

The epidemic divide

Health and care department / July 2009 //

INTERNATIONAL FEDERATION

INTERNATIONAL FEDERATION



International Federation
of Red Cross and Red Crescent Societies

MAIN FINDINGS

- Infectious diseases cause close to 14 million deaths every year worldwide. But the mortality rate should not be the only factor considered and can even be misleading. Even though non-communicable diseases are now responsible for the majority of deaths worldwide, this report shows that communicable diseases are still indeed the dominant burden in poor and vulnerable settings. This further increases the inequality for health and care between rich and poor countries.
- Red Cross Red Crescent operations responding to epidemics more than tripled between 2004 and 2007. The number of people helped in these operations increased by 15.4 per cent between 2007 and 2008. Such a rise can indicate improved capacities but also shows that outbreaks are still a major burden, especially in developing countries.
- Between January 2006 and May 2009, more than 41 million people needed assistance from Red Cross and Red Crescent societies throughout the world because they were affected by epidemics. The total number of people helped for the first four months of 2009 was already more than 10.6 million, already on target to surpass the 16.3 million epidemic-affected people helped in 2008.
- There is no easy formula to fight epidemics. Reducing their impact involves addressing complex issues that include prevention of disease, empowering communities, better access to health services at the community level, availability of health personnel and better infrastructure (especially for water and sanitation).
- Having a purely emergency response approach in responding to epidemics is costly and will not stop them from happening again. Only long-term action addressing the roots of the problem can robustly improve the situation. It is essential to inform communities about dangers and disseminate simple prevention messages that can save many lives. Working in partnership is also essential to reach lasting results.
- In a global situation where resources for tackling epidemics of infectious diseases are scarce, it is essential to channel those resources smartly and into interventions that will not only provide treatment but will also stimulate behavioural change that will lead to a culture of prevention.
- Complacency in developed countries regarding epidemics is a major threat in itself. The re-emergence of diseases such as measles in western Europe shows that if the growing burden of communicable diseases in developing countries is ignored, there is a high risk that epidemics will affect developed countries with predictably severe consequences.



Infectious diseases still cause close to 14 million deaths every year¹. Respiratory infections account for four million deaths annually, with more than two million deaths for diarrhoeal diseases out of a total of 4.5 billion episodes estimated every year. Meningitis kills half of the people that are infected. This is more than 340,000 deaths. Nine million cases of dengue fever are also recorded every year and yet, this rarely hits the news^{2,3}.

Meanwhile, neglected, emerging and re-emerging diseases affect approximately one in six of the world's population and more than 70 per cent of countries affected are low income or lower income countries⁴.

Looking beyond mortality rates

These statistics speak for themselves and emphasize the gravity of the situation. However, experts will argue that if you take into consideration the mortality rate alone, non-communicable diseases (such as cancer and heart conditions) have become the leading cause of deaths worldwide. Since 2004, they have been responsible for six in ten deaths compared to three in ten for communicable,

reproductive or nutritional conditions and one in ten for injuries⁵. But relying on the mortality rate can be misleading, as it does not take into account other key components that need to be included.

The use of other indicators instead of just the number of deaths will allow the data to disclose the real picture of the serious effects communicable diseases have on the community. When it comes to evaluating the real burden of diseases, other aspects such as the age in which the death happens need to be taken into account⁶.

For instance, a 70-year-old man dying of a heart attack in Switzerland will lose an average of nine years of life if you take into account life expectancy at birth for a male is 79. Because he is retired, used his skills, had the opportunity to raise his family and send his children to school, the social and economic effects of his death will be less severe.

Now let's take the example of a 20-year-old student who dies of cholera in Mozambique. Even though life expectancy at birth is much more limited, at 48 years, the social and economic consequences will be more serious. His community will not benefit from the education that he received at school, he will not be in the position

1. WHO. *Deaths by cause, in WHO Regions (a), estimates for 2004*. Accessed June 2009. Available at: http://www.who.int/healthinfo/global_burden_disease/estimates_country/en/index.html

2. *Ibid.*

3. WHO. *Annual incidence for selected causes, in WHO Regions (a), estimates for 2004*. Accessed June 2009. Available at: http://www.who.int/healthinfo/global_burden_disease/estimates_country/en/index.html

4. WHO. *Control of Neglected Tropic Disease*. Accessed June 2009. Available at: http://www.who.int/neglected_diseases/en/index.html

5. WHO. (2009). *World Health Statistics*. WHO Press, France. p47.

6. *Ibid.* p47.

