

# Integrated Training Package on Emergency Preparedness and Response for Rapid Response Team (RRT)



Government of Nepal  
Ministry of Health  
Department of Health Services  
Epidemiology and Disease Control Division (EDCD)  
Teku, Kathmandu  
May 2017

**Integrated Training Package on Emergency Preparedness  
and Response for Rapid Response Team (RRT)**



**Epidemiology and Disease Control Division (EDCD)  
Department of Health Services  
Ministry of Health  
Kathmandu, Nepal  
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स्वास्थ्य मन्त्रालय  
स्वास्थ्य सेवा विभाग  
कर्णधार पश्चात शाखा  
स्वास्थ्य सेवा विभाग  
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पचली, टेकु,  
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पत्र संख्या : ०७३/०७४

च.नं.

मन्तव्य

जननिर्वाचित संविधान सभाबाट जारी नेपालको संविधानले निर्दिष्ट गरेको नागरिकका मौलिक हकहरूमध्ये स्वास्थ्य सम्बन्धी हकले जनताको स्वास्थ्य सम्बन्धी हकलाई राज्यको नीति नियम र कानूनको परिधि भित्र रही स्वास्थ्य मन्त्रालय र यससँग सम्बद्ध निकायहरूले योजनावद्ध रूपमा क्रमशः कार्यान्वयन गर्दै लैजान आ-आफ्नो क्षेत्रबाट महत्वपूर्ण भूमिका निर्वाह गर्दै आईरहेका छन् । स्वास्थ्य सेवा विभाग, ईपिडिमियोलोजी तथा रोग नियन्त्रण महाशाखाबाट आफ्नो कार्य सम्पादनको क्रममा तयार गरिएको यो आपतकालीन अवस्थामा तयारी तथा उद्धार कार्यमा संलग्न हुनु हुने द्रुत प्रतिकार्य टोली ( Rapid Response Team –RRT ) का सदस्यहरूका लागि तयार पारिएको निर्देशिका र उपकरणहरू सम्बन्धी एकिकृत तालिमका लागि तयार योग्य सामग्री यहाँहरू समक्ष प्रस्तुत गर्न पाउँदा म अत्यन्त खुशी छु । प्रस्तुत प्याकेज जिल्ला स्तरीय RRT सदस्यहरू, जिल्लाका स्वास्थ्यकर्मी र समुदायका सदस्य साथीहरू मध्ये आपतकालीन तयारी र समस्या समाधानका लागि उद्धार कार्यमा संलग्न हुनु पर्ने सदस्यहरूका निम्ति लाभदायक हुने आशा लिएको छु । स्थानीयस्तरमा उपलब्ध हुने श्रोत र साधनहरूलाई अन्य सरोकारवाला निकायहरूसँगको सहकार्यमा समन्वयात्मक तवरले व्यवस्थापन गरी संकटक घडीमा गर्नुपर्ने जनस्वास्थ्यसँग सरोकार राख्ने क्रियाकलापका लागि यो निर्देशिका सहयोगी हुने कुरामा विश्वस्त छु ।

नेपाल विपद उन्मुख मुलुक हो र यहाँ बाढी पहिरो जस्ता विभिन्न किसिमका प्राकृतिक तथा मानव निर्मित विपदहरूले सताई रहेको हुन्छ । नेपाल भुकम्पीय हिसावले जोखिममा रहेको भुगोलमा अवस्थित भएको कुरालाई हामीले २०७२ साल बैशाख १२ गते गएको विनाशकारी महाभुकम्पले पुऱ्याएको ठुलो धनजनको क्षतीलाई अनुभव र सामना गर्यौं र त्यसको सामना र प्रतिकार गर्दै स्वास्थ्यको क्षेत्रमा विपदको व्यवस्थापन गर्न समर्थ भयौं । सम्भावित महामारी, अन्य विविध खालका विपद पश्चातको अवस्था तथा पूर्व तयारीको व्यवस्थापन गर्न स्वास्थ्य मन्त्रालय, स्वास्थ्य सेवा विभाग, ईपिडिमियोलोजी तथा रोग नियन्त्रण महाशाखा ( Epidemiology and Disease Control Division ) सफल भएको मैले अनुभूत गरेको छु । ईपिडिमियोलोजी तथा रोग नियन्त्रण महाशाखाले केन्द्र, क्षेत्र र जिल्लास्तरीय RRT गठन गर्ने प्रकृया मिलाएर विपद व्यवस्थापनमा द्रिक्लौ काम गरेको छ । सम्भावित महामारी वा विपद भई हालको खण्डमा पहिलो सूचना सहितको प्रतिवेदन दिन र तयारीको निक्कौल, रोगको महामारी व्यवस्थापन आदिका लागि आवश्यक कार्य गर्नु गराउनु RRT को मूल उद्देश्य हो ।

यो निर्देशिका प्रकाशित भईसके पश्चात आपतकालीन विपद व्यवस्थापनको कार्य दिशामा सकारात्मक प्रभाव पार्नेछ भन्ने मलाई लागेको छ । प्रस्तुत निर्देशिका तयार पार्ने सन्दर्भमा प्राविधिक र आर्थिक सहयोग गर्ने UNFPA, Nepal Red cross Society र आवश्यक निर्देशन सहित राय सल्लाह सुझाव दिई अहम भूमिका निर्वाह गर्नु हुने Epidemiology and Disease Control Division का निर्देशक डा.भीम आचार्य लगायत यसमा संलग्न सबै सदस्यहरूलाई धन्यवाद दिन चाहन्छु ।

धन्यवाद !!

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महानिर्देशक

महानिर्देशक





नेपाल सरकार  
स्वास्थ्य तथा शान्त्यालय  
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नेपाल एकात्मक राज्यबाट संघीय लोकतान्त्रिक गणतान्त्रिक राज्यमा प्रवेश गरिसकेको छ। संघीय राज्य प्रणाली हाम्रो निम्ति विल्कुलै नौलो अनुभव हो। स्वास्थ्य मन्त्रालयको नेतृत्वमा स्वास्थ्य सेवा विभाग, इपिडिमियोलोजी तथा रोग नियन्त्रण महाशाखा समेत संघीय राज्यमा स्वास्थ्य क्षेत्रको संरचना निर्माण प्रकृत्यामा प्रत्यक्ष रुपमा संलग्न रहेको छ। नेपालको संविधानमा राज्यको मौलिक हक र राज्यको निर्देशक सिद्धान्त, नीति तथा दायित्वमा स्वास्थ्यलाई समावेश गरिएकोले स्वास्थ्य सम्बन्धी विविध क्रियाकलापहरु योजनावद्ध रुपमा कार्यान्वयनमा लैजानु सम्बद्ध निकाय विशेष गरी स्वास्थ्य मन्त्रालय र यसका मातहत निकायहरुको प्रमुख दायित्व र कर्तव्य हो।

