

THE UNITED REPUBLIC OF TANZANIA



MINISTRY OF HEALTH

**INTEGRATED DISEASE
SURVEILLANCE AND RESPONSE
Training Modules for
Health Facilities
Participant Manual**



NOVEMBER 2004



Centres for Disease Control and Prevention



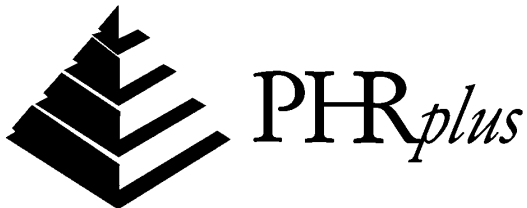
Change Project



Ministry of Health



National Institute for Medical Research



Partners for Health Reform *plus*

Integrated Disease Surveillance and Response (IDSR) in Tanzania is being implemented for the Ministry of Health in 12 districts through a collaboration of the following USAID-funded partners: Centers for Disease Control and Prevention(CDC), Change Project, Partners for Health Reform *plus*, Ministry of Health and National Institute for Medical Research.

List of contributors	
<p>National Institute for Medical Research (NIMR) Peter K.L Mmbuji Leonard E.G. Mboera William M. Krekamoo Janneth Maridadi-Mghamba Susan F. Rumisha Elizabeth H. Shayo Kesheni P. Senkoro Jumanne M. Mayoka Emaya A. Kapange Andrew Kajeguka Debora M.M. Bulemo</p> <p>Ministry of Health Ahmed Seha Raphael Kalinga Amos Mwakilasa Vincent Mgya Theopista Mbago Robert Mdoe Anna Nswilla Elias Martin Mohamed A Mohamed</p> <p>Centre for Development of Health, Arusha (CEDHA) Ben Mboya Melkiory Masatu</p> <p>World Health Organization – Tanzania Mohamed Amri</p>	<p>Partners for Health Reform-plus (PHRplus) Kathryn Banke Lynne Franco Debbie Gueye Margaret Morehouse Kathleen Novak Hirshini Patel Stephanie Posner Chris Tetteh Paul Richardson</p> <p>CHANGE Project Rebecca Fields Eileen Hanlon Ann Jimerson Julia Rosenbaum Mark Weeks</p> <p>TRG Graeme Frelick Fred Rosensweig</p> <p>Centers for Disease Control and Prevention (CDC) Kathy Cavallaro Jeanette St. Pierre</p> <p>USAID Mission/Tanzania Patrick Swai</p>

Acknowledgements

We would like to express our sincere gratitude to the WHO/AFRO whose strategy, technical guidelines and self administered training modules formed the foundation upon which materials were built.

Appreciation is also extended to the regions and districts with whom we have worked for their continuous work and feedback in defining roles and responsibilities around which the modules are organized. We would like to thank the Regional Health Management Teams of Arusha/Manyara, Mtwara, Rukwa, Mwanza, Ruvuma, Dodoma, Kagera na Tabora together with Council Health Management Teams of Babati, Mbulu, Masasi, Nkasi, Sumbawanga Rural, Mwanza Urban, Tunduru, Dodoma Rural, Mpwapwa, Muleba, Igunga na Tabora Urban.

We thank Ministry of Health-Tanzania especially the IDSR “*Task Force*” for supervising the implementation of activities of IDSR in the 12 chosen districts. We also acknowledge Zonal Training Centres for their technical assistance in preparing the training modules.

Lastly we express our gratitude to USAID for the financial support which enabled this work to be completed.

Table of Contents

Module 1: Introduction to the Workshop.....	1
Module 2: Introduction to IDSR	8
Module 3: Detect and Record Priority Diseases Using Standard Case Definitions.....	15
Module 4: Report Priority Diseases	28
Module 5: Analyse and Interpret Data for Action.....	44
Module 6: Investigate and Respond to Outbreaks/Epidemics.....	65
Module 7: Successful Community Relations for Surveillance	77
Module 8: Application Planning	83
Module 9: Evaluation and Workshop Closure.....	87
Annex 1: Glossary of key terminologies used in Facility level training	92

Task 1-1

Introductions

Please state:

- Your name
- The health facility where you work
- How long you have worked with your health facility
- Your designation
- One thing you hope to learn during the workshop

Task 1-2

Individual Task

Think about the disease surveillance and response activities at your health centre, dispensary or hospital

Please identify and write down on a piece of paper:

- one thing you feel your facility is doing well
- one thing you feel your facility could be doing more effectively

You have 5 minutes

Task 1-3

In your trio (in threes)

- Reintroduce yourselves, if necessary.
- Each person shares with the others what he/she wrote.
- See if there are any commonalities.
- Have one person ready to make a brief summary for the whole group.

You have 15 minutes

Document 1-1

Workshop Goals

By the end of the workshop, the participants will be able to:

1. Explain the IDSR strategy and the importance of the health facility in its implementation
2. Detect and accurately report on priority diseases to the district level
3. Analyse and interpret data on priority diseases
4. Use data to respond to diseases
5. Investigate and respond to suspected outbreaks.
6. Advocate with communities to support IDSR implementation
7. Develop a plan to apply in each facility what was learned in the workshop

Document 1-2

Workshop Agenda

Monday	Tuesday	Wednesday	Thursday	Friday
8:30 – 10.30 Introduction to the Workshop	8:30 – 10.30 Detect Priority Diseases	8:30 – 9.00 Report Priority Diseases 9.00 – 10.30 Analyse and Interpret for Action	8.30 – 10.30 Investigate and Respond to Outbreaks/Epid emics	8.30 – 10.30 Successful Community Relations
11:00 – 12.30 Introduction to IDSR	11.00 – 12.30 Detect Priority Diseases	11.00 – 12.30 Analyse and Interpret for Action	11.00 – 12.30 Investigate and Respond to Outbreaks/Epid emics	11.00 – 12.30 Application Planning
12:30 – 1.30 Lunch	12:30 – 1.30 Lunch	12:30 – 1.30 Lunch	12:30 – 1.30 Lunch	12.30 – 1.30 Lunch
1.30 – 4.30 Introduction to IDSR	1.30 – 4.30 Report Priority Diseases	1:30 – 4.30 Analyse and Interpret for Action	1:30 – 3.00 Investigate and Respond to Outbreaks/Epid emics 3:00 – 4.30 Successful Community Relations	1.30 – 3.00 Evaluation and Workshop Closure

Note: These times are approximate. The schedule assumes a half hour break in the morning and a 15 minute break in the afternoon. The assumption is that the training day will end at 5 pm.

Document 1-3

Working Norms

- Active participation and full attention
- Openness to new or different ideas
- Active listening
- Balanced participation; giving everyone a chance to participate
- Keep time
- Turn cell phones off during sessions

Document 1-4 Pre-Test

To be provided by Facilitators

Document 2-1

Module 2 Objectives

By the end of this session, participants will be able to:

Explain the IDSR strategy for improving surveillance in Tanzania

Describe how surveillance data helps in understanding local public health issues

Explain the benefits and uses of surveillance in their community

Discuss the facility's role in carrying out the IDSR strategy

Document 2-2

Objectives of the Tanzania Ministry of Health IDSR Strategy

(full version)

Strengthen the capacity of the health system to conduct effective surveillance activities and provide better information for planning and managing services of all types.

Integrate multiple surveillance and other health information systems so that forms, personnel and other resources can be used more efficiently and effectively.

Improve the availability and use of information for decision-making.

Improve the flow of surveillance information between and within levels of the health system.

Strengthen laboratory capacity and involvement in confirmation of pathogens and monitoring of drug sensitivity.

Strengthen the involvement of laboratory personnel in epidemiological surveillance.

Increase active participation of health workers in surveillance.

Emphasize community participation in detection and response to public health problems.

Ministry of Health IDSR Guidelines 13 IDSR priority diseases

1. Cholera
2. Bacillary dysentery
3. Plague
4. Measles
5. Yellow fever
6. Cerebral spinal meningitis
7. Rabies/ animal bites
8. Acute Flaccid Paralysis
9. Neonatal Tetanus
10. Diarrhea in children aged <5 years
11. Pneumonia in children aged <5 years
12. Malaria
13. Typhoid Fever

Task 2-1

In groups,

Answer the following questions

- What are some uses of surveillance information?
- What are some benefits of surveillance information?

Record responses to both questions on flipchart

Select a spokesperson to report out

You have 40 minutes.

Document 2-3

Facility Level Steps, Desired Level of Performance and Tasks

Steps	Desired Performance	Tasks
A. IDENTIFY OR CONFIRM DX	Proper diagnosis (based on SCD & lab results)	Make diagnosis using standard case definitions (SCDs) based on presenting symptoms, history and lab results
B. RECORD PRESUMPTIVE /CONFIRMED DX	Complete and accurate record on register	Record all cases (including information requested in register) that present at the health facility in register
		Record diagnosis and treatment (presumptive/ confirmed) of all cases presenting at the health facility in register at time of clinician-patient interaction
C. DIAGNOSIS/ OUTBREAK CONFIRMATION FROM LABORATORY	Take specimen(s) (at lab or by clinician)	Decide if laboratory confirmation needed and request appropriate test(s)
		Collect specimen according to protocol for requested test(s) (in laboratory or in observation room)
	Test specimen(s)	Test specimen(s) in lab according to standards
		Record lab result immediately
	Confirm diagnosis	Deliver results to requestor of test(s)
		Requestor confirms diagnosis on positive or develops alternative presumptive diagnosis
		Record confirmation of diagnosis
	Confirm outbreak using standard thresholds	Requestor confirms diagnosis on positive or develops alternative presumptive diagnosis
Confirm an outbreak based on known thresholds		

D. CASE TREATMENT /REFERRAL	Appropriate case management of presumptively or definitively diagnosed case	Manage treatment of case according to protocol for presumptive /confirmed diagnosis
		Based on result of lab test, clinician proceeds with treatment (or referral) according to protocol
E. RECORD OUTCOME	Record outcome for inpatients at discharge	Record outcome (including deaths) of all inpatient cases in register at time of discharge
F. COMMUNICATE DIAGNOSIS FOR OUTBREAK PRONE DISEASES TO DISTRICT/COMMUNITY	Timely communication of potential disease for outbreak prone disease based on thresholds to district office	Communicate information about outbreak-prone case(s) to district immediately and inform the community
G. PARTICIPATION IN OUTBREAK INVESTIGATION AND RESPONSE AND CASE TREATMENT	Participation and collaboration of case investigation and case treatment with district (teams)	Assist district with case investigation according to roles and responsibilities of facility staff during outbreak
		Manage and treat cases according to outbreak protocol
		Prevention/control of outbreak
		Long term prevention measures after outbreak
H. COMPILE WEEKLY SUMMARY DATA	Completed weekly summary reports on time	Compile summary reports from register of 7 priority diseases weekly
I. COMPILE MONTHLY SUMMARY DATA	Completed monthly summary reports on time	Compile summary reports from register of 13 priority diseases monthly (including updated death information)
J. REPORT TO DISTRICT	Summary reports are communicated to district on time	Send weekly/ monthly summary reports to district on time (day and time defined by district)
K. ANALYZE DATA	Analysis of data according to protocol and needs of facilities	Analyse and interpret data according to protocol and needs of facility
		Analyse data for meeting thresholds of non-outbreak diseases
L. USE OF ANALYSED DATA FOR ACTION	Awareness of disease trends and patterns within facility	Monitor disease trends and patterns within facility catchment's area regularly

	catchment's area Determining needs for facility and outreach efforts	Determine needs for facility and outreach efforts
		Use feedback data to monitor operations at facility
M. FEEDBACK ON ANALYSED DATA AND OUTBREAK INFORMATION TO COMMUNITY	Feedback to communities and outreach/community health workers	Provide feedback on disease trends, patterns, actions, source of outbreak to communities on action
		Provide guidance and feedback to communities regarding treatment and control measures, including longer-term prevention activities
		Provide guidance and feedback regarding program needs and strategies to outreach and community-based health workers

