

Measuring SDG 16.1.2: The UCDP Data

This paper is intended as a contribution to ongoing discussions on how to measure SDG indicator 16.1.2: “Conflict-related deaths per 100,000 population, by sex, age and cause”.

It explains in detail the definition and methodology used by the Uppsala Conflict Data Program (UCDP), and shows how the international community, UN agencies, NSOs, NGOs, and civil society organizations can utilize these data to track progress on this indicator.

Brief Points

- Measuring armed conflict is integral to the sustainable development agenda
- The UCDP has developed a definition and methodology for collecting data on conflict and conflict-related deaths
- This definition draws on established social science research and is compatible with International Humanitarian Law
- The UCDP has also developed infrastructure that allows annual updating of these data

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Introduction

In September 2015, world leaders agreed on the transformational 2030 Agenda for Sustainable Development, with an ambitious set of 17 Sustainable Development Goals (SDGs) and 169 targets. Member States identified peace as one of five cross-cutting development priorities for the world, captured in Goal 16 to “Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels”. To measure peaceful societies, member states have agreed on indicator 16.1.2: “Conflict-related deaths per 100,000 population, by sex, age and cause”.

Presently, NSOs are not comprehensively collecting data on conflict-related deaths. However, the Uppsala Conflict Data Program has developed and extensively tested a definition of armed conflict as well as a methodology for collecting data on conflict and conflict-related deaths. The UCDP currently provides such data for every country in the world annually.

These data are considered the gold standard in the scientific data on armed conflict. In this brief, we discuss the definition and methodology used by the UCDP and show how it could be utilized to inform official reporting and data collection for SDG indicator 16.1.2. We also use the UCDP data to illustrate historic and recent trends in armed conflict.

UCDP Methods and Sources

The UCDP has been providing global data on armed conflicts for the past 40 years. Unlike any other conflict data-gathering group in the world, the UCDP has become a permanent institution, a global data provisioning infrastructure that is the most cited academic source for conflict data. Given the unique intention of the program and its commitment to data provisioning, UCDP is exclusively staffed by permanent full-time experts at all levels – from data collection and data processing to analysis and management.

UCDP collects georeferenced events-level data that are available in a free, online database, which allows end-users to specify their own datasets. Events are aggregated to produce comprehensive lists of armed conflicts, which have been published annually in the *Journal of Peace Research* since 1993.

The UCDP uses a wide array of sources to code its conflict data. Media sources, particularly local news sources, compose an important foundational source, as do local human rights NGOs that make their data publicly available.

In addition, the UCDP also consults reports and documentation from the UN and other international organizations, other research projects, reports from truth and reconciliation bodies, and in-depth case studies. UCDP uses this plurality of data sources to triangulate conflict activity and to verify or discard the reliability of claims.

The UCDP maintains an informal network of experts – mainly researchers, NGO workers, and diplomats – that can be contacted for clarification. This wide array of coding sources ensures that UCDP includes even low-intensity conflicts that may not have received much attention from international organizations or in international news sources.

Defining and Operationalizing Armed Conflict

The UCDP’s definitions have been carefully crafted since the project’s inception, forming the backbone of the program. These definitions have become standard in the world of conflict research. They allow the UCDP to consistently identify violent conflict, as well as clearly specify and categorize conflict in terms of overall goals, intensity level, and participants. In this respect, UCDP data is optimal for measuring the number of direct conflict-related fatalities on an annual, global basis.

The UCDP requires a low minimum level of intensity of violence – operationalized as 25 annual fatalities – which allows users to track conflicts already in their early stages. It also requires a minimum level of organization for armed groups by specifying that they must have a name and organizational structure for inclusion. In this, the UCDP definition of armed conflict matches, to a large extent, the definition of an armed conflict found in International Humanitarian Law (IHL). IHL, which differentiates between international armed conflict and non-international armed conflict, also requires a minimum level of intensity and a level of organization to classify a confrontation as an armed conflict.

The UCDP collects data on four main categories

of violence: interstate armed conflict (conflict between two or more states); intrastate armed conflict (conflict between the government of a state and one or more non-state armed groups); non-state conflict (conflict between two or more non-state armed groups); and one-sided violence (the intentional killing of civilians by a state or non-state armed group). These categories are mutually exclusive, allowing the user to examine the relationship between different types of violence or to aggregate these different types of violence as they deem appropriate. For every conflict event, a determination is made as to what category of violence the event falls into, the location and date of the event, and the number of fatalities.