यसै क्रममा इपिडिमियोलोजी तथा रोग नियन्त्रण महाशाखाले आफ्नो कार्यक्रम अन्तर्गत यो प्याकेज (तालिम निर्देशिका) तयार गर्न पाउनु मेरा लागि खुशीको कुरा हो। यो निर्देशिका द्रुत प्रतिकार्य टोली (Rapid Response Team – RRT) सदस्यहरुको आपतकालीन उद्धार कार्यमा क्षमता अभिवृद्धि गर्नका लागि मात्र नभएर स्वास्थ्यका अन्य पदाधिकारीहरु र सम्बद्ध पक्षका लागि पनि उक्त परिवेशमा समन्वयात्मक तयारी र अन्य उद्धार कार्यका लागि पनि उत्तिकै जरुरत छ। विगत वर्षहरुमा यस महाशाखाले RRT सदस्यहरु र जिल्लाका स्वास्थ्यकर्मीहरुलाई माहामारी व्यवस्थापन तथा उद्धार क्रियाकलापहरुलाई लक्षित गरेर तालिम, अभिमूखीकरण र योजना तर्जुमा सम्बन्धमा विभिन्न कार्यहरु संचालन गरेको थियो। यसले हाम्रो प्रयाशलाई विपद व्यवस्थापन गर्न मदत पुऱ्याएको अनुभव भएको छ। प्रजनन् तथा मानसिक स्वास्थ्य, मनोवैज्ञानिक समर्थन, संरक्षण, पोषण, वातावरणीय स्वास्थ्य संकटकालमा सरसफाई आदि विषयहरु समेटेर यस महाशाखाबाट एकीकृत प्याकेजको रुपमा यो निर्देशिका तयार गरिएको हो।

इपिडिमियोलोजी तथा रोग नियन्त्रण महाशाखाले राष्ट्रिय र क्षेत्रीय कार्यशाला गोष्ठी गरेर विभिन्न खालका तालिम प्याकेज तयार पाउँ आइ रहेको छ। UNFPA, WHO, Nepal Red Cross Society तथा विपद व्यवस्थापनमा संलग्न अन्य निकायहरुको सहयोगमा हाम्रो महाशाखाले यो प्याकेज (तालिम निर्देशिका) तयार गरेको छ। निर्देशिकाले विपदको पूर्व तयारी र विपद पश्चातको व्यवस्थापनमा महत्वपूर्ण र अहम भूमिका निर्वाह गर्न RRT सक्षम हुनेछ भन्ने मैले विश्वास लिएको छु।

यो निर्देशिका तयार गरी प्रकाशित गर्न सहयोग पुऱ्याउनु हुने स्वास्थ्यका विभिन्न संघ संस्थाहरु तथा आपतकालीन तयारी र उद्धार कार्यमा शक्ति संचय गर्न गराउन उद्भूत सवै निकायहरुलाई धन्यवाद दिन चाहन्छु। द्रुत प्रतिकार्य टोली (Rapid Response Team) निर्देशिका तयारी कार्यदलका सदस्यहरुका साथै निर्देशिका परिमार्जनमा सक्रिय सहयोग गर्नु हुने विशेषज्ञ डा.बालकृष्ण सुवेदीलाई विशेष आभार प्रकट गर्न चाहन्छु। आर्थिक र प्राविधिक सहयोगका लागि UNFPA सहित यस कार्यमा संलग्न हुनु हुने EDCD का सहकर्मी मित्रहरुमा मेरो तर्फबाट धेरै धेरै धन्यवाद र आभार प्रकट गर्दछु।

धन्यवाद !!

डा.भीम आचार्य

निर्देशक



## Acronyms

AIDS	Acquired Immunodeficiency Syndrome
CDO	Chief District Officer
CP	Contingency Plan
CRRT	Community Rapid Response Team
DDC	District Development Officer
DDK	Diarrheal Disease Kit
DDRC	District Disaster Relief Committee
DG	Director General
DOHS	Department of Health Services
D(P)HO	District Public Health Office
EDCD	Epidemiology and Disease Control Division
EPR	Emergency Preparedness and Response
FHD	Family Health Division
GON	Government of Nepal
HA	Health Assistant
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
IEHK	Inter-agency Emergency Health Kit
INGO	International Non- Government Organization
IFE	Infant Feeding in Emergencies
ITP	Integrated Training Package
KM	Kilometer
LDO	Local Development Officer
MISP	Minimum Initial Service Package
MIRA	Multi-Sectoral Initial Rapid Assessment
MoHP	Ministry of Health and Population
NGO	Non-Government Organization
NHTC	National Health Training Centre
NRCS	Nepal Red Cross Society
PFA	Psychological First Aid
PHN	Public Health Nurse
RH	Reproductive Health
RHAF	Rapid Health Assessment Format
RHD	Regional Health Director
RHDO	Regional Health Directorate Office
RRT	Rapid Response Team
SRH	Sexual and Reproductive Health
UNICEF	United Nations Children Fund
UNFPA	United Nations Population Fund
WHO	World Health Organization





## Content

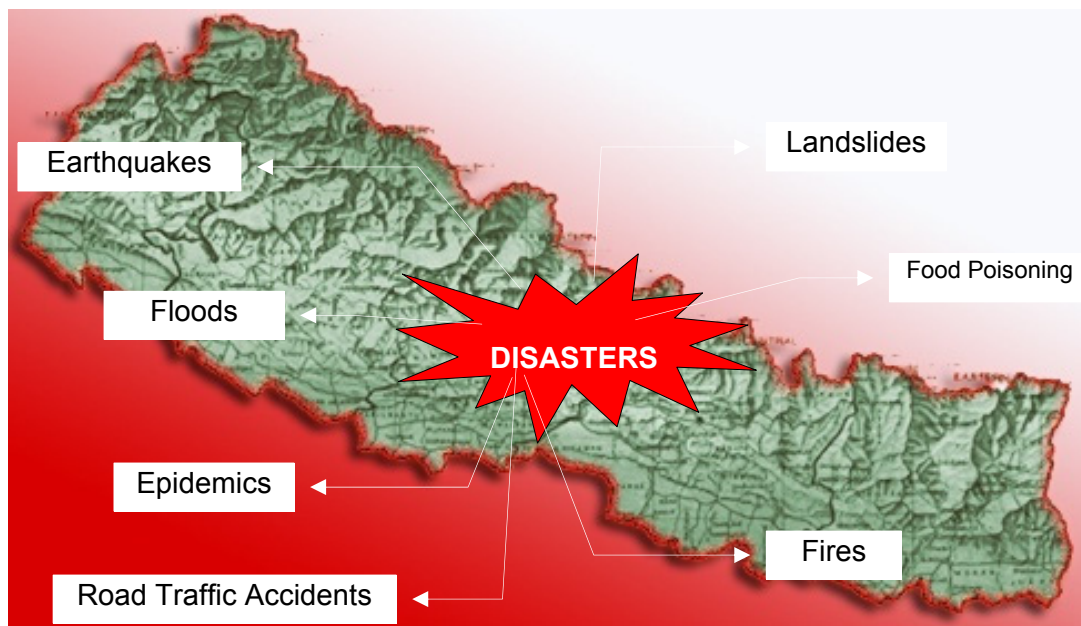
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Introduction	1
Objectives	3
Expected Outcome	3
Specific objectives	3
Integrated training package	3
Participants	4
Teaching methodologies	4
Teaching materials to be used in the training	4
Forms, formats and tools as part of teaching materials	4
Training components	5
Suggested Training Schedule for 3 days	6
UNIT I: Disaster Management	9
UNIT II: Management of Epidemic/Outbreak and Nutrition Interventions	15
UNIT III: Minimum Initial Service Package (MISP) for Reproductive Health in Emergency and Mental Health	23
Integrated training package	29
RAPID HEALTH ASSESSMENT FORMAT	31
RAPID HEALTH ASSESSMENT GUIDELINES	33
Multi-Cluster Initial Rapid Assessment (MIRA) –Nepal	35
<b>अभिलेख र प्रतिवेदन</b>	47
<b>सरुवा रोग प्रकोप अभिलेख फारम (Outbreak Recording Form) भर्ने निर्देशिका</b>	48
Outbreak Reporting Form	49
<b>सरुवा रोग प्रकोप प्रतिवेदन फारम (Outbreak Reporting Form- 2)- नं. २ भर्ने निर्देशिका</b>	51
References	53
Appendix 1	55
Appendix 2	56
Appendix 3	58



