Warfare becomes less deadly

The 20th century saw dramatic changes in the number of people killed on the world's battlefields.

The two world wars accounted for a large majority of all battle-deaths in this period, with Europe being the major killing ground.

> In the second half of the century most of the killing took place in the developing world, especially in Asia.

World War I killed 1 to 3 million people a year on the battlefield. World War II was far more deadly, with an average 3 to 4 million battle-deaths a year. Since the Korean War ended in 1953, the annual global battle toll has never again reached even half a million a year.

In the second half of the century, which is the focus of this report, most of the killing took place not in Europe but in the developing world, especially in Asia.

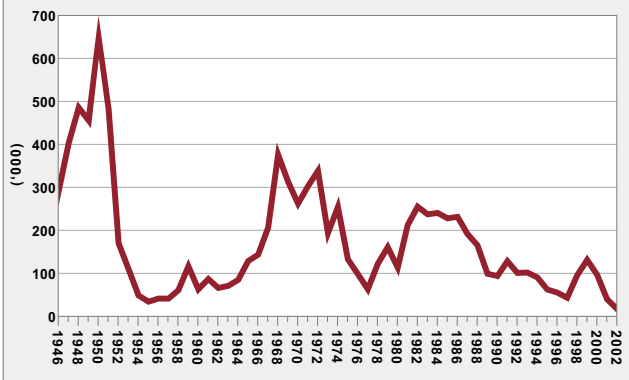
Figure 1.6 shows the global trend in battle-deaths from 1946 to 2002; battle-deaths include civilians killed in the fighting. These death tolls are from conflicts in which a state is one of the warring parties and do not include deaths from intercommunal and other non-state conflicts. Nor do they include deaths from massacres or genocides, which is why Figure 1.6 does not show a major spike in 1994, the year of the genocide in Rwanda.

There was a marked but uneven downward trend in global battle-deaths during the second half of the 20th century. Figure 1.6 shows absolute figures: the total number of deaths per year. But it does not take into account the fact that the world population more than doubled between 1950 and 2000.

Figure 1.8, in contrast, presents a decade-by-decade picture of global battle-deaths per thousand of the world's population. By using death rates per thousand, rather than absolute numbers, it gives a better picture of the declining deadliness of warfare. The battle-death rate in the 1990s was only one-third that of the 1970s.

Figure 1.8 is based on a different dataset to Figure 1.6, and counts only those conflicts in which there were at least 1000 battle-deaths in a year. Since it averages deaths across each decade, the trend in Figure 1.8 looks somewhat different to that in Figure 1.6

Figure 1.6 War becomes less deadly: Battle-deaths, 1946–2002



Source: Lacina and Gleditsch, 2004 [18]

Since the end of the Korean War in 1953, there has been a clear but uneven decline in battle-deaths around the world.

> From 1946 to 2002 a mere five wars accounted for more than half of all battle-deaths.

The single most important reason for the decline in battle-deaths over the past 50 years is the changing nature of warfare.

From 1946 to 2002 a mere five wars together accounted for more than half of all battle deaths. They were the Chinese Civil War (1946–49), the Korean War (1950–53), the Vietnam War (1955–75), the Iran-Iraq War (1980–88) and the wars in Afghanistan (1978–2002). All involved huge armies and heavy conventional weapons, while today's wars are predominantly low-intensity conflicts.

WHO'S WAR DEATH DATA AND THE *HUMAN SECURITY REPORT*

The World Health Organization is the only international agency that has published data on war death numbers. Its death toll estimates, for the years 1998 to 2002, were far higher than those of other datasets.

In the Overview we noted that neither governments nor international organizations publish annual counts of the number or the human cost of armed conflicts. There is one partial exception to this rule. The World Health Organization (WHO) provided estimates of global and regional war deaths from 1998 to 2002 in the *World Health Report*. The dataset used for these reports also disaggregated war deaths on the basis of age and gender, something that no other datasets have done.

The *Human Security Report* does not use WHO data for two reasons.

First, WHO war death data cover only five years—1998 to 2002—in contrast to the 57-year period—1946 to 2002—covered by the Lacina and Gleditsch battle-death data. A five-year time series obviously cannot describe long-term trends, nor is it very useful for statistical analysis.