Indicators for burden of infectious diseases:

Mortality rate: A convenient and easily understood measure of the burden of a disease on a population that counts the number of deaths due to the disease and weighs the impact of all deaths equally and doesn't account for the extent to which people are dying prematurely.

Life expectancy at birth: is the average in number of years the person is expected to live when born. It is usually calculated by country and region and varies greatly among countries (Sweden 81 years, Lesotho 45 years)

Years of life lost (YLL): A measure that calculates the loss of years of life because of a certain cause or disease

by comparing the age of death with the life expectancy at birth. YLL puts more emphasis on deaths at earlier age as compared to those at later stages in life.

Years lost due to disability (YLD): A measure that calculates the loss of years of potential healthy life because of a certain cause of disease by comparing the age at which disability occurred with the life expectancy at birth. YLD adds emphasis on the impact of disability.

Disability adjusted life years (DALY): A measure of overall burden of disease that quantifies the impact of both premature death and disability. DALY is calculated by adding the YLL and YLD.

$$DALY=YLL+YLD$$

to take care of his parents, younger brothers and sisters as this is traditionally the case in Africa. If he lives in a village, he will no longer be able to cultivate his land. The well-being of the community and the economic development of a country can therefore be hindered by the effects of epidemics and this is not demonstrated if only the mortality rate is taken into account.

Another interesting parameter is the disabling effects of communicable disease. Let's take the example of a two-year-old girl who becomes paralyzed due to polio infection. Polio may not kill her but it will render her disabled for life, possibly preventing her from going to school, finding a job, cultivating the land or having a family. Furthermore, this child will need expensive human and material resources to care for her for the rest of her life. Even if she dies at the age of 60, her life will be made difficult as well as for those in the community who will need to support her. In this case, instead of spending a few cents to vaccinate the child, the

family, community and government will have to bear the social and economical brunt of caring for her disability.

As illustrated, without taking into account the longer-term health, social, cultural and economical consequences of epidemics, their full effect cannot be sufficiently calculated or understood.

The social and economic consequences

Communicable diseases are the enemies of development. The vicious circle of disease and low resources needs to be broken if development goals are to be reached. Besides the devastating effects of chronic communicable diseases on wealth and development as seen with HIV and tuberculosis, other epidemics claim their fair share of destruction of livelihoods in the poorest and most vulnerable communities.



DANIEL CIMANA / AMERICAN RED CROSS

We rarely hear of dengue fever, which causes a relatively low mortality of 18,000 people every year. However, when looking beyond the bare figures, we will be able to see the burden of nine million cases of dengue on communities that cannot continue their normal life due to sickness, overwhelmed health facilities, and absenteeism.

The World Bank estimates that dengue fever – which is widely spread in Africa, the Americas, Eastern Mediterranean, South East Asia and West Pacific – causes severe social and economical burdens.

For instance, the burden of dengue in Puerto Rico alone during 1984-1994 was similar to that for the entire Latin America and Caribbean region from malaria, tuberculosis, intestinal helminths, and other childhood diseases.⁷

Complacency raises epidemics to a worldwide threat

One of the major dangers facing the international community when dealing with epidemics is complacency, especially in developed countries. There is sometimes the idea that communicable diseases are now only a problem for developing countries because of the tremendous progress that has been made in medicine and the growing number of modern and sophisticated healthcare facilities. However, recent history showed us that there is a need to remain vigilant even in developed countries.

Measles is a good example of why we should not lower our guard. Many efforts have been made to reduce measles-related morbidity and mortality, especially in Africa, with tremendous success. **Between 2000 and 2007, the Measles Initiative (led by the American Red Cross, the United Nations Foundation, the US Centers for Disease Control and Prevention, UNICEF and WHO) managed to slash the number of measles deaths in Africa by 89⁸ per cent, which represents a considerable achievement and a major contribution to the UN Millennium Development Goals.** Thousands of Red Cross and Red Crescent volunteers were involved in immunization campaigns, mobilising communities and convincing families to bring their children to vaccination centres. The number of lives that have been saved is equal to

a reduction in global measles deaths by 74 per cent, from an estimated 750,000 deaths in 2000 to 197,000 in 2007. This is arguably the biggest public health success since the eradication of smallpox and should be followed for other communicable diseases.