Document 3-1

Module 3 Objectives

After completing this module, participants will be able to:

Apply standard case definitions correctly to 13 IDSR priority diseases (+TB and AIDS and viral hemorrhagic fever)

Consistently record presumptive diagnoses from standard case definitions in facility register(s)

Describe the epidemic/action thresholds for each of the priority diseases

Become conversant with the case investigation form

Document 3-2

Standard Case Definition and Epidemic/Action Thresholds for Communicable Diseases for Health Facility Level

Disease	Age	Cardinal signs	Epidemic/Action threshold
Acute flaccid paralysis	<15 years	Sudden lameness (<i>Guillain Barrie Syndrome</i>); any suspect of polio	1 case
Bacillary dysentery	All ages	Bloody diarrhoea , abdominal pain	≥2 cases per week at health facility
Cholera	≥5 years	Severe dehydration, acute watery diarrhoea	1 case
Diarrhoea + some dehydration + severe dehydration	2 months – 5 years	Diarrhoea, restless/ irritable, sunken eyes, drinks eagerly, skin pinch goes back slowly. Diarrhoea + unconscious, sunken eyes, not able to drink, skin pinch goes back very slowly	Number of cases clearly exceeding number of cases of previous year/ season
Malaria (Uncomplicated)	All ages	High fever± joint pains, sweats, nausea, chills, vomiting	Number of cases for that period exceeds the expected by 50%
Severe Malaria	All ages	High fever ± altered consciousness , behavioural change, convulsions, passing black urine, extreme body weakness, severe pallor, jaundice For infants: also inability to drink or breastfeed, or vomiting everything	Number of cases for that period exceeds the expected by 50%
Measles	All ages	Fever, rash± cough, running nose, red eyes	5 cases/ health facility
Cerebrospinal meningitis	All ages	Sudden fever ± neck stiffness, intense headache, nausea and vomiting, altered consciousness and convulsions, bulged anterior fontanel (in infants)	1 case
Neonatal tetanus	Newborn + 2-28days	Unable to suck/feed, stiffness, convulsions	1 case
Plague	All ages	Fever, headache, painful swelling of inguinal/ axillary lymphnode. cough with blood stained sputum	1 case

Pneumonia	2months– 5 years	Cough, rapid/ difficult breathing (2-12mo = >50/ min; 2mo-5yr = 40/min)	Number of cases for the period clearly exceeds cases of previous year/season
Severe pneumonia	2months – 5 years	Cough, difficult breathing ± chest in drawing, stridor, unable to drink/ breastfeed, vomiting, convulsions, lethargy or unconsciousness	
Rabies	All ages	History of animal bite ± fever, mental confusion, fear of drinking water, altered consciousness or death	1 case
Typhoid	All ages	Long-standing fever, abdominal pain ± skin rash, constipation/ diarrhoea	2 cases/ week at health facility
Yellow fever	All ages	Sudden fever, jaundice within 2 weeks	1 case
*AIDS	All ages	Any person with a positive HIV test and with features of opportunistic infection e.g. TB, fungal infection, etc.	
*Tuberculosis	All ages	Person presenting with chronic cough, weight loss, and night sweats. Mycobacterium tubercle isolated from the body specimens.	
*Viral Hemorrhagic Fever	All ages	Mild/ severe fever bleeding from nose, gums, vagina, skin or eyes and vomiting blood	1 case

NB: * Not a priority disease in National IDSR guidelines (Sept 2001), but a national priority and very important for health facility to note (Mboera, 2002)

Document 3-3

Sample Registration for Out-Patient (OPD) - Regular forms

Sehemu ya Kawaida from MTUHA Book 5

Date of starting a new page _____

1	2	3	4	5	6	7	8
*	SN	Name of Patient	Physical Address	Age	Sex	Diagnosis	Treatment

Document 3-4

Sample Registration for Out-Patient (OPD) - Reportable diseases form

Sehemu ya Magonjwa yanayotolewa Ripoti from MTUHA Book 5

Date of starting a new page _____

1	2	3	4	5	6	7	11	12	13	14
*	SN	Date of onset	Name of patient	Physical address	Age	Sex	Lab results	Immunization	Diagnosis	Treatment

Document 3-5

Registration for In-Patient (IPD)

FORM 1 (a): IDS REGISTRATION FOR IN-PATIENT (IPD) (in Tanzania IDS Guidelines)

S N	ID	Name of Patient	Address	Age	Sex	Occupation	Date of Onset	Date of Admission	Diagnosis on Admission	Lab Status	Imm	Treatment	Outcome DA = Alive & discharged DD = Dead DR = Referred	Diagnosis on discharge	Date of discharge or Death or Referral	Other comments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Task 3-1

In pairs:

- Using the SCD table (Doc 3-2) in your manual, complete the “Suspected disease/syndrome” column of the sample register (Doc 3-6). Use only IDSR diseases.
- Note that the first three rows have been completed as examples.

Take 20 minutes

Document 3-6

Application of Standard Case Definitions

Below is an extract from the Tumaini Health Centre register for new cases from 6-10 May 1996. Complete the last column, applying the standard case definitions to the symptoms provided. The first 3 rows have been completed as examples. Use only IDSR priority diseases.

ID No.	Date of attendance	Name	Village	Sex	Age	Signs / Symptoms	Suspected diagnosis
01	6/5/96	A.M.	C	M	6/12	Cough, fever, difficulty in breathing	<i>Pneumonia</i>
02	6/5/96	N.N.	C	M	22 yrs	Laceration of right arm	<i>Injury</i>
03	9/5/96	L.D	A	F	16 yrs	Acute watery diarrhoea and vomiting, severe dehydration	<i>Cholera</i>
04	6/5/96	Y.E.	C	F	28 yrs	Pregnancy, fever, anaemia	
05	6/5/96	I.L.	B	F	7/12	Fever, bulging fontanel	
06	6/5/96	R.E.	B	F	8/12	Fever, cough, difficult in breathing	
07	6/5/96	K.L.	D	F	4 yrs	Fever, vomiting, diarrhoea	
08	6/5/96	T.I.	A	M	13 yrs	Fever, headache, bodily pains	
09	6/5/96	A.F.	D	F	15 yrs	Severe muscle pains with Paralysis of the lower limbs	
10	6/5/96	D.O.	D	F	24 yrs	Fever. Headache, neck stiffness	
11	7/5/96	K.M.	A	M	22 yrs	Bloody diarrhoea, Abdominal pain	
12	7/5/96	U.G	A	F	1yr 9/12	Fracture, left humerus	
13	7/5/96	P.F.	C	M	1yr 11/12	Cough, fever, rashes	
14	7/5/96	H.I.	C	F	24 yrs	Amenorrhoea for 3 months, abdominal pain, Per vaginal bleeding, anaemia	

ID No.	Date of attendance	Name	Village	Sex	Age	Signs / Symptoms	Suspected diagnosis
15	7/5/96	G.T.	C	F	21 yrs	Fever, shock	
16	7/5/96	W.T.	A	F	16 yrs	Cough, fever, weight loss	
17	7/5/96	R.Y.	B	M	2yrs 2/12	Diarrhoea, vomiting. Dehydration	
18	8/5/96	A.C.	C	M	1 yr	Fever, cough, difficult in breathing	
19	8/5/96	Z.U.	B	F	1 yr 1/12	Fever, vomiting, headache	
20	8/5/96	A.C.	C	M	11/12	Pustular eruptions on hands, groins and flexor aspects of the knees	
21	8/5/96	J.F.	B	M	15 yrs	Fever, pain in the joints	
22	8/5/96	M.M.	B	F	18 yrs	Bloody diarrhoea	
23	8/5/96	L.M.	B	M	5 yrs	Infected sore on left leg	
24	8/5/96	P.L.	C	M	1 yr 10/12	Diarrhoea and dehydration	
25	8/5/96	Z.E.	A	M	16 yrs	Laceration of left leg	

Document 3-7

Case investigation form

The sample form on the next page has two sections. The top half is where information is recorded about the individual case. It provides information that can be used to plan a more detailed case investigation. The bottom half of the form is a laboratory transmittal slip. It contains spaces where laboratory results and information about the timeliness of the laboratory testing should be recorded. After the health facility or district staff complete the top part of the form, a copy of it can be made and included with the specimen, if a specimen has been collected, when it is sent to the laboratory.



United Republic of Tanzania
Ministry of Health

Form 10
CASE INVESTIGATION FORM

Compulsory notification - Health facility or district should complete all information in full.

GENERIC REPORTING FORM - from health facility/health worker to Council Health Management Team

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AFP	Cholera	Measles	Meningitis	Neonatal Tetanus	Plague	VHF	Yellow Fever

Reporting health facility: _____ Reporting district: _____

ID number assigned by district: _____
Region District Year of onset Case number

Received form: _____ at district: ____/____/____ at national level: ____/____/____

PATIENT INFORMATION

Name(s) of patient: _____ Date of birth (DOB): ____/____/____
Sex: M = Male F = Female Age (if DOB unknown): ____ Years ____ Months

Patient's residence: _____
Village Neighborhood Town City
District U = Urban R = Rural

Locating information: _____
(If applicable, name of mother and father if patient is neonate or child)

CLINICAL INFORMATION

Date seen at health facility: ____/____/____ I = Inpatient
O = Outpatient
Date notified district: ____/____/____ Name of clinician: _____
Date of onset: ____/____/____ Diagnosis: _____
Outcome: 1. Alive 2. Dead 3. Unknown Final Classification: _____
(Confirmed, probable, discarded, presumptive)
Number of vaccine doses: _____ Unknown
[Measles, neonatal tetanus (mother), yellow fever, meningitis only]
Date of last vaccination: _____
[Measles, neonatal tetanus (mother), yellow fever, meningitis only]

IF LAB SPECIMEN IS COLLECTED

Complete the following information. Send a copy of this form to the lab with the specimen.
Date of specimen collection: ____/____/____
Lab that specimen was sent to: _____
Specimen collected: Blood CSF Stool
(please circle) Other: _____
(list)
Date/time specimen sent to lab: ____/____/____ : ____ : ____
Time

Person completing form: _____

Date sent form to district: _____

FOR THE LABORATORY

Complete this information and return this form to the IDSR focal person at your level.

