The Role of Networks

Global Alert and Response

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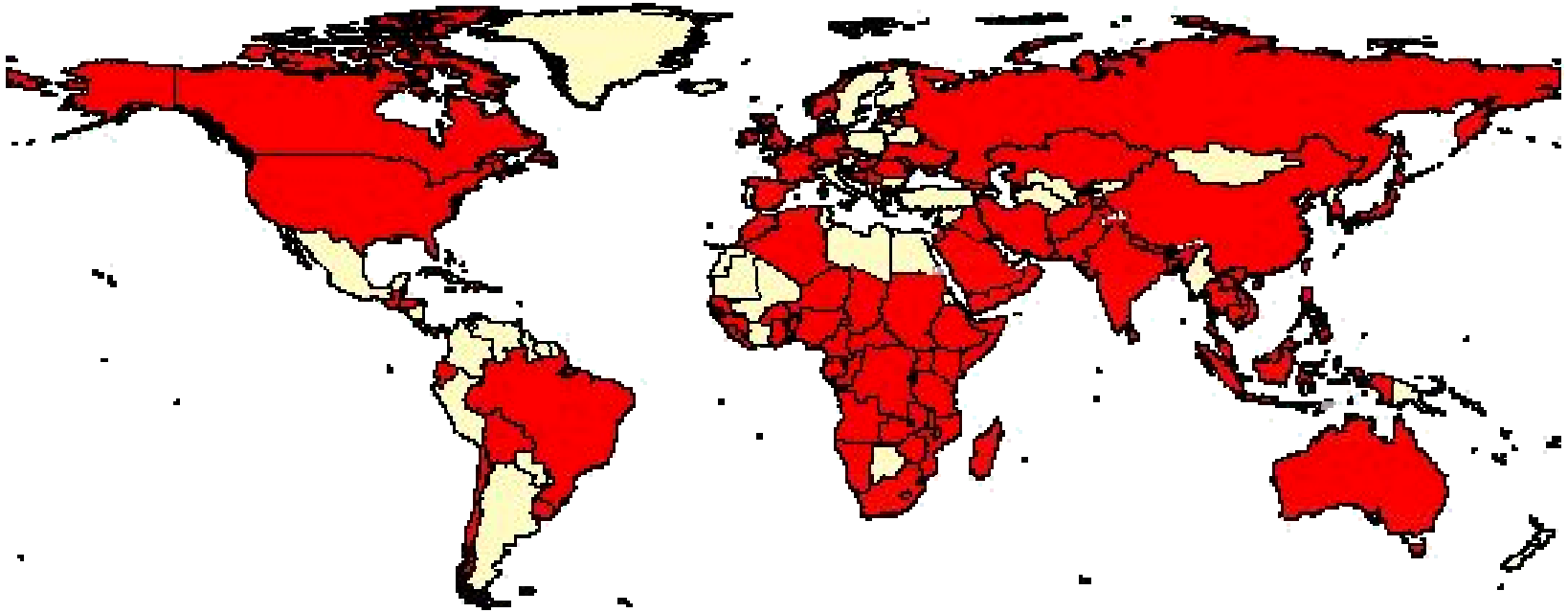
A Dangerous World !

- Since 1997, WHO has verified 800 outbreaks of international importance



- Over 50 partner institutions have been involved with WHO in mounting international responses

The Challenge

Outbreak Alert and Response

- Timely detection and verification of outbreak events
- Rapid and effective response to:
  - reduce human suffering
  - contain international spread
  - minimize impact on travel and trade
- Sustained epidemic preparedness at all levels

WHO brings partners together to focus global resources on the problem

The Challenge

Outbreak Alert and Response

No single institution has all the capacity!

WHO brings partners together to focus global resources on the problem

GLOBAL HEALTH SECURITY

EPIDEMIC ALERT & RESPONSE

INTERNATIONAL HEALTH REGULATIONS

Contain known risks

Respond to the unexpected

Improve preparedness

GLOBAL PARTNERSHIP

Alert and Response Operations at WHO

- WHO Operational Support Team
  - HQ - Geneva
  - 6 Regional Offices
  - 141 WHO country offices
- WHO outbreak event management system
  - a human process
  - supported by IT tools

