

Water and Disasters

A practical guide to celebrating
and promoting World Water Day

22 March 2004



World Health Organization



Water and Disasters

A practical guide to celebrating and promoting World Water Day

22 March 2004



Human survival and health are the cross-cutting objectives and the measures of success of all humanitarian endeavour. The goal of WHO is “to reduce avoidable loss of life, burden of disease and disability in emergencies and post-crisis transitions”.



© World Health Organization 2004

All rights reserved. Publications of the World Health Organization can be obtained from Marketing and Dissemination, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel: +41 22 791 2476; fax: +41 22 791 4857; email: bookorders@who.int). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to Publications, at the above address (fax: +41 22 791 4806; email: permissions@who.int).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

The World Health Organization does not warrant that the information contained in this publication is complete and correct and shall not be liable for any damages incurred as a result of its use.



Sustainable Development and Healthy Environments Cluster

Our Mission

The WHO Sustainable Development and Healthy Environment Cluster's (SDE's) mission is to address environmental and other non-health determinants of ill health in order to improve people's health and their quality of life. Our objective is to integrate health fully into development processes, and into the priorities and actions of all sectors of society using ethical standards and human rights as benchmarks.

Our Strategy

We strive to reduce environmental risks and promote health where people live, eat, study, play and work, and to ensure ethical and human rights dimensions to, and adequate reflection and financing of a health component in, national health policies, development plans and legislation, and in international agreements.

Our strategy is grounded in the knowledge that improving health is central to many building blocks of sustainable development, including the promotion of equity and poverty reduction.

Our Actions

Our actions stretch across WHO and across many sectors of activity at international and national level. We are responsible for improving the responsiveness of WHO's national offices to country needs and for orchestrating/advocating/coordinating/ underpinning



international and national efforts to attain the health-related Millennium Development Goals in a manner which respects/fosters/supports health care human rights and equity.

We work with a wide range of experts to provide health situation analysis and to develop guidelines and standards for many of the non-health determinants of health, including water and sanitation, chemical, food and radiation safety and climate change. We enhance sustainable and equitable health gains by ensuring that health policies take into account human rights and ethical questions, and that national legislation and international trade agreements foster better and more equitable access to health care. We work with individual countries to plan for and increase the resources put into health systems.

Through our network of regional offices and country representatives, and in close collaboration with other clusters at headquarters, we promote the adaptation of policies, guidelines and standards to national and local conditions, and we work with governments, the UN system and other partners to identify and implement effective and affordable health-improving measures which benefit all people, and especially the most vulnerable populations.

The Millennium Development Goals, Agenda 21 and the aspiration of *Health for All* guide our actions.



Table of contents

1.	Background	1
2.	World water day 2004	3
3.	The kit	4
4.	Web sites	5
5.	Getting the message out	6
5.1	Document the problem	6
5.2	Package the message	6
5.2.1	Droughts	6
5.2.2	Floods	7
5.2.3	Landslides	7
5.2.4	Tropical cyclones	7
5.3	Mobilize others	8
5.4	Organize events	9
5.5	Work with the media	10
5.5.1	The news conference	10
5.5.2	Sound bites	11
5.5.3	The news agencies – don't neglect them	12
6.	Beyond World Water Day - keeping up the momentum	12



1. Background

The theme for World Water Day 2004 (held on 22 March 2004) is dedicated to Water in Disasters. The two lead agencies are the World Meteorological Organization (WMO) and the United Nations International Strategy for Disaster Relief (UN-ISDR).

Emergencies and disasters can occur anywhere in the world and affect human health, people's lives, and infrastructure. In an emergency or disaster, environmental health problems arise from the effects of the disaster on the physical, biological and social environment that pose a threat to human health, well-being and survival. These effects include the destruction of houses, shelters, and water supply and sanitation facilities; the pollution of water sources; and the spread of disease vectors.

Water is a basic requirement for life and health, and water and health are intimately related. Consequently, the World Health Organization (WHO) is concerned, not merely with responding effectively to emergencies that derive from disasters, but also with reducing the vulnerability of communities to hazards, increasing their ability to withstand disruption, and assisting the community to recover rapidly.