Date/time lab received specimen: ____/____/____ ID Number: _____
 ____ : ____ District: _____
 Time

Specimen condition:

Assess the condition of the specimen container and the documentation as follows:

- | | | |
|------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| | YES | NO |
| • Specimen container should be labeled. Information on container label and case investigation form should match. | <input type="checkbox"/> | <input type="checkbox"/> |
| • Specimen container should be intact and not leaking. | <input type="checkbox"/> | <input type="checkbox"/> |
| • Specimen should be at appropriate temperature. | <input type="checkbox"/> | <input type="checkbox"/> |

Please record the condition: _____

Was specimen rejected? YES NO Reason for rejection: _____

Disease/Condition	Type of test	Results (A=Awaiting results/pending)	Disease/Condition	IGM Results	Virus Detection
Cholera	Culture	+ - A	Yellow Fever	+ - A	+ - A
	Direct exam	+ - A	Measles	+ - A	+ - A
	Method used for direct exam: _____		Rubella	+ - A	+ - A
Meningitis			AFP	P1 P2 P3 ENT	
	<i>N. meningitidis</i>	Culture		W1 W2 W3 P	
	<i>S. pneumoniae</i>	Culture	+ - A		
	<i>H. influenzae</i>	Culture	+ - A	Viral Haemorrhagic Fevers	
	<i>N. meningitidis</i>	Latex	+ - A	Rift Valley Fever	+ - A
	<i>S. pneumoniae</i>	Latex	+ - A	Ebola	+ - A
	Latex	+ - A	CCHF	+ - A	
			Lassa	+ - A	
			Marburg	+ - A	
Dysentery					
<i>Shigella dysenteriae</i>	Culture	SD type 1 <input type="checkbox"/>			
		Other shigella <input type="checkbox"/>			
		No shigella <input type="checkbox"/>			
Plague	Culture	+ - A	Other lab tests: _____		
	IFA.1: 64	+ - A	_____		
	Dipstick (F1)	+ - A	_____		
Typhoid			Other pending tests: _____		
	<i>Salmonella sp.</i>	Culture	_____		
Pneumonia			_____		
	<i>Diplococcus</i>	Culture			
	<i>Pneumoniae</i>	Culture			

Date lab sent results: ____/____/____ Date district received lab results: ____/____/____

District person receiving results: _____ District person receiving results: _____

Date lab tests sent to clinician: ____/____/____ Date lab tests sent to clinician: ____/____/____

Note: District is responsible for sending lab results to clinicians. Failure to do so will undermine cooperation with clinicians on report.

Document 4-1

Module 4 Objectives

By the end of this module, participants will be able to:

Explain the benefits of sharing information to all levels

Identify the correct report forms to use

Fill out correctly IDSR weekly and monthly report forms.

Report information to the district in a timely, complete, and accurate manner

Task 4-1

In small groups

- For the level assigned to your group, develop a list of benefits of sharing information.
- Take the point of view of the people at that level.

Record your response on the flipchart.

Take 25 minutes

Document 4-2**Procedure for filling in Forms for Accurate Recording and Reporting**

<i>When</i>	<i>What to do</i>	<i>What forms you need</i>
Every day	<ul style="list-style-type: none">• Add patients' records to the in-patient and out-patient registers• Add lab results or other diagnosis confirmations to prior entries (need to practice this)• Contact the District immediately if you have reached an epidemic threshold	In-patient register Out-patient register
Every week	<ul style="list-style-type: none">• Go through the registers and write down the number of new cases and deaths that occurred during the past week• Send the information to the District by available means (radio-call, telephone) or send the filled in form• Organise the data so it can be used in the future	IDSR Weekly report form
Each month	Start the facility register serial/registration numbers .Starting with 001, number the register books	In-patient register Out-patient register
On the first of the month	<ul style="list-style-type: none">• Go through the registers and write down the number of cases and deaths that occurred during the past month• Send the filled in form to the District	IDSR Monthly report form
During an outbreak	Use a line list to keep track of patients coming in during an outbreak. Start using the line list after 5-10 patients have come in that week with the same outbreak-prone disease.	Line list
In January of each year	Prepare annual report	MTUHA Register Book 2, Table 27A & 27B

Documents 4-3

**IDSR Form 3(b)
IDSR Weekly form for reported new cases/deaths to be sent to District
level
(to be reported to district level)**

**IDSR Form 3(c):
IDSR Working data sheet at each level for weekly reported New
Cases/Deaths
(to be maintained at the facility)**

(on next pages)

IDSR Form 3(b)
Form for health facility to report weekly new cases/deaths
Send completed form to district level.

Name of Health Facility: _____ In-patient

Outpatient

Week No _____ Starting Date: _____ Ending Date: _____ Year: _____

Disease	< 5 Years		≥5 Years	
	Cases	Deaths	Cases	Deaths
Cholera				
AFP				
Measles				
CSM				
Plague				
Yellow fever				
Animal/dog bites				
Rabies				

Date of filling the form: _____

Has this form been discussed/reviewed at the health facility? Y / N

Name of health facility in-charge: _____

Reporting officer _____

Title: _____

Signature: _____

Date received at District _____

Received at District on Time (T) or Late (L)? T / L

IDSR Form 3(c): Working data sheet at each level for weekly reported New Cases/Deaths – Part 1

Name of Health facility/District/Region: _____ In-patient Year: _____
 Outpatient

Disease			Week																									
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Cholera	< 5	C																										
		D																										
	≥5	C																										
		D																										
AFP	< 5	C																										
		D																										
	≥5	C																										
		D																										
Measles	< 5	C																										
		D																										
	≥5	C																										
		D																										
CSM	< 5	C																										
		D																										
	≥5	C																										
		D																										
Plague	< 5	C																										
		D																										
	≥5	C																										
		D																										
Yellow fever	< 5	C																										
		D																										
	≥5	C																										
		D																										
Animal/dog bites	< 5	C																										
		D																										
	≥5	C																										
		D																										
Rabies	< 5	C																										
		D																										
	≥5	C																										
		D																										

This form will be kept at each level to keep record of weekly communicable diseases that occurred for the whole year to monitor trend.

IDSR Form 3(c): Working data sheet at each level for weekly reported New Cases/Deaths – Part 2

Name of Health facility/District/Region: _____ In-patient Year: _____
 Outpatient

Disease			Week																																	
			27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52								
Cholera	< 5	C																																		
		D																																		
	≥5	C																																		
		D																																		
AFP	< 5	C																																		
		D																																		
	≥5	C																																		
		D																																		
Measles	< 5	C																																		
		D																																		
	≥5	C																																		
		D																																		
CSM	< 5	C																																		
		D																																		
	≥5	C																																		
		D																																		
Plague	< 5	C																																		
		D																																		
	≥5	C																																		
		D																																		
Yellow fever	< 5	C																																		
		D																																		
	≥5	C																																		
		D																																		
Animal/dog bites	< 5	C																																		
		D																																		
	≥5	C																																		
		D																																		
Rabies	< 5	C																																		
		D																																		
	≥5	C																																		
		D																																		

This form will be kept at each level to keep record of weekly communicable diseases that occurred for the whole year to monitor trend.

Document 4-4

IDSR Form 2(b)

IDSR Form for health facility to sum up monthly data for in-patient and out-patient *Send this form to district level*

Form 2(a)

**Monthly working data sheet for in/out-patients.
Keep this form at the facility level**

(on next page)

IDSR Form 2(b)**Form for health facility to sum up monthly data for in-patient and out patient***Send completed form to district level.*

Name of Health Facility: _____

In-patient Outpatient

Month: _____

Year: _____

Disease	< 5 Years		≥ 5 Years	
	Cases	Deaths	Cases	Deaths
Uncomplicated Malaria				
Severe Malaria				
Diarrhoea with some dehydration				
Diarrhoea with severe dehydration				
Typhoid				
NNT				
Bacillary dysentery				
Pneumonia				
Severe pneumonia				
Cholera				
AFP				
Measles				
CSM				
Plague				
Yellow fever				
Animal/dog bites				
Rabies				

Date of filling the form: _____

Has this form been discussed/reviewed at the health facility? Y / N

Name of health facility in-charge: _____

Name of reporting officer: _____

Title: _____

Signature: _____

Date received at District _____

Received at District on Time (T) or Late (L)? Please circle accordingly T / L

Monthly data sheet for in/out-patients, Form 2 (a)

Monthly working data sheet for in/out-patients. *(Keep this form).*

Name of Health facility/District/Region: _____ **In-patient**

Year: _____ **Outpatient**

Disease			Months												Total
			1	2	3	4	5	6	7	8	9	10	11	12	
Uncomplicated Malaria	<5	C													
		D													
	≥ 5	C													
		D													
Severe Malaria	<5	C													
		D													
	≥ 5	C													
		D													
Diarrhoea with some dehydration	<5	C													
		D													
	≥ 5	C													
		D													
Diarrhoea with severe dehydration	<5	C													
		D													
	≥ 5	C													
		D													
Typhoid Fever	< 5	C													
		D													
	≥ 5	C													
		D													

Disease			Months												Total
			1	2	3	4	5	6	7	8	9	10	11	12	
Neonatal Tetanus (NNT)	< 28 days	C													
		D													
Bacillary Dysentery	<5	C													
		D													
	≥ 5	C													
		D													
Pneumonia	< 5	C													
		D													
	≥ 5	C													
		D													
Severe pneumonia	< 5	C													
		D													
	≥ 5	C													
		D													
Cholera	< 5	C													
		D													
	≥ 5	C													
		D													
Measles	< 5	C													
		D													
	≥5	C													
		D													

Disease			Months												Total
			1	2	3	4	5	6	7	8	9	10	11	12	
Cerebral Spinal Meningitis (CSM)	<5	C													
		D													
	≥ 5	C													
		D													
Acute Flaccid Paralysis (AFP)	<5	C													
		D													
	≥ 5	C													
		D													
Animal/Dog bite	<5	C													
		D													
	≥ 5	C													
		D													
Rabies	<5	C													
		D													
	≥ 5	C													
		D													
Plague	<5	C													
		D													
	≥ 5	C													
		D													

Key: C= cases; D= deaths

This form will be kept at each level (Health Facility/District/Region) to keep a record of communicable diseases which occurred for the whole year and to monitor trends by month:

District level – use this form to monitor disease trends by health facility and in the whole district

Regional – use this form to monitor disease trends by districts and in the whole region

Central - use this form to monitor disease trends by region, district, and country as a whole

Task 4-2

Individually,

Tally the diseases that are to be reported weekly. Which are the top three diseases seen in the week?