Alert and Response Operations

Informal
Global Public Health Intelligence Network
(Media), NGOs

Formal
WHO laboratory networks, regional/sub-regional networks, WROs & MoH, UNOs

Epidemic Intelligence

Official Sources e.g. WRO, MoH

Verification/Confirmation

Unofficial Sources e.g. NGOs, WHO CCs

Risk Assessment

World Health Organization

HQ Departments
Regional Offices
WROs

Response Coordination

Global Outbreak Alert and Response Network

110 partner institutions and networks

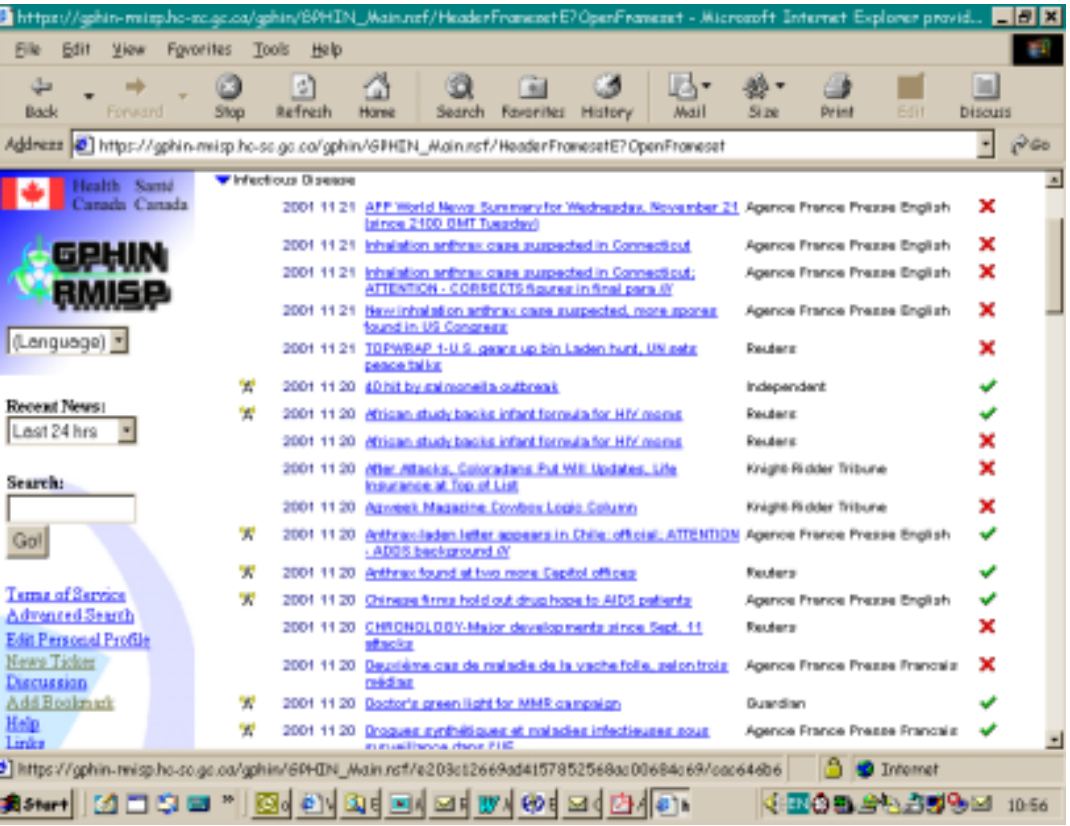
Epi/Lab Investigation

Prevention incl. Env. Control Measures

Case Management

Public Information

Intelligence



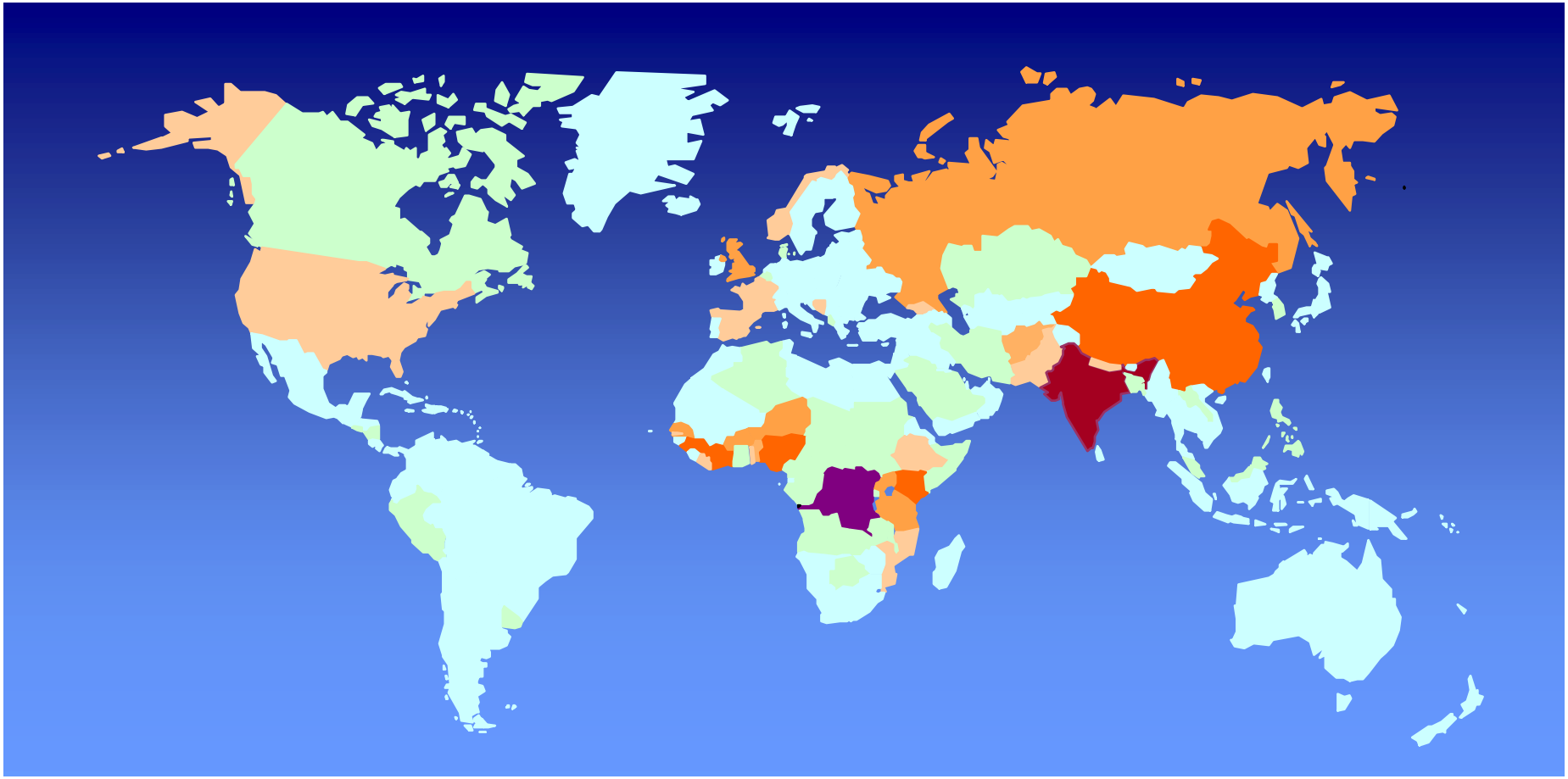
- Real time gathering of information related to outbreak events
- Multiple sources
  - GPHIN 39%
  - WHO System 33%
  - PRO-MED 6%
  - Others (labs, NGOs…) 22%

Global Public Health Information Network

Verification

- The systematic process by which WHO verifies the existence of an outbreak, its etiology and the need for assistance in an affected state(s)
- Focuses on events of potential "International Public Health Concern" (WHA 2001)
- Specific Criteria….Unknown, unexpected morbidity /mortality, assistance needed, Intl. travel and trade implications, IHR, intentional

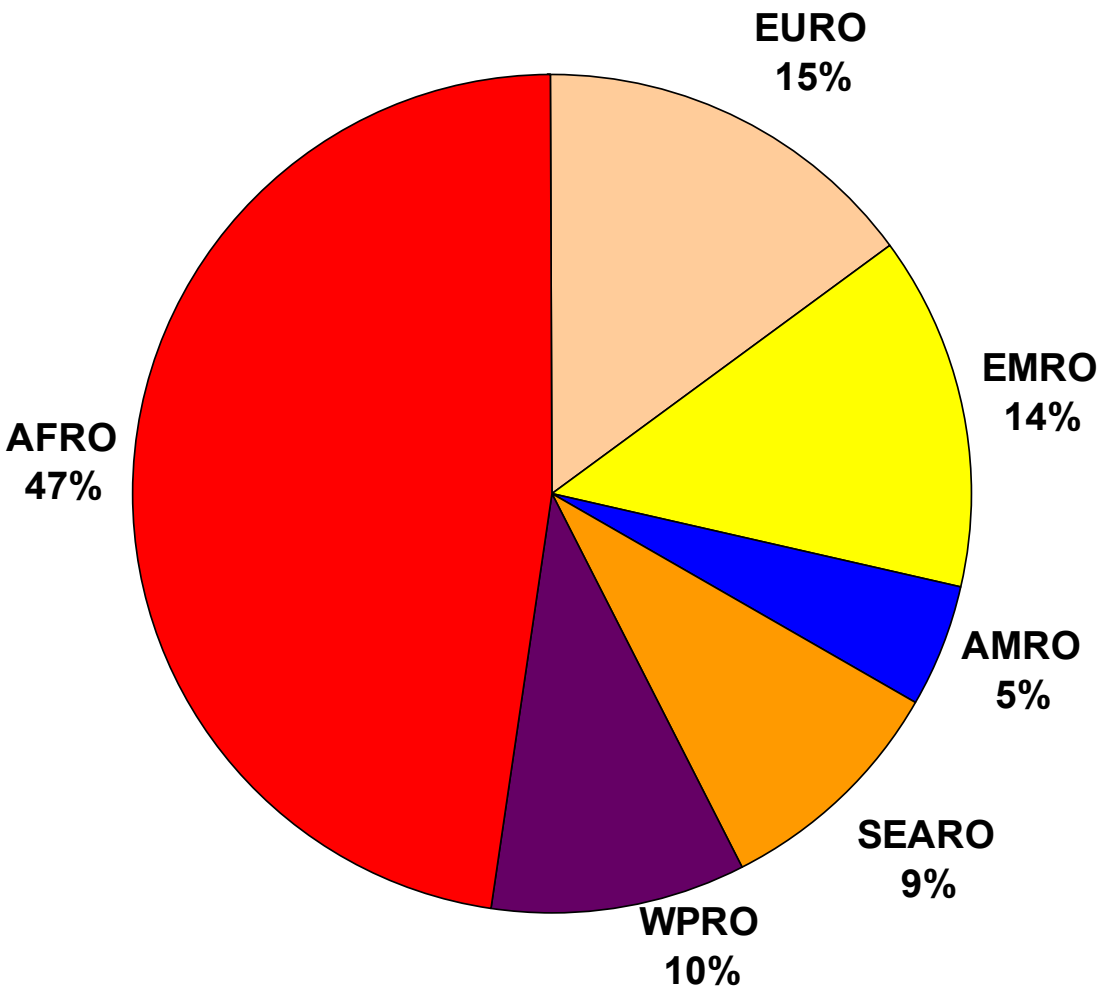
Verified Events March 2001 to Feb 2002



N = 195

Number of events verified
1
2
3
4
7
11

Verified Outbreaks March 2001 to February 2002



(N = 195)

