

Sudan: Death Toll in Darfur

It is estimated that 98-181,000 people have died since March 2003 in the conflict-affected area of Darfur and eastern Chad. Excluding an expected "normal" base mortality total of 35,000 deaths for this population, 63-146,000 "excess" deaths can be attributed to violence, disease, and malnutrition because of the conflict. Wildly divergent death toll statistics, ranging from 70,000 to 400,000, result from applying partial data to larger, nonrepresentative populations over incompatible time periods. Violent deaths were widespread in the early stages of this conflict, but a successful, albeit delayed, humanitarian response and a moderate 2004 rainy season combined to suppress mortality rates by curtailing infectious disease outbreaks and substantial disruption of aid deliveries.

■ Estimating mortality: rationale and methodology

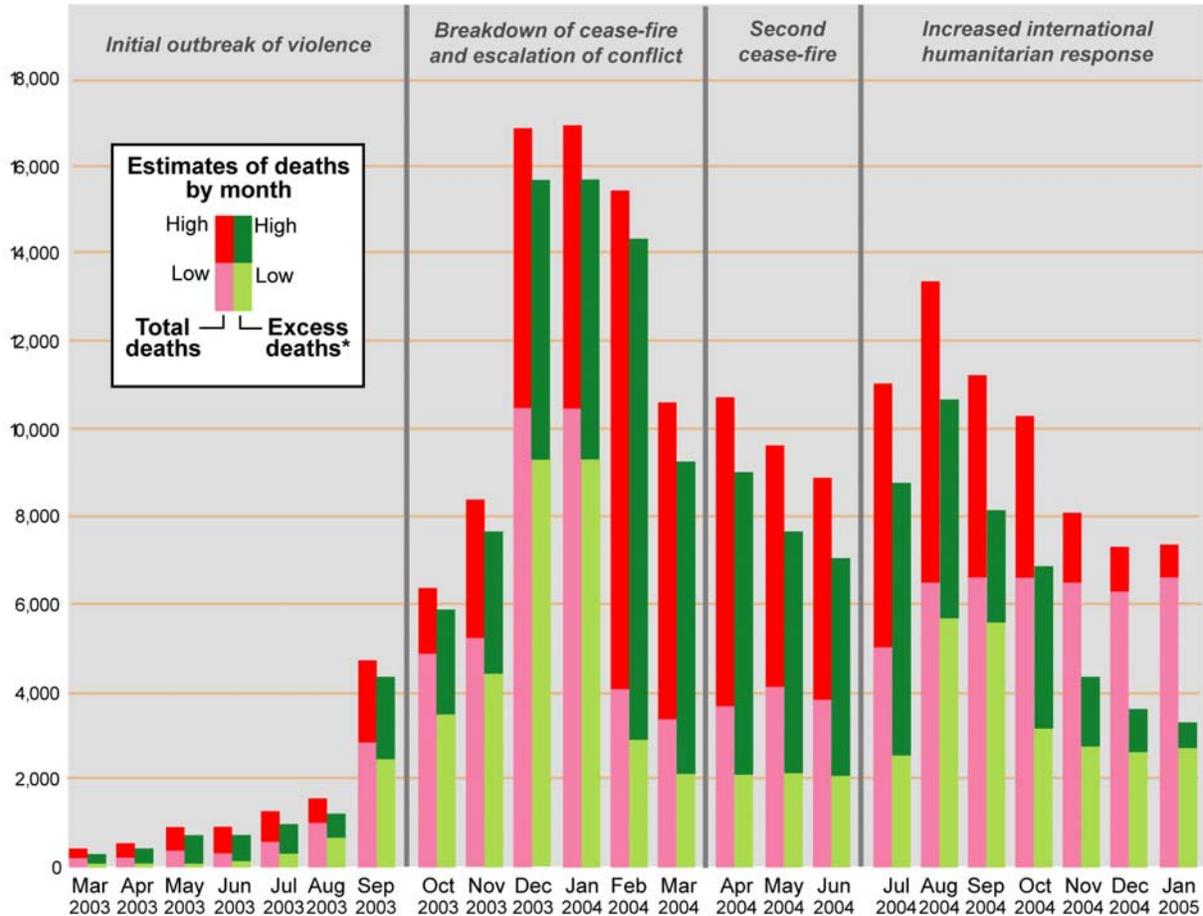
Insufficient data are available to determine Darfur's death toll, a number that will probably never be fully known. The most important factor distorting the debate on deaths in Darfur has been the application of elevated mortality rates derived from site-specific surveys of displaced populations to the broader affected populace, of which they are not representative.