Yet, as the international community was celebrating this major accomplishment, measles cases re-appeared in Britain and Switzerland due to a lapse in routine immunization. This came as a necessary reminder that there is a need to be constantly vigilant and to maintain the required levels of immunization so that diseases such as measles do not re-emerge.

Another example of the necessity to avoid claiming victory too early is polio. Of course spectacular progress has been made over the past 20 years as a result of the Global Polio Eradication Initiative, lead by the US Centers for Disease Control and Prevention, WHO, UNICEF and Rotary International, and supported by the Red Cross Red Crescent. Polio is now endemic in four countries – Nigeria, Afghanistan, India and Pakistan – while in 1988, it was endemic in 125 countries across the world with more than 1,000 children a day being paralyzed as a result of the disease. This reduction was made possible thanks to the comprehensive efforts made by the international community to finance immunization campaigns for children and protect them from the threat of polio. The last steps toward polio eradication proved to be massively difficult. The last four countries represent a population of more than 1.5 billion. They are still exposed to the disease and remain a real threat to spreading it beyond their borders.

The challenge of achieving polio eradication has been multifaceted, including donor fatigue, poor routine immunization levels to sustain the gains made during polio campaigns, and specific contextual factors within each of the remaining endemic countries. On the African continent the disease has been re-emerging in early 2009, with outbreaks in several African countries, some of which had not reported a case of wild polio virus in more than a decade. Because of less than a full achievement of eradication, there is now a need for the international community to redouble efforts to ensure that polio does not spread to countries which have worked so hard to eradicate it from their populations.

7. (Meltzer et al 1998) cited in Jamison, D. et al. (2006). *Disease Control Priorities in Developing Countries* (2nd Ed.). The World Bank and Oxford University Press, New York.

8. *Measles Initiative*. (2008). *Global measles deaths drop by 74%: The Eastern Mediterranean region achieves measles goal three years early*. Available at: <http://www.measlesinitiative.org/docs/mi-press-release.pdf>



In 2004-2006, a similar outbreak resulted in the spread of polio from Port-Sudan (on the eastern coast of Sudan) to the Arabian Peninsula and threatened to go even further. It is not only a case of poor countries exchanging the disease in isolation from the rich world. Polio expert Dr. W. A. Orenstein was quoted recently saying that the “wild polio virus is only a plane ride away from the United States”⁹. This has happened before with diseases like Marburg threatening in the heart of Europe and can easily happen again.

Major vaccination campaigns have been undertaken since early 2009 with the support of Red Cross Red Crescent volunteers. This will help stop polio spreading for now, but until eradication efforts are supported with more rigour and polio eradication is seen as a top priority for all countries, the threat remains real for everyone.

Climate change: an aggravating factor

Developing countries are set to suffer the greatest burden of the effects of climate change. Extreme weather phenomena create more natural disasters, such as the succession of droughts and floods, and cause stronger storm and hurricane seasons.

Climate change is also likely to result in a change in the distribution of several infectious diseases that are sensitive to rainfall or temperature. Examples include vector borne diseases such as dengue and chikungunya. This means that there may be more severe outbreaks, or that the geographical or seasonal distribution of a disease may change. It is not currently possible to predict what those changes will be, and the Red Cross Red Crescent has to be prepared for the risks to change. It is vital in this context to continue to build on existing collaborations with ministries of health, and ensure access to surveillance information to be aware of how disease patterns change.

This is why the International Federation of Red Cross and Red Crescent Societies (IFRC) developed an integrated approach to respond to humanitarian crises. Working to reduce the effects of climate change, just like building more resilient and sustainable communities, is an essential component of the Red Cross Red Crescent vision. The IFRC is more and more shifting from a purely “emergency response” approach to health crises to also include longer-term action addressing the roots of the problems. It is particularly essential to be able to predict the coming effects of changing weather patterns on populations’ health, inform communities about dangers and disseminate simple prevention messages that can save many lives. This is why besides training volunteers for

.....
⁹ Blazek, N. (2009), *Heightened awareness, renewed commitment needed to eradicate polio*, in *Infectious Diseases in Children*, volume 22, number 6, pp. 10-11.

emergency response to epidemics, the IFRC also developed wider tools for community-based health and first aid in action (CBHFA – see separate box, page 14). The approach builds the volunteer network and community capacity so it is possible to activate networks of trained volunteers in the communities anytime in response to a health emergency.