Building on conflict theory, the UCDP defines state-based armed conflict around political issues, i.e., incompatibilities concerning government and/or territory that are disputed by force by two parties, of which at least one is the government of a state. (For full definitions, see online appendix.) Hence, state-based armed conflicts are political in this central aspect. In contrast, there is no requirement of any identifiable incompatibility in the definition of non-state conflict, which involves the use of armed force between two organized armed groups, neither of which is the government of a state.

This means that what would typically be thought of as criminal violence, e.g., turf wars between drug cartels, may show up in the non-state conflict category. However, much lethal criminal violence will never enter UCDP figures. This can be because the intensity threshold – at least 25 deaths between the same two organized groups in one calendar year – is not

I: The 2008 Mumbai Attacks: Many Events in One

Over a period of four days in November 2008, Mumbai experienced a series of attacks that led to 164 deaths. On the first day, bombings and shootings targeting civilians occurred at numerous locations in Mumbai. As gunmen moved through the city and security forces responded, more altercations took place. After setting off several bombs, gunmen took hold of the Taj Hotel for several days, shooting civilians and holding others hostage. The gunmen were eventually killed by Indian special forces. In coding this incident, UCDP distinguishes between the cases of one-sided violence against civilians by militants and armed conflict altercations between armed forces and militants.

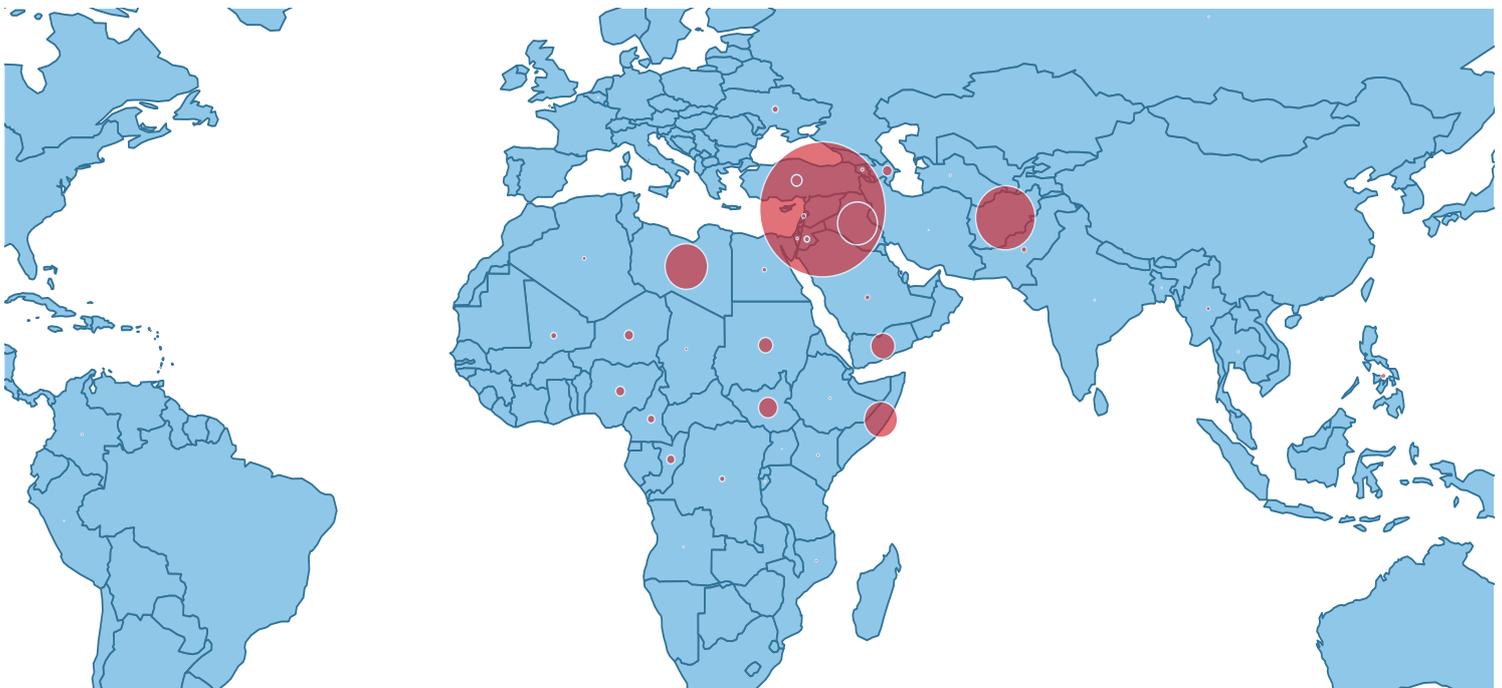


Figure 1: Bubble map of conflict-related deaths per 100,000 inhabitants, 2016.

met, or because many of the criminal deaths are impossible to attribute to any identifiable actor. Thus, state-based armed conflict captures violent political conflict, whereas some criminal violence is coded as non-state conflict.