Many extrapolations do not factor in the progression and intensity of the conflict in different areas of Darfur and the consequent shift in rates over time and region. The misconception that violence, not infectious disease outbreaks, is the primary cause of death in most populations affected by conflict also has skewed the many projections regarding loss of life.

The following analysis draws on available information—epidemiological surveys, displacement trends, and patterns of village destruction—to estimate the progression of the conflict and associated mortality rates throughout the three Darfur states from March 2003 to early 2005. Mortality rates were ascertained first from a compilation of more than 30 health and mortality studies conducted in the region; these were applied to other populations experiencing similar levels of violence and displacement to derive mortality estimates for affected populations by

Total Deaths and Excess Deaths* in Darfur and the Chad Refugee Camps High and Low Estimates, March 2003 - January 2005

* Deaths owing to violence, disease, and malnutrition attributable to the conflict.

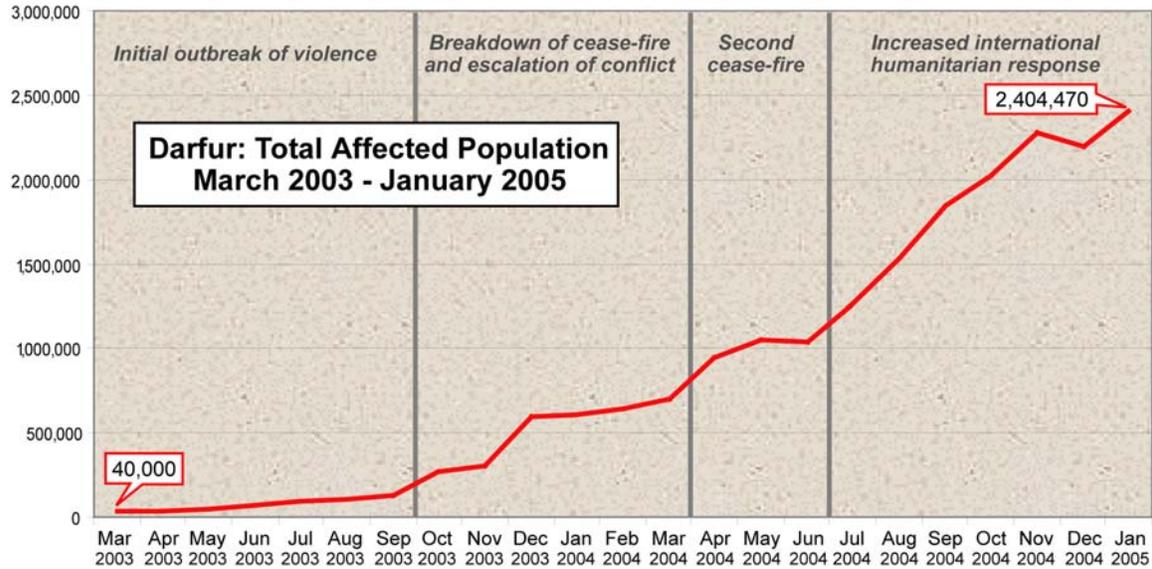


state and month. “High” and “low” estimates of mortality rates were then applied to UN data for all affected populations. Separate rates were applied to displaced and otherwise affected populations with different levels of vulnerability.

■ Progression of the conflict

Initial outbreak of violence (March-September 2003)

The conflict between the government and two rebel groups in Darfur began in February 2003 when the Sudan Liberation Movement/Army (SLM/A) and the Justice and Equality Movement (JEM) carried out the first major attack against a government airport in North Darfur. The government and its local militia allies responded; the conflict then spread to other areas of North Darfur, including Kutum, Malha, and Kabkabiyah as well as parts of West Darfur (see map, p.4). In the early stages, the conflict was relatively limited in scope and resulted in about 110,000 internally displaced persons (IDPs) in North Darfur and an additional



30,000 IDPs in West Darfur by September 2003. The first Sudanese refugees began to arrive in Chad during this time. Figures on displaced populations and mortality are scant, but 4,100-8,800 excess deaths are estimated to have occurred, primarily in North and West Darfur.