Median days to verification = 1 (Range 0 -109)

Response Coordination

- Rapid, appropriate and effective assistance to affected state(s)
- Level of response geared to the needs (epidemic potential + national capacity to contain)
- Daily response coordination meetings
- Field presence and coordination when needed
- Systematic information management

Daily Summary

ALERT & RESPONSE – DAILY SUMMARY – 28 November 2001

Department of Communicable Disease Surveillance and Response (CSR)

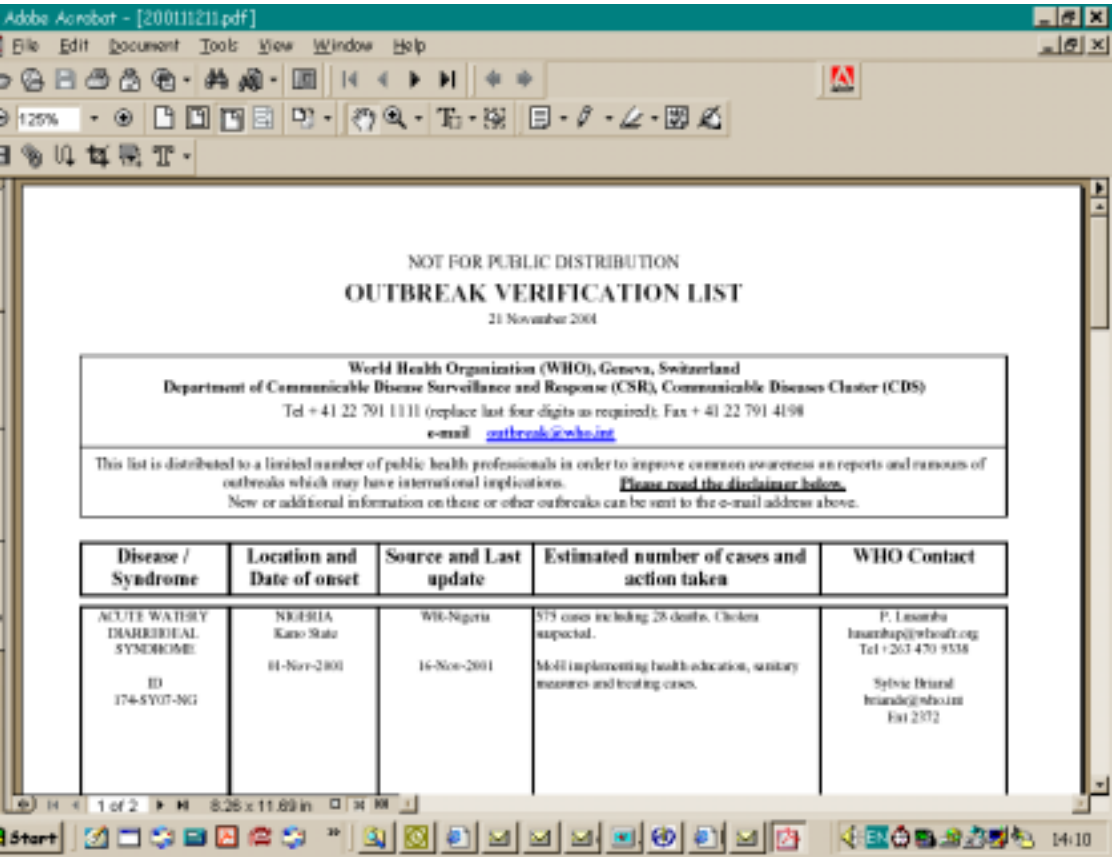
World Health Organization (WHO), Geneva, Switzerland

• Working Document for WHO Staff Only

Under verification

Disease/Syndrome	Location - onset - Epidemiological data	Decision and action	Publications
UNKNOWN ID 172-XXX-IN Initial Report: GPHIN Various source 13-Nov-2001 (as Unknown)	INDIA Assam State 01-Nov-2001 **First report** **Verified** 19-11-01 cases: 729; deaths : 7 **Unofficial** 13-11-01 cases: 700; deaths : 1 **Last update: WR India 20-Nov-01** **Verified** 20-11-01 cases: 725; deaths : 1 **Unofficial** 13-11-01 cases: 700; deaths : 1 NEW AFFECTED AREAS: LABORATORY: No	LAST INCOMING INFO 26-Nov-2001 Unicef submitted a report to the Indian Govt: Deaths not be attributed to Vit-A, State's preparedness was adequate for Vita-A programme, Overdose may be related with side-effects (nausea, vomiting), Regional Drug Analyst lab of Govt. of India reported Vit. A to be safe. **Summary info** • 20-11-01 - verbal communication: 1 deaths and 724 non-fatal cases, (most of hitter tririal or resolved by time of health-care attendance). Vit. A samples sent to MoH. UNICEF/MoHFW currently investigating. **Action** Mike to follow up with HTP ☐	Points of contact HQ: Bruno de Benoist RO: M.V.H. Gunaratne Daily list: 13 Nov 2001 OVL: No Web: No Press release: No Criteria for int. imp. High morb.mort. ☐ Int.Disease Spread ☐ Int. travel or trade ☐ Int. assistance ☐ Unknown disease ☑ Pending ☐ No importance ☐
ACUTE WATERY DIARRHOEAL SYNDROME ID 181-SY07-PH Initial Report News Media GPHIN (AAP)	PHILIPPINES Eastern Samar 11-Aug-2001 **First report** **Verified** cases: ; deaths : **Unofficial** 26-11-01 cases: 150; deaths : 11	LAST INCOMING INFO Request to verify 27-Nov-2001 Under verification **Summary info** • 26-11-01 - 150 cases including 11 deaths reported. MoH	Points of contact HQ: C-L. Chaignat RO: H. Oshitani Daily list: 26 Nov 2001 OVL: No Web: No