## Introduction

Nepal is a disaster prone country and faces various types of natural and man-made disasters, the most frequent natural disasters being floods and landslides. Nepal also lies in an earthquake prone zone and the earthquake of April 25, 2015 has been a devastating one. All these disasters not only cause deaths and casualties, but also displace people and cause infrastructural damage.



Nepal experiences disasters almost on an annual basis, with notable disasters occurring every few years.

- The most tragic disaster in Nepal are earthquakes:
  - In 1934, an earthquake with a magnitude of 8.3 struck Nepal and resulted in the deaths of 8,500 people.
  - In 1988, an earthquake with a magnitude of 6.6 struck Udayapur and resulted in the deaths of more than 700 people.
  - In 2015, an earthquake with a magnitude of 7.6 struck Gorkha and later in Dolakha resulted in more than 8970 deaths and around 23000 injuries.

- In the years 1996-2000 nearly, 3,633 people died as a result of various epidemics
- During the period 1996-2000, nearly 1,380 died as a result of flooding and landslides
- The Koshi flood and succeeding flash floods in the west during the month of August/September 2008 displaced 55,000 people, and directly affected 240,000 people in Sunsari and Saptari districts.

In 2000, the Ministry of Health and Population (MoHP), Department of Health Services (DHS), and the Epidemiology and Disease Control Division (EDCD) established a mechanism for managing epidemics consisting of a Rapid Response Team (RRT) at three levels: central (1 RRT), regional (5 RRTs) and districts (75 RRTs). The objectives of these teams is to establish an early warning and reporting mechanism for potential epidemics, ensure preparedness for potential epidemics, manage disease outbreaks, and institutionalize disaster management.

Various activities were conducted in the past to address the issue of mobilizing health workers in case of outbreak or disasters. For example:

- EDCD regularly conducted different training programs on “Disaster Management and Response (2 days)”
- Epidemic Preparedness and Response (3 days)
- National Health Training Centre (NHTC) also adapted a 3-day training package for RRT members and health service providers on “Reproductive Health (RH) in Emergencies or Minimum Initial Service Package (MISP) for Sexual and Reproductive Health (SRH)”, targeted for use during crisis or post crisis situations

The training package, created for district to Ilaka level RRT members, will also aim to strengthen its disaster, crisis, and emergency response mechanisms.

The latest integrated training package (ITP) on Emergency Preparedness and Response (EPR) was developed in 2011 and trainings were carried out for Rapid Response Teams (RRT) across the country. However, over the years it was felt that the ITP needs to be updated in the light of the Earthquake of 2015.

In this context the EDCD in collaboration with UNFPA and Nepal Red Cross Society (NRCS) developed a task force to revise the ITP.

## **Objectives**

The overall objective of the integrated training package is to enhance the emergency response capacity of RRT members during any kind of disaster, crisis or emergency.

## **Expected Outcome:**

The expected outcome is that the RRTs (at the district and community levels) carry out effective and efficient emergency preparedness and responses at all levels, and are prepared to support in contingency planning.

## **Specific objectives:**

- To enhance the RRT's capacity in initiating emergency preparedness and response actions and plan in close cooperation with relevant stakeholders
- To provide RRTs with the necessary knowledge and skills to conduct rapid assessments and effectively analyze the results
- To help in prioritizing key intervention areas of the RRTs based on the rapid assessments results
- To update knowledge in disease surveillance, outbreak investigation, and response
- To provide knowledge on Reproductive Health (RH) in Emergency which includes Minimum Initial Service package (MISP) on Sexual and Reproductive Health, and how to prepare an emergency response plan during crisis or post crisis situations
- To provide knowledge on other key areas such as mental health, psychosocial counseling, and nutrition that need to be addressed during a crisis or emergency
- To support in the logistics management capacity of RRTs

## **Integrated training package:**

The **Integrated Training Package on Emergency Preparedness and Response for Rapid Response Team** is developed on the basis of past experiences and feedback/comments received from relevant stakeholders. The realization that the ITP needs updating was felt during the Earthquake of 2015 and several other happenings.

## **Major components of the integrated training package:**

- Unit one deals with *disaster management*;
- Unit two deals with epidemic *outbreak management and* nutrition in emergency;

- Unit three deals with *Reproductive Health in Emergency (Minimum Initial Service Package (MISP)*, and mental health in emergency.

This training package is prepared for the members of RRT. It is expected that it will help in increasing their capacity on emergency preparedness and response for any kind of disaster, crisis, or emergency.

### **Participants:**

<b>Training Days</b>	<b>Participants</b>	<b>Number of participants</b>
<b>3 days</b>	District level RRT members and In-charges of peripheral level health facilities	<b>30</b>

### **Teaching methodologies:**

Following methodology will be used for training of the RRT on ITP

- Power point presentation and discussion
- Small group discussion
- Demonstration
- Brainstorming
- Video presentation
- Sharing of personal experience in responding to disaster, outbreak, crisis or emergency situations
- Exercises

### **Teaching materials to be used in the training:**

- Flip chart, markers, board markers, white board, and news print
- Poster, photographs and animated disaster related videos
- Disaster, emergency, and crisis case studies
- Various assessment and analysis forms and formats

### **Forms, formats and tools as part of teaching materials:**

- Rapid Health Assessment (RHA) Format
- Outbreak Recording Form
- Outbreak Reporting Form
- Daily Surveillance Form
- Multi sectoral Initial Rapid Assessment (MIRA)

## **Training components**

### **Unit 1: Disaster Management**

- 1.1: Basic concepts of disaster/emergency
- 1.2: Disaster management mechanism
  - a) Disaster management policy and process in Nepal
  - b) Functional Mechanism of RRT
  - c) Setting priorities, Communication and coordination in disaster
- 1.3: Rapid Health Assessment and analysis in Emergency
- 1.4: Logistics and Financial management in emergency
- 1.5: Water, Sanitation and Hygiene and Environmental Health in Emergency
- 1.6: Sharing and lessons learnt by the participants

### **Unit 2: Epidemic/Outbreak Management and Nutrition Interventions**

- 2.1: Communicable disease surveillance
- 2.2: Outbreak investigation and response
  - a) Importance of outbreak investigations and its steps
  - b) Prevention and Control of outbreak in disaster
  - c) Laboratory investigation in outbreak
- 2.3: Outbreak investigation- Exercise
- 2.4: Communication and Coordination in Emergencies
- 2.5: Nutrition in Emergency
  - a) Basic concept of nutrition in Emergency
  - b) Measuring malnutrition and Infant Feeding in Emergencies guidance note of Nepal
  - c) Assessing and Responding to severity of crisis
- 2.6: Child Health in Emergencies