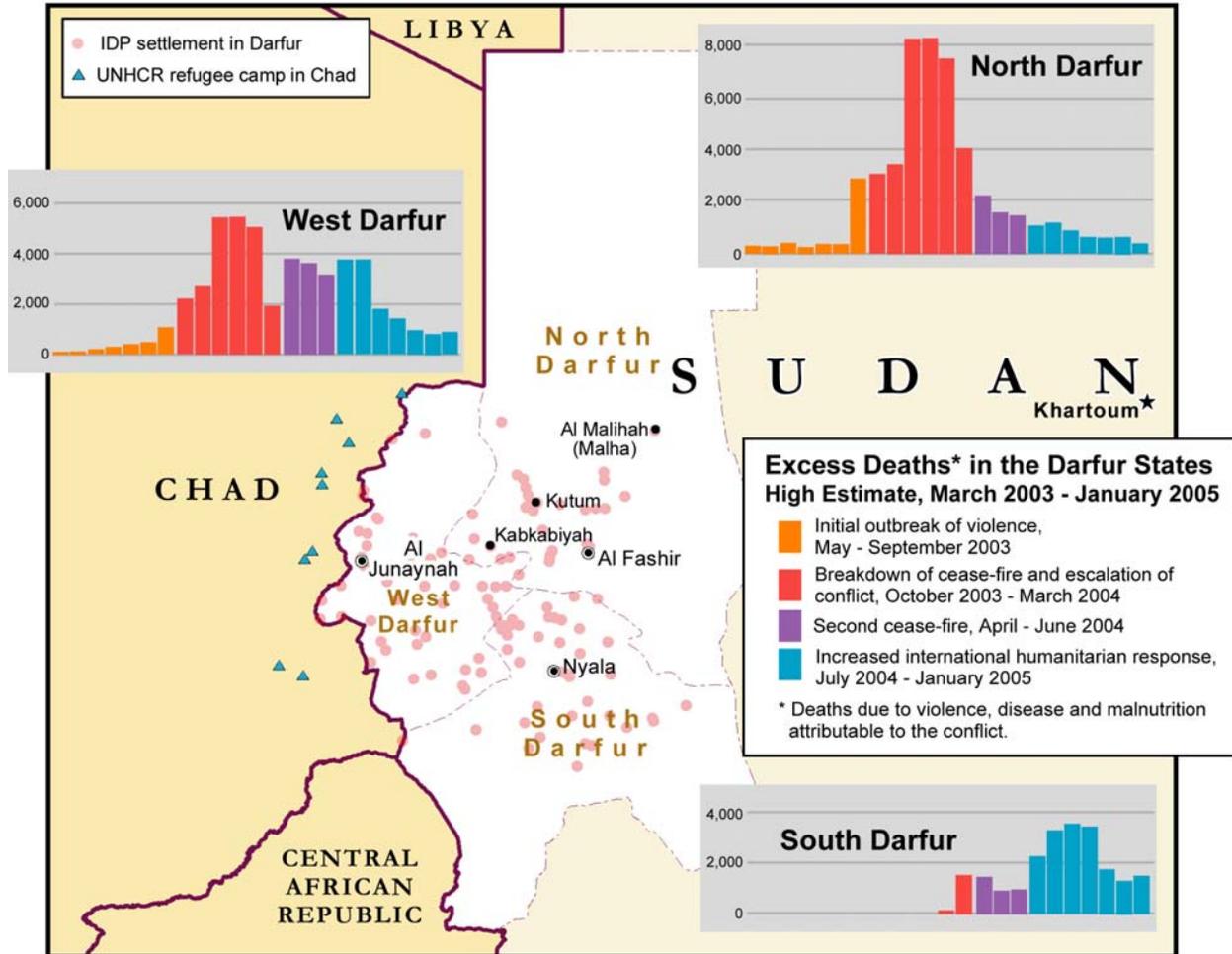
Breakdown of cease-fire/escalation of conflict (October 2003-March 2004)

Failure to implement the September 2003 cease-fire agreement among the SLM/A, JEM, and the government was followed by a swift intensification of the conflict and increased attacks on civilian villages by Jingaweit and government troops. Large-scale displacement occurred and refugees began to arrive in Chad in large numbers. Studies by an NGO operating in West Darfur reveal extremely high mortality rates among displaced populations. The highest numbers of deaths are believed to have occurred during this period, primarily in West and North Darfur, with violence a major cause of death. An estimated 32-68,000 excess deaths (average 5,200-11,400 a month) occurred from October 2003 through March 2004. The fighting in South Darfur was relatively light during this period.