Tally by village for the top three diseases. What does this tell you?

Determine if the cases reach the epidemic threshold and whether case investigation forms are required.

Record the priority disease on the weekly form
What disease(s) do you need to report immediately?

What diseases need to be followed up weekly?

Take 30 minutes.

Document 4-5

Register from Upendo Health Centre

Use the extract from the Upendo Health Centre register in the table below for the cases received from May 6-10, 1996.

- Tally the diseases that are to be reported weekly. Which are the top three diseases seen in the week?
- Tally by village for the top three diseases? What does this tell you?
- Determine if the cases reach the epidemic threshold and whether case investigation forms are required.
- Record the priority disease on weekly form
- What disease(s) do you need to report immediately?
- What diseases need to be followed up weekly?

ID No.	Date of attendance	Name	Village	Sex	Age	Suspected disease / syndrome	Outcome L - living
01	6/5/96	A.M.	C	M	6/12	Pneumonia	L
02	6/5/96	T.F.	A	M	2 yrs	Measles	L
03	6/5/96	N.N.	C	M	22 yrs	Injury	L
04	6/5/96	Y.E.	C	F	28 yrs	Malaria	L
05	6/5/96	I.L.	B	F	7/12	Meningitis	Died
06	6/5/96	R.E.	B	F	8/12	Pneumonia	L
07	6/5/96	K.L.	D	F	4 yrs	Malaria	L
08	6/5/96	T.I.	A	M	13 yrs	Malaria	L
09	6/5/96	A.F.	D	F	15 yrs	Acute Flaccid Paralysis	L
10	6/5/96	D.O.	D	F	24 yrs	Meningitis	L
11	7/5/96	K.M.	A	M	22 yrs	Dysentery	L
12	7/5/96	U.G	A	F	1yr 9/12	Fracture	L
13	7/5/96	P.F.	C	M	1yr 11/12	Measles	L
14	7/5/96	H.I.	C	F	24 yrs	Abortion	L
15	7/5/96	G.T.	C	F	21 yrs	Malaria	L
16	7/5/96	W.T.	A	F	16 yrs	Tuberculosis	L
17	7/5/96	R.Y.	B	M	2yrs 2/12	Diarrhoea	L
18	8/5/96	A.C.	C	M	1 yr	Pneumonia	L
19	8/5/96	Z.U.	B	F	1 yr 1/12	Malaria	L
20	8/5/96	A.C.	C	M	11/12	Scabies	L
21	8/5/96	J.F.	B	M	15 yrs	Malaria	L
22	8/5/96	M.M.	B	F	18 yrs	Dysentery	L
23	8/5/96	L.M.	B	M	5 yrs	Wound	L
24	8/5/96	P.L.	C	M	1 yr 10/12	Diarrhoea	L
25	8/5/96	Z.E.	A	M	16 yrs	Injury	L
26	8/5/96	A.B.	C	F	25 yrs	Haemorrhagic	L

ID No.	Date of attendance	Name	Village	Sex	Age	Suspected disease / syndrome	Outcome L - living
						fever	
27	8/5/96	S.R.	B	F	17 yrs	Malaria	L
28	9/5/96	A.K.	C	F	4/12	Meningitis	L
29	9/5/96	T.T.	B	M	3 yrs	Abscess	L
30	9/5/96	W.F.	B	M	12 yrs	Meningitis	L
31	9/5/96	K.K.	B	F	2 yrs 10/12	Malaria	L
32	9/5/96	L.D.	A	F	16 yrs	Cholera	L
33	9/5/96	D.B.	B	F	1 yr 8/12	Pneumonia	L
34	9/5/96	A.N.	B	F	21 yrs	Tuberculosis	L
35	9/5/96	L.S.	A	M	1 yr 5/12	Severe diarrhoea	L
36	9/5/96	B.D.	A	M	11/12	Pneumonia	L
37	9/5/96	P.K.	B	F	1 yr	Malaria	L
38	9/5/96	K.R.	A	F	2 yrs 5/12	Scabies	L
39	10/5/96	K.A.	D	M	26 yrs	Injury	L
40	10/5/96	P.N.	D	F	4 yrs 4/12	Pneumonia	L
41	10/5/96	S.A.	D	F	3 yrs 3/12	AIDS	L
42	10/5/96	M.A.	A	F	2 yrs	Dehydration	L
43	10/5/96	E.R.	C	F	16 yrs	Injury	L
44	10/5/96	U.H.	A	M	22 yrs	AIDS	L
45	10/5/96	Y.L.	C	M	18 yrs	Malaria	L
46	10/5/96	W.C.	A	F	4/12	Malaria	L

Tanzania WHO training module 3

Document 5-1

Module 5 Objectives

By the end of this module, participants will be able to:

Describe why analysis is important

Use some key types of analysis

Practice some key analyses, interpret them and develop actions (for diseases common to the health facility)

Describe various important analyses for diseases commonly seen at the health facility

Document 5-2

Weekly report form example from Bagamoyo with cholera cases

IDSR Form 3(b)

Form for health facility to report weekly new cases/deaths

Send completed form to district level.

Name of Health Facility: CHALINZE HEALTH CENTRE In-patient

Outpatient

Week no / Starting Date: 14/10 Year: 2003

Disease	< 5 Years		≥5 Years	
	Cases	Deaths	Cases	Deaths
Cholera	1	0	3	0
AFP	0	0	0	0
Measles	0	0	0	0
CSM	0	0	0	0
Plague	0	0	0	0
Yellow fever	0	0	0	0
Animal/dog bites	0	0	1	0
Rabies	0	0	0	0

Date of filling the form: 14/10/2003

Has this form been discussed/reviewed at the health facility? Y / N

Name of health facility in-charge: DR.J.B.MWAKIJYALA

Title: AMO

Signature: _____

Date received at District _____
 Received at District on Time (T) or Late (L)? T / L

Monthly Trends from Monthly Reported Data from Mtitaa Dispensary

Facility: Mtitaa Dispensary, Dodoma Rural District

Year: 2003

DISEASES	Dec '02		Jan '03		Feb '03		Mar '03		Apr '03		May '03		Jun '03															
	<5	≥5	<5	≥5	<5	≥5	<5	≥5	<5	≥5	<5	≥5	<5	≥5														
	C	D	C	D	C	D	C	D	C	D	C	D	C	D														
Malaria	0	0	0	0	63	0	86	0	84	0	96	0	46	0	62	0	31	0	57	0	27	0	47	0	38	0	44	0
Diarrhoea with some dehydration	0	0	0	0	8	0	3	0	4	0	4	0	6	0	4	0	4	0	36	0	2	0	36	0	3	0	27	0
Diarrhoea with severe dehydration	0	0	0	0	3	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Typhoid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
NNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bacillary dysentery	0	0	0	0	0	0	1	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Pneumonia	0	0	0	0	28	0	41	0	63	0	73	0	74	0	22	0	91	0	101	0	84	0	56	0	63	0	61	0
Severe pneumonia	0	0	0	0	26	0	26	0	32	0	31	0	14	0	23	0	18	0	41	0	21	0	27	0	19	0	39	0
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CSM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Animal/dog bites	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Facility: Mtitaa Dispensary, Dodoma Rural District

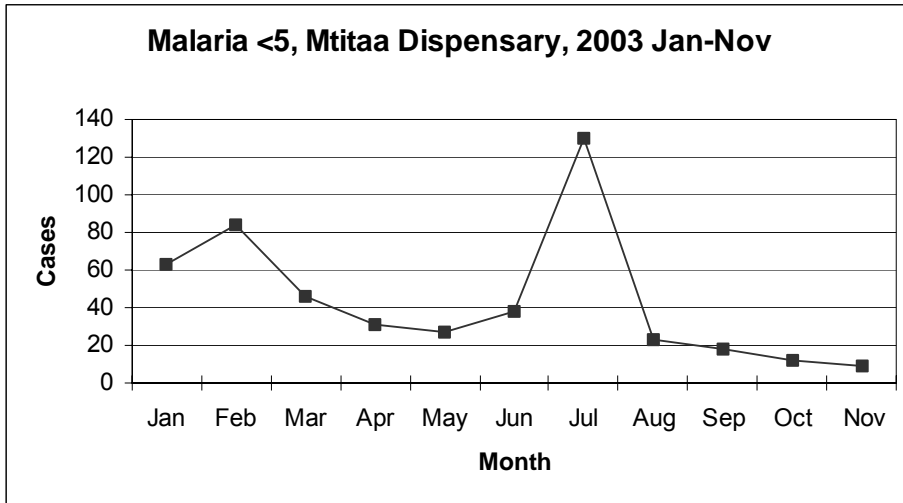
Year: 2003

DISEASES	Jul '03		Aug '03		Sep '03		Oct '03		Nov '03		Dec '03													
	<5	≥5	<5	≥5	<5	≥5	<5	≥5	<5	≥5	<5	≥5												
	C	D	C	D	C	D	C	D	C	D	C	D												
Malaria	130	0	98	0	23	0	22	0	18	0	15	0	12	0	9	0	9	0	28	0				
Diarrhoea with some dehydration	31	0	17	0	3	0	7	0	6	0	4	0	12	0	7	0	4	0	7	0				
Diarrhoea with severe dehydration	0	0	0	0	0	0	0	0	8	0	6	0	9	0	3	0	8	0	2	0				
Typhoid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
NNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Bacillary dysentery	4	0	3	0	0	0	0	0	1	0	0	0	1	0	4	0	0	0	0	0				
Pneumonia	10	0	14	0	82	0	86	0	121	0	136	0	112	0	103	0	81	0	87	0				
Severe pneumonia	0	0	0	0	16	0	36	0	32	0	68	0	26	0	43	0	41	0	62	0				
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
AFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
CSM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Animal/dog bites	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