IFRC operational experience shows need to be vigilant

In March 2009, the IFRC launched a strong warning regarding the rise in diarrhoeal diseases, based on the fact that its response operations jumped by about 30 per cent in fewer than three years¹⁰. The data collected also showed that in 2007 and 2008, around 60 per cent of all requests submitted by National Red Cross and Red Crescent Societies for allocations from the IFRC Disaster Relief Emergency Fund (DREF), were directly or indirectly related to outbreaks of acute diarrhoeal diseases.

These figures hold even greater significance because Red Cross and Red Crescent societies respond not only to major health crises but also to local and regional emergencies. These are not always taken into account when global statistics are calculated, often because of inadequate health and care reporting and weak surveillance systems.

Global statistics on the Red Cross Red Crescent response to epidemics also tell a lot about the need to be vigilant. Besides showing the massive scale-up of Red Cross and Red Crescent societies in terms of emergency response, they also demonstrate how critical it is to be vigilant on the spread of epidemics.

Between 2004 and 2007, the number of Red Cross Red Crescent responses to epidemics more than tripled, from 16 operations in 2004 to 55 in 2007. For the first four months of 2009, the IFRC had already responded to 20 major epidemics. In 2007, response operations to epidemics accounted for ten per cent of the global Red Cross Red Crescent emergency responses. In 2004, it was only six per cent.

Better monitoring and an increased capacity to respond is not an indicator that epidemic outbreaks are increasing at a similar rate, but these

statistics still highlight the continuing burden of epidemic outbreaks especially in developing countries. In 2008, even though the total number of Red Cross Red Crescent major emergency response operations to epidemics was 39 (slightly lower than in 2007), more than 16.3 million needed assistance while the number of beneficiaries in 2007 was just over 14.1 million – an increase of 15.4 per cent.

Between January 2006 and May 2009, more than 41 million people were affected by epidemics and helped by Red Cross and Red Crescent societies throughout the world. Even though statistics are only available for the period ending 20 May 2009, the total number of people helped for the first four months of 2009 was already more than 10.6 million people, on course to surpass the 2008 figure of 16.3 million people.

From 2006 until May 2009, more than 31,000 Red Cross Red Crescent volunteers were mobilized throughout the world to deal with epidemics.

Early warning, early action

Early warning is also essential to mobilize community members. For instance, families need to be aware that if the area they live in is affected by floods, the risk of diarrhoeal diseases immediately becomes higher. To be better prepared, the IFRC developed its own disaster management information system (DMIS), a web-based platform where disaster management specialists from the global network of Red Cross and Red Crescent societies can immediately share information regarding the different emergencies they respond to. The IFRC is also partnering with different organizations, such as NASA and the International Research Institute (IRI) in Columbia University, to improve meteorological forecasting and relaying this data to the communities that need it most.

In 2006, based on comprehensive information gatherings coming both from the region and from partners, the IFRC could warn about massive flooding of the Zambezi river, this happened again in 2008. Early warning mechanisms made it possible to significantly reduce the number of potential victims by evacuating them from flood-prone areas. This also had a positive effect on the number of epidemics that

.....
¹⁰. Based on statistics gathered by Red Cross and Red Crescent societies in 186 countries

.....

11. GOARN is a technical collaboration of existing institutions and networks who pool human and technical resources for the rapid identification, confirmation and response to outbreaks of international importance. The Network provides an operational framework to link this expertise and skill to keep the international community constantly alert to the threat of outbreaks and ready to respond (<http://www.who.int/csr/outbreaknetwork/en/index.html>).

were registered compared to other similar flooding in the early 2000s.

By triangulating information from different sources, including National Red Cross and Red Crescent Societies through DMIS, epidemic detection and confirmation through WHO, Global Outbreak Alert and Response Network (GOARN¹¹) and ministries of health, meteorological sources such as NASA and IRI and epidemic early warning systems such as the IFRC collaboration with Veratect corporation, the IFRC has a comprehensive early warning system that enables preparedness and early response to epidemics.