Second cease-fire (April-June 2004)

The April 8 cease-fire agreement among the SLM/A, JEM, and the government, though often violated, led to a significant decrease in the level of violence in Darfur. The decline in violence was brought about by increased international pressure, a greater humanitarian presence in Darfur, and the retreat of rebel forces following a series of battlefield defeats. Violence as a cause of death therefore decreased, but mortality rates among displaced populations in both Darfur and Chad remained elevated because of the increasingly weakened condition of persons arriving at camps and deficient humanitarian assistance. Populations in

West Darfur and Chad suffered the highest mortality and morbidity rates because of their inaccessibility. The conflict and violence spread south and the IDP population of South Darfur doubled in June.



Boundary representation is not necessarily authoritative.

Though region-wide mortality rates dropped, a high number of deaths occurred because of an increase in the affected population throughout Darfur and higher mortality rates in South Darfur. Nondisplaced populations hosting large numbers of displaced persons also began to experience elevated mortality rates as their water and food resources became strained and more vulnerable to infectious disease. Major battles, resulting in a large loss of combatants on either side, sharply declined. From this point on, mortality reflects almost entirely civilian rather than combatant losses. Between 6,300 and 24,000 people (average 2,000-7,900 per month) are estimated to have died in this time period.

Increased international humanitarian response (July 2004-present)

Following increased international pressure, the government gradually lifted most restrictions on access to Darfur for international aid organizations starting in June 2004. The number of humanitarian workers in Darfur increased from 200 in March 2004 to nearly 10,000 (local and international) by March 2005. South Darfur and parts of North Darfur continue to experience fighting and new displacement; stabilization of humanitarian conditions began first in North and then West Darfur. Low-level violence and widespread insecurity have continued throughout the region, with another surge in fighting in November and December 2004. Because of greater humanitarian assistance, mortality rates gradually decreased in mid- to late 2004 and early 2005, but pockets of higher mortality remain, particularly in South Darfur.

This fluctuation of mortality rates tracks with comparative historical experience where mortality rates in complex emergencies tend to return to near normal levels four to six months after the arrival of international assistance. Despite the improvement in humanitarian conditions, which led to lower mortality rates, 21-45,000 estimated “excess” deaths (average 3,000-6,500 per month) occurred during this phase.

■ Why are deaths lower than expected?

The highest rates of mortality were already subsiding—and the cleansing of primarily non-Arab populations from large sections of Darfur was already completed—when the international community realized the scope of crisis in Darfur in the spring of 2004. Though elevated mortality rates were predicted to climb further because of a rise in malnutrition and infectious disease outbreaks—such as measles and cholera—these were largely averted owing to the international humanitarian response and a moderate 2004 rainy season. The fact that many prognosticators overemphasize the degree to which violent deaths contribute to large-scale mortality in a region as big and diffuse as Darfur continues to result in grossly overestimated projections of overall deaths.

■ Not out of the woods yet

Despite enormous logistical and security challenges, the efforts of humanitarian workers in Darfur and Chad—specifically preventing large-scale infectious disease outbreaks and massive food shortages—have saved tens, if not hundreds, of thousands of lives, but the situation remains desperate. The number of displaced and affected persons is still growing, and insecurity continues. The light rainy season of 2004 helped save countless lives in the camps, but its negative impact on the harvest will be felt throughout Darfur in the coming months. Food stocks from the 2004 harvest are estimated to be only 20-50% of those of previous years and will be exhausted in about two months, creating increased food insecurity and malnutrition and possible new displacements as rural populations

travel in search of food. An interruption in the supply of food aid is also expected in the middle of this “hunger gap” before next fall’s harvest.

Substantial new arrivals caused by food shortages may overwhelm already overstretched humanitarian services in camps and urban centers, increasing the risk of infectious-disease outbreaks and causing mortality rates again to spike. Mortality levels are likely to increase among resident populations as well when food shortages spread in rural areas. The interruption of traditional livestock and grain trading mechanisms has debilitated the local economy, further aggravating vulnerability and the risk of “aid pull” displacement. Though fighting calmed in recent weeks, general lawlessness—and resulting attacks on aid workers—are rising. Further deterioration of the security situation or increased direct targeting of humanitarian workers, resulting in a significant interruption of aid access, would be disastrous in the precarious months ahead.