### **Unit 3: RH in Emergencies and Mental Health**

- 3.1: Overview of RH in Emergency
- 3.2: Components of MISP
- 3.3: RH Kits in Emergency
- 3.4 Monitoring and Evaluation with MISP Indicators
- 3.5 Mental health and Psychosocial Support in disaster
- 3.6 Exercise on Forms and Drills



## Suggested Training Schedule for 3 days

Day One : Unit I Disaster management	
10:00–11:00	<ul style="list-style-type: none"> <li>• Registration, Welcome, Introduction</li> <li>• Objectives and expected outcome</li> <li>• Briefings on agenda /ground rules/remarks</li> <li>• Pre-test (Optional)</li> </ul>
11:00–11:15	Tea-Break
11:15-12:00	1.1 Basic concept of disaster/ emergency (45 Min)
12:00-12:45	1.2 Disaster management Mechanism (total 45 Min), (a) Disaster management policy and process in Nepal (15 min) (b) Functional mechanism of RRT and Contingency Planning (15 min) (c) Setting priorities and communication in disaster (15 min)
12:45-13:30	Refreshment (Khaja) – (45 min)
13:30-14:30	1.3 Rapid Health Assessment (RHA) and analysis in emergency (60 min)
14.30- 15.15	1.4 Logistic and Financial management in Emergency (30 min)
15:15-16:00	1.5 Water, Sanitation and Hygiene (WASH) and Environmental Health in Emergency (45 min)
16:00 -16:15	Tea-Break
16:15-17:00	1.6 Sharing on lessons learnt on management in EQ 2015 (45 min)

Day Two: Unit II Epidemic/Outbreak management and Nutrition Interventions	
10:00 – 10:15	Recap of day 1
10.15-11.00	2.1 Communicable Diseases surveillance (45 minutes)
11:00-11:15	Tea-Break
11:15– 12:30	2.2 Outbreak investigation and response (Total 1 hour 15 minutes) (a) Importance of outbreak investigation and its steps (15 min) (b) Prevention and control of outbreak in disaster (45 min) (c) Laboratory investigations in outbreak (15 min)
12.30-13.00	2.3 Outbreak investigation Exercise (30 minutes)
13:00 –13:45	Refreshment (Khaja) -45 min
13.45- 14:15	2.4 Communication and Coordination in Emergencies
14:15-15:30	2.5 Nutrition in Emergency (Total 1 hour 15 min) a) Basic concept on nutrition in emergency (20 min) b) Measuring malnutrition and IFE Guidance note of Nepal (30 min) c) Assessing and responding to the severity of crisis (20 min)
15:30-15:45	Tea-Break
15:45- 16:30	2.6 Child Health in emergencies (30 min)
Day Three: Unit III RH in Emergency (MISP), and Mental Health	
10:00 – 10:15	Recap of day 2
10.15 - 11:10	Reproductive Health in Emergency (MISP) – (55 min) 3.1 Overview of RH in emergencies (MISP)
11:10– 11:25	Tea-Break
11:25- 11:55	3.2 Components of MISP (30 min)

11:55 – 12:15	3.3 RH Kits in Emergency (20 min)
12:15- 13.00	3.4 Monitoring and evaluation with MISP indicators (30 min) + exercise (15 min)
13:00 – 13:45	Refreshment (Khaja) 45 min
13:45-14:15	3.5 Mental Health and Psychosocial Support in Disaster (30 min)
14:15- 14.45	Exercise on Forms
15:15-15:30	Tea-Break
15:30- 16:30	Mock Drill
16:15- 16.30	Post-Test (optional)
16:30- 17:00	Closing

**DAY ONE:**

**UNIT I:**

**Disaster Management**

<b>Unit 1.1:</b>	<b>Basic Concept of Disaster/ Emergency</b>
Duration:	45 minutes (including 15 min discussion)
Objectives:	<ul style="list-style-type: none"> <li>• To update the knowledge and understanding of basic concept of disasters/emergencies</li> <li>• To familiarize participants on frequently used terminologies, disaster management cycles, and consequences of various hazards.</li> </ul>
Contents:	<ul style="list-style-type: none"> <li>• Introduction to basic concept of disasters/emergencies,</li> <li>• Terminology,</li> <li>• Disaster management cycle and</li> <li>• Consequences of various hazards</li> </ul>
Methodology:	Brainstorming, power point presentation, video presentation, discussion, matching of flash card
Brief on delivery of the sub-unit:	Disaster management cycles, and consequences of various hazards. The session will conclude with a summarization of key points.
Advance preparation:	Link with disasters faced by Nepal such as the Koshi floods in 2008 and 2015 Earthquake

<b>Unit 1.2:</b>	<b>Disaster Management Mechanism</b>
Sub-topic:	<p><b>(a) Disaster Management Policy and Process in Nepal (15 min)</b></p> <p><b>(b) Functional Mechanism of RRT (15 min)</b></p> <p><b>(c) Setting Priorities and Communication in disaster (15 min)</b></p>
Duration:	45 minutes
Objectives:	To familiarize participants on disaster management policy and processes in Nepal, functional mechanism for Rapid Response Team, priority setting and communication in disaster
Contents:	<ul style="list-style-type: none"> <li>• Disaster management mechanism (policy and process) in Nepal</li> <li>• Functional mechanisms of the Rapid Response Teams</li> </ul>

	<ul style="list-style-type: none"> <li>• Communication in disaster</li> </ul>
Methodology:	Power point presentation and discussion
Brief on delivery of the sub-unit:	Power point presentation on the national disaster management policies and processes in Nepal, functional mechanisms for Rapid Response Teams of different levels (Central, Regional, District and Community) and Communication and coordination in disaster
Advance preparation:	Policy, guidelines

<b>Unit 1.3:</b>	<b>Rapid Health Assessment and Analysis in Emergency</b>
Duration:	60 minutes (including 10 min discussion)
Objectives:	To orient the participants on rapid health assessment To orient application of different types of forms and emergency analysis techniques
Contents:	<ul style="list-style-type: none"> <li>• Rapid Health Assessment Form,</li> <li>• Syndromic Surveillance Form,</li> <li>• Outbreak recording and reporting Forms,</li> <li>• MIRA and its applications</li> </ul>
Methodology:	PowerPoint presentation and Practice on forms
Brief on delivery of the sub-unit:	Brainstorming questions on different forms and formats used during times of crisis or emergency. Use different types of forms such as (RHAF, SSF, ORRF and MIRA) and how they should be filled out during an emergency or disaster
Advance preparation:	RHA Form, SS Form which need to be filled out daily during an emergency Outbreak Recording and Reporting Forms and MIRA

<b>Unit 1.4:</b>	<b>Logistics and Financial Management in Emergency</b>
Duration:	30 minutes (including 5 min discussion)
Objectives:	To orient participants on emergency logistics management with budgets, kits and supplies including adaptation of international kits (RH kits), and supplies.