Neither is there a requirement of any identifiable political issue in the definition of one-sided violence. Sometimes one-sided violence happens as part of criminal activities, e.g., numerous targeted killings of civilians by the drug cartel Los Zetas in Mexico. Yet, both non-state conflict and one-sided violence often happen in close connection to wider political conflict.

The UCDP focuses exclusively on direct deaths, i.e. those that result from the use of arms. The main criterion is intentionality, so fatalities that derive from means other than arms must have been clearly deployed with murderous intent. Such incidents are rare. Events where intentionality is problematic to infer, such as fatalities resulting from the deprivation of health care or denying movement of access to goods and services, are not included.

The UCDP includes both *civilian* and *belligerent* fatalities. In defining civilians, the UCDP applies a factual rather than legal categorization. Military forces and police officers, as agents of the state's security apparatus, are included as

belligerents. High-level officeholders are also included as state agents due to their symbolic roles as representatives of the state. Local public civil servants are not considered belligerents.

Leave No One Behind: Disaggregation

Disaggregated events-level data facilitate the identification of unique events and ensure against duplication. Disaggregated data can also be used for analytical purposes and to inform discussions about policy. There are a number of types of disaggregation which may be of interest to end users for analysis, including date and location of events; status of the victim and perpetrator; name, sex, and age of the victim; and cause of death.

Several of these categories of disaggregated data are already part of UCDP's data collection procedures. The *date* and *location* of conflict fatality events are collected at the most disaggregated level possible. Careful reading of the incident reports allows trained coders to distinguish between unique events that take place close in time and space to other events (see Box 1). The UCDP also codes the *status of the victim*, that is, whether s/he was a civilian or member of an armed group. The *status of the perpetrator* is included to a degree. The perpetrator is always recorded when armed groups attack civilians. Determining a "perpetrator" is more difficult for

clashes and other events where more than one armed group is involved in fighting, as parties often disagree about who initiated the fighting. The UCDP collects data on the identity of individuals killed in such encounters, but does not attribute the violence to one or another party.

The *cause of death*, i.e. the weapons or other means used to execute the act of violence, is usually available in the source data that UCDP uses in coding and is an integral part of the determination of inclusion in the dataset. While this data is not currently recorded in the dataset, the fact that these data are available means that this could easily be included if resources allowed.

2: Coding Women and Children in Conflict

Afghanistan and India were selected for a pilot study to code the sex and age (mi-nor/adult) of conflict victims. Despite these countries having amongst the best data coverage, UCDP found that information was only available for 11–12% of the fatalities. UCDP also found that the sex and age were more likely to be reported for acts of deliberate civilian victimization rather than for fighting between belligerents, concluding that there is a risk that observers emphasize when women or children are killed.

Finally, the individual attributes of those killed, such as *name of the victim*, *sex of the victim*, and *age of the victim*, pose considerable data collection challenges. The source data only rarely includes this level of detail. The UCDP has conducted a pilot study to determine the extent to which data on the sex of the victim and whether they are a minor or an adult could be coded (see Box 2). The results indicate that there is likely to be a reporting bias, such that acts of victimization in which women and children die are more likely to contain information about the sex and age of the victims.

Using UCDP Data to Examine Current and Past Trends in Conflict

Using the UCDP data, we can identify 1049 conflicts (171 state-based, 624 non-state and 254 one-sided) in 117 locations since the end of the Cold War. This includes all organized military conflict over government or territory involving one or more state government(s) and causing at least 25 battle-related fatalities in a year, as well as non-state conflicts and one-sided violence. In 2016, there were 49 state-based conflicts, two of which were interstate, down by three from the previous year; 60 non-state, down by 13 from 2015; and 21 instances of one-sided violence, down by five from 2015. These are shown in the map in Figure 1, where the bubbles are proportional to the number of conflict-related fatalities per 100,000 inhabitants.

