by fear of the infection, opposition to or enforcement of any measures put in place to contain the spread of infection, or opposition to health measures implemented or any acts of violence that directly affect the COVID-19 response because they injured or killed health workers engaged in the COVID-19 response or working in health care during the pandemic and damaged or destroyed health facilities during the COVID-19 pandemic.

Conflict

Any act of verbal or physical violence, obstruction, or threat of violence against health care providers perpetrated by conflict actors. We refer to the Uppsala Conflict Data Program (UCDP)¹ to determine if the perpetrator in an attack on health care is considered a conflict actor. The focus is on events of violence against health care in the context of conflict or in situations of severe political volatility and public health programmes. Interpersonal violence or violence by patients against health care providers are not included, even when they occurred in conflict-affected countries. Violence against health workers in the context of demonstrations or public unrest are included, if these occur in countries that also experience conflict as defined by UCDP.

Health care

Services provided to maintain and improve the human health via prevention, diagnosis, treatment from disease, illness, or injury. Health care can be provided physicians, nurses, mid-wives, pharmacists, physiotherapists, paramedics and others working for a private, government or charity run health services, that may be financed with contributions from the international community, INGOs, local governments, philanthropists, medical insurances and people seeking access to health care. It includes the provision of primary, secondary, and tertiary care as well as public health.

Health worker

Any person working in a professional or voluntary capacity in the provision of health care or who provides direct support to patients. Includes: administrator, ambulance personnel, dentist, doctor, government health official, hospital staff, medical education staff, nurse, paramedic, physiotherapist, surgeon, vaccination worker, volunteer or any other health personnel not named here.

COVID-19 worker

Any person - other than members of the state security forces or vigilante groups trying to enforce government measures- who supports the health work during the COVID-19 responses with for example, disinfecting, contact tracing, sensitization about health measures, organization of safe burials etc.

Health facility or COVID-19 related facility

Any facility that provides direct support to patients or those suspected to be infected with COVID-19. Includes clinic, hospital, laboratory, makeshift hospital, medical education facility, mobile clinic, pharmacy, warehouse, or health facility not named here, as well as other facilities turned into temporary COVID-19 treatment or quarantine facilities.

Health transport

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

CODEBOOK

Events are coded based on available information about the event. Each row represents an individual event. Only the relevant columns are filled in.

1. COVID-19 pandemic: Attacks on health care in 2020

This dataset contains data on two different types of COVID-19 related events that affect aid security:

- **COVID-19:** Event in response to COVID-19 health measures, events that affect the delivery of COVID-19 health measures, and events where health workers working during the COVID-19 pandemic are harmed.
- **Conflict Events:** Conflict-related event affecting health care.

* **Event number:** Unique number used to order events by event number.

* **Date:** YYYY-MM the event took place (e.g. Events in February would be 2020-02).

* **Month:** Month the event took place.

* **Day:** Day the event took place.

* **Country:** Country in which the event occurred.

* **COVID-19 Event:** Note, an event can be classified as both a COVIDEvent and ConflictEvent:

COVIDEvent	The event impacting health care related to COVID-19. Example: Rioters attacked an ambulance and attempted to disrupt hospital activities over the transportation of patients afflicted with COVID-19.
NotApplicable	There is no indication that the event is related to COVID-19. Example: Unidentified perpetrators abducted a doctor of the Federal Medical Centre from his private residence. A ransom of N10 million has been demanded for his release.

* **Conflict Event:** An event is considered a conflict related event if it was perpetrated by an actor linked to conflict. We referred to the Uppsala Conflict Data Program (UCDP)² conflict actor ID system to determine which perpetrators are considered **conflict actors**. Note, an event can be classified as both a COVIDEvent and ConflictEvent:

ConflictEvent	The perpetrator of the event was a conflict party pursuing a conflict related activity. Example: A national SCD volunteer and four civilians were killed in bombing by Russian warplanes.
NotApplicable	There is no indication that the perpetrator had any links to a conflict party or acted in the context of an ongoing armed or one-sided conflict as defined by SHCC. Example: Rioters attacked an ambulance and attempted to disrupt hospital activities over the transportation of patients afflicted with COVID-19.

Suggested citation: Insecurity Insight. 2020. Attacks on health care during the COVID-19 response January and June 2020. v. August 2020. Geneva,

2. Conflict Events Affecting Health Care

This dataset contains only the *Conflict Events* from the above dataset. It contains only events that are perpetrated by conflict actors, defined as state security forces or non-state actors engaged in armed conflict or who carry out one-sided violence against civilians. It provides details on the perpetrator and the weapon use. This dataset follows the definition and methodology of the **Safeguarding Health in Conflict Coalition** (SHCC).

* **Event number:** Unique number used to order events by event number.

* **Country:** Country in which the event occurred.

* **Date:** YYYY-MM the event took place (e.g. Events in February would be 2020-02).

* **Month:** Month the event took place.

* **Day:** Day the event took place.

* **Perpetrator:**

NonStateArmedGroups	The perpetrator is part of a <u>named</u> or unnamed armed group who are not formally part of the state's law enforcement, military, or security apparatus and includes groups opposed to the government, paramilitary groups working informally for the government and vigilante groups .
StateForces	The perpetrator is a member of the state administration or a member of the state security forces whether military or law enforcement.
MultipleActors	There are multiple perpetrators involved in this event. This could include cross-fire that affected health care between state and non-state actors for example.
NoInformation	The report does not identify the perpetrator, or the perpetrator is unknown

* **Weapon use:** If known, this field provides information about the category of weapons used. If no weapons were used, it is left blank. If the report mentions weapons were used (e.g. an armed group ransacked a clinic,) but it is unclear what type of weapon was used it is coded as 'NoInformation'.