	To ensure proper preparation with buffer stocking of drugs, supplies and kits
Contents:	<ul style="list-style-type: none"> <li>• Logistics management mechanisms in emergency,</li> <li>• Logistic estimation and buffer stocking</li> <li>• Financial management</li> </ul>
Methodology:	Power point presentation, discussion, and sharing ideas
Brief on delivery of the sub-unit:	<p>Initiation with lessons learnt from recent epidemics in terms of logistic management, followed by feedback from participants on the logistics management difficulties faced. Identification of the local procurement process for drugs, supplies, and kits along with a discussion on how to prepare in advance through buffer stocking system.</p> <p>EDCD has allocated some budget for each district to respond to emergencies. Besides, D(P)HO can request DDRC for more support in case it is necessary. The session will conclude with a summarization of key points.</p>
Advance preparation:	List of supplies, drugs, and kits

<b>Unit 1.5:</b>	<b>Water, Sanitation and Hygiene and Environmental Health in Emergency</b>
Duration:	45 minutes (including 5 min discussion)
Objectives:	To provide basic knowledge on environmental health and sanitation during times of emergency (water purification, sanitation, waste disposal management)
Contents:	<ul style="list-style-type: none"> <li>• Importance of safe water, sanitation and hygiene and environmental health during times of emergency</li> <li>• Various methods of water purification for safe drinking water,</li> <li>• Prevention and control of communicable diseases through sanitation and waste disposal</li> <li>• Minimum standard based on Sphere Guidelines for</li> </ul>

	prevention and control of communicable diseases
Methodology:	Power point presentation, demonstration, discussion, and sharing ideas
Brief on delivery of the sub-unit:	Initiation with a power point presentation on prevention and control of communicable diseases through water purification and waste disposal management. Demonstration of possible water purification. The session will conclude with a summarization of key points.
Advance preparation:	Pre-visit Jajarkot district experience of diarrhea epidemic and case studies from districts during earthquake

<b>Unit 1.6:</b>	<b>Sharing and lesson learnt on management in 2015 earthquake by the participants: (Experience on Epidemics /Emergency /Disaster and its Response)</b>
Duration:	45 minutes
Objectives:	To learn from district experiences on management of 2015 earthquake including epidemic/ emergency/ disaster
Contents:	<ul style="list-style-type: none"> <li>• Sharing of the management during 2015 earthquake and immediate response on it</li> <li>• Response activities conducted,</li> <li>• Coordination and communication</li> </ul>
Methodology:	Discussion, sharing of experiences and lessons learnt for further emergency preparedness
Brief on delivery of the sub-unit:	Initiation with sharing of lessons learnt from recent earthquake and epidemics. Analyze the preparedness and response provided as case studies. Finally come up with some of the recommendations and preparedness plan for future
Advance preparation:	Presentation will be made by participants through whichever methods they feel are most effective.





**DAY TWO:**

**UNIT II:**

**Management of Epidemic/Outbreak  
and Nutrition Interventions**

<b>Unit 2.1:</b>	<b>Communicable Disease Surveillance</b>
Duration:	45 minutes (including 5 min discussion)
Objectives:	To orient participants on communicable disease surveillance
Contents:	<ul style="list-style-type: none"> <li>• Basic concepts, importance,</li> <li>• principle, function, and</li> <li>• components of surveillance</li> </ul>
Methodology:	Power point presentation, discussion, and sharing ideas
Brief on delivery of the sub-unit:	Initiation with a power point presentation on the basic concepts, importance, principle, function, and components of surveillance, followed by a discussion on past surveillance experiences. Emphasis will be placed on recording and reporting of Syndromic Surveillance form. The session will conclude with a summarization of key points.
Advance preparation:	Pre-visit Syndromic Surveillance Format Recording and reporting format

<b>Unit 2.2:</b>	<b>Outbreak Investigation and Response</b>
<b>Sub-topic:</b>	<b>(a) Importance of outbreak investigation and its steps</b>
Duration:	15 minute (including 5 min discussion)
Objectives:	To orient participants on importance of outbreak investigation, and its procedures
Contents:	Importance and steps of outbreak investigation
Methodology:	Power point presentation, discussion, and sharing ideas
Brief on delivery of the sub-unit:	Initiation with a power point presentation on the importance of outbreak investigation, and its procedures. The session will conclude with a summarization of key points.

Advance preparation:	Pre visit Outbreak Recording and Reporting Format and its operation guidelines.
<b>Sub-topic:</b>	<b>(b) Prevention and Control of Outbreak in Disaster</b>
Duration:	45 minutes (including 15 min discussion)
Objectives:	To orient participants on the prevention and control of disaster outbreaks among displaced populations.
Contents:	<ul style="list-style-type: none"> <li>• Consequences of disaster, Transmission of outbreak,</li> <li>• Prevention, diagnosis and case management,</li> <li>• Outbreak preparedness and response</li> </ul>
Methodology:	Power point presentation, discussion and sharing ideas
Brief on delivery of the sub-unit:	Initiation with a power point presentation on the process of prevention and control of various disaster outbreaks, discussion with sharing ideas on past disaster outbreak management. The session will conclude with a summarization of key points.
Advance preparation:	Pre visit Outbreak Recording and Reporting Format and its guidelines to use it.
<b>Sub-topic:</b>	<b>(c ) Laboratory Investigation in Outbreak</b>
Duration:	15 min
Objectives:	To orient participants on laboratory investigation in outbreak
Contents:	<ul style="list-style-type: none"> <li>• Role and importance of laboratory diagnosis in outbreak investigation,</li> <li>• Sample collection and transport procedures</li> <li>• Common lab diagnostic tools</li> </ul>
Methodology:	Power point presentation, demonstration, discussion and sharing ideas

Brief on delivery of the sub-unit:	Initiation with a power point presentation on the role and importance of common lab diagnostic tools, its procedures, and laboratory diagnosis preparations needed for outbreak investigation. Demonstration of possible equipments and kits use in laboratory diagnosis. The session will conclude with a summarization of key points.
Advance preparation:	Possible equipment and kits

<b>Unit 2.3:</b>	<b>Outbreak Investigation Exercise</b>
Duration:	30 minutes
Objectives:	To provide practical knowledge on outbreak investigation
Contents:	Different scenario of a Cholera Outbreak
Methodology:	Group formation 2-3 persons in each group, Questionnaire will be distributed & Group work in each questions and presentation
Brief on delivery of the sub-unit:	Group exercises and presentation by questionnaire forms step by step.
Advance preparation:	Materials for group work (Flip chart, markers and so on)

<b>Unit 2.4:</b>	<b>Communication and Coordination during emergencies</b>
Duration:	30 minutes
Objectives:	To provide knowledge on appropriate communication and communication during emergencies

Contents:	<ul style="list-style-type: none"> <li>• Communication during emergencies</li> <li>• Coordination during emergencies</li> </ul>
Methodology:	Presentation, Case studies and Discussion
Advance preparation:	Materials for case studies (Flip chart, markers etc)