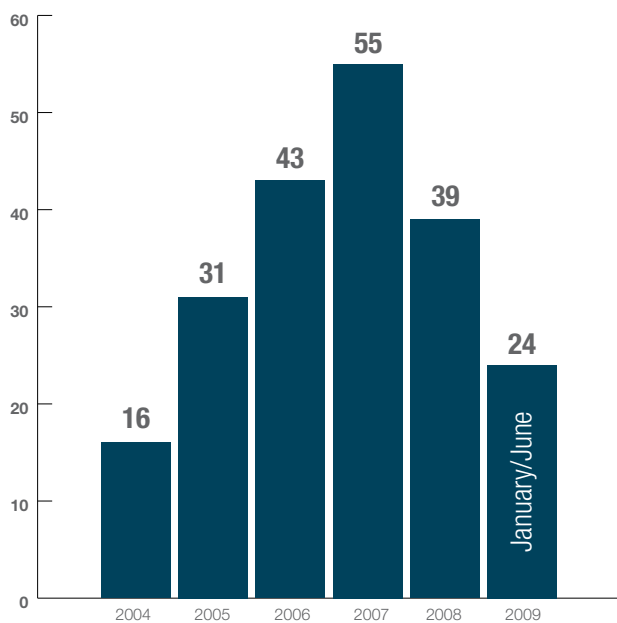
Behind the numbers, every humanitarian crisis is also a personal tragedy, further amplified in

developing countries by severe economic consequences, social disruption, population movement, fear and stress. Also epidemics will have devastating consequences on ongoing long term health programmes (such as HIV/AIDS and malaria) especially by depriving them from the already limited human and financial resources that are available.

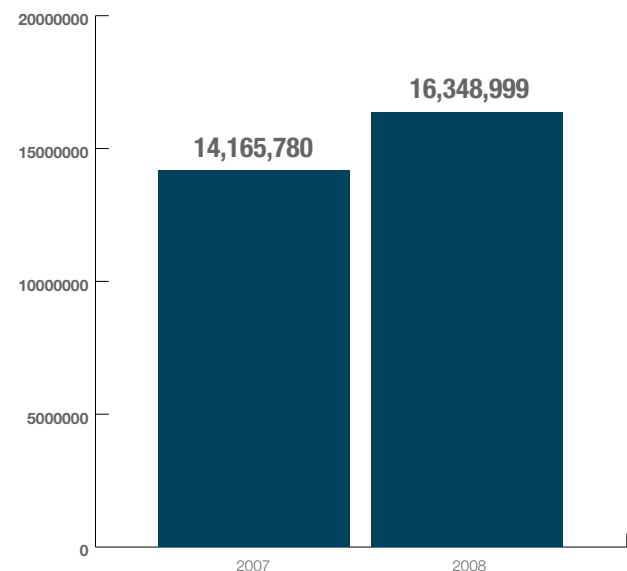
In the end, this is also about safeguarding development gains in health that have been accomplished over the past few decades. This is also why the IFRC includes post-crisis programmes to help affected communities to restore their livelihoods but also to be better prepared if an epidemic starts again in the future.

.....

Number of Red Cross Red Crescent operations responding to epidemics



Red Cross Red Crescent response to major epidemics: total number of people supported



Epidemics include the following: Acute Watery Diarrhoea – Avian influenza – Chikungunya – Cholera – Crimea Congo Hemorrhagic Fever (CCHF) – Dengue – Ebola – Enterovirus 71 (EV71) – Gastroenteritis – Hepatitis E virus (HEV) – Influenza A (H1N1) – Intestinal virus – Malaria – Marburg fever – Measles – Meningitis – Monkey Pox – Polio – Rift Valley Fever – SARS – Typhoid Fever – Watery diarrhoea – Yellow Fever.

Data as of 20 May 2009. The figure used for 2009 is from 1 January – 20 May only.

source: IFRC operations support department, Geneva

.....

From local to global: three examples of Red Cross Red Crescent epidemic response

Whether it is at the country level, at the regional level or at the global level, the Red Cross Red Crescent response to epidemics relies on a community-based approach, adapting plans to the realities of the country hit by the emergency crisis. An integrated approach that also includes prevention and preparedness activities is systematically included.

Fighting meningitis in Burkina Faso

Every year, between November and the first rains in May, countries such as Burkina Faso, in West Africa, live in fear of an epidemic. In 2007, the country suffered one of the worst meningitis epidemics since the 1996 outbreak, with more than 25,000 cases.

When the IFRC was alerted about possibly an ever bigger epidemic in 2008, the decision was quickly made to anticipate and immediately allocate funding to train volunteers so that they can warn communities about the danger in their own language and support health authorities in vaccination campaigns.

The Burkina-Faso Red Cross society deployed more than 900 volunteers throughout the country. Volunteers also visited households and systematically referred all suspected cases to the health services, contributing to reducing the delay in medical attention, which also meant saving many lives.