Figure 2 displays the number of fatalities from state-based, non-state, and one-sided violence per 100,000 inhabitants from 1989 to 2016. We see a general slow trend towards fewer fatalities across the period. This trend is punctuated, however, by a massive spike in 1994, driven by the Rwandan genocide. We also see an uptick in the fatalities starting with the onset of the Syrian armed conflict in 2011. Presently, fatalities from conflict are highly geographically

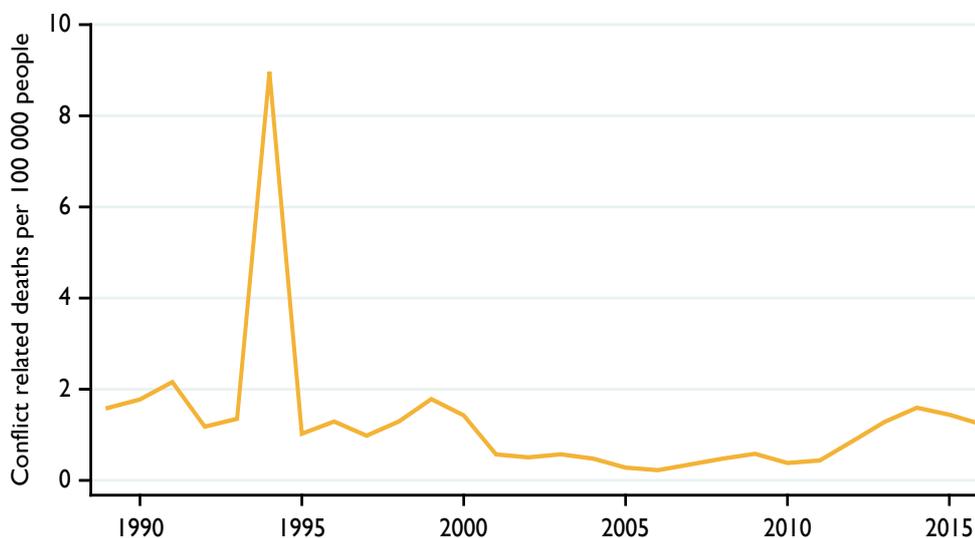


Figure 2: Conflict-related deaths per 100,000 inhabitants.

concentrated. As illustrated by Figure 1, a few countries account for a large portion of all conflict fatalities. Indeed, Syria, Afghanistan, and Iraq alone accounted for around 80% of all fatalities in 2016.

Despite some negative trends, there are signs of hope for some of the most long-lasting, intractable conflicts. A peace agreement was finally signed in Colombia in 2016 with the main rebel group, FARC, and the government is currently negotiating a separate agreement with a second rebel group, the ELN. Battle deaths have declined dramatically in the country. Violence has also declined in one of the main conflicts in the Philippines (Mindanao), and overall conflict-related deaths have declined in the country.

Since the 1950s, the number of people killed in warfare has generally declined. While the number of armed conflicts in the world fell continuously after the end of the Cold War, since 2013 we have seen a rise in both the number

of conflicts and in battle fatalities. Despite the ongoing conflicts in the broader Middle East, in particular, we can expect the longer-term trend in the decline of war and battle deaths to continue as democratization and development proceed. Yet there is still an urgent need to invest in both conflict resolution and prevention efforts so as to ensure that the march towards global peace continues.

It is paradoxical that the United Nations, founded to end the scourge of war, does not provide official statistics on armed conflicts in the world. The hope is that SDG 16.1.2 will rectify this. Detailed, systematic, and rigorous analyses of conflict are critical if the international community is to achieve the UN Secretary General's ambition to prevent armed conflict. Data is necessary for all policy makers, practitioners, and academics that seek to understand, mediate, and end armed conflict. ■

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UCDP

The Uppsala Conflict Data Program (UCDP) is the world's main provider of data on organized violence and the oldest ongoing data collection project for civil war, with a history of almost 40 years. Its definition of armed conflict has become the global standard of how conflicts are systematically defined and studied.

PRIO

The Peace Research Institute Oslo (PRIO) is a non-profit peace research institute (established in 1959) whose overarching purpose is to conduct research on the conditions for peaceful relations between states, groups and people. The institute is independent, international and interdisciplinary, and explores issues related to all facets of peace and conflict.