Dissemination of Information



NOT FOR PUBLIC DISTRIBUTION

OUTBREAK VERIFICATION LIST

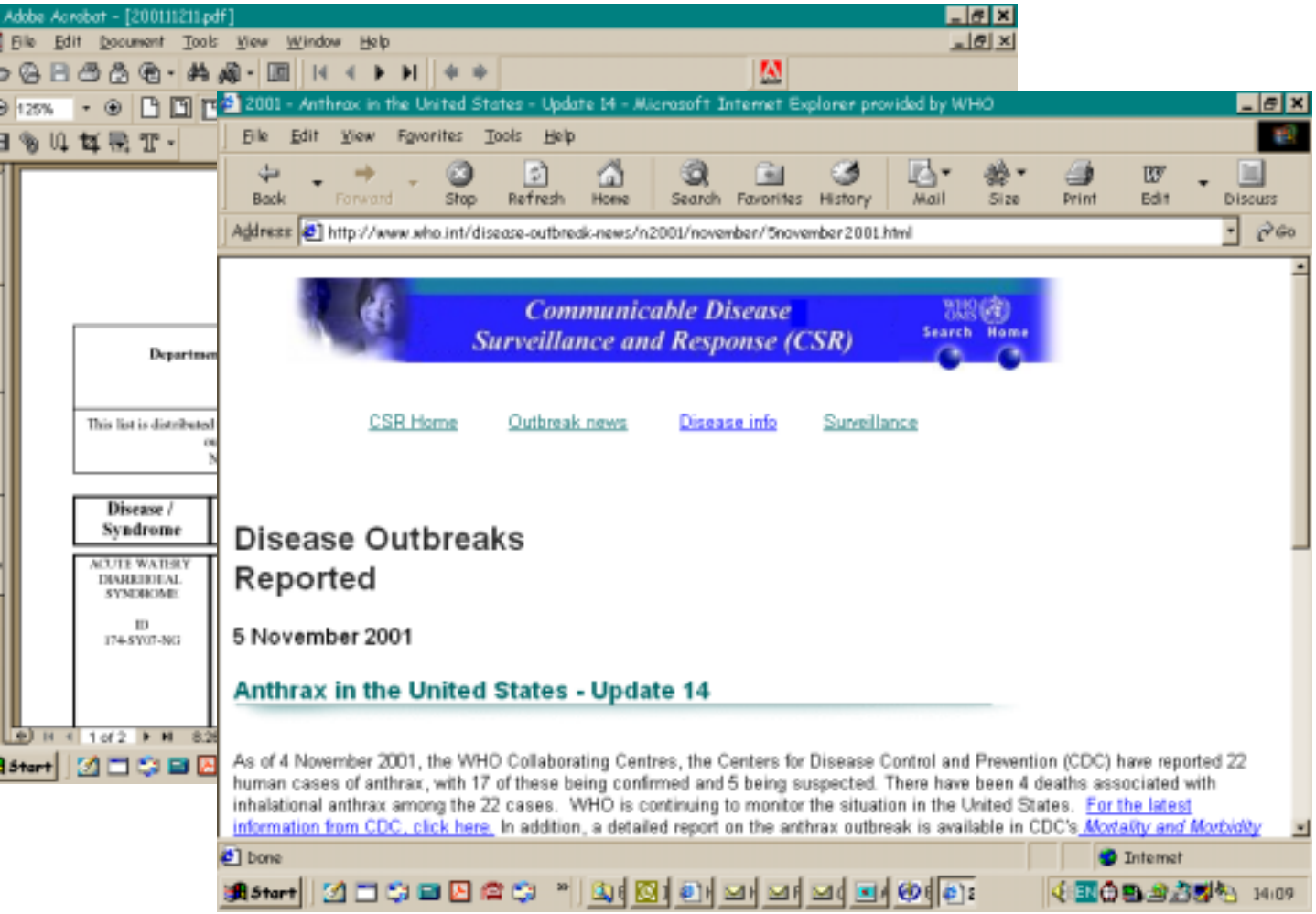
21 November 2001

World Health Organization (WHO), Geneva, Switzerland
Department of Communicable Disease Surveillance and Response (CSR), Communicable Diseases Cluster (CDS)
Tel +41 22 791 1111 (replace last four digits as required); Fax + 41 22 791 4198
e-mail outbreak@who.int

This list is distributed to a limited number of public health professionals in order to improve common awareness on reports and rumours of outbreaks which may have international implications. **Please read the disclaimer below.**
New or additional information on these or other outbreaks can be sent to the e-mail address above.

Disease / Syndrome	Location and Date of onset	Source and Last update	Estimated number of cases and action taken	WHO Contact
ACUTE WATERY DIARRHOEAL SYNDROME ID 174-5Y07-NG	NIGERIA Kano State 01-Nov-2001	WR-Nigeria 16-Nov-2001	575 cases including 28 deaths. Cholera suspected. MoH implementing health education, sanitary measures and treating cases.	P. Lusamba lusambap@whoafr.org Tel +263 470 9338 Sylvie Briand briands@who.int Fax 2372

Dissemination of Information



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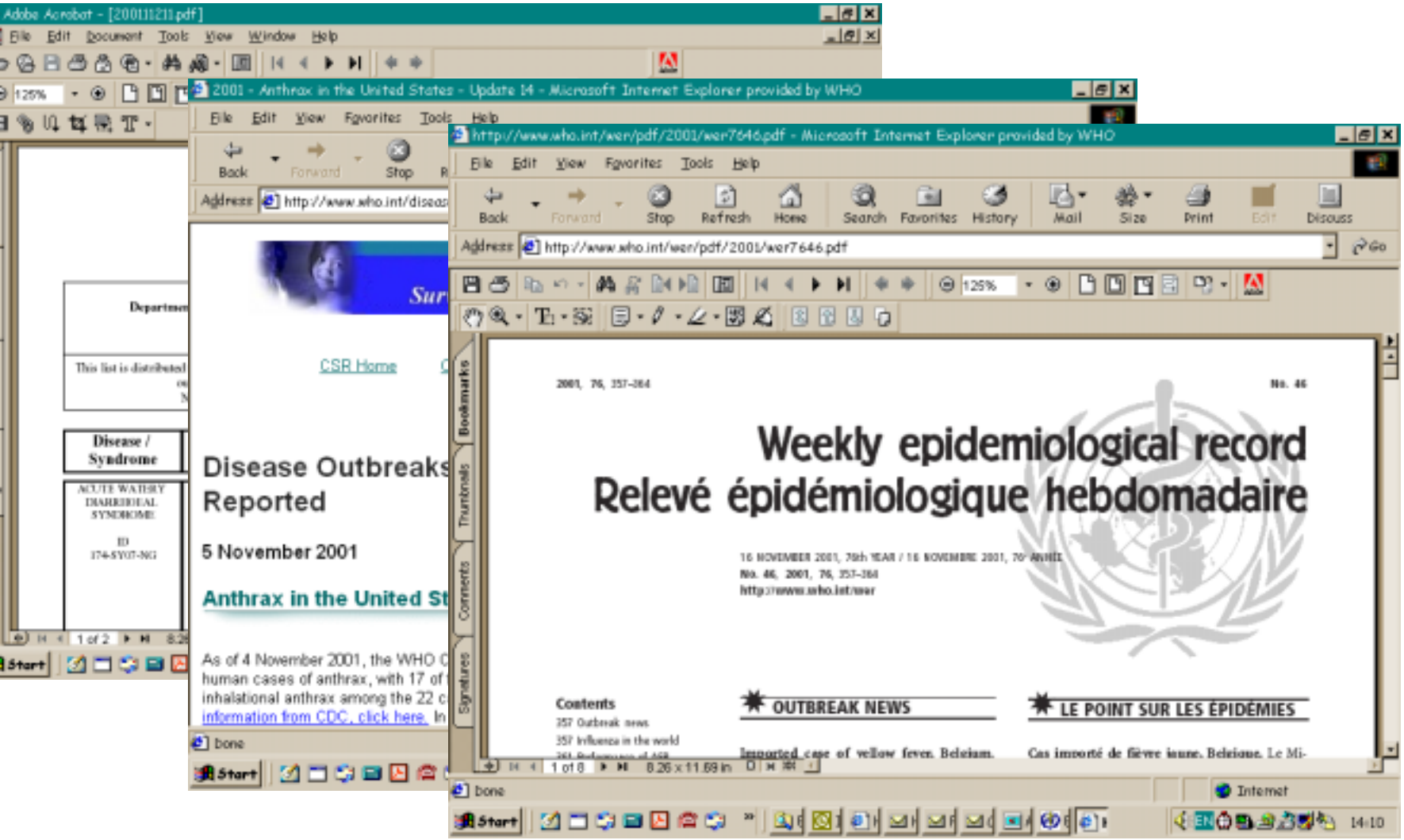