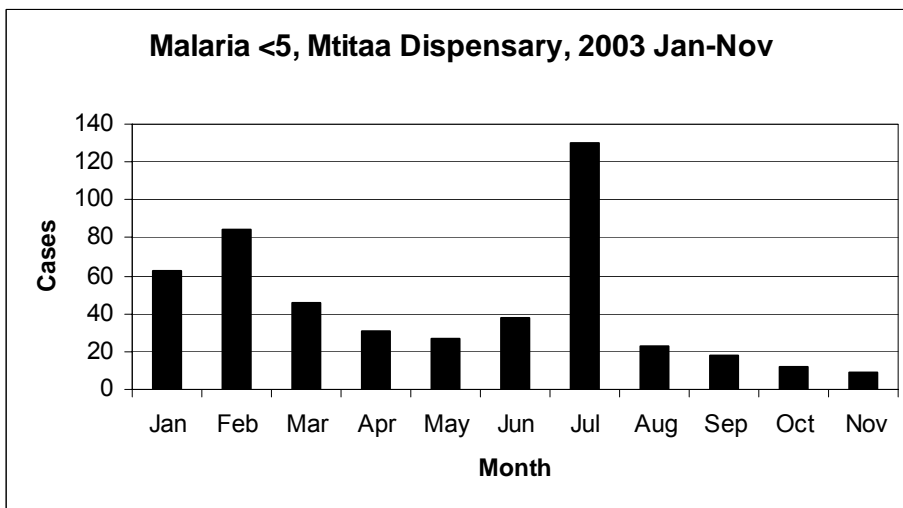
Document 5-4

Examples of line graphs and bar charts

Example: Line Graph

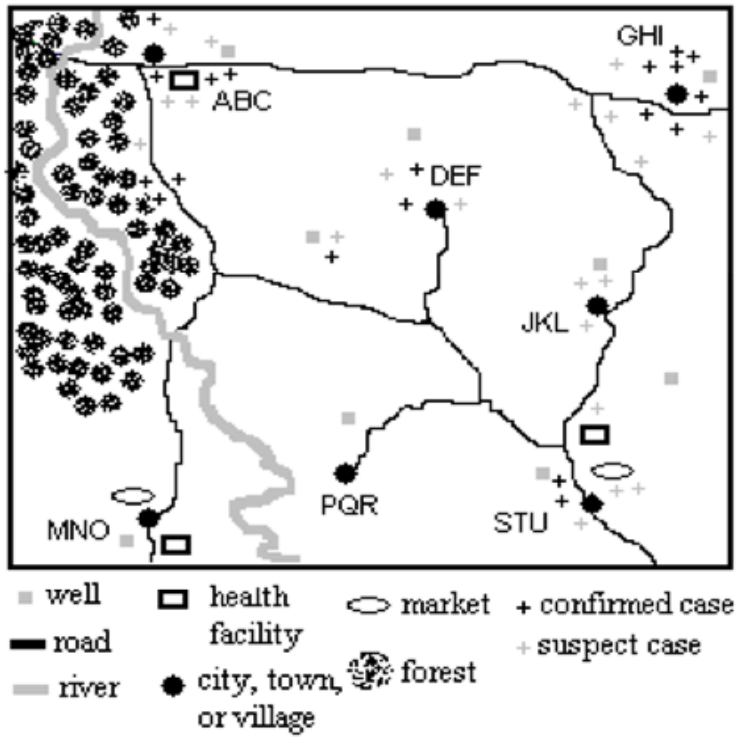


Example: Bar Chart



Spot map of cholera cases in District X

Figure 5: Spot Map of District X



Task 5-1

Individually

For the Mtitaa Dispensary

1. Graph the existing number of cases of severe and non-severe pneumonia in children aged <5 years for the last year (Jan-Nov 2003):
 - Review the data table and select the appropriate data
 - Plot the data for pneumonia and severe pneumonia on the blank grid
 - Connect the points they have plotted (first the pneumonia points and then the severe pneumonia points)
2. Look at the trends to observe seasonal variation and disease incidence trends
3. Interpret the data and draw conclusions, considering the points on the next flip chart – Interpreting the Data

You have 30 minutes to work individually

Document 5-6

Analysis Practice **Mtita Dispensary and Mvumi Hospital** **Pneumonia and severe pneumonia in children aged <5 years**

Exercise 1. What is the trend of cases in Mtita for both severe and non-severe pneumonia?

To draw the graphs:

The data have been supplied in the graph for this exercise in Doc 5-3.

Interpret the data and draw conclusions using the questions below.

1. Graph the existing number of cases of severe and non-severe pneumonia in children aged <5 years for the last year (Jan-Nov 2003):
 - Review the data table and select the appropriate data
 - Plot the data for pneumonia and severe pneumonia on the blank grid below
 - Connect the points (first the pneumonia points and then the severe pneumonia points)
2. Look at the trends to observe seasonal variation and disease incidence trends. Trends of pneumonia deaths should go down if effective interventions are in place.
3. Plot the threshold on the graphs to monitor progress toward the goal.
4. Interpret the data and draw conclusions, considering the points below.

To analyse the data and draw conclusions

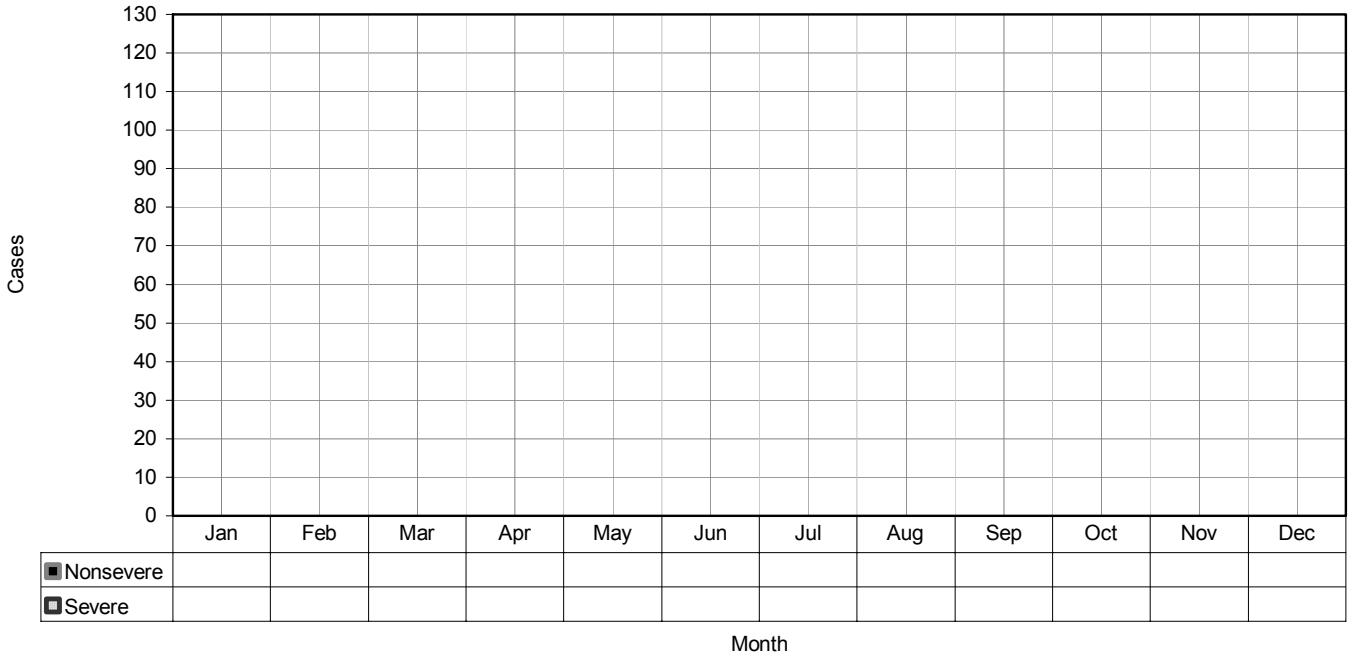
Decide:

- Whether the number of cases of severe and non-severe pneumonia is the same, higher or lower than in previous months or seasons, and
- Whether you are making progress toward your targets.

Also consider non-disease reasons for changes in trends. For example, is the increase or decrease due to:

- A new health facility or hospital has opened in the catchment's area resulting in a change in referral patterns.
- New clinicians in the area are using different diagnostic criteria or case definitions.
- Data recording errors.
- Inconsistent recording across health workers.
- Compiling and reporting quality.
- Change in the number of health facilities reporting information.
- Seasonal variation.
- Change in community awareness of the signs and symptoms of ARI that accounts for an increase in the number of people seeking care.
- Recent immigration or emigration.
- Change in the quality of services being offered at the health facility (drug availability, shorter lines, health workers are more helpful).
- Successful referral of severe pneumonia, anti-microbial treatment, and oxygen therapy in hospitals should decrease case fatality rate.
- Introduction of vaccines for ARI agents should reduce pneumonia cases and deaths.
- A blank grid to assist your graphing is provided on the next page.

**Pneumonia and Severe pneumonia in <5
by Month in Mtitaa Dispensary 2003**



Exercise 2: What is the trend of case fatality rates for severe pneumonia cases in Mvumi Hospital (In-patient)?

To draw the graphs:

The data for this graph are provided in the next pages. The blank graph follows the data and may be used for this exercise. The data compile all monthly reports from Mvumi Hospital (Inpatient).

1. Graph the case fatality rates for severe pneumonia among children aged <5 years in in-patients (IPD) for the last year (Jan-Nov 2003).
 - Review the data table for Mvumi Hospital and select the appropriate data.
 - Use the data provided on severe cases and deaths.
 - Calculate the case fatality rate by month by dividing the number of deaths by the number of cases and multiplying by 100 for each month.
 - Label the axes appropriately for your data.
 - Plot these points on the blank grid and connect the points with straight lines.
2. Look at the trends to observe the case fatality rates. Trends of case fatality rates should go down if effective interventions are in place.
3. Interpret the data and draw conclusions, considering the points on the flip chart – Interpreting the Data.

To analyse the data and draw conclusions

Decide whether:

- The case fatality rate is the same, higher, or lower than in previous months, seasons, or years.
- Whether the case fatality rate is acceptable and you are making progress toward your targets.

Consider non-disease reasons for changes in trends. For example, is the increase or decrease due to:

- A new health facility or hospital has opened in the catchment's area resulting in a change in referral patterns.
- New clinicians in the area are using different diagnostic criteria or case definitions.
- Data recording errors.
- Inconsistent recording across health workers.
- Compiling and reporting quality.
- Change in the number of health facilities reporting information.
- Seasonal variation.
- Change in community awareness of the signs and symptoms of ARI that accounts for an increase in the number of people seeking care.
- Recent immigration or emigration.
- Change in the quality of services being offered at the health facility (drug availability, shorter lines, health workers are more helpful).
- Successful referral of severe pneumonia, anti-microbial treatment, and oxygen therapy in hospitals should decrease case fatality rate.
- Introduction of vaccines for ARI agents should reduce pneumonia cases and deaths.

Task 5-2

In small groups

- Share your individual interpretations and conclusions (Question 4).
- Try to reach agreement on the key conclusions
- Determine what follow-up action or further analysis is needed regarding the pneumonia cases

Record your key conclusions and follow up actions on flipchart

You have 40 minutes

Select a spokesperson to report out

Task 5-3

Individually

For Mvumi Hospital

1. Graph the case fatality rates for severe pneumonia among children aged <5 years in in-patients (IPD) for the last year (Jan-Nov 2003).
 - Review the data table for Mvumi Hospital and select the appropriate data.
 - Use the data provided on severe cases and deaths.
 - Calculate the case fatality rate by month by dividing the number of deaths by the number of cases and multiplying by 100 for each month.
 - Label the axes appropriately for your data.
 - Plot these points on the blank grid and connect the points with straight lines.
2. Look at the trends to observe the case fatality rates. Trends of case fatality rates should go down if effective interventions are in place.
3. Interpret the data and draw conclusions, considering the points on the next flipchart – Interpreting the Data.

