

## PREPARATION OF IDSR INDICATORS IN UGANDA

**Implementation of the WHO-AFRO and CDC supported Integrated Disease Surveillance and Response (IDSR) strategy at country level goes through four phases. These phases are:**

- 1) Assessment of the strengths and weaknesses of the current IDSR systems
- 2) Preparation of a plan of action for reform
- 3) Implementation of the plan of action
- 4) Monitoring and evaluating the implementation of the plan.

The IDSR indicator working group which comprises members from WHO-AFRO, WHO-HQ and CDC (Division of International Health and the Meningitis and Special Pathogens Branch of the Division of Bacterial and Mycotic Diseases) proposed a list of indicators to monitor and evaluate the implementation of the IDSR program at country and WHO-AFRO level to the May 2002 Task Force on IDSR meeting in Kampala, Uganda. The indicators were divided into eight core indicators and five AFRO level indicators as shown below:

### **A. Core Indicators**

1. *Proportion of districts submitting reports on time*
2. *Proportion of cases of each disease targeted for elimination and eradication which were reported using case-based forms*

3. *Proportion of suspected outbreaks of epidemic-prone diseases notified from the district to the next higher level within 2 days of surpassing the epidemic threshold*
4. *Proportion of districts that have current trend analysis (line graphs) for priority diseases*
5. *Proportion of reports of investigated outbreaks that include case-based data*
6. *Proportion of outbreaks of epidemic-prone disease that occurred in the last 12 months with laboratory confirmation*
7. *Proportion of confirmed outbreaks with recommended response*
8. *Case fatality rate for each epidemic-prone (priority disease) reported*

### **B. AFRO level Indicators**

9. *Proportion of countries producing and disseminating feedback bulletins*
10. *Proportion of districts with health personnel trained on IDSR using the IDSR training materials*
11. *Proportion of countries that have an established national laboratory network*
12. *Proportion of countries that have assessed their national surveillance, epidemic preparedness, and response systems after September 1998 using the IDSR assessment protocol*
13. *Proportion of countries that have a functional national interdisciplinary IDSR committee*

Countries were requested to start using the indicators after the Task Force Meeting

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### **In This Issue:**

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- **GSP team in Uganda is strengthened**
- **Epi Info and communication workshops in Zimbabwe**
- **IDSR indicators in Uganda are calculated**

This newsletter includes a special section on the IDSR core indicators for the period January to December 2002 in Uganda.

## GHANA

### DISTRICT DIRECTORS AND DISEASE CONTROL OFFICERS ATTEND AN OUTBREAK INVESTIGATION AND EPI INFO WORKSHOP

In May, the Ministry of Health in Ghana and the Ghana Public Health School together with CDC/GSP organized training for regional and district surveillance personnel in Ghana. The one-week training workshop was conducted in Kintampo, Ghana on infectious disease surveillance, outbreak investigation, and introduction to Epi Info2002 for case-based reporting. This workshop represents module 4 of a 7 module training program in Integrated Disease Surveillance and Response (IDSR). Two representatives attended the workshop from each of Ghana's 10 administrative regions. Each region sent one District Director (a physician), and one disease control officer from the regional office. In addition, three tutors from the Rural Health Training School also attended. The Rural Health Training School is the only training program in Ghana that prepares secondary school graduates in a two or three year program to develop skills in disease surveillance, outbreak investigation, and environmental health interventions. The school admits approximately 40 candidates per class into a curriculum that includes approximately half classroom and half in-field assignments over the course of training. Graduates take positions in District or Regional offices.

The workshop agenda and training materials were developed



jointly by Ghana Health Service, CDC-Division of International Health, Atlanta, with financial support from CDC and USAID, facilitated by the Ghana School of Public Health. The participants achieved a overall pre-training score of 69% and a post-training score of 86%; stratified by subject matter areas, the pre- and post-training scores were 75% and 93% for

disease surveillance, 68% and 81% for outbreak investigation, 81 and 95 for Epi Info 2002, 33% and 68% for epidemiology study design.

GSP supported the activity through the Cooperative Agreement that CDC has with Ghana Public Health School. Dr. Ed Maes represented GSP and was the lead instructor.

#### **IDSR Indicators in Uganda, from page 1**

The Epidemiology and Surveillance Division of the Uganda Ministry of Health, which has epidemiologists supported by GSP, recently produced the first attempt by any country in the African region to produce the indicators.

The Uganda Ministry of Health calculated the IDSR indicators based on calendar year 2002 databases and reports. Of note, based on the information from the databases they had, they were unable to calculate indicators 3, 4, 5, and 7 on the proposed list. The Ugandan team

also added another indicator not on the proposed list at the bottom. During the calculations they prepared comments on the status of the indicators and what needed to be done next. The results of these calculations appears at the end of this Update.