ExplosiveWeapons	This include any of the following weapons: general explosives (including IEDs), aerial bombing, artillery, missiles, mortars, RPG, or shells, grenades, mines, car combs, explosive belts or vests
Firearm	This includes any of the following weapons: Assault rifle, such as Kalashnikov AK47, M16, hunting rifles, or handguns.
NoInformation	The report makes it clear that weapons will have to be involved but does not include any information what kind of weapon was used in the event
Other	The event involved other weapons such as clubs/batons, fire, knives, stones or other items.

Suggested citation: Insecurity Insight. 2020. **Conflict Events Affecting Health Care January-June 2020 v. August 2020.** Geneva, Switzerland: Insecurity

Methodology

Event criteria: We included only the events that meet the following criteria

- Events affecting health facilities (recording whether they were destroyed, damaged, looted, or occupied by armed bodies)
- Events 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
- Events affecting health transport (recording whether ambulances or other official health vehicles were destroyed, damaged, hijacked / stolen, or stopped /delayed)
- Events that are directly related to a COVID-19 treatment or prevention measure, including lockdowns, quarantining, treatments or burial of patients or related laws and regulations and research.
- Events of access constraints such as ambulances being preventing from reaching their intended destination.

Sources

The aim of the **COVID-19 pandemic: Attacks on health care in 2020** event monitoring is to bring together known information on violence or threats of violence perpetrated in the context of the COVID-19 pandemic. Access to sources differs between countries. Each source has its own strengths and weaknesses. Each source introduces unique reporting and selection biases, which are discussed below.

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

1. Information included in Insecurity Insight's Monthly News Briefs on Aid Security, Attacks on Health Care, Education in Danger and protection in Danger. These News Briefs provide a combination of media sources and publicly shared information from partner networks, such as the Aid Worker Security Database (AWSDB)³ for global data from international aid agencies coordinating health programs; Airwars,⁴ the Union of Medical Care and Relief Organizations (UOSSM),⁵ and the Syrian Network for Human Rights (SNHR)⁶ for data on Syria; the Civilian Impact Monitoring Project (CIMP)⁷ for data on Yemen; as well as databases, such as the Armed Conflict Location & Event Data Project (ACLED).⁸
2. Research conducted by Insecurity Insight staff to identify additional events reported by UN agencies, the media, and other sources
3. Information from the WHO's SSA for seven countries: Afghanistan, Libya, Myanmar, Nigeria, the oPt, South Sudan, and Yemen. Information from the SSA represents approximately 5 % of the data gathered in this dataset.
4. Aid in Danger partner agencies.

Coding principles

The datasets are compiled following general theory and principles of event-based coding. Care is taken not to enter the same event more than once. The standard coding principles are described above. Please see www.insecurityinsight.org/projects/healthcare/shcc for full details regarding SHCC coding and annexes.⁹ The coding is based on reported information. However, some forms of violence, such as psychological violence, blockages of access, or threats of violence, are rarely reported. We also record events of violence against patients within health facilities when included in event descriptions. However, the impact of events of violence against patients is much broader and complex than individual events and cannot be accurately documented through event-based monitoring.

Data limitations

The dataset is based on reported and identified events of violence in the context of the COVID-19 response and that are relevant for Aid Security. The events included provide a minimum estimate of the number of violent events in the context of the COVID-19 response. However, the severity of the problem is likely much greater, as many events 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 events.

The dataset suffers from limitations inherent in the information gathered in open sources and provided by contributors 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 events by country should not be compared to those of other countries without considering the factors that affect information flow. For example, events in English speaking countries that enjoy high levels of press freedom will be more frequently included than events from countries in national languages and where journalists would take risk to report on violence in the context of the COVID-19 response.

Reported context categories should not be read as describing the full range of particular events or how frequently they occur. For example, largescale events that affect multiple people are more likely to be captured by reporting systems than the harassment experienced by individuals. These events are likely to occur more frequently than reports indicate.

Reporting and selection bias

The dataset suffers from reporting bias the technical term for selective reporting. While the process of data cleaning carried out focuses exclusively on selecting events based on the inclusion criteria, the pool of information accessible for this process depends on the work done by those who first reported the events. 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 datasets may not be complete or representative and that only a selection of events is included in the first lists that are used to compile the final COVID-19 dataset. The COVID 19 dataset therefore only covers a fraction of relevant evidence and covers events in certain countries and certain types of events more widely than others.

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 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 violent event, while in others, hardly any events 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 events and will provide more events 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 events covered over the past years, but a bias toward larger events 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 events 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 protests¹⁰ and thus introduces a bias toward events 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 (AWSDB), and the WHO's SSA, compile lists of events 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 events that are never publicly reported. However, these partner compilations are limited to the events experienced by the contributing partner organizations. They are therefore biased toward events 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.

¹ Department of Peace and Conflict Research, Uppsala Universitet. The Uppsala Conflict Data Program. <https://ucdp.uu.se/> (accessed March 10, 2020).

² Department of Peace and Conflict Research, Uppsala Universitet. The Uppsala Conflict Data Program. <https://ucdp.uu.se/> (accessed March 10, 2020).

³ <https://aidworkersecurity.org/>

⁴ <https://airwars.org/>

⁵ <https://www.uossm.org/>

⁶ <http://sn4hr.org/>

⁷ <https://civilianimpactmonitoring.org/>

⁸ <https://www.acleddata.com/>

⁹ www.insecurityinsight.org/projects/health_care/shcc

¹⁰ <https://acleddata.com/#/dashboard>