Second, we have concerns about the methodology WHO used to determine war deaths.

The *World Health Report* findings do, however, pose a challenge to the Lacina and Gleditsch dataset on which the *Human Security Report* relies. The global war death totals from violence that WHO reports are from two to nine times greater than the battle-deaths reported by Lacina and Gleditsch and the WHO's data bear little relationship to any other dataset.[19]

WHO researchers have stressed the uncertainty that surrounds their estimates, and they define war deaths somewhat more widely than Lacina and Gleditsch. But WHO's more inclusive definition of 'collective violence' cannot possibly account for the huge disparity between its death toll totals and those of the Lacina and Gleditsch dataset.

WHO reports provide little information on how the war death data are estimated, other than to say that they were obtained from a variety of published and unpublished war mortality databases, including the Project Ploughshares *Armed Conflict Report* for 2001 and 2002.[21]

Project Ploughshares is a widely respected Canadian NGO that estimates ranges of battle-death numbers each year for countries in conflict. Its estimates are somewhat higher than those of Lacina and Gleditsch, in part because it defines conflicts differently. But Project Ploughshares' estimates are much lower than the WHO war death estimates.

WHO states that the war death data from its 'primary source', Project Ploughshares, are 'vetted against the historical and current estimates of other research groups'.[22] But the disparity between the Lacina and Gleditsch data and the WHO data is striking. Figure 1.7 illustrates the differences.

It seems likely that WHO estimates are higher than those of other datasets because WHO researchers take median estimates of deaths from other sources and then multiply them by an 'adjustment factor'. It is not clear what that factor is, how it is determined, why it should differ from year to year, and what the rationale behind it is. Nor is it clear how WHO establishes the global and regional gender and age breakdowns for their war death data.

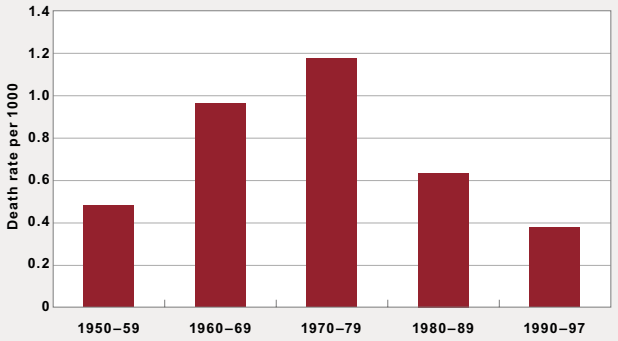
In 2002 WHO revised the death total for 2000 from 310,000 down to 235,000. The *World Health Report* no longer includes war death data.

	Lacina/Gleditsch	WHO
1998	97,893	588,000
1999	134,242	269,000
2000	99,536	235,000
2001	42,068	230,000
2002	19,368[20]	172,000

Figure 1.7 War death estimates compared
WHO war death figures are many times greater than the Lacina and Gleditsch figures. It is not clear why.

Source: Human Security Centre, 2005

Figure 1.8 War death-rates by decade, 1950–1997



Source: Human Security Centre 2004[25]

When global battlefield deaths are measured not in absolute numbers but per thousand of the world's population per decade, it becomes clear that war in the 1990s was only one-third as deadly as in the 1970s.

As Bethany Lacina and Nils Petter Gleditsch point out in the most comprehensive recent analysis of post-World War II battle-deaths, 'the most cataclysmic battles of the past half century were related to the now defunct ideological polarization between East and West'.[23] The fact that conflicts are no longer exacerbated by the imperatives of Cold War geopolitics means that one of the major drivers of high battle-death rates has also ceased to exist.

The best single indicator of the deadliness of wars is the average number of battle-deaths per conflict per year. In 1950 there were more than 38,000 deaths per conflict; in 2002 there were just 600—an extraordinary change.[24]

Battle-deaths by region

Against this remarkable worldwide decline in the deadliness of warfare, what has been the regional picture? Figure 1.9 provides a breakdown of battle-death tolls in each of the world's major regions.