## UGANDA

### PROJECT TEAM IS STRENGTHENED

The project team in Uganda was strengthened and expanded by adding a Resident Student Mentor, Mr. David Mukanga, and a Field Coordinator, Dr. Robina Najjemba. The two team members will be working at the Uganda PHSWOW to provide support and assistance to the students. An epidemiologist to replace Dr. Margaret

Lamunu has also been recruited. Dr. John Ndyahikayo joined the Uganda team in April. Dr. Lamunu, who was a member of the GSP Uganda team for the last three years, accepted an assignment with the Communicable Disease Surveillance and Response (CSR) Department of WHO in Geneva. Also, Mr. Simon Lali, a

laboratory technologist, was recruited in January 2003 to support the central public health laboratory to initiate a robust specimen collection, analysis, and reporting system. He will also be responsible for the publication of a regular monthly laboratory report in the MoH's epidemiological bulletin.

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## ZIMBABWE

### COMMUNICATION AND EPI INFO WORKSHOPS

GSP team members assisted in teaching the introductory course and Epi Info 2002 to first year MPH students in Zimbabwe in January 2003.

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GSP support to Zimbabwe has led to the beginning of the production of national guidelines on cholera and anthrax control.

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MPH trainees from the PHSWOW assisted the Ministry of Health and Child Welfare in the investigation of three outbreaks: an outbreak of cholera in Beitbridge, Matebeleland South, an anthrax outbreak in Manicaland province, and

an outbreak of Cholera in Masvingo province. The team gave oral presentations for the investigated outbreaks in all districts where investigations took place and at the MPH monthly meeting.

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A 14 day GSP supported workshop on communication skills was held during June 2003, and facilitated by Elliott Churchill, a Senior Communications expert at the Division of International Health. Participants included MPH trainees, academic staff from the Department of Community Medicine, University of Zimbabwe, and

Provincial Directors from the Ministry of Health and Child Welfare.

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Dr. Eugen Manyora, the epidemiologist supporting sub-national training and linkage of the district epidemiology course to the MPH course, accepted a position with UNICEF Zimbabwe. GSP is working on recruiting another epidemiologist to support the Epidemiology Unit of the Ministry of Health and Child Welfare in outbreak response and an information officer to assist with the regular production of the surveillance bulletin. These officers are anticipated to be in place by November 2003.

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## TANZANIA

### AN EPIDEMIOLOGIST TO BE HIRED

Dr. Peter Nsubuga, GSP team leader assisted the Ministry of Health in installing an Epi Info 2002 database for the Infectious Disease Week Ending (IDWE) surveillance system in the

Epidemiology Unit during a trip in February 2003.

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At the request of the Ministry of Health, GSP is planning to recruit

and place an epidemiologist in the Epidemiology Unit to support the Ministry in data analysis and epidemic response.

## RECENT/UPCOMING EVENTS

- Visits to Uganda, Tanzania and Ghana by Dr. Peter Nsubuga in June and July
- Renewal of Cooperative Agreement proposals from Ghana, Tanzania, Uganda, and Zimbabwe due to CDC in July.
- GSP supported attendance by GSP Field staff and MoH collaborators in various summer/fall trainings in South Africa (Health Information Systems) and Atlanta (Applied Field Epidemiology).



Group discussion during the Ghana workshop

The Global Surveillance Project Team

**CDC Project Team:**

***Medical Epidemiologist:***

Dr. Peter Nsubuga

***Public Health Advisor:***

Mr. B. J. Jarrar

***Program Analyst:***

Ms. Brenda Thomas

***Training Specialist:***

Ms. Nadine Sunderland

**Uganda:**

***Epidemiologist / Trainer:***

Mr. Luswa Lukwago

***Laboratory Technologist:***

Mr. Simon Lali

***Senior Resident Mentor (PHSWOW)***

Mr. David Mukanga

***Medical Epidemiologist:***

Dr. John Ndyahikayo

***Field Coordinator:***

Dr. Robina Najjemba

**Ghana:**

***Information Officer:***

Mr. Simon Yaw Kwadje

***Medical Epidemiologist:***

Dr. Jack Galley

## Special Section

### THE IDSR CORE INDICATORS FOR THE PERIOD JAN-DEC 2002

(Blue numbers in first column refer to indicators number on the IDSR indicator list)