<b>Unit 2.5</b>	<b>Nutrition in Emergency</b>
<b>Sub-topic:</b>	<b>(a) Basic concept on nutrition in emergency</b>
Duration:	20 minutes
Objectives:	To orient basic concept on why nutrition is important in crisis, assessing the severity of crisis and responding to the crisis
Contents:	<ul style="list-style-type: none"> <li>• Vulnerable people prone to nutritional problems,</li> <li>• Immediate steps for nutritional activities (Focusing on pregnant woman, lactating woman, newborn, under five children and old people)</li> </ul>
Methodology:	Brainstorming, Power point presentation, discussion and sharing ideas
Brief on delivery of the sub-unit:	Initiation with sharing ideas on the importance of nutrition health during a disaster. This will be followed by a power point presentation and discussion on vulnerable people prone to nutritional complications, and immediate steps to be taken to address nutrition during times of emergency. The session will conclude with a summarization of key points on the continual need for of nutritional activities, especially for lactating mothers, pregnant mothers, the elderly, and children under the age of five.
Advance preparation:	Pre-visit guiding principles for feeding infants and young children during emergencies, WHO, Geneva

<b>Unit 2.5</b>	<b>Nutrition in Emergency</b>
<b>Sub-topic:</b>	<b>(b) Measuring Malnutrition and IFE Guidance Note of Nepal</b>
Duration:	15 minutes
Objectives:	To orient on measurement of malnutrition in emergency
Contents:	<ul style="list-style-type: none"> <li>• technique of measurement of malnutrition</li> <li>• IFE Guidance note of Nepal</li> </ul>
Methodology:	Brainstorming, Power point presentation, discussion and sharing ideas
Brief on delivery of the sub-unit:	Initiate the session with sharing of knowledge on the importance of basic nutrition intervention during an emergency followed by a power point presentation on measuring malnutrition among young children and infant. It will be followed by orientation on IFE Guidance note of Nepal. The session will conclude with a summarization of key points on the need for continued collaboration and cooperation to effectively respond to nutrition needs during an emergency, focusing on young children and infants.
Advance preparation:	Sakir Tape for MUAC IFE Guidance note of Nepal
<b>Unit 2.5</b>	<b>Nutrition in Emergency (continued)</b>
<b>Sub-topic:</b>	<b>(c) Assessing and Responding to Severity of Crisis</b>
Duration:	20 minutes
Objectives:	To orient on assessing the severity of crisis and responding to the crisis
Contents:	<ul style="list-style-type: none"> <li>• Vulnerable people prone to nutritional problems,</li> <li>• Immediate steps for nutritional activities (Focusing on pregnant woman, lactating woman, newborn, under five children and old people)</li> </ul>

Methodology:	Brainstorming, Power point presentation, discussion and sharing ideas
Brief on delivery of the sub-unit:	Initiate the session with discussion on vulnerable people (especially pregnant women, lactating women, newborn and under five children) during emergencies followed by a power point presentation on immediate steps for nutritional activities. Conclude the session with summarization of key points.

<b>Unit 2.6</b>	<b>Child Health in Emergency</b>
<b>Sub-topic:</b>	<b>(a) Child Health in Emergency</b>
Duration:	30 minutes
Objectives:	To orient and discuss the necessity of child health in an emergency
Contents:	Issues and concerns on child health during crisis
Methodology:	Power point presentation and question and answer
Brief on delivery of the sub-unit:	Child Morbidity and Mortality issues and concerns during an emergency followed by a power point presentation on specific concerns actions focusing on child survival. The session will conclude with a summarization of key points on need for the continued collaboration and cooperation to effectively respond to child survival during an emergency.
Advance preparation:	International Experiences in dealing with emergencies





**DAY THREE:**  
**UNIT III:**  
**Minimum Initial Service Package  
(MISP) for Reproductive Health in  
Emergency and  
Mental Health**

<b>Unit 3.1:</b>	<b>Reproductive Health in Emergency</b>
<b>Sub-topic:</b>	<b>(a) Overview of Minimum Initial Service Package (MISP) for Reproductive Health in Emergency</b>
Duration:	55 minutes (including 5 min discussion)
Objectives:	To orient participants on Reproductive Health during an emergency To provide basic knowledge on MISP in order to reduce mortality, morbidity, and disability of displaced populations
Contents:	<ul style="list-style-type: none"> <li>• RH in Emergency and</li> <li>• MISP</li> </ul>
Methodology:	Video presentation (Women in war), Brainstorming, Power point presentation, discussion and sharing ideas
Brief on delivery of the sub-unit:	Initiate the session with a video presentation on disasters, followed by a brainstorming session. A power point presentation will be made regarding an overview of RH during an emergency, including importance of MISP for Sexual and Reproductive Health (SRH) during disaster, crisis, or post crisis situations. The session will conclude with a summarization of key points on what is <b><u>NOT</u></b> MISP.
Advance preparation:	Video and speaker. Use reference manual developed by NHTC on MISP in Nepali.

<b>Unit 3.2:</b>	<b>Components of MISP</b>
	<b>Major components of Minimum Initial Service Package (MISP)</b>
Duration:	30 minutes
Objectives:	To orient participants on the five major MISP components and RRT's role in monitoring the day to day implementation of

	MISP during any emergency or post emergency situation.
Contents:	<ul style="list-style-type: none"> <li>• Five major components of MISP and</li> <li>• RRT's role in implementation during a disaster.</li> </ul>
Methodology:	Brainstorming, Power point presentation, discussion and sharing ideas
Brief on delivery of the sub-unit:	Initiation with a brainstorming on the components of MISP, followed by a power point presentation and discussion of each component including role of RRTs. Finally sum up the session with key points on plan for comprehensive SRH services for the management of post crisis situation.
Advance preparation:	Use reference manual developed by NHTC on MISP in Nepali

<b>Unit 3.3</b>	<b>RH Kits in Emergency</b>
Duration:	20 minutes
Objectives:	To orient on 13 different types of RH kits and to make familiarize with the RH Kits name.
Contents:	RH Kits (13 different types of RH Kits)
Methodology:	Brainstorming, Power point presentation, discussion and sharing ideas
Brief on delivery of the sub-unit:	Initiate with Brainstorming on the RH Kits with the support of Public Health Nurses (PHNs). Then display of power point presentation and discuss one by one RH kits including role of RRTs. Finally sum up the session with key points on plan for RH kits in order to make sure availability of RH kits during disaster.
Advance preparation:	Identify # of SBAs in district and identify # of RH kits in districts

	Identify # of CEOC, BEOC and BCs for referral mechanism during emergency
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<b>Sub-topic:</b>	<b>(d) Monitoring and evaluation with MISP Indicators</b>
Duration:	30 minutes
Objectives:	To orient on conducting basic monitoring and evaluation for MISP To orient on needs assessment tools to plan for comprehensive SRH
Contents:	<ul style="list-style-type: none"> <li>• Five essential M &amp; E components</li> <li>• MISP Basic Demographic and Health Information</li> <li>• MISP Indicators based on five major components</li> <li>• MISP Monthly Data Collection ( by using HMIS system)</li> </ul>
Methodology:	Brainstorming, Power point presentation, discussion, and sharing ideas
Brief on delivery of the sub-unit:	Initiation with a brainstorming session on the importance of monitoring and evaluation during disaster. This will be followed by a power point presentation and discussion on monitoring indicators for each MISP components, and the importance of monthly database updates using the HMIS system. The session will conclude with a summarization of key points on comprehensive SRH service planning based on post disaster situation evaluations.
Advance preparation:	HMIS Monthly database Reporting mechanism Use reference manual developed by NHTC on MISP in Nepali

