From the Director’s desk

Dear CE-DAT friends,

CRED wishes you a happy, productive and peaceful New Year 2009. In this eighth newsletter, the CE-DAT team has chosen to look into the trends from 2008 compared to the previous years. While methodological issues around mortality need to widen its horizons, CRED would like to learn more and more from other disciplines and compare those used by epidemiologists, demographers, forensic anthropologists, statisticians, sociologists and political scientists. All use different tools to estimate mortality. It is time to bring all of these different threads together and learn from each other. This was one of the objectives of the symposium organized in November 2008, from which you will find some conclusion in this newsletter. Regarding methodological issues, CRED also analyzed issues of survey quality and reporting. During two expert group meetings (EGM), checklists were prepared aiming at enhancing the way in which surveys are reported. Finally, two members of our staff, Ruwan and Antonio, are leaving us to pursue new challenges. They will be replaced by new staff that we will introduce to you shortly.

Should you have any comments or questions, please feel free to contact us.

Thanks for your continued support!

Debby Sapir, Director

Ruwan Ratnayake came to CRED as a Health and Nutrition Analyst and hit the ground running. During his year at CRED, he put out several country briefs within tight turnaround times and carried out several missions, including one to Amman to investigate and reinforce the collection of health and demographic data for crisis-affected Iraqi populations. Ruwan leaves us to further develop his epidemiological training with the Canadian Field Epidemiology Program (CFEP).

... and Antonio

Antonio Zugaldia came to CRED after an internship at the European Commission’s Research Directorate-General. As an IT specialist at CRED he spent most of his time playing with data and expanded his horizons working on international humanitarian issues and picking up key elements through the various projects he participated in. He is now moving forward to being a true world citizen, joining the Emergency Operations Center of the Pan American Health Organization (PAHO) in Washington D.C.

What do the health indicators tell us about humanitarian crises in 2008?

January is typically the month of statistical overviews. Analysts rush through their databases to come up with summary tables and analyses showing clear improvements, deteriorations or no change at all. So did we.

Although there is often a considerable lag between field work and the publication of the survey report, CE-DAT has already collected information from 99 nutrition and mortality surveys for 2008. Several of them were conducted in locations that had already been surveyed in 2006 or 2007. We present here some preliminary findings for some places in Sudan, Ethiopia, Kenya and Uganda based on the comparison of 2006/2007 health data with the 2008 data.

CE-DAT is a global database on the human impact of conflicts and other complex humanitarian emergencies and serves as a unique source of health indicators for monitoring conflict-affected populations and for the production of trend analyses, impact briefings and policy recommendations

To subscribe to CE-DAT Scene click here. To unsubscribe click here.
Sudan - Darfur region The mortality rates for the Darfur region show a positive evolution. All surveys conducted in 2008 had CMRs that were below the emergency threshold of 1 death per 10,000 people per day. In addition, improvement was reported for almost all places. Noteworthy is the considerable CMR reduction in Kass and Otash camp. Child mortality showed a similar improving trend. Not one location reported an increase in U5MR and only 1 (Kass) had a rate that was still above the emergency threshold of 2 deaths per 10,000 children per day. As far as this later is concerned, we note however that USMR has decreased by 50%. There is less reason to be optimistic about the nutritional situation. Although in general malnutrition has decreased, the percentage of undernourished children is still above the threshold of 10%.

Sudan - Southern region The crude mortality rates in southern Sudan were below the threshold of 1/10,000/day and around the expected values for Sudan. Overall, they have remained stable when compared to the previous years. However, a survey conducted in Bentiu and Rubkona (Unity State) showed a considerable increase in child mortality, reaching the U5MR threshold. As far as malnutrition is concerned, levels were above emergency thresholds, but have remained stable over the last years or even improved (Unity State).

Ethiopia The surveys included in CE-DAT, so far, suggest a deterioration of the health situation in some areas in Ethiopia. Both mortality and malnutrition indicators show higher figures for 2008 compared to 2007 or 2006. Even though no mortality rate exceeds the emergency threshold, in Damot Woyde and Dugna Fango, the U5MR has almost reached the 2/10,000/day. As for malnutrition, the surveys from SNNP region show significantly higher values than in previous years.