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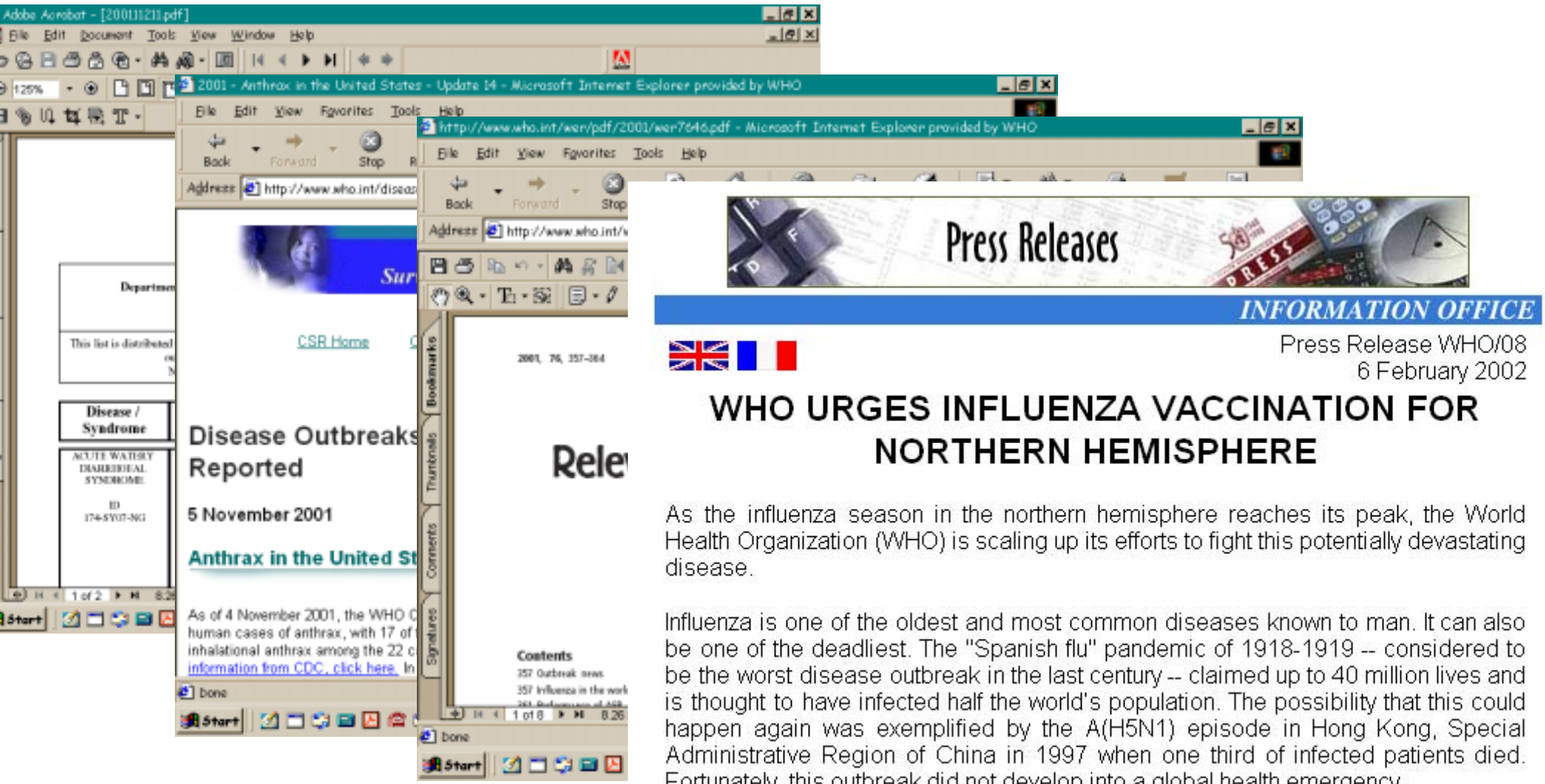
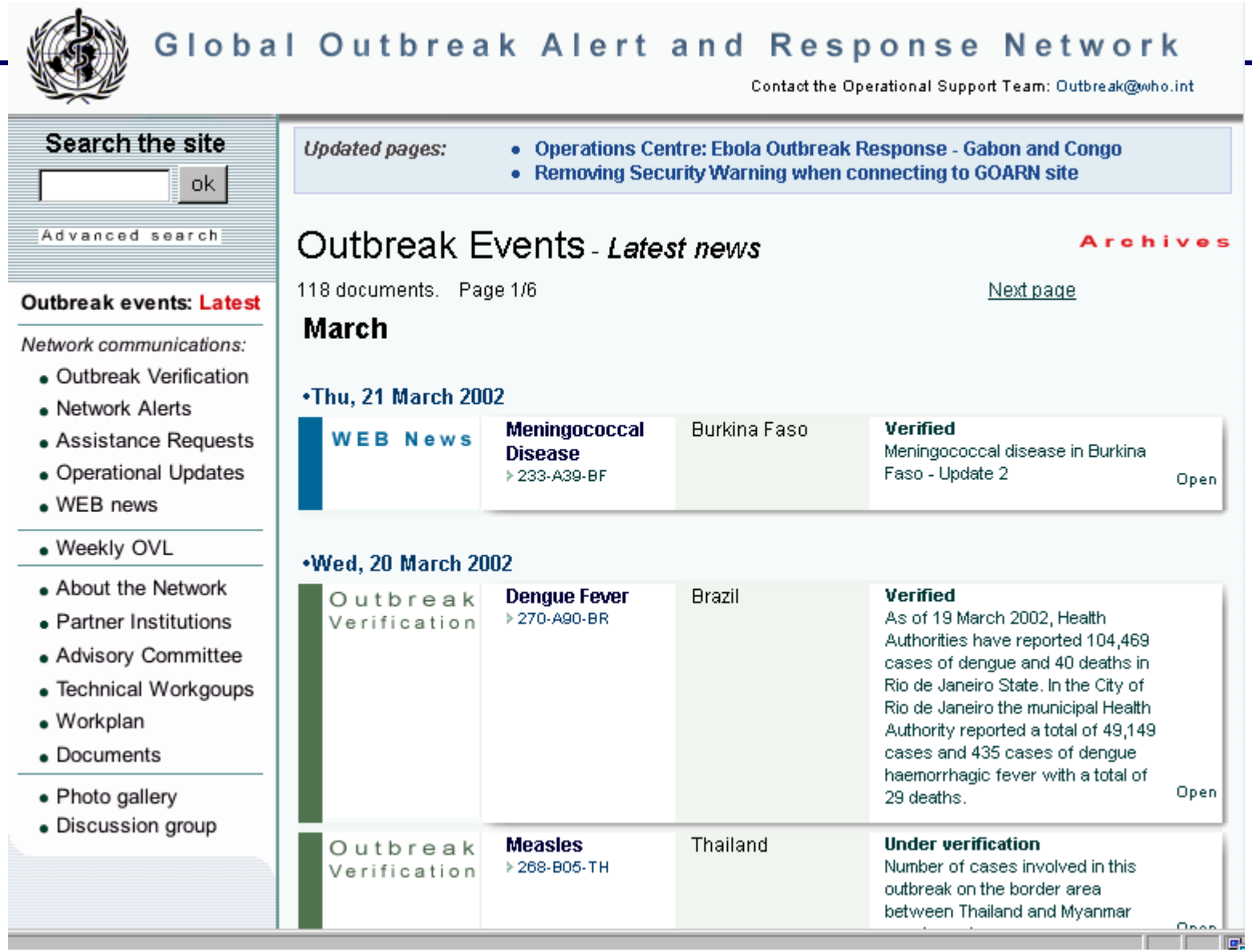