<b>Unit 3.5:</b>	<b>Mental Health and Psychosocial support in Disaster</b>
Duration:	30 minutes
Objectives:	To orient participants on the importance of mental health, psychosocial support, and protection during emergency and post emergency situations
Contents:	<ul style="list-style-type: none"> <li>• Importance of mental health,</li> <li>• psychological consequences due to disaster,</li> <li>• Psychological First Aid (PFA) and Counseling</li> </ul>
Methodology:	Brainstorming, Power point presentation, discussion and sharing ideas
Brief on delivery of the sub-unit:	Initiate the session with sharing ideas on the importance of mental health during emergencies. Make a power point presentation on psychological consequences of a disaster, Psychological First Aid (PFA), and Counseling. Mention that the District Women and children's office has mechanism to provide psychosocial counseling and referral can be made. The session will conclude with a summarization of key points on the continual need for psychosocial counseling support during post disaster situations.
Advance preparation:	Pre-visit IASC guidelines on mental health and psychosocial support in emergency settings

<b>Unit 3.6</b>	<b>Exercise on Forms</b>
<b>Sub Topic:</b>	<b>Practice on Various recording and reporting forms</b>
Duration:	30 minutes
Objectives:	To make participants confident on filling emergency and surveillance related forms
Contents:	Various forms for recording and reporting

Methodology:	Group Work
Brief on delivery of the sub-unit:	Form groups with 2-3 persons in each group. Provide them with recording and reporting forms and provide case studies from the district. Then ask each group to review another group's form and provide feedback. The session will conclude with a summarization of key points on contingency planning.
Advance preparation:	Sufficient number of copies of recording and reporting preparation Case studies to fill in the forms (from the same district desirable, if not, case from adjacent district)

<b>3.6</b>	<b>Mock Drill</b>
Duration:	60 minutes
Objectives:	To make participants mentally ready in case of any emergency or disaster.
Contents:	<ul style="list-style-type: none"> <li>• Whistle blowing</li> <li>• Place of gathering/ exit</li> <li>• Personal Safety</li> <li>• Preparing Emergency Kit</li> <li>• Deployment for field</li> </ul>
Methodology:	Exercise
Brief on delivery of the sub-unit:	Brief the participants about mock- drill. Repeat the major steps. Then create a situation of emergency and ask the participants to go for relief work.
Advance preparation:	Case study for drill Emergency Kits Adequate space for drill

## **Integrated training package**

### **Forms, formats and tools as part of teaching materials:**

The following forms are included in this ITP for easiness for training.

- I. Rapid Health Assessment Form (RHAF) in Nepali and Guidelines in English
- II. Multi sectoral Initial Rapid Assessment (MIRA) in English
- III. Daily Surveillance Form for health Facilities
- IV. Outbreak Recording Form in Nepali and Guidelines in Nepali
- V. Outbreak Reporting Form in Nepali and Guidelines in Nepali







नेपाल सरकार  
स्वास्थ्य तथा जनसंख्या मन्त्रालय,  
स्वास्थ्य सेवा विभाग



## इपिडिमियोलोजी तथा रोग नियन्त्रण महाशाखा

### RAPID HEALTH ASSESSMENT FORMAT

जिल्ला/गा.वि.स./वडा नं : ..... प्रतिवेदन पेश गरेको मिति: ..... प्रतिवेदन नं.: .....

प्रकोपको प्रकार : ..... प्रकोप भएको मिति र समय: .....

१. सूचनाको स्रोत (नाम, पद, संस्था, ठेगाना, फोन नं) : .....

२. विस्थापित/प्रभावितहरूको विवरण:

संख्या उमेर	मृत्यु		घाइते		हराएका		विस्थापित (पुर्ण/अनुमानित)	प्रभावित (पुर्ण/अनुमानित)
	महिला	पुरुष	महिला	पुरुष	महिला	पुरुष	परिवार संख्या	परिवार संख्या
< ५ वर्ष								
≥ ५ वर्ष							विस्थापित जनसंख्या (पुर्ण/अनुमानित)	प्रभावित जनसंख्या (पुर्ण/अनुमानित)
जम्मा								

३. स्वास्थ्य संस्थाको क्षति: पुरै  आंशिक  छैन  .....

४. रिफर गरिएका संस्था (अस्पताल) हरुको नाम र संख्या : .....

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५. प्रकोपमा पहिलो उद्धारकार्यमा सहयोगी: (सेना, प्रहरी, रेडक्रस र अन्य): .....

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६. स्वास्थ्य सेवामा स्वास्थ्य सहयोग (वस्तुस्थितिको आंकलन, समन्वय, उपचारसेवा, औषधि, जनस्वास्थ्य एवं सरसमान):

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७. खानेपानीको अवस्था, परिणाम र गुणस्तर कस्तो छ खुलाउनु होस् : .....

.....

८. वातावरणीय स्वास्थ्य र सरसफाईको अवस्था कस्तो छ खुलाउनु होस् : .....

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९. स्वास्थ्य सम्बन्धि प्रमुख आवश्यकताहरु खुलाउनु होस्: .....

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१०. प्रकोप स्थलमा पुग्न सक्ने अवस्था : सजिलै  कठिन  सकिदैन

११. प्रकोप स्थलको सुरक्षा स्थिति: राम्रो  ठिकै  तराम्रो

प्रतिवेदन तयार गर्ने: .....

ज.स्वा.का प्रमुखको नाम: .....

सम्पर्क नं.: .....

सम्पर्क नं.: .....

हस्ताक्षर: .....

हस्ताक्षर: .....

मिति: .....

मिति: .....



Government of Nepal

Ministry of Health & Population - Department of Health Services  
Epidemiology & Disease Control Division



## RAPID HEALTH ASSESSMENT GUIDELINES

A rapid health assessment form needs to be filled out by DHO / DPHO, the Rapid Response Team, or available health staff no later than 24 hours after a public health emergency occurs. It should immediately be faxed or in other ways communicated to the addresses given below.

### WHEN TO USE THE ASSESSMENT FORMAT:

- An emergency is an exceptional situation exceeding the response capacity of the affected community
- For field assessment purposes, it can be defined as any event resulting in the death of more than one person, the injury of 10 people, or significant displacement of local population
- Rapid health assessments are not expected following road traffic accidents
- Unusual disease incidents need to be reported in the separate post-emergency syndromic surveillance format

### HOW TO USE THE ASSESSMENT FORMAT:

#### **Disaster and report information:**

- Indicate district, VDC, ward no, reporting date and report number at the top of the form
- Categorize the type of disaster (e.g. flood OR landslide) along with the date and time of occurrence

#### **1. Source of information:**

- List name, position, contact number and address of key informant(s)

#### **2. Health data and number of displaced / affected:**

- Search accurate figures for the number of deaths / injured / missing and breakdown by gender / age
- Give exact OR estimated number of displaced and affected people (indicate validity by tick mark) based on number of families OR persons (indicate data unit and calculation method)
- Displaced people are homeless due to the disaster event and affected people are anyone who have experienced mortality, morbidity, loss of livestock or property

**3. Damage to health facilities:**

- Assess damage to health facilities based on condition of physical structures, supplies and equipment. Indicate whether facilities remain fully operational / functional / non-functional

**4. Referral services and referral hospital:**

- Mention referral services and list the referral hospital for seriously injured casualties

**5. Active emergency responders:**

- Briefly list active emergency responders and describe response actions being taken

**6. Health response being provided:**

- Describe health response being provided including assessments, coordination, first aid, mass casualty management, referral, provision of medicine, psycho-social support and logistics

**7. Water quantity / quality:**

- Describe current status and risks related to water quantity / quality

**8. Sanitation and hygiene:**

- Describe current status and risks related to sanitation and hygiene

**9. Priority health needs:**

- Explain in detail priority health needs including medical supplies and equipment

**10. Access:**

- Assess whether the accessibility to the incident site is good / fair / poor

**11. Security:**

- Assess whether the security situation at the incident site is good / fair / poor

**Signature and contact details of DHO / DPHO and reporter:**

- Don't forget to sign, indicate date and provide contact details of DHO / DPHO and yourself.