Kenya Surveys were conducted along the border with Ethiopia in the North Eastern Province and presented a mixed picture. Crude mortality rates in 2008 were around the expected level for the country and well below the emergency threshold. The USMR however showed discrepant patterns. In the northwestern area of the province rates in 2008 were higher than 2007 whereas in the northeastern region, the opposite was true and the situation had improved. Malnutrition was well exceeding the emergency thresholds in all surveyed places, with 2008 data worse than that of 2007.

Uganda Compared to 2007, mortality had increased in the locations that were surveyed in 2008. CMRs were equal to or above the emergency threshold and USMRs were considerably elevated. Malnutrition levels, on the other hand, were still below the emergency threshold.

Average CMR and U5MR are presented online for those four countries.

Development of a GIS at CRED

Cartography has imposed itself as an essential tool for all actors involved in the different sectors of the disaster and conflict management cycle. Over the last decade, the world witnessed a significant increase and diffusion of easily and freely available geographic information on disasters and conflicts. Notably, there has been a growing trend in the availability of satellite-based monitoring initiatives. Aware of the strong research potential and the high added value of these technologies, CRED decided jump on the bandwagon and make a first step towards the integration of the EM-DAT and CE-DAT databases into a Geographic Information System (GIS).

Beyond creating a GIS in which both databases could be integrated, we are developing a multi-database interface through which users could concurrently query both EM-DAT and CE-DAT and retrieve data on, for example, malnutrition or mortality rates in areas recently impacted by a flood or drought.

To link both databases through a unique interface first meant identifying a common denominator. However, the spatial nature of the two databases was quite different, with CE-DAT registering its data at the 2nd or 3rd administrative level and EM-DAT at a national scale. It was therefore decided to increase the resolution of EM-DAT data and record disasters at a finer level than the previous national one. This in itself, is a major step for EM-DAT, as significant as the development of website technology in 2002 that allowed for online access to the database.

Secondly, it was necessary to identify a standardized and reliable global spatial dataset of administrative boundaries. The Global Administrative Unit Layers (GAUL) dataset developed by FAO within the EC-FAO Food Security Information for Action Programme was chosen as it provided a standardized spatial dataset up to the 2nd administrative level. (http://www.foodsec.org/tools_gaul.htm).

Currently, all CE-DAT records have been geo-referenced and linked to a recognized administrative unit, health zone, livelihood zone, camp or locality. For EM-DAT, the geo-referencing of data is still work in progress. However, with the kind support of the University of Hawaii, all natural disasters that occurred in Africa have been geo-referenced and are now available in-house at a first administrative level resolution.

Beyond creating a GIS in which both databases could be integrated, we are developing a multi-database interface through which users could concurrently query both EM-DAT and CE-DAT and retrieve data on, for example, malnutrition or mortality rates in areas recently impacted by a flood or drought.

The next steps include the integration of the GIS system within the CE-DAT and EM-DAT websites to bring these new capabilities to our network of users. In addition, the use of satellite imagery and external spatial datasets will be explored to further increase the value of the EM-DAT and CE-DAT databases to those involved in the management and research of the impacts of disasters and complex emergencies on human populations.

As always, we welcome your comments and feedback.

Centre for Research on the Epidemiology of Disasters
Université catholique de Louvain, 30.94 Clos Chapelle-aux-Champs, 1200 Brussels, Belgium
Tel: +32-(0)2-764.33.27 - Fax: +32-(0)2-764.34.41 - www.cedat.org - contact@cedat.org
In order to advise the CE-DAT team on such issues within Spiegel, 2007). 1994; Garfield, 2000; Spiegel et al., 2004; Prudhon and methodologies and poor methodological rigor (Boss et al., results due to variation in reporting, the use of different quality have also shown varied levels of comparability of report of biases and limitati ons. Past reviews of survey quality have also shown varied levels of comparability of results due to variation in reporting, the use of different methodologies and poor methodological rigor (Boss et al., 1994; Garfield, 2000; Spiegel et al., 2004; Prudhon and Spiegel, 2007).

In order to advise the CE-DAT team on such issues within daily operations, CRED has conducted Technical Advisory Group (TAG) meetings to bring together NGOs, UN agencies and development agencies. The TAGs were supplemented by Expert Group Meetings (EGM), which have taken place in 2007 and 2008 and during which epidemiologists, data specialists with specific expertise and the CE-DAT team analyzed issues of a more methodological nature, including indices of survey quality and reporting.