WHO is contributing to the celebration of World Water Day by providing:

- this practical guide to highlight the importance of health issues in water-related disasters. This guide provides key message on how to prepare for and commemorate WWD. It encourages partners, international organizations, private companies, governments, NGO's, and the community at large to support and celebrate this unique occasion;



- links to WHO web sites where documents on water in emergencies will be available for downloading. Visit http://www.who.int/water_sanitation_health/en/;
- an issue of the Health Action in Crisis newsletter, dedicated to the theme for 2004. The newsletter will feature global stories, case studies, and events focusing on water-related disasters;
- a message from the Director-General of WHO;
- a WHO fact sheet focusing on the role of WHO in health aspects of water emergencies. This is available in English and French;
- organizational support for ceremonies on water in emergencies in most WHO country offices.

Every year, World Water Day is part of a continuing initiative to promote access to safe drinking-water supply and sanitation. It is a springboard for raising awareness about water, stimulating debate, and focusing on the health dangers that derive from inadequately managing water and sanitation. This year, World Water Day is a unique opportunity to bring attention to water in disasters, and particularly to the health dangers that arise from water-related problems during an emergency. It is also a key date for mobilizing political will and encouraging countries throughout the globe to promote initiatives related to water in disasters. The theme, Water in Disasters, is a call to reach out beyond the community and to link with worldwide efforts by international agencies, multilateral corporations, nongovernmental agencies (NGOs), governments and the community at large. It is an opportunity to capitalize on the energy and commitment of people, and to achieve a common goal: to bring global and local attention and to galvanize action, so that every person on the planet is less vulnerable to the disruption of water and sanitation systems when a disaster strikes.



This guide highlights the importance of water and sanitation in health, and focuses on how to protect health through effective water and sanitation interventions. Users of this guide should bear in mind that effective advocates often recycle successful ideas from others by creatively adapting and applying the ideas to their own situation.



2. World water day 2004

World Water Day 2004 is a unique opportunity to bring attention to the importance of water and sanitation in emergencies and disasters, and to:

- ensure that humanitarian health assistance is in line with international standards and local priorities, and does not compromise future health development;
- ensure that the risks related to inadequate water resource management, and to the lack of access to safe water supply, sanitation and hygiene, are recognized and properly addressed;
- advocate and negotiate for secure humanitarian access and the neutrality and protection of health workers;
- promote the integration of services and structures into public health programmes;
- ensure that the lessons learnt in a crisis are used to reduce vulnerability related to poor water and sanitation

All actions planned for World Water Day 2004 will work towards raising awareness among the general public and towards bringing about a positive change in public opinion. Public opinion can then influence policy-makers. A range of activities in every country will make the difference.



3. The kit

The World Meteorological Organization (WMO) in producing an information kit for use in conjunction with World Water Day 2004 that includes:

1. The role of the World Meteorological Organization in Water and Disasters: a fact sheet describing WMO's activities in water-related disasters.
2. A series of fact sheets on the role of other UN agencies in the Water and Disasters. Each UN or specialized agency has been invited to contribute by providing a fact sheet describing their role and functions in water-related disasters.
3. Technical information on Water and Disasters. This provides hands on practical information to field officers dealing directly with water-related disasters and providing the latest in depth information on how to manage water-related disasters.
4. A poster for the day. The poster will provide a strong visual component to the World Water Day 04 campaign. You are encouraged to use it at all WWD04 events, ceremonies, media, and other related activities.
5. Press briefing. On the day, a press briefing/conference will be organized.



4. Web sites

To support celebration of World Water Day 2004, information on water-related disasters can be found at the following web sites:

<http://www.wmo.ch>

<http://www.unisdr.org>

http://www.who.int/water_sanitation_health/en/

<http://www.who.int/disasters/>

<http://www.worldwaterday.org>

The WMO and ISDR will be launching a web site soon to address the World Water Day 2004. You should consult the above web sites as a link to the foregoing site will be available.

Remember that World Water Day on 22 March 2004 is, above all, a media event. This provides you with a tremendous opportunity to capture public attention and to raise awareness on:

- the importance of World Water Day, and especially to raise awareness on the health hazards from water infrastructure damaged by disasters;
- the good work done by you or your organization to improve the situation;
- the information gaps and what more you can do to raise awareness;
- the success stories.



5. Getting the message out

5.1 Document the problem

Facts based on solid research are crucial to any advocacy campaign. Although many global statistics exist, local data will be most persuasive to local politicians and media.