Secure Network Website



Secure Network Website

Global Outbreak Alert and Response Network

Search the site

Advanced search ok

Outbreak events: latest

Network communications:
- Outbreak Verification
- Network Alerts
- Assistance Requests
- Operational Updates
- WEB News

- Weekly OVL

- About the Network
- Partners institutions
- Advisory committee
- Technical workgroups
- Workplan
- Documents

- Photo gallery
- Discussion group

Request for Assistance

Back

printable view reply to this item

Outbreak ID:	199 A00.TZ	Fri, 25 January 2002
Classification:	**Confidential**	
Status:	Verified	
Syndrome / disease:	**Cholera**	
Country:	United Republic Of Tanzania	
Place:	Zanzibar	
WHO Region:	AFRO	

Request for Assistance for Cholera Mission to Zanzibar.

From 9 November 2001 to 4 January 2002, 548 people have been diagnosed with Vibrio cholera infection and 24 persons have died (CFR= 4.38%). The cases have been laboratory confirmed by the Public Health laboratory Ivo de Carneri. Since 1978, Zanzibar has been affected by frequent cholera outbreaks.

Action

A WHO mission is going to Zanzibar on the 31 January, 2002 for a project related to *Shistomiasis*. At the same time, this mission will collect basic information on the present cholera outbreak.

Secure Network Website

Global Outbreak Alert and Response Network

Search the site

Advanced search ok

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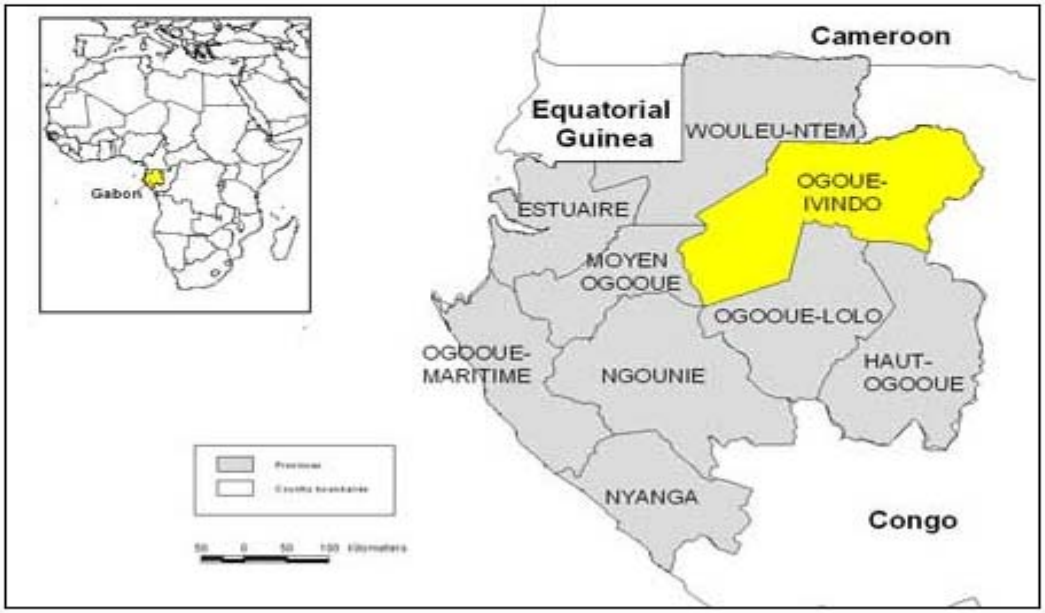
printable view reply to this item forward this item

Operations Centre: Ebola Outbreak Response - Gabon and Congo



- **Latest Updates**

Secure Network Website

Global Outbreak Alert and Response Network

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Advanced search ok

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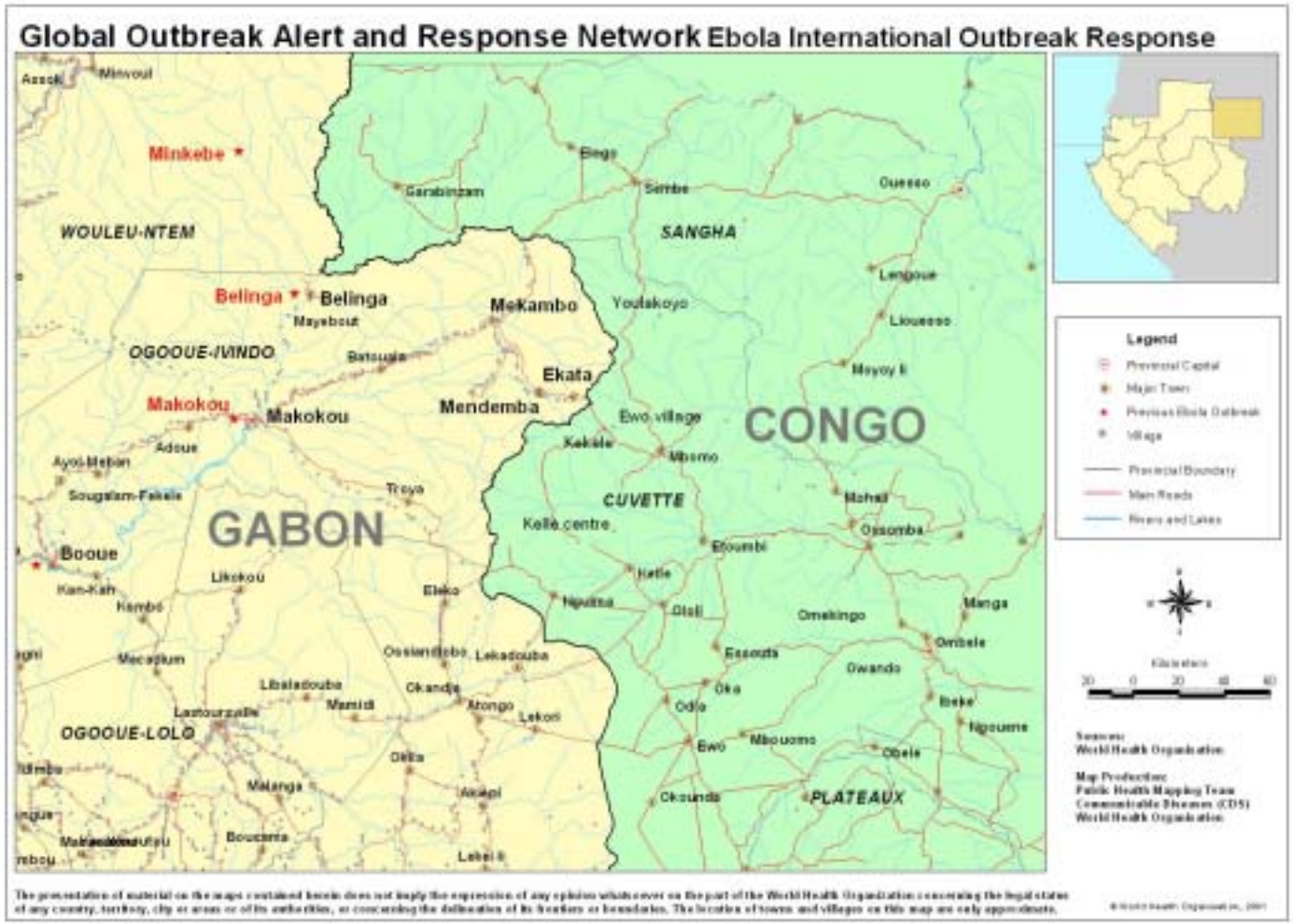