You have 30 minutes to work individually

Facility: DCT Mvumi Hospital (inpatient), Dodoma Rural District
Year: 2003

DISEASES	Dec '02				Jan '03				Feb '03				Mar '03				Apr '03				May '03				Jun '03							
	<5		≥5		<5		≥5		<5		≥5		<5		≥5		<5		≥5		<5		≥5		<5		≥5					
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
Malaria	22	1	8	1	43	3	13	1	157	9	23	3	281	18	43	3	179	11	37	2	166	14	18	2	98	6	12	0				
Diarrhoea with some dehydration	1	0	0	0	0	0	0	0	4	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diarrhoea with severe dehydration	1	1	1	0	1	0	3	0	0	0	1	0	2	0	3	0	1	0	3	0	8	0	5	0	14	0	1	0				
Typhoid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0
NNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bacillary dysentery	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	2	0				
Pneumonia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Severe pneumonia	7	3	2	0	11	2	3	1	27	4	3	0	40	3	6	0	13	4	1	0	35	6	1	0	19	1	1	0				
Cholera	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CSM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	1	1	3	2	1	0				
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Animal/dog bites	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Facility: DCT Mvumi Hospital (inpatient), Dodoma Rural District Year: 2003

DISEASES	Jul '03		Aug '03		Sep '03		Oct '03		Nov '03		Dec '03														
	<5	≥5	<5	≥5	<5	≥5	<5	≥5	<5	≥5	<5	≥5													
	C	D	C	D	C	D	C	D	C	D	C	D													
Malaria	41	2	12	0	17	0	10	1	34	1	14	3	26	0	23	2	21	0	19	1					
Diarrhoea with some dehydration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Diarrhoea with severe dehydration	4	0	1	0	0	0	0	0	0	0	0	0	5	0	2	0	0	0	2	0					
Typhoid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0					
NNT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Bacillary dysentery	5	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	4	0					
Pneumonia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Severe pneumonia	18	2	2	0	11	1	3	1	18	1	4	1	20	1	1	0	12	1	1	0					
Cholera	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0					
AFP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
CSM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Yellow fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Animal/dog bites	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					

Task 5-4

In small groups

- Share your individual interpretations and conclusions (Question 3 above).
- Try to reach agreement on the key conclusions
- Determine what follow-up action or further analysis is needed regarding the pneumonia cases.

Record your key conclusions and follow up actions on flipchart

You have 40 minutes

Select a spokesperson to report out

Document 5-7

Analysis standards at the facility level

Disease	Analysis to be done	Sources of data	Public health actions
Cholera	Weekly trend	Weekly data sheet Form 3c IDSR GDL, line lists, or Registers MTUHA B5	Follow up and investigation strategies
	Analysis by place (mapping of catchment's area)	Line list or Inpatient register	Investigation
	Case fatality rate	Line list or Inpatient register	Proper case identification and management
	Monthly trend	Facility Monthly data sheet Form 2a IDSR GDL or Registers (MTUHA B5)	Compare with last year's data on cases and deaths
Pneumonia < 5 yrs	Monthly trend	Facility Monthly data sheet Form 2a IDSR GDL, or Registers (MTUHA B5)	Compare with last year's data to detect outbreaks, case management + IMCI, HE on early presentation to the HF
	Case fatality rate	Inpatient register/ Facility Monthly data sheet Form 2a IDSR GDL	Case management and drug resistance
Diarrhoea <5	Monthly trend	Facility Monthly data sheet Form 2a IDSR GDL, Registers (MTUHA B5)	Compare with last year's data, case management + IMCI, HE on prevention, danger signs for early presentation to the HF
	Case fatality rate	Inpatient register/ Facility Monthly data sheet Form 2a IDSR GDL	Case management and early presentation
Meningitis	Weekly trend	Weekly data sheet Form 3c IDSR GDL, line lists, Registers MTUHA B5	Follow-up and investigation strategies
	Analysis by place (urban/rural)	Line list, Inpatient register	Investigation and follow-up

Disease	Analysis to be done	Sources of data	Public health actions
	Case fatality rate	Line list, Inpatient register	Proper case identification and management
	Monthly trend	Facility Monthly data sheet Form 2a IDSR GDL, Registers (MTUHA B5)	Compare with last year's data on cases and deaths
Measles	Weekly trend	Weekly data sheet Form 3c IDSR GDL, Registers MTUHA B5, Line list,	Follow-up of cases to detect outbreak, vaccination status
	Analysis by place	Registers MTUHA B5, Line list	Investigation
	Case fatality rate	Weekly data sheet Form 3c IDSR GDL	Early identification of cases and proper case management
AFP	Weekly trend	Weekly data sheet Form 3c IDSR GDL, Registers MTUHA B5, Line list	Follow-up, vaccination status, investigation
	Analysis by place	Registers MTUHA B5, Line list	Investigation, check on vaccination coverage
NNT	Monthly trend	Facility Monthly data sheet Form 2a IDSR GDL, IDSR monthly reports Form 2b	Investigation to identify possible factors (vaccination status, efficacy, cord care, delivery environment)
	Analysis by person	Registers MTUHA B5, Line list, Case investigation forms	ANC care + vaccination status, location of birth, attendant at birth, age of the mother
	Analysis by place	Registers MTUHA B5, Line list, Case investigation forms	Vaccination coverage, investigation
	Case fatality rate	Registers MTUHA B5, Line list, Case investigation forms	Age at death
Bacillary Dysentery	Monthly trend	Facility Monthly data sheet Form 2a IDSR GDL, IDSR monthly reports Form 2b	Success/Failure measures
	Analysis by place	Register MTUHA B5, Line lists, Inpatient Register	Investigation purposes (e.g. poor sanitation)
	Analysis by age	Register MTUHA B5, Line list, Inpatient Register	Faster case detection and treatment especially in young children and elderly

Disease	Analysis to be done	Sources of data	Public health actions
	CFR	Register MTUHA B5, Line list, Inpatient register	Investigation (late reporting, poor access to health care services)
Plague	Weekly trend	Weekly data sheet Form 3c IDSR GDL, Registers MTUHA B5, Line list, Case investigation forms	Investigation and monitoring of trends, magnitude of plague, effectiveness of control measures
	Analysis by place (mapping)	Registers MTUHA B5, Line list, Case investigation forms	Investigation (Risk factors, risk areas, tracking of direction of spread of the epidemic)
	Analysis by person	Registers MTUHA B5, Line list, Case investigation forms	Investigation (Identification of groups at risk, control measures adjustment)
	Case Fatality Rate	Register MTUHA B5, Line list, Inpatient register	Case management review, strengthen IEC on plague to improve awareness
Yellow fever			
	Analysis by place (mapping)	Registers MTUHA B5, Line list, Case investigation forms	Investigation (identification of high risk areas, tracking of direction of spread of the epidemic)
	Analysis by person	Registers MTUHA B5, Line list, Case investigation forms	Investigation (identification of groups at high risk), Adjustments of intervention according to targeted group
	Case Fatality Rate	Register MTUHA B5, Line list, Inpatient register	
Typhoid Fever	Analysis by place (mapping)	Registers MTUHA B5, Line list	To identify the source of infection
	Analysis by person	Registers MTUHA B5, Line list	To identify risk factors
	Case Fatality Rate	Facility Monthly data sheet Form 2a IDSR GDL	Case management
	Monthly trend	Facility Monthly data sheet Form 2a IDSR GDL, Registers (MTUHA B5)	Observe trends, detect outbreak

Disease	Analysis to be done	Sources of data	Public health actions
Malaria	Monthly trend	Facility Monthly data sheet Form 2a IDSR GDL, Registers (MTUHA B5)	Compare with last year's data to detect outbreaks, case management + IMCI, HE on early presentation to the HF, control measures and preparedness
	Analysis by place	Registers (MTUHA B5)	Early presentation to the HF, community-based interventions
	Analysis by person (age, pregnant mothers)	Registers (MTUHA B5)	Community- based intervention (ITN, case management) and IPT
	Case Fatality Rate	Facility Monthly data sheet Form 2a IDSR GDL	Early presentation to the HF, community-based interventions, IPT and case management
Rabies/Animal bites	Monthly trend	Monthly data sheet Form 2a IDSR GDL	Effectiveness of control measures
	Analysis by place	Monthly data sheet Form 2a IDSR GDL	Identify affected areas, spread of a disease
	Analysis by person	Monthly data sheet Form 2a IDSR GDL	Identify persons at higher risk
	Case fatality rate	Monthly data sheet Form 2a IDSR GDL	Case management, early presentation, control measures

Document 5-8

Application Planning

Please take a few minutes to think through and respond to the following questions. These questions are intended to help you think about how this module applies to your work.

1. What are the obstacles to improving the analysis and interpretation of data in your facility?

2. What specific actions do you need to take to improve your analysis and interpretation of data?

Individually

Facility

Document 6-1

Module 6 Objectives

By the end of this module, participants will be able to:

Define what is an outbreak

Describe why outbreaks need investigation and what are the components of an outbreak investigation

Describe the facility level's role in outbreak investigation and response.

Conduct a simple investigation of an outbreak/epidemic

Document 6-2

**Facility Level Performance Expectations
Outbreak Investigations and Response**

Steps	Desired Performance	Tasks
C. DIAGNOSIS/ OUTBREAK CONFIRMATION FROM LABORATORY	Take specimen(s) (at lab or by appropriately trained clinician)	Decide if laboratory confirmation needed and request appropriate test(s)
		Collect specimen according to protocol for requested test(s) (in laboratory or in observation room)
	Test specimen(s) (if appropriate lab is at facility)	Test specimen(s) in lab according to standards
		Record lab result immediately
	Confirm diagnosis	Deliver results to requestor of test(s)
		Requestor confirms diagnosis on positive or develops alternative presumptive diagnosis
		Record confirmation of diagnosis
Confirm outbreak using standard thresholds	Confirm an outbreak based on known thresholds	
G. PARTICIPATION IN OUTBREAK INVESTIGATION AND RESPONSE AND CASE TREATMENT	Participation and collaboration of case investigation and case treatment with district (teams)	Assist district with case investigation according to roles and responsibilities of facility staff during outbreak
		Assist with identifying and treating new cases
		Manage and treat cases according to outbreak protocol
		Initiate Prevention/control of outbreak
		Long term prevention measures after outbreak

Document 6-3

Steps in Conducting an Outbreak Investigation

1. Confirm the diagnosis

Upon meeting a threshold or reporting a case based on a presumptive diagnosis, cases need to be confirmed to verify an outbreak. Confirmation involves reviewing the clinical history, collecting a lab specimen, and obtaining and interpreting testing results. The confirmation process is done by both facility and district level staff.

a) Take the clinical history

Examine the patient or patients to confirm that their signs and symptoms meet the standard case definition. Ask the patient or a family member who can speak for the patient and document at least the following:

- Where do you live?
- When did the symptoms begin?
- Who else is sick in your home (or workplace, village, neighbourhood)
- Where have you travelled recently?
- Where did you live within the 2 weeks prior to the onset of symptoms (residence at time of infection)?
- Were you visited by anyone within the last 2 weeks?