A disaster is an event that exposes a significant number of people to extreme conditions to which they are vulnerable. The disaster can result in injury and loss of life, and damage to property and livelihoods.

Some of the information that could be gathered to help communicate the message is given in the following text box, as well as how the information could be used.

Document the problem

- collect information on water in disasters in your region/country;
- identify gaps (problems) in water/sanitation coverage, as well as the steps you can take to raise awareness and stimulate action;
- publicize and promote the work done by you or your organization to improve the situation;
- highlight success stories.



5.2 Package the message

Once you have collected and analysed data, transform it into something everyone can relate to. Sound bites (short, catchy facts) are the best for this purpose, but remember that the message may need to be changed to fit the target audience. Below are a few examples of short messages that could be used under different conditions.

5.2.1 Droughts

- The risk of infectious diseases, such as cholera, typhoid fever, diarrhoea, acute respiratory infections and measles, are all increased by a lack of water-supply and sanitation services, by malnutrition and displacement, and by the greater vulnerability of the population brought on by the drought emergency.
- The ability of people to access health-care services is undermined by the disruptions that attend drought emergencies. The disruptions include forced migration, loss of buying power, and the erosion of coping capacities, all of which contribute to an overall increase in morbidity and mortality. Health services might not have adequate water-supply and sanitation facilities, which only adds to the health risks.

5.2.2 Floods

- Drowning is the leading cause of death in the case of flash floods and coastal floods. Fatal injuries can occur during evacuation or during cleanup activities.
- Injuries consist of small lacerations or punctures from glass debris or nails. Electric shocks can also occur.
- In the short term, the impact of floods on the transmission of communicable diseases is limited, although there is definitely an increased risk for water-borne and vector-borne diseases.



- Flooding can damage lifeline systems, such as the water and sanitation infrastructure, and can interrupt water-supply and sanitation services.
- Water sources might become contaminated during flooding. Latrines and shallow wells might also become flooded, which would represent a major health hazard.
- Toxic chemicals could contaminate water sources during flooding, but this has not been adequately documented so far.

5.2.3 Landslides

- Landslides cause high mortality and few injuries: trauma and suffocation by entrapment are common.
- Short-term and long-term mental health effects are observed.
- Lifeline systems (water system, hospital, health centre, energy and lines of communication) in the path of a landslide can be severely damaged or destroyed.
- The indirect effects of a landslide include loss of property value, livestock and crops, which increase the vulnerability of the population by reducing the coping and caring capacities of the affected people.

5.2.4 Tropical cyclones

- Building collapse and wind-driven debris cause injuries, trauma, and asphyxiation due to entrapment. Electrocutation or drowning can also occur (e.g. while securing property, such as television antennae or boats). Flooding and sea surges increase the risk of drowning.
- Short-term and long-term mental health effects are observed.
- The impact of tropical cyclones on the transmission of communicable diseases is limited, and outbreaks are rarely observed. Nonetheless, the risk of water-borne disease and diseases transmitted by vectors



can be exacerbated, since the changes in the physical environment caused by the cyclone can increase human exposure to disease vectors.

- The impact of a cyclone on the health infrastructure and other lifeline systems can cause food shortages and interrupt basic public-health services (water, etc).

5.3 Mobilize others

Approach local partners with an outline of activities and events for World Water Day and ask for their involvement and support. Explain how their participation shows enlightened self interest. As well as supporting a good cause, it will increase their profile and visibility in the community.

Discussions, fora, seminars and courses are useful for exchanging information with the public, NGOs, policy-makers and decision-makers, and with associations for physicians, teachers, children and environmental health. You can discuss the implications if no action is taken, and state what can and should be done to improve the situation in a water emergency.

In the following text boxes are checklists of actions you might choose to take, and examples of people/organizations you may want to involve.



Policy-makers and decision-makers

- identify the relevant water and sanitation policies and legislation, and those in government responsible for them;
- assess information on water in disasters and ensure priority issues get the necessary high-level attention;
- ensure that government budgets in health and other sectors can fund programmes to improve water and sanitation in disasters;
- promote linkages between water, sanitation and hygiene, and health and environment policies;
- ensure that health workers, volunteers and others are adequately equipped to address health hazards from disrupted water and sanitation infrastructure;
- raise awareness among stakeholders of the dangers in water-related disasters.