Even though the epidemic did hit Burkina Faso this year, action taken by Burkinabè Red Cross made a major contribution in limiting the scale of the epidemic. The total number of deaths was 341 at the end of March 2009 compared to the total number of 1,743 deaths from meningitis for the 2007 epidemic. The ability to quickly

gather funding for prevention activities, partner with regional and national health authorities as well as with UN agencies made it possible to reach this spectacular achievement.

Besides meningitis, a similar campaign against yellow fever also held in Burkina Faso in 2008 made possible to immunize around eight million people. It was supported by 770 Burkinabè Red Cross volunteers thanks to a specific budget allocated by the IFRC's Disaster Relief Emergency Fund.

Fighting dengue fever in the Americas

Since the beginning of 2009, several countries in South America have experienced dengue outbreaks, especially Argentina, Bolivia, Brazil, Paraguay and Peru. The outbreak especially hit in the Andean region which experienced severe rainfall during the first months of the year, increasing the breeding grounds for the *Aedes aegypti* mosquito transmitting the disease.

This epidemic situation received very little international attention, even though it seriously disrupted the social and economic activities of entire regions. In Bolivia, more than 33,000 cases had been recorded in a little more than two months with a mortality rate of 21.1 per cent.



Red Cross societies in the Americas supported health authorities in their national response, with the support of the IFRC regional capacities. Besides mobilizing volunteers to help sick people and their families, they also tried to limit the scale of the outbreak by setting up awareness campaigns to inform families how to avoid being infected. They included distribution of material with information on dengue prevention and control as well as posters with key messages to hospitals, community centres and businesses. Awareness raising workshops were also organized as well as information campaigns through radio spots.

This type of response by Red Cross societies in the Americas focusing both on the emergency response itself and on prevention activities is a good example of the type of response to epidemics the IFRC is promoting.

Fighting the H1N1 influenza virus: a global response

Whether it is H1N1 or another virus, all epidemiologists agree that the world will again have to face a major influenza pandemic that might have major human and economic consequences. Because the Red Cross Red Crescent is working in more than 186 countries with a significant geographical coverage and presence at community level, it has built a remarkable experience in responding to major health crises over the years. This was the case with the SARS crisis in 2003 as well as for the avian influenza crisis. So preparedness activities did not start when the H1N1 virus was first identified in Mexico.

As auxiliaries to their governments on humanitarian issues, Red Cross and Red Crescent societies have a specific role to play in responding to a pandemic, depending on the overall

disaster response mechanisms at the national level. Activities range from an advisory role to governments and UN agencies on community health and preparedness, direct support to communities, coordination of civil society partners, dissemination of public health messages and transporting patients to hospitals.

But to be able to fulfil that mission, it is essential that Red Cross and Red Crescent societies themselves take steps to make sure prevention messages are disseminated also internally with their volunteers and staff. This allows them to continue providing basic services for

communities even during a pandemic is essential for keeping the situation under control. So it is crucial to make contingency plans and make sure volunteers and staff have access to protective equipment as well as any appropriate medicine to prevent them from being infected themselves, which would then paralyse activities.

Even though it immediately made clear there was no need to create unnecessary panic, the IFRC also warned against the danger of complacency towards the virus. It also called for funding, especially to help Red Cross and Red Crescent societies in developing countries to train volunteers and get ready, as the consequences on those countries might be even more serious because of poor health facilities and reporting and the presence of other communicable diseases.



The way forward

Finding sustainable solutions to reduce the effect of epidemics is a major humanitarian challenge. There is no easy formula but rather a combination of measures that can be taken to move forward. This is what is required:

1. Creating better health infrastructures and making sure water and sanitation facilities are built and maintained. This in addition to promoting better hygiene, vaccination and health behaviours, if we use the example of Zimbabwe, experts agree that – besides social, economic and political factors – the poor state of water and sanitation facilities throughout the country was a major aggravating factor for the cholera outbreak that hit the country in 2008 and continued into 2009. Unless this is addressed, containing the cholera now will be the end of this round rather than the end of the threat. The Red Cross Red Crescent supports sustainable water and sanitation programmes in over 30
2. Prioritizing well coordinated partnerships. Because of the enormity of the challenge, no single actor – be they governments, donors or international organizations – can succeed alone. Every partner should play their part, whether they are authorities, public and private donors, civil society, UN agencies or other humanitarian agencies such as Red Cross and Red Crescent societies, which are also auxiliary to their governments for humanitarian response.
3. The knowledge and resources at community level must be fully harnessed in the fight against the continuing spread and burden of epidemics. Civil society organizations in particular, including the 186 National Red Cross and Red Crescent Societies worldwide, are ideally placed to contribute to limiting the spread of epidemics, especially when the health and care system is inadequate.