- From 1946 to the mid-1970s by far the highest battle-death tolls were on the battlefields of East Asia, Southeast Asia and Oceania.
- By the 1980s the focus of global warfare had shifted and the Middle East and North Africa, sub-Saharan Africa, and Central and South Asia were experiencing the highest number of battle-deaths.
- In the 1990s wars in the Balkans hit a continent that had not seen significant fighting since the aftermath of World War II.
- At the beginning of the new millennium the battle-death toll in sub-Saharan Africa was greater than the toll in all other regions combined.

Beyond battle-deaths

Battle-deaths are an important measure of the human costs of war, but they do not provide the whole picture. As Lacina and Gleditsch put it: 'The number of battle-deaths provides an exhaustive measure of how many have died in combat operations. But it does not provide a remotely adequate account of the true human costs of conflict. War kills people in less direct (but highly predictable) ways, especially when it causes the collapse of a society's economy, infrastructure of health and human services, and public safety systems.'[26]

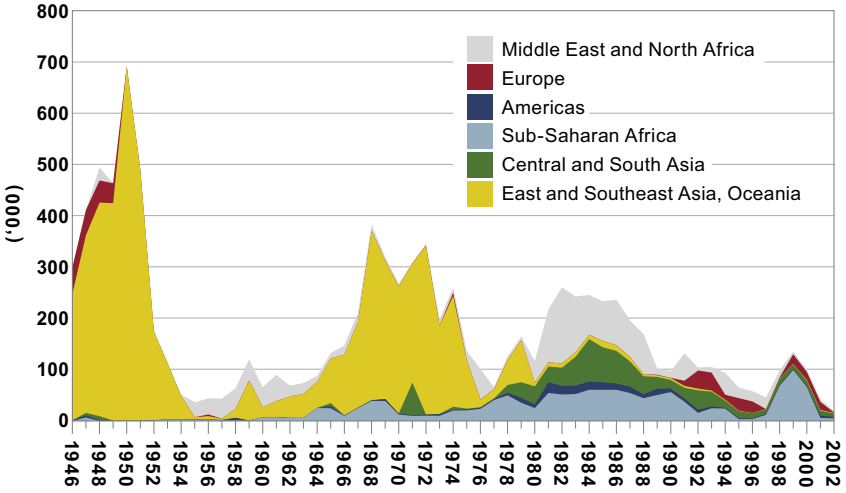
> The number of battle-deaths does not provide a remotely adequate account of the true human costs of conflict.

There are no global trend data on indirect deaths—those caused by war-induced malnutrition and disease. Indirect deaths are examined in Part IV of this report.

FIGURE 1.9

Numbers of battle-deaths, 1946–2002: Global and regional breakdowns

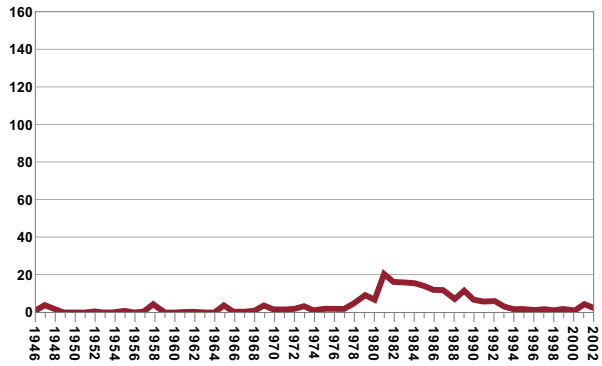
Global



The regional focus of battle-deaths has shifted from decade to decade. In this 'stacked graph', the number of deaths in each region each year is indicated by the depth of the band of colour, and the total number of deaths is indicated by the top line on the graph.