Local authorities, mayors NGOs, society

- push for authorities to provide better services;
- build community awareness about water, sanitation and health issues, and about the importance of preparedness for reducing the vulnerability of water and sanitation services;
- influence local and national policies, and hold authorities accountable for their actions and for the services they provide.

Health and social workers, and environmental health officers

- promote recognition of the main hazards related to water disasters;
- assist community groups to create healthier places;
- evaluate the impact of the actions taken.

Private sector

- involve the private sector in preparedness and in vulnerability reduction by forming public/private partnerships;
- create institutional and management arrangements that ensure that the private sector will be involved in an effective response when a disaster disrupts water-supply and sanitation infrastructure.



5.4 Organize events

Parades, competitions, street events, and quizzes with the World Water Day 2004 theme all create media attention and get the message out to large numbers of people in an entertaining and stimulating way. This is a good way to reach people who might not be attracted to more traditional events, such as seminars or meetings.

It is also a good idea to involve celebrities as spokespersons, but remember it takes time and preparation to get celebrities involved.

Involve celebrities

- choose individuals who are well known and respected within the country or community and who can bring positive attention to World Water Day;
- invite personalities in music, film, sports, and politics to talk about the issues;
- find out if a well-known person lives nearby or is from your area – they may be more likely to give “local support” to your event;
- celebrities are often not aware of the causes and consequences of the subject matter, so make sure they are briefed in advance – specify clearly to the celebrity or their agent/manager how you want them to contribute and the message you hope to put across.



5.5 Work with the media

The media are potentially the most effective tool for communicating a message, but to work with the media you must understand how the media work. Timing is everything and again sound bites are best. Before approaching the media, prepare talking points. The title and opening line of a presentation are important, since they will determine whether you attract the attention of a listener/reader and encourage them to listen/read further. A further point is that you should not be an advocate for WHO only, but should advocate for health in general and share credit and visibility with partners. More information on dealing with the media in emergencies can be found at the following web site: <http://www.who.int/disasters/>

News reporters will be most interested in information that is newsworthy (i.e. is new, surprising, compelling or has an impact on the public). Make sure the story you wish to present to the media is newsworthy.

What makes a story newsworthy?

- a newsworthy story interests the intended audience (a personal story linked to a news event is more interesting than dry statistics);
- a newsworthy story includes only facts and figures that are accurate (every name, date and piece of information should be double-checked with a reliable source).



5.5.1 The news conference

Perhaps the single most effective means of winning media coverage for your World Water Day event is to hold a news conference.

News conference checklist

- invitation list for the print press, radio, TV and others;
- call back to invited press members to confirm their attendance;
- check the time and date for any possible conflicts with competing events;
- media advisory;
- photo opportunity;
- prepare a media kit that includes speeches, a release of the main announcement, biographies, background information, fact sheet, photographs, etc;
- anticipate possible questions from the media and prepare answers;
- focus all presentations and answers on a small number (e.g. three) of key messages.

On-site arrangements include renting hotel rooms for event participants, placing name signs on the podium for speakers, and providing audiovisual equipment and refreshments.



5.5.2 Sound bites

- Some 1.7 million deaths a year worldwide are attributable to unsafe water, and poor sanitation and hygiene, mainly through infectious diarrhoea.
- Most deaths (90%) occur in children, and virtually all occur in developing countries.
- Over one million people, every year, die of malaria, a disease closely linked to the poor management of water resources, and about 6% of the global burden of disease is water related.
- Evidence suggests that providing adequate sanitation services, a safe water supply, and hygiene education is an effective intervention that can reduce mortality from diarrhoeal disease by an average of 65% and related morbidity by 26%.
- Almost two billion people – one-third of humanity – were affected by natural disasters in the last decade of the 20th century. Floods and droughts accounted for 86% of them.
- Floods are the second most-frequent cause of natural disaster after windstorms, and they affect more regions and more people than any other phenomenon.
- Flooding increases the ever-present health threat from inadequate drinking-water and sanitation systems. Water supplies can become contaminated with industrial waste and by refuse dumps.
- Drowning, which is closely linked to flooding, adds considerably to the burden of disease attributable to flooding disasters. People who have lost everything in a flood their homes, their food, their livelihood – are also more vulnerable to disease.
- Droughts cause the most ill-health and death because they often trigger and exacerbate malnutrition and famine, and deny access to adequate water supplies.