A completeness checklist was first developed in order to identify the methodological elements required for a survey to be considered valid and publicly available in the CE-DAT database. The second EGM has further developed an evaluation system to assess the quality of surveys, proposing guidelines for consistent reporting and methodological quality. Those guidelines were convened by the Expert Group and further justified by evidence from the literature. They were rendered practical through the use of a checklist of elements to be included in a survey report. They are currently used internally and were pilot tested on surveys in the CE-DAT database for further refinement of the criteria.

The checklist will consist of a tool for field organizations in the preparation of reports and for the CE-DAT team in screening surveys for quality purposes, as it has been doing regarding completeness criteria. Additionally, the guidelines might assist users of the literature in understanding components and interpreting the evidence that contribute to a valid survey report. In conclusion, they should be viewed as a step forward in the process of standardization of epidemiological methods in complex emergency settings. In the future, the CE-DAT team hopes to use the CE-DAT initiative to maintain and strengthen the dialogue with users, researchers and fields investigators regarding the application of the guidelines in order to further refine the criteria, as well as to explore more delineations of methodological quality.

A consensus paper on these guidelines will be published shortly.

Symposium: documenting mortality in conflicts

In recent years, various analysts have attempted to estimate death tolls due to armed conflicts, including for Iraq and Darfur. As results have shown inconsistencies, this has led to vigorous discussions on the best approaches for collecting and analyzing such mortality data. In this context, the WHO Collaborating Centre for Research on the Epidemiology of Disasters (CRED), in collaboration with the Harvard Humanitarian Initiative (HHI), organized an innovative, inter-disciplinary symposium on the different techniques and applications for the estimation of mortality due to armed conflicts.

The aim of the symposium was to strengthen the scientific basis by drawing on recent progress in disciplines such as field epidemiology, demography and forensic anthropology. Although meetings within each discipline have previously been held, the objective of this symposium was to build bridges between these disciplines and develop complementary approaches towards more reliable estimations of mortality in armed conflicts. The symposium brought together forty discussants from thirty organizations representing academia, non-governmental organizations, international organizations, governments and United Nations agencies.

A broad range of techniques to document mortality in conflicts were discussed, including survey techniques, prospective surveillance, witness accounts, forensic anthropology investigations, and databases of media reports. The pitfalls and limitations of each technique were discussed, as was the usefulness of the collected data for timely decision making. The symposium clearly opened more doors and posed more questions than could be sufficiently explored over two days. Participants carefully reflected on avenues for collaboration among disciplines, to move past speculative discussions and attempt to put new thoughts to practice. Even though collaborations face significant obstacles between the objectives of different disciplines, ‘Serendipity’, or the act of accidentally discovering something fortunate, is the other side to the coin.

Given this intense environment for scientific progress, responsibility for good quality data and the potential impact on human well-being, it is unsurprising that the symposium fostered healthy debate and genuine tensions over the core scientific approaches for mortality estimation. Mutual respect for scientific disciplines is imperative though respectful debates are valuable. Upon reflection, one participant summarized the reality which underlies this tension and hence the basis for such a symposium: ‘there is no incompatibility here; [debate] is the nature of science’. A full report will be available shortly

A list of the organizations represented is available here.
CE-DAT and CRED News

EM-DAT/UNISDR Press Conference - Brussels, February 12th, 2008 A joint press conference with the United Nations International Strategy for Disaster Reduction (UNISDR) will be held at the International Press Center in Brussels on February 12, 2008 at 10:30. CRED will present its EM-DAT data on the occurrence and impact of natural disasters in 2008, with a particular focus on Europe. For more information, please contact Regina Below


MICRODIS Annual meeting The EU-funded project "Integrated Health, Social and Economic Impacts of Extreme Events: Evidence, Methods and Tools (MICRODIS)" will hold its annual meeting at the Fondation Universitaire in Brussels on February 25th and 26th, 2008. For more information, please contact Barbara Cichon

Assessing Public Health in Emergency Situation (APHES) CRED's International summer course will be held in Brussels from July 6th to 17th, 2009. This course aims to familiarize professionals with epidemiological techniques to determine impacts of disasters and conflicts. The course will introduce participants to the methods and tools of epidemiology in the context of humanitarian emergencies and will also cover the different uses of quantitative tools for the assessment of health needs in populations affected by catastrophic events.

Deadline for submission of applications is April 30, 2009. For more information, please see the APHES official website