If the presumptive diagnosis is one of the 7 weekly reportable conditions and the epidemic/action threshold has been reached, then a case investigation form should be filled in. The district is responsible for initiating the case investigation form, however, the facility may be asked to participate.

b) Collect laboratory specimens and obtain laboratory results

A trained district person, laboratory person, or trained facility level person should determine the diagnostic test and the specimen that is required for confirmation. The health facility should assist this person to collect, store, and ship the specimen and to follow up with the lab results and document the results. Laboratory job aids have been developed for trained health workers to guide the collection, handling, and transport of the specimens. (See laboratory job aids for specimen collection, handling, and transport.)

Review laboratory results with the investigation team, clinicians, and laboratory persons at the health facility. Are the laboratory results consistent with the clinical findings? If so, then document a confirmed diagnosis. If not, seek additional information to identify the diagnosis (review clinical history for another potential diagnosis, review lab information for quality of lab test, etc). Seek additional assistance from district, level CHMT, focal persons, program managers or technical experts if you have any questions about the laboratory results.

2. Isolate cases as needed and treat them

Enhance infection control as needed (including isolation) depending on the specific disease. Use standard precaution with all patients in the health facility, especially during an outbreak of a disease transmitted by contact with contaminated supplies and body fluids.

Monitor the patients' signs and symptoms

Treat the patient with available recommended drugs and therapies

3. Search for additional cases

Once the initial cases have been confirmed and treatment has begun, actively search for additional cases. Use information already gathered on previous cases to search for additional cases in your facility, in other facilities, and in the community.

a) Search for cases in the health facility records

In the health facilities where cases have been reported, search for additional cases in the registers. Look for other patients who may have presented with the same or similar signs and symptoms as the disease or condition being investigated. Request health workers and hospital staff to search for similar cases in the registers of neighbouring health facilities. Make sure to follow up with any cases that have been allowed to go home. They may provide additional information about how the disease is being transmitted and where.

b) Search for cases in the community

Use information from the presenting cases to develop strategies to identify other cases that may not have presented at the health facility. Identify areas or events of likely risk where the patients have lived, worked, travelled or socialised. If appropriate, talk to other informants in the community such as pharmacists or school teachers.

The areas for the search may be influenced by the disease, its mode of transmission, and factors of risk related to time, place and person analysis. Visit those places and talk to people who had or were likely to have had contact with the patient. Ask if they or anyone they know has had an illness or condition like the one being investigated. Find out if anyone else in the area around the case has been ill with signs or symptoms that meet the case definition. Collect information that will help to describe the magnitude and geographic extent of the outbreak.

Refer newly identified cases to the health facility for treatment.

4. Record information about the additional cases

For each new case either in the health facility register or in searches of the community that fits the standard case definition for the facility level, record the collected information on either a case investigation reporting form or a line list.

a) Assist district with recording information on a case investigation form

Assist the district with recording information on a case investigation form for at least the first five to ten patients. Also record information on a case investigation form for all those from which laboratory specimens will be taken.

b) Record information about additional cases on a line list

When more than five cases have been identified, and the required number of laboratory specimens has been collected, record any additional cases of the same disease on a line list. A line list helps to organise the information during an epidemic. The responsibility of line lists is a combined function of the district and the facility together. In some cases, the district may be responsible (e.g. a treatment camp) where as in others the facility may be asked to keep the line list (e.g. in an isolation ward). Line list forms are available for cholera and measles in their respective guidelines. A line list should include *at least* the following information on all patients.

- name of the patient
- residence (village)
- date of onset of illness or date first seen at the facility
- age
- sex
- immunisation status for vaccine-preventable diseases (children and TT status for mothers)
- laboratory test status and result
- outcome (survived, still in the hospital, referred or died)

5. Participate in analysis, and interpretation of outbreak investigation information, and participate in the decision regarding appropriate response activities

With district analyse information, interpret information from case investigation, and use information to decide on appropriate response activities and actions.

Task 6-1

Individually,

- Read the case study (Doc 6-4) and answer the questions at the end.

Take 35 minutes

Task 6-2

In small groups,

- Share your individual answers and agree on a group response
- You do not have to record your response on a flipchart
- Instead, designate one person to record the group's response on paper.

Take 50 minutes

Document 6-4

Facility level participation in Outbreak Investigation and Response Case Study

Zepisa village is 24 km away from Mupasi Hospital, in Dulanga. It has a population of about 2,800 people, a school, two general merchandise shops, a small market and six *pombe* shops for local brews. The villagers and their 8,000 domestic animals depend on two water holes on the Northern border of the village for all their water needs. There, the Zepisa dispensary is run by a Clinical Officer (Mr. Nzali), one MCH Aide, and one medical attendant.

On Monday 20th October, 2003, Mr. Nzali received two patients at his outpatient clinic. They were a 26-year-old mother called Regina Chilolo and her son Petero, aged 4 years. Both had history of painless severe watery diarrhoea of acute onset. Both patients were severely dehydrated. Eight men, who said they were her neighbours in Zepisa, had accompanied them and gave the history and particulars.

Regina and the child had gone to an aunt's wedding at Gawaye village, which is about seven km away to the north of Zepisa village, where they had eaten well and Regina drank a lot of local brew. When they got to the wedding, there were other people with problems of vomiting and watery diarrhoea. Regina's neighbours said they had carried the patients in a bed for the seven km from Gawaye village to Zepisa. They had to stop at the water hole at the Zepisa border to rest, drink water and wash some of the patients' bed sheets, which were badly soiled from their diarrhoea.

Mr. Nzali recorded the presumptive diagnosis of cholera based on the standard case definition. After the detailed history and examination, Mr. Nzali took immediate steps to deal with the two patients. He put the two patients in a small side room to keep them away from the other patients. He began efforts to rehydrate the patients and referred to the cholera outbreak guidelines for other information on treating them. He knew that he should take a specimen, but had not been trained on how to do this and did not have the appropriate supplies.

Before leaving the dispensary, Mr. Nzali called the MCH Aide and asked her to give the neighbours instructions about washing their hands with disinfectant before leaving the facility and to take care of their own cleanliness at home. She should tell them how the disease is spread and how to prevent it. He also asked for a fast bicycle rider to carry an important message to the nearby Mupasi Hospital where there was a radio to call the district and inform them of the cholera cases. The message also indicated that he needed assistance with obtaining laboratory specimens.

The next day, more patients had come to the facility and two had died just on arrival. The MCH Aide started a line list for all the patients in the facility. The new patients were all from Gawaye village except Paulo Langiboli, who was from Zepisa village. Those who had died on arrival were identified as Masunga Kichele (M) 22 yrs and Mary Lenda (F) 4 yrs, both from Gawaye village. Those alive came to the facility in this order:

1 Maria Chilongola (F) 28 yrs
2 John Mhekela (M) 24 yrs
3 Canisia Masunga (F) 8 yrs
4 Devota Malechela (F) 28 yrs

5 John Lweno (M) 34 yrs
6 Olivia Festus (F) 29 yrs
7 Michelo Kaduguda (M) 23yrs
8 Paulo Langiboli (M) 20 yrs

Later in the day, the DHO and DCCO arrived. With the help of Mr. Nzali, they completed case investigation forms for the first 5 of the alive patients. They then took a rectal swab on each of those 5 patients. Each swab was put in a separate sterile bottle and closed tight and labelled with the following information: Name, Age, Sex, Address, Date and Time taken. The specimen was then taken to the district lab within 24 hours. The MCH Aide documented on the line list which of the patients had a rectal swab.

At the end of the day, Mr.Nzali visited the Ward Executive Officer. He told him about the patients and their conditions, the potential outbreak and asked for his cooperation in opening a treatment camp.

Over the next few days, a treatment camp was started with the help of the district and hospital staff because 22 new suspected cholera patients came to the facility over the next 48 hours. Most of the new patients were from Zepisa and had not attended the wedding.

On day four, news came that all the laboratory results came back positive for cholera. At the treatment camp, another line list was started. No laboratory specimens were taken because they already knew it was cholera.

Discussion Questions

1. Was the epidemic threshold for this disease reached? If so, when?

2. How was the diagnosis described in the case study confirmed?

3. Use the table below and check the appropriate boxes to identify:
 - a. What went well in relation to the facility's investigation and response responsibilities?
 - b. What needed to be improved in relation to the facility's investigation and response responsibilities?

For each, explain your answer by noting down why you either see it as done well or not done well and what needs to be improved.

Steps	Going well	Not going well
Detect cases (use SCD)		
Take clinical history		
Record case- investigation form		
Collect laboratory specimens		
Notify the district		
Confirm the diagnosis		
Isolate and treat cases		
Search for additional cases		
Record information about additional cases (case investigation forms or line list)		
Analyse data from the outbreak		
Communicate regarding the outbreak		
Implement response actions		
Evaluate preparedness		

4. Construct the line list that The MCH aide had by the end of the second day.

5. How should Mr Nzali have searched for additional cases?
6. Was the public health response adequate? If yes, why? If no, why not?

7. What would you have done differently given what you have learned about outbreak investigations?

Document 6-5

Application Planning

Please take a few minutes to think through and respond to the following questions. These questions are intended to help you think about how this module applies to your work.

1. What specific actions do you need to take to do a better job of outbreak investigation and response?

2. Whose help do you need to do a better job?

Document 7-1

Module 7 Objectives

By the end of this module, participants will be able to:

- Define the benefits of communication for surveillance
- Identify the key actors and actions for improving linkages outside the health care system
- Practice effective communication skills

Document 7-2

**MATRIX OF PRIORITY ACTORS AND ACTIONS FOR IMPROVING LINKAGES
BEYOND THE HEALTH SYSTEM**

Look on the matrix below and answer the following questions.

- Identify the possible obstacles to carry out the tasks in Column 3 for each group/actor.
- Suggest the possible solutions to the above obstacles.

IN ORDER FOR THIS GROUP ...	TO TAKE THIS SPECIFIC ACTION...	HEALTH WORKER NEEDS TO DO WHAT?	COMMENTS: (feasibility, frequency, obstacles, enabling factors, resources needed)
Community leaders: VEOs, WEOs, Councillors including CORPs	<ol style="list-style-type: none"> 1. To inform and involve the community to refer cases 2. Participate in the investigation 3. To inform the facility of suspected cases. 4. Demand timely and appropriate response. 5. Promote adherence to, and participate in control measures as part of response. 	<ol style="list-style-type: none"> 1. Periodic meetings with community leaders to inform on disease pattern including sources and seasonality; plan for prevention. Provide feedback to communities 2. Convene meetings with local committees (e.g. social affairs) and include the importance (consequences) 3. Put case definitions into practice at the community level 4. Provide information and feedback about how to define an appropriate and timely response—and how health system has performed. 	