5.5.3 The news agencies – don't neglect them

In addition to newspapers and magazines, you should contact the national news agencies, also known as the wire services. If they put out a dispatch on HEC for World Water Day, the story will go out to every newspaper, magazine, radio station and television network in your country.

Ten important news media

Agence France-Presse (AFP)

Associated Press (AP)

British Broadcasting Corporation (BBC)

Cable News Network (CNN)

El Pais

International Herald Tribune

Le Monde

Radio France Internationale (RFI)

Reuters

Spanish News Agency (EFE).

Beyond World Water Day – keeping up the momentum!

World Water Day should not be the only advocacy effort of the year!

World Water Day should be a catalyst for bringing together new partners, generating media interest and mobilizing resources that can build on throughout the year. The World Water Day can continue throughout the year to keep the issues at the forefront and to build momentum towards the next World Water Day! Every year the theme changes, but the theme is always broad enough to adapt to particular water interests.



Acknowledgements

Special thanks to the Water, Sanitation and Health (WSH) unit, Sustainable Development and Healthy Environments (SDE), and Health Action in Crisis (HAC) Department, World Health Organization (WHO), Geneva.

The **Water, Sanitation and Health Unit (WSH) at the World Health Organization** aims to reduce water-related disease and optimize the benefits of sustainable water and waste management. Our objectives are to support the health sector in effectively addressing water and waste-related disease burden and in engaging others in its reduction. WSH also assists non-health sectors in understanding and acting on the health impacts of their actions.

Activities carried out by WSH include:

- Articulating consistent ethical and evidence-based policy.
- Providing technical and policy support for sustainable capacity building.
- Setting, validating, monitoring and guiding the implementation of norms and standards.
- Assessing status and trends.
- Developing tools and guidelines for disease control and risk reduction.
- Stimulating research and development, testing new technologies and comparing performance.



The WHO Health Action in Crisis (HAC) department aims at increasing the capacity of countries to: prevent disasters, become more self-reliant, prepare for emergencies, mitigate the health consequences of a disaster, and create a synergy between emergency action and sustainable development. The HAC web site provides situational information, including baseline statistics, health situation reports and epidemiological surveillance data (<http://www.who.int/disasters/>).

For further information please contact:
World Health Organization, Geneva, Switzerland (Headquarters)

World Health Organization
20 Avenue Appia, Geneva, Switzerland
Water, Sanitation and Health Programme (WSH),
or
Department for Health Action in Crises
Tel. 0041 22 7912111
Fax. 0041 22 7913111
www.who.int/disasters
www.who.int/water/sanitation_health



Regional Offices of WHO

Africa

World Health Organization Regional Office for Africa
P.O. Box 6
Brazzaville, Congo
Tel. +242 63 72 05/81 15 53/81 12 60
Fax +242 81 19 39/81 14 09
Email. : afro@who.org
Website: www.whoafr.org

Americas

World Health Organization
Regional Office for the Americas
Pan American Health Organization
525, 23rd Street, N.W.
Washington DC 20037, USA
Tel. +1-202 974 3000
Fax +1-202 974 3663
Email: postmaster@paho.org
Website: www.paho.org



Eastern Mediterranean

World Health Organization Regional Office for the Eastern Mediterranean
WHO Post Office
Abdul Razzak Al Sanhoury Street (opposite Children's Library)
Naser City
Cairo 11371, Egypt
Tel. +20 2 670 2535
Fax +20 2 670 2492 or 94
Email: PIO@emro.who.int
Website: www.emro.who.int

Europe

World Health Organization Regional Office for Europe
8, Scherfigsvej
DK-2100 Copenhagen j, Denmark
Tel. +45 39 17 17 17
Fax +45 39 17 18 18
Email: postmaster@euro.who.int
Website: www.euro.who.int



South-East Asia

World Health Organization Regional Office for South-East Asia
World Health House, Indraprastha Estate
Mahatma Gandhi Road
New Delhi 110002, India
Tel. +91 11 3370804/09/10/11
Fax +91 11 337 0297 / 3379395
Email.: PADEYH@whosea.org
Website: www.whosea.org/rdoc

Western Pacific

World Health Organization Regional Office for the Western Pacific
P.O. Box 2932
Manila 1099, Philippines
Tel. +63 2 528 80 01
Fax +63 2 521 1036 ,536 0279, 536 0362
Email.: postmaster@who.org.ph
Website: www.wpro.who.int