Global Outbreak Alert and Response Network

A "Network of Networks"

- **A technical partnership of 110 institutions and networks who mobilize and pool resources for outbreak alert and response**
- Contain outbreaks by rapid identification, verification and communication of threats
- Deliver appropriate technical assistance to affected state(s)
- Contribute to long-term outbreak preparedness

Building the Partnership

April 2000 – November 2001

- A framework for international outbreak response
- Partnership consultations in Geneva (Apr. 2000 & Nov. 2001)
- Interim Working Group*
  - Defining constitution and membership
  - Providing strategic advice on outbreak response
  - Guiding principles for international alert and response
  - Communications & Operational protocols, Code of conduct
  - Technical working groups
  - Work plan

** CDC Atlanta, Epicentre, EPIET, European Commission, Health Canada, Institutes Pasteur, IPH Belgium, INVS Paris, IRC, Mekong Basin Disease Surveillance, NIID Japan, MSF, NIH Pakistan, NIV South Africa, TEPHINET, Thai FETP, UNICEF, WHO*

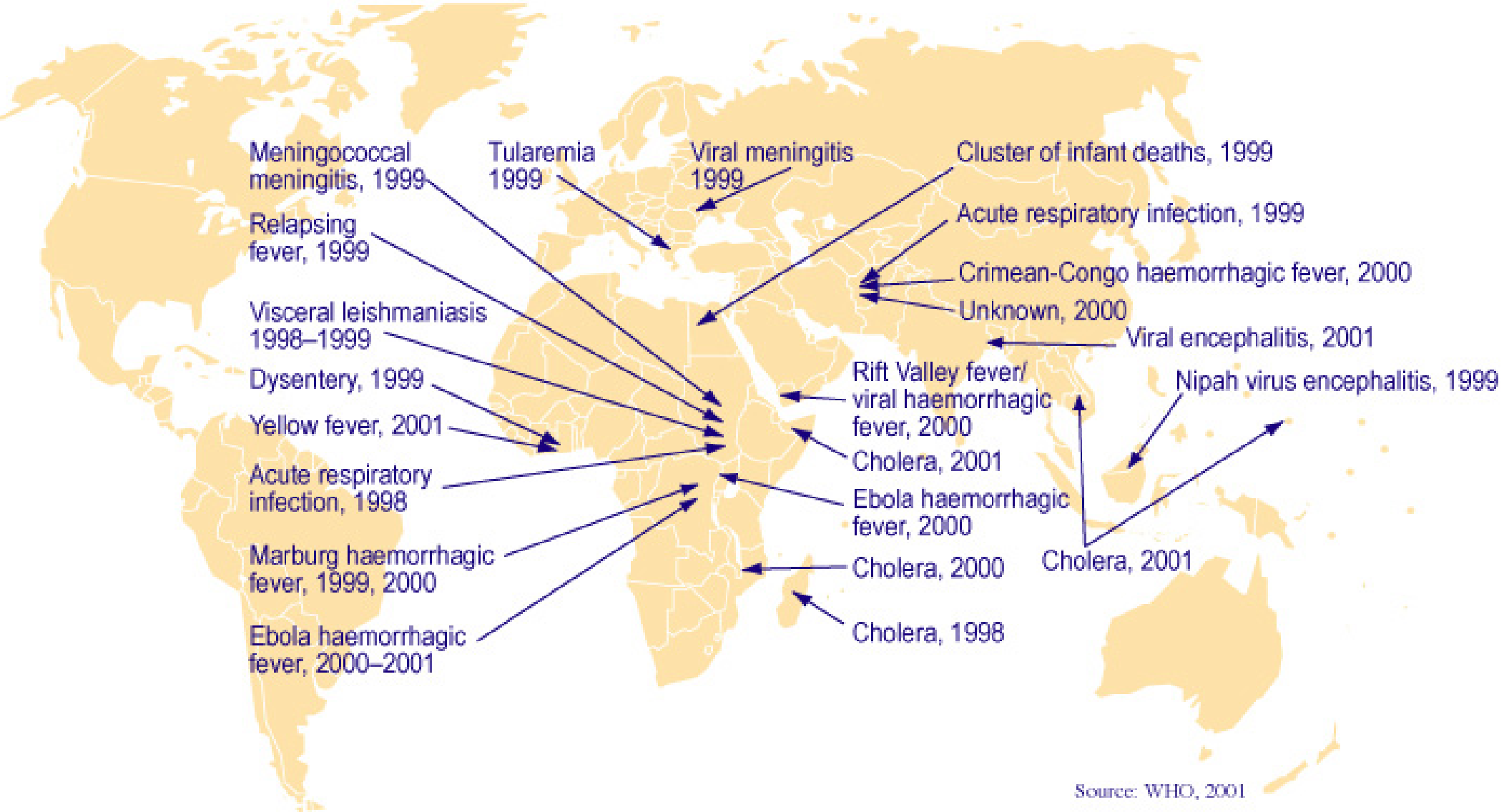
Supporting the Network

Operational Support Team At WHO/HQ

Alert and Response Operations Center in Geneva

- Network Manager
- Logistics and Security Coordinator
- Event Management System
- Field Epidemiology Support
- Disease Specific Expertise
- Administrative Support