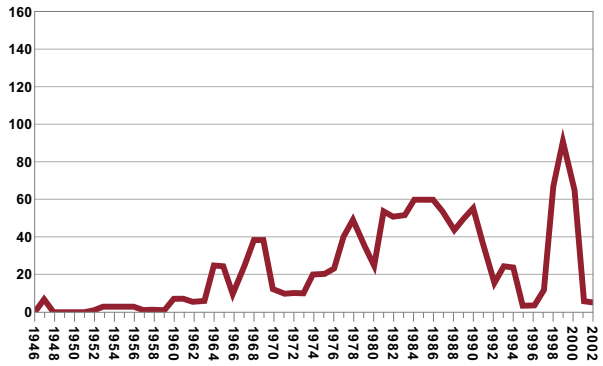
Source: Lacina and Gleditsch, 2004

Americas



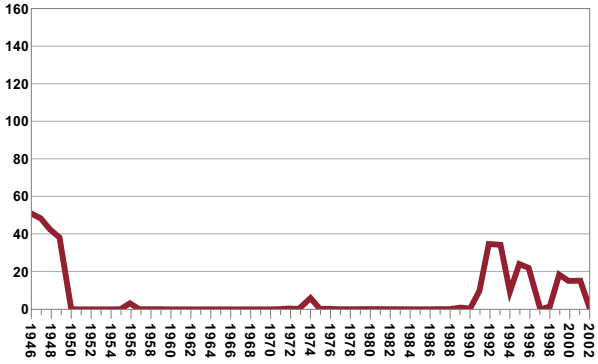
During the 1980s the bloody civil wars in Central America were partly fuelled by the Cold War.

Sub-Saharan Africa



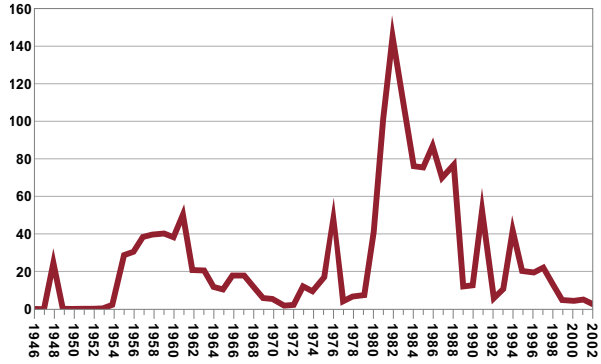
Battle-deaths in sub-Saharan Africa rose from almost zero in 1950 to about 100,000 in 2000.

Europe



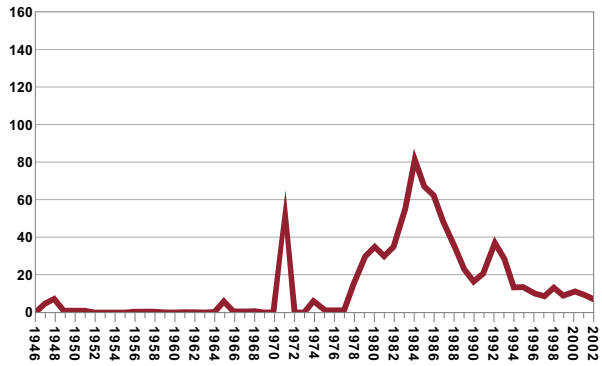
Following the aftermath of World War II, Europe was largely peaceful until the collapse of the Soviet Union.

Middle East and North Africa



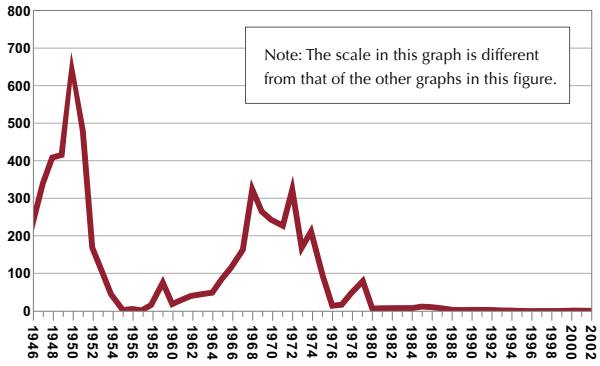
In the first half of the period most battle-deaths were associated with Algeria's bloody war for independence; in the second half it was the Iran-Iraq War.

Central and South Asia



The first three peaks represent the wars between India and Pakistan in 1947–48, 1965–66 and 1971. Later peaks are mainly due to the long-running conflict in Afghanistan, and to the civil war in Sri Lanka.

East Asia, Southeast Asia and Oceania



After accounting for most of the world's battle-deaths from 1946 to the mid-1970s, the region has been free of major conflict since the fighting in Cambodia and Vietnam came to an end.