Traditional healers	<ol style="list-style-type: none"> 1. Refer cases of IDSR diseases to health facility 2. Alert community leaders and/or nearest health facility when they detect certain conditions 3. Promote the use/application of control measures as part of response 	<ol style="list-style-type: none"> 1. Educate traditional healers about dangers, need to refer, and their role in surveillance 2. Create incentives to refer (recognition of their powerful role, engagement in dialogue) 3. Give feedback to traditional healers on referrals 4. Make traditional healers feel part of health system, help them register 5. Improve attitudes of conventional practitioners towards traditional healers. 6. Recognize the role and responsibilities of traditional healers in community health provision. Incorporate them as an early warning system. 	1.
Community groups/CBOs, NGOs	<ol style="list-style-type: none"> 1. Alert community leaders and /or nearest health facility when they detect certain conditions 2. Participate in outbreak investigations 3. Promote the use/application of control measures as part of response 	<ol style="list-style-type: none"> 1. Orient about IDSR priority diseases 2. Provide reference materials on recognition of diseases and action to take 3. Assign specific tasks as appropriate in outbreak Investigation 4. Provide information about when and how to institute particular outbreak control measures 	
School teachers, religious leaders	<ol style="list-style-type: none"> 1. Alert community leaders and or the nearest health facility when they detect certain conditions 2. Participate in outbreak investigations 3. Promote the use/application of control measures as part of response 	<ol style="list-style-type: none"> 1. Orient about IDSR priority diseases 2. Provide reference materials on recognition of diseases and action to take 3. Assign specific tasks as appropriate in outbreak Investigation 4. Provide information about when and how to institute particular outbreak control measures 	
Private health care providers (conventional) <ul style="list-style-type: none"> • Pharmacists • Chemical sellers 	<ol style="list-style-type: none"> 1. Alert community leaders and or the nearest health facility when they detect certain conditions 2. Participate in outbreak investigations 3. Promote the use/application of control measures as part of response 	<ol style="list-style-type: none"> 1. Orient about IDSR priority diseases 2. Provide reference materials on recognition of diseases and action to take 3. Assign specific tasks as appropriate in outbreak Investigation 4. Provide information about when and how to institute particular outbreak control measures 	

Document 7-3

Good Communication

- **Sending and receiving messages:**
A key to good communication is having a 2-way system. This means listening for the community's concerns and responding, as well as informing.
- **Regular:**
Provide your community with regular updates on the community's health status. Don't wait until there is bad news: review past outbreaks for signs of future ones; provide reassurance that all is well; inform the community when an investigation may take place; listen to hear their concerns.
- **Factual:**
Use your surveillance data and prevention information to improve your communications
- **Appropriate:**
Give priority to information that is relevant to the people you are communicating with or addresses their concerns. Don't overburden people with information that is not relevant to them, or ignore their concerns.
- **Action-oriented:**
Give practical prevention and referral advice that people can use.

Task 7-1

In small groups

- Agree on three key messages to communicate at the community meeting
- Stress the benefits
- Agree on two members of the group to make the presentation

Take 30 minutes to prepare

Document 8-1

Module 8 Objective

By the end of the session, participants will:

Develop a plan to apply what was learned in the workshop

Task 8-1

In your facility teams:

- Review what we have covered in the workshop and agree on the main activities related to IDSR implementation that need to be carried out when you return to your facility
- Be sure to focus on areas that need to be strengthened or improved
- Develop a practical and realistic action plan for the next 6-12 months that includes the following:
 - implementation tasks
 - identification of persons responsible
 - resource requirements
 - timing

Use the planning format provided

You have 40 minutes

Document 8-2

Application Planning Format

Priority Area	Implementation Tasks	Persons with lead responsibility	Resources needed	Timing
Understand IDSR strategy and roles and responsibilities	Meet with HWs to explain and discuss IDSR strategy and the role of the facility in its implementation			
Use of SCDs and epidemic/action thresholds to 13 IDSR priority diseases	Meet with HWs to explain, discuss and direct on the application of SCDs in all IDSR priority diseases			
Proper and consistent recording of presumptive diagnosis	Meet with HWs and go through the registers and show how to record presumptive diagnosis properly			
Availability of correct report forms at the facility	Take inventory of all correct forms and determine the required amount and request immediately from the district.			
Understand correct, accurate and complete filling of IDSR weekly and monthly forms	Meet with HWs and explain, discuss and direct them on how to fill weekly and monthly forms accurately and completely.			
Understand the importance of effective and efficient modalities for timely reporting to district	Meet with HWs to explain, discuss and build consensus on the importance of timely reporting and work and agree on the effective and efficient			

	mechanisms for sending their reports on time.			
Understand minimal analysis package for the facility, analysis and interpretation of data for action.	Meet with HWs and together analyse and interpret data and display them on the wall.			
	Plan and implement based on analysed data			
Understand disease out-breaks, outbreak investigation and response, and the role of the facility	Meet with HWs and explain and discuss about disease outbreaks, investigation and response, and the role of the facility HWs.			
Benefits of communication for surveillance	Meet with HWs to explain and discuss the benefit of communication of surveillance to key actors and identify ways to improve communication			
Working with key actors on disease surveillance and response	Meet with HWs to identify key actors on surveillance and response and how to link them with IDSR activities.			

Document 9-1

Post Test

Facilitators will provide

Document 9-2

**Evaluation Form
IDSR Training Workshop for Facilities**

Please share with us your assessment of the effectiveness of the training workshop. We are interested in your sense of how it helped you reach the workshop objectives, how effective you felt the trainers were, and what you thought of the learning environment.

We would like to encourage you to circle the responses on the rating scales. We would also like to urge you to add your written comments, which will help us better understand your ratings and continue to improve the workshop in future offerings. You will find comment sections with each item, and a place for more general comments in Part Three of the form.

Rating Scale:

1	2	3	4
<i>Not Satisfied</i>	<i>Somewhat satisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>

Part One: Attainment of Workshop Objectives

What is your level of satisfaction with the way in which the workshop helped you achieve the following objectives?

1. Explain the IDSR strategy and the importance of the health facility in its implementation

1	2	3	4
<i>Not Satisfied</i>	<i>Somewhat satisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>

Comments:

2. Detect and accurately report on priority diseases to the district level

1	2	3	4
<i>Not Satisfied</i>	<i>Somewhat satisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>

Comments:

3. Analyse and interpret data on priority diseases

1	2	3	4
<i>Not Satisfied</i>	<i>Somewhat satisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>

Comments:

4. Use data to respond to non-outbreak diseases

1	2	3	4
<i>Not Satisfied</i>	<i>Somewhat satisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>

Comments:

5. Investigate and respond to suspected outbreaks

1	2	3	4
<i>Not Satisfied</i>	<i>Somewhat satisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>

Comments:

6. Advocate with communities to support IDSR implementation

1	2	3	4
<i>Not Satisfied</i>	<i>Somewhat satisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>

Comments:

7. Develop a plan to apply in each facility what was learned in the workshop

<i>Not Satisfied</i>	<i>Somewhat satisfied</i>	<i>Satisfied</i>	<i>Very Satisfied</i>
----------------------	---------------------------	------------------	-----------------------

Comments:

Part Two: Effectiveness of the Trainers and Quality of the Learning environment

1. What is your assessment of the trainers' effectiveness?

1

2

3

4

Not Satisfied

Somewhat satisfied

Satisfied

Very Satisfied

Comments:

2. What do you think of the quality of the training materials?

1

2

3

4

Not Satisfied

Somewhat satisfied

Satisfied

Very Satisfied

Comments:

3. How do you feel about the training facility?

1

2

3

4

Not Satisfied

Somewhat satisfied

Satisfied

Very Satisfied

Comments:

Annex 1: Glossary of key terminology used in IDSR facility level training and appendices

TERM	DEFINITION
Epidemic threshold	The number of cases reached in a community when the facility and district are required to begin actions for outbreak response.
Case based forms	Forms to complete that describe a patient with a suspected diagnosis of one of the seven priority diseases.
Confirmed diagnosis	A case diagnosis made by using laboratory tests in addition to clinical assessment.
Disease surveillance	The process of being systematically watchful/vigilant for health problems within the community with the intent to take measures that will control or prevent disease and improve the health of the community.
Disease trend	The pattern formed by increases and decreases in the number of reported cases over time.
Epidemic	The occurrence in a community or region of more cases of a disease than usually occur in a specified period of time. Synonym: outbreak.
Epidemic pattern	The occurrence of a disease in a pattern in which more cases (epidemics/outbreaks) occur during certain months each year or after a year or several years' interval.
Epidemic preparedness plan	A contingency plan as a part of IDSR outlining all possible activities and resources with their orderly utilisation to avert or control an outbreak in case it occurs.
IDSR	The acronym for "Integrated Disease Surveillance and Response." This is a system of recording and reporting a number of specific prioritised diseases of public health importance at the same time, in order to analyse the data, prevent and respond to outbreaks more efficiently.
Immunisation coverage	The proportion of individuals in a specific population who have been vaccinated.
Incidence	The number of new cases of a disease in a defined population during a specified period of time.
Prevalence	The number of cases of a disease existing within a community at a specified point in time
Case Fatality Rate	the percentage of the total cases of a disease which end in deaths
Laboratory confirmation	The process of taking a specimen and checking the diagnosis using laboratory tests in order to confirm the examiner's diagnosis and ensure the proper use of drugs and other response actions.
Line list	A register (list) of cases, used during outbreaks.
Outbreak	The occurrence in a community or region of more cases of a disease than usually occur in a specified period of time. Synonym: epidemic.
Outbreak investigation	Studies conducted for the purpose of collecting data about an outbreak. The goal is to control the disease outbreak (identify the source, if possible) and prevent similar outbreaks in the future.
Outbreak response	The actions taken by health workers and others to treat

	patients and stop the spread of a disease in a community.
Presumptive diagnosis	An initial diagnosis made using standard case definitions. Synonym: suspected diagnosis.
Routing reporting site	A health facility that is designated to regularly submit information on the number of cases of certain diseases that occur in the area.
Seasonal variation	The occurrence of a disease in a pattern where more cases occur in one (or more) season(s) of the year.
Standard case definitions	A set of set criteria and symptoms for deciding if a person has a particular disease.
Suspected diagnosis	An initial diagnosis made using standard case definitions. Synonym: presumptive diagnosis
Symptoms of disease	The sensation of disease felt by the patient.
Treatment camp	A location in a community where patients can be treated and monitored together during an outbreak.
Vaccine efficacy	The ability of a vaccine to prevent disease when used in routine immunization services.
Zero reporting	The task of completing reporting forms with "0" to document that no cases were seen during the reporting period. These reports are then sent to the next higher level on a regular basis.
Timeliness of facility reporting to the district	Proportion of weekly facility reports received by district on time Proportion of monthly facility reports received by district on time
Completeness of facility reporting to the district	Proportion of expected weekly health facility reports that are filled in and received by District Proportion of expected monthly health facility reports that are filled in and received by district