No.	Indicator	Factors in computation		Target	Indicator result (Per quarter)				Data source	Comments
		Numerator	Denominator		1 <sup>st</sup> Qtr	2 <sup>nd</sup> Qtr	3 <sup>rd</sup> Qtr	4 <sup>th</sup> Qtr		
111	Regions that have established Regional laboratory network	Functional regional laboratories	Regional labs that should have been established last year	100%					CPHL database	1. Regional to central is good 2. District to regional is as low as 40%
				(3/3)						(3/3)
18	<b>Case fatality rate for each epidemic prone (priority diseases) reported last year</b>									
2	i. Cholera	Deaths that were due to cholera last year	All Cholera cases that were registered last year	< 1%	4.7%	5.9%	5.4%	6.2%	ESD database	Late reporting contributes to the high fatality rate
					27/572	30/508	25/465	42/683		124/2228
	ii. Measles	Deaths that were due to measles last year	Total cases of measles that were registered last year	None	2.5%	2.2%	1.6%	1.2%	ESD database	The measles cases being registered are too high for a disease targeted for elimination
					114/4482	159/711	134/8485	79/6391		486/26469
	iii. Meningococcal meningitis	Deaths that were due to meningococcal meningitis last year	All cases of meningococcal meningitis that were registered last year	< 10%	18.7%	12.4%	19.3%	15.6%	ESD database	Some of the diagnoses were not laboratory confirmed
					77/412	75/603	97/503	104/668		353/2186
	iv. Plague	Deaths that were due to plague last year	Cases of plague that were registered last year	< 1%					Plague control database	
										6.9%
										4/58
11	<b>Districts submitting timely weekly and monthly surveillance reports</b>									
3	i. Weekly reports	Districts that submitted weekly reports in time last year	Districts that were supposed to have submitted weekly reports in time last year	90%	84.9%	94.5%	94.4%	93.5%	ESD database	The multiple communication facilities (fax, radio, telephone, and cell phones) have helped to achieve this
					618/728	688/728	687/728	681/728		2674/2912
	ii. Monthly reports	Districts that submitted monthly reports in time last year	Districts that were supposed to have submitted monthly reports in time last year	80%	56.6%	69.6%	63.1%	63.1%	HMIS database	Target not yet achieved. There is need to improve
					95/168	117/168	106/168	106/168		424/672

<b>Completeness of district reports submitted weekly and monthly (Received compared to expected)</b>										
11 4	i. Weekly reports	Number of districts that submitted weekly reports every week last year	Districts that were expected to submit weekly reports every week last year	90%	84.9%	94.5%	94.4%	93.5%	91.8%	ESD database
					618/728	688/728	87/728	681/728	2674/2912	
	ii. Monthly reports	Number of districts that submitted monthly reports every month last year	Districts that were expected to submit monthly reports on monthly basis last year	80%	92.9%	92.9%	92.9%	91.1%	92.4%	HMIS database
					156/168	156/168	156/168	153/168	621/672	Weekly and monthly value difference is caused by not updating the data base with late coming weekly reports
<b>Cases of each disease targeted for elimination or eradication notified using case based forms</b>										
12 5	i. AFP/Polio	AFP/Polio cases that were reported last year using case based forms	All cases of AFP/Polio that were reported last year	100%					100%	UNEPI database
	ii. Neonatal tetanus	Cases of neonatal tetanus that were reported last year using case based forms	All cases of Neonatal tetanus that were reported last year	100%					7.2%	UNEPI/HMIS database
	iii. Guinea worm	Cases of Guinea worm that were reported last year using case based forms	All cases of Guinea worm that were reported last year	100%	100%	100%	100%	100%	100%	Guinea worm program office database
	iv. Leprosy	Cases of Leprosy that were reported using case based forms last year	All cases with Leprosy that were reported last year		100%	8/8	12/12	3/3	24/24	NTLP database
<b>Epidemic prone diseases that occurred last year with laboratory confirmation results</b>										
16 6	i. Cholera	Epidemics of Cholera which were confirmed by laboratory last year	All the cholera epidemics that were reported last year	100%	100%	60%	50%	100%	82.4%	CPHL/ESD databases
	ii. Meningococcal meningitis	Epidemics of meningococcal meningitis that were confirmed by laboratory last year	All epidemics due to Meningococcal meningitis that were reported last year	100%	100%	3/5	1/2	6/6	14/17	CPHL/ESD databases
	iii. Measles	Measles epidemics that were confirmed by laboratory last year	Measles epidemics that were reported last year	100%	2/2			1/1	3/3	UNEPI database
	iv. Plague	Epidemics of plague that were	Epidemics of plague that were	100%					40/58	Available data not adequate to compute

		confirmed by laboratory last year	reported last year							ESD database	this indicator
<b>13</b> 7	<b>Suspected outbreaks of epidemic prone diseases notified within 48 hours of surpassing epidemic threshold</b>	Suspected outbreaks notified within 48 hours	All suspected outbreaks notified to the MoH last year							ESD database	System not accurate enough to capture this information
<b>17</b> 8	<b>Confirmed outbreaks with recommended response (timely response with effective team)</b>	Confirmed outbreaks with recommended response	All confirmed outbreaks responded to last year							ESD database	Not possible to determine this indicator from the data available
<b>110</b> 9	<b>Districts with health personnel trained on IDSR using the IDSR training materials</b>	Districts with health personnel trained on IDSR using IDSR materials	All districts with health personnel trained on IDSR	100%						ESD database	All districts have Rapid Response teams and Surveillance Focal Persons trained on IDSR
<b>Ug1</b> (not on IDSR list) 10	<b>Completeness of health units reporting</b>	Health units reports received	Total number of reports expected from all the health units last year	80%	43%	57.7%	35.9%	87.6%	<b>56.1%</b>	ESD database	Factors like poor communication from the periphery to the district and insecurity in some district affect this indicator
				56/56	11432/26572	15338/26572	9541/26572	23263/26572	<b>59574/106288</b>		