Some WHO-facilitated epidemic response missions in the field, 1998–2001



Global Outbreak Alert and Response Field Operations

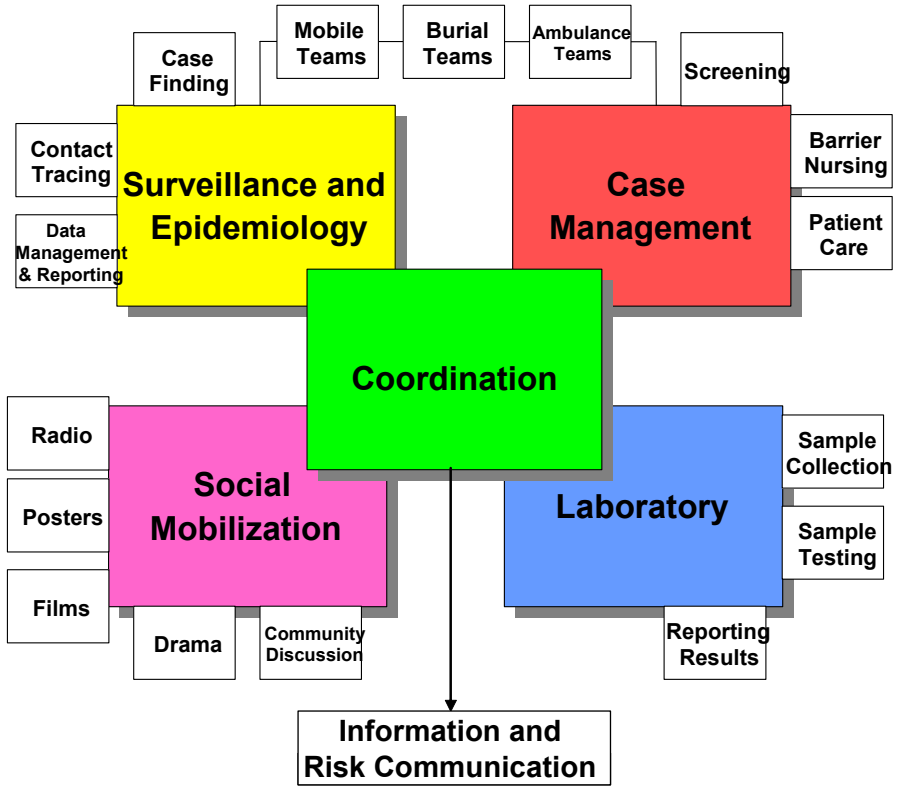
Uganda – Ebola, 2000–2001

- Largest outbreak of Ebola recorded
- Urban centre in northern Uganda
- 70% of population internally displaced in “protected villages”
- 425 cases and 6000 contacts over a 30,000 km^2 area

Coordinated Network Response

Global Outbreak Alert and Response Field operations

- 500 national and local staff and volunteers
- 120 international staff from 22 institutions
- Coordinated investigation, control and research
- First ever Ebola field laboratory
- Effective information management
- Targeted advisory notices on appropriate precautions and response



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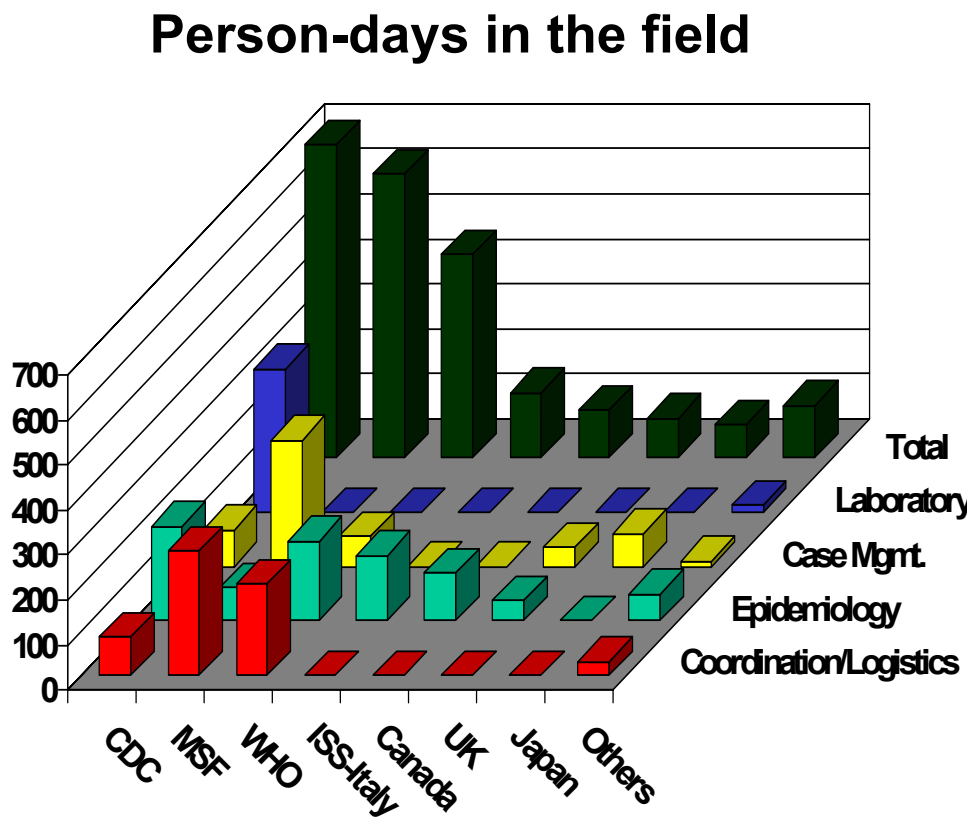

Sustained Follow-up

Global Outbreak Alert and Response field operations

- Permanent isolation wards established in Gulu
- Community-based early warning surveillance and response system for priority infectious diseases implemented
- June 2001: new focus of 3 suspected cases of HF detected within three days, patients isolated and specimens tested negative at NIV in South Africa

Rapid Alert and Response

Global Outbreak Alert and Response Field Operations

October 2000

Sun 8: Two student nurses die in Lacor hospital with fever and haemorrhage.

Mon 9: National MOH investigate

Tues 10: WHO Country Office notified of acute HF outbreak (pathogen unknown).

Wed 11: WHO HQ notified by Country Office. WHO Country Office surveillance officer and MoH clinical expert visit Gulu. Samples collected. Information appeared on OVL.

Thu 12: Samples forwarded to NIV in S. Africa.

Fri 13: Preliminary lab results reported by NIV were positive for Ebola. Task force formed at national level. Message sent from WHO to Network partners.

Sat 14: Confirmatory lab tests completed. Ugandan Press release announcing Ebola outbreak. National task force meeting held in Kampala with WHO. WHO offers to coordinate international response.

Sun 15: WHO sub-regional team travels to Gulu

Mon 16: WHO is formally asked to coordinate international response WHO HQ team departs from Geneva for Uganda. WHO press release.

Urban Yellow Fever

Global Outbreak Alert and Response Field Operations

Cote d'Ivoire - 2001

- First urban yellow fever epidemic in over a decade
- 3.5 million people at risk
- International response
  - Team (WHO/UNICEF/MSF/IFRC/CDC/IP...)
  - Global reserve stock of vaccine (UNICEF/WHO) released
  - 3 million vaccines and safe injection equipment dispatched
  - 2.8 million people vaccinated in 7 days
  - Surveillance (for new cases, adverse events)

Currently …..in 2002

- Ebola Response Teams in Gabon and Congo (EPIET, NHS, PHLS, CDC, Epicentre, MSF-B, MSF-H, IP Lyon, CIRMF, Health Canada, IFRC, WHO ….)
- Support to diagnostics in Kosovo for tularaemia (ISS, German KFOR)
- Assessment team in Afghanistan for hemorrhagic fever (WHO)
- Response in meningitis belt 2002 - Ethiopia, Somalia, Burkina Faso, Mali (MSF, CDC,WHO)
- Southern Sudan, investigation of haemorrhagic fever (KEMRI, WHO)
- Cholera response in Tanzania (ICDDRB, WHO)
- Technical assistance with plague in India (CDC, WHO)
- Investigation team for monkeypox in DR Congo (MSF)

Thank You

For further information please contact

outbreak@who.int