YOSHI SHIMIZU / INTERNATIONAL FEDERATION

Building a culture of prevention

Tackling epidemics and infections in general means much more than just the effective management of outbreaks or treating the sick. This has been repeatedly shown in many different cases. For example, providing medicines for Tuberculosis (TB) alone without raising awareness and changing the situation and the behaviour is deemed to be far less effective and unlikely to lead to significant outcomes.

At a glance

Main figures used and sourced in the report

- > 14 million: number of annual deaths due to infectious diseases worldwide
- > 9 million: total number of annual cases for dengue fever worldwide.
- > 4.5 billion: total of annual episodes of diarrhoeal diseases
- > 340,000 deaths: annual number of deaths due to meningitis
- > 1 in 6: One in six of the world's population is affected by neglected, emerging and re-emerging diseases.
- > 74 per cent decrease global: Measles deaths dropped by 74 per cent between 2000 and 2007 from an estimated 750,000 deaths in 2000 to 197,000 in 2007.
- > Threefold rise: between 2004 and 2007, the number of Red Cross and Red Crescent responses to epidemics more than tripled from 16 operations in 2004 to 55 in 2007.
- > Ten per cent: In 2007, response operations to epidemics accounted for ten per cent of the global Red Cross Red Crescent emergency responses. In 2004, it was only six per cent.
- > More than 16.3 million: Total number of people affected by epidemics who needed assistance from Red Cross and Red Crescent societies in 2008 (against 14.1 million in 2007. That's a 15.4 per cent increase in people reached.)
- > 31,000: total number of Red Cross Red Crescent volunteers mobilized worldwide to respond to epidemics between 2006 and May 2009

It is also about longer term integrated "health interventions" such as community-based health and first aid *in action* (CBHFA) which engages volunteers residing in the very same communities that they serve. These volunteers speak the local language and have sufficient cultural awareness to facilitate prevention messages getting through. The IFRC believes that the community-based health approach brings primary health care to people, in particular the most vulnerable. They are often more susceptible, and outbreaks of disease not only affect their health, but also their livelihoods.

Preparing for a disaster before it happens is a highly efficient way to limit the number of victims and limit the opportunity for outbreaks to re-occur. Not only is preparation a good way to reduce the number of those affected during a disaster, it is also cost-effective, as every dollar invested in disaster preparedness can save up to four dollars in costly emergency response. This ratio also applies to health emergencies.

It can be difficult to mobilize funding for prevention activities as the immediacy and visibility are not as substantial compared to emergency response operations broadcast by news media. However, it is only by working with communities and promoting preventive health practices *before the outbreak* using tested methods and reliable surveillance data that we can have a chance to curb the number of epidemics and their victims.

Based on the experience of its member Red Cross and Red Crescent societies, the IFRC has built a real expertise in handling epidemics and other "health emergencies". This has been completed by the additional contribution in emergency medicine in conflict areas of the International Committee of the Red Cross (ICRC).

Since there is no single formula or easy solution to curb the number of epidemics, the IFRC believes the following measures can be taken:

1. **Renewing commitment:** The IFRC – together with its member societies and its key partners – will continue advocating on behalf of people affected by epidemics and infectious diseases and acting to help them by all means available. Moreover, all will be done to raise awareness and promote more

Top 7 infectious diseases by deaths

Infectious disease	Deaths
Respiratory infections	4,259,000
Diarrhoeal diseases	2,163,000
HIV/AIDS	2,040,000
Tuberculosis	1,464,000
Malaria	889,000
Childhood infections	847,000
Tropical diseases	152,000

Source: World Health Organization – 2004



should be promoted, together with the scaling-up of health and care systems and water and sanitation maintenance in developing countries. This should be enhanced by embracing new technologies to ensure better two-way communication between communities at risk, health authorities and humanitarian organizations. For its part, the IFRC is prioritizing areas of Africa where epidemics are recurrent.

actions from partners, donors and the public at large.

2. The focus of the fight against epidemics should take place mainly at the community level, and it is by empowering communities that we will win the fight.
3. Educational and training tools such as “Epidemic control for volunteers” training manual and toolkit and “Community-based health and first aid in action” tools

prevention and health education at the community level.

4. More funding for preventive health activities is critical, especially to long-term health intervention, including
5. More partnership needs to be promoted and strengthened to make sure we act faster and better and work together for a more integrated approach that tackles both the causes and effects of epidemics. Such partnerships should include governments of affected and donor countries, public-private partnerships and the public in addition to international health organizations.

Training volunteers to better respond to epidemics



Managing epidemics, or preferably preventing them, is a priority for the IFRC. A large part of the International Red Cross and Red Crescent Movement response is carried out by volunteers based in the community. However, research has shown that they frequently lack the initial background information necessary for a quick and efficient response to epidemics, especially when they are located in areas that do benefit from the support and guidance of health professionals. This is particularly the case in developing countries which often lack sufficient health care facilities and staff.

To help fill those gaps, the IFRC launched a training package **“Epidemic control for volunteers”**, in harmonization with the community-based health and first aid *in action* (CBHFA) approach, involving volunteers more effectively in the management of epidemics. It especially provides volunteers with a basic understanding of the diseases that can easily turn into epidemics. The training manual and the accompanying toolkit is full of illustrations and provide a special factsheet called “action tools” for each disease so users don’t have to carry the whole toolkit with them at all times.

This training package is intended for volunteers and their trainers in local branches of Red Cross and Red Crescent societies. It familiarizes them with the most common epidemics that cause the most death and suffering and teach them how they can help limit the number of victims, act quickly and effectively and define their role in the community before, during and after an epidemic.

Integrating a longer-term approach into emergency response



The IFRC strongly believes that responding to emergencies such as epidemics should be fully integrated with a developmental approach that includes longer-term health programmes.

“Community-based health and first aid *in action*” (CBHFA) is a community based approach to long-term capacity building for improved health programmes and community development. It includes an implementation guide, a facilitator guide, a volunteer manual and community tools. These guides, manuals and tools were created to reflect the insight and knowledge of those working within communities. The community tools consist mainly of illustrations, meaning that they can easily be used in the by volunteers, regardless of literacy.

CBHFA *in action* is a dynamic and flexible new approach to first aid skills development, basic disease prevention and health promotion messaging, and capacity building from healthier communities. CBHFA *in action* is a partnership between the IFRC secretariat and expertise from more than 35 National Societies. It identifies and addresses community health priorities, advocates the importance of health promotion, provides guidance for life-saving basic first aid activities, introduces community based methods for disease prevention, and prepares volunteers to respond to disasters. CBHFA *in action* is about building healthier and safer communities, as well as providing guidance for developing stronger volunteer management systems. It increases capacities of local branches and their ability to prepare for, and recover from disasters and crises better. Training programmes are currently being implemented all over the world to disseminate this integrated approach.

The Fundamental Principles of the International Red Cross and Red Crescent Movement

Humanity

The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

Impartiality

It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

Neutrality

In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

Independence

The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

Voluntary service

It is a voluntary relief movement not prompted in any manner by desire for gain.

Unity

There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

Universality

The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.

The epidemic divide

For more information on the IFRC global health and care programmes, please contact:

Dominique Praplan
Head of IFRC health and care
E-mail: dominique.praplan@ifrc.org

For more information on the IFRC health in emergencies programmes, please contact:

Dr Tammam Aloudat
IFRC senior officer, health in emergencies
E-mail: tammam.aloudat@ifrc.org

Daniela Stow
Consultant, health in emergencies
E-mail: daniela.stow@ifrc.org

For more information on measles, polio and community-health:

Kate Elder
IFRC senior officer, measles and polio
E-mail: kate.elder@ifrc.org

Media and public relations contacts:

Jean-Luc Martinage
IFRC communications and advocacy officer, global health
E-mail: jl.martinage@ifrc.org
Tel: 41 79 217 3386



The International Federation of Red Cross and Red Crescent Societies promotes the humanitarian activities of National Societies among vulnerable people.

By coordinating international disaster relief and encouraging development support it seeks to prevent and alleviate human suffering.

The International Federation, the National Societies and the International Committee of the Red Cross together constitute the International Red Cross and Red Crescent Movement.



**Our world is in a mess.
It's time to make your move.
ourworld-yourmove.org**