<p><b>Please complete and return / send to the following addresses: Director / Disaster Focal Point</b> Epidemiology and Diseases Control Division Department of Health Services Ministry of Health and Population Tel: 977-1-4255796 Fax: 977-1-4262268 <a href="mailto:edcddhs@gmail.com">edcddhs@gmail.com</a></p>	<p><b>Technical Officer / National Operations Officer</b> Emergency and Humanitarian Action (EHA) World Health Organization (WHO) Pulchowk, Kathmandu Tel: 977-1-4264033 Fax: 977-1-4264033/5527756 <a href="mailto:nepeha@searo.who.int">nepeha@searo.who.int</a></p>
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**Multi-Cluster Initial Rapid Assessment (MIRA) -Nepal  
for Multi-Hazards Scenarios as of July 2012**

*(This assessment form should be used in close coordination and review with the District Disaster Relief Committee (DDRC). Stakeholders are requested to use this format to collect and analyze information of affected VDCs and Districts)*

<b>1. Assessment Team Information</b>			
Organizations participating			Date of assessment
			From
			To
Name of team leader		Contact Details	

<b>2. Geographic information (to be filled up in consultation with DDRC)</b>							
2.1 Name of the District							
2.2.Type of Hazard/Disasters (Tick appropriate only) :							
Flood		Epidemic		Drought		Earthquake	
Landslide		Fire		Hailstorm		others	
2.3 Using a map of the district, identify the VDCs/Communities that are affected by the disaster. Use the following categories: a. Worst affected (Highest impact) b. Highly affected (High impact) c. Moderately affected (Moderate impact) d. Lightly affected (Light impact) e. Not affected (No impact)							
2.4 On the same map, indicate which of the affected VDCs/communities cannot be reached by vehicle							
2.5 On the same map, indicate major concentrations of the Internally displaced people							
2.6 On the same map, indicate critical transportation infrastructural damage (roads, bridges, airports)							
2.7 On the same map, indicate potential security threats (dacoit, other groups, ...)							
2.8. Distance of the most affected VDCs from the DHQs (walking hours: ..... Driving hours .....)							

**Following questions (3, 4 & 5) should be collected in DHQ in advance by the assessment team or prepared at the time of Disaster Preparedness and Response Planning in every District**

<b>3. District Level data to be considered (Collect Information from DPHO)</b>
3.1 Functioning health facilities in the district

Type of facility	Buildings		Adequate staff		Accessibility	
	Total No.	No. of affected buildings	Yes	No	Yes	No
Sub Health Post						
Health Post						
Primary Health Care						
Hospital						

If local (S)HP/PHC are inaccessible for VDC population please explain why:

3.2 How many cases of acute malnutrition are currently under treatment in the Hospital and/or Nutrition Rehabilitation Home?  
 (For district level facilities) Number: \_\_\_\_\_  
 (Optional)

- Is this different from previous/other years? Explain:
- Is there sufficient treatment capacity? Yes or No

3.3 Participation of community organization or community      a. Yes      b. No

If yes, provide a) Name.....      b) Contact Number      c) Email

If there are concentrations of families displaced outside of their community of origin (in neighboring VDC or beyond) collect the following additional information for each location:

<b>4. Sampled VDC/Community</b> <i>(Randomly select a community(s) within affected areas for the detailed information on the following (if time does not allow, select a community from the worst and/or highly affected areas only)</i>			
District	VDC	GPS of the sampled VDC: If not available, P-code of the VDC:	Mapping impact category (1-5)
Visited Ward numbers:	Number of wards affected:		Name of Villages visited:
Altitude of the visited wards	Latitude (Y):		Longitude (X):

<b>5. Population data (Village/Settlement level)</b>						
5.1 Total population						
Affected level and population	Total Families	Female	Male	Children < 5 yrs	Total population	
5.2 Highly affected population (count)						
5.3 Less affected population (count)						
5.4 Number of Persons:	Male	Female	Children < 5 hrs	Common cause		

Dead:				
Injured:				
Missing				

5.5 Affected groups or Vulnerable groups (Count number of persons in every case)										
Families with no shelter due to disasters		Unaccompanied elders >60 years		Unaccompanied minors		Severely ill / Disabled		Pregnant / Lactating Women	# Female headed households	Disadvantaged, Ethnic, religious, communities
Male	Female	Male	Female	Male	Female	Male	Female			

6. Shelter and NFI	
6.1 What is the level of housing damage?	
a) Total number of houses destroyed, no habitation whatsoever (requires complete reconstruction and demolished)	
b) Total number of severely damaged houses, unsafe for habitation (Walls, roof and column collapsed, hanging wall etc.)	
c) Total number of moderately damaged houses, that are safe for habitation but requiring minor maintenance (cracks evident but the structure intact)	
d) Total number of houses with no visual damage	
6.2 Are community shelter facilities with water and sanitation provisions available?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, indicate the type and number of facilities within the immediate community boundary and how many people can be adequately accommodated (Narrative):	
<input type="checkbox"/> Public buildings (locations and accommodation capacity): <input type="checkbox"/> Host families (locations and accommodation capacity): <input type="checkbox"/> Other (locations and accommodation capacities):	
6.3 What are the most likely immediate NFI needs of the community:	
<input type="checkbox"/> Emergency shelter / tarpaulin <input type="checkbox"/> Shelter tools <input type="checkbox"/> Blankets <input type="checkbox"/> Cooking utensils <input type="checkbox"/> Buckets / jerrycans <input type="checkbox"/> Clothing / material <input type="checkbox"/> Other (specify):	
Narrative:	



7. Household food security		
7.1 What percentage of households lost percentage of their food stocks? (e.g. 40% of households lost 100%)	% of food stocks lost <input type="checkbox"/> 0-25% <input type="checkbox"/> 25-50 % <input type="checkbox"/> 50- 75 % <input type="checkbox"/> 75-100%	Corresponding %age HH <hr/>
7.1 Within these food stocks what type of food is available	<input type="checkbox"/> Cereal <input type="checkbox"/> Pulses <input type="checkbox"/> Oil <input type="checkbox"/> <input type="checkbox"/> Vegetable <input type="checkbox"/> Meat	
7.2 For those who have stocks remaining, on average, how long is it expected to last?	<input type="checkbox"/> 1-3 days <input type="checkbox"/> 4-7 days <input type="checkbox"/> 1-2 weeks <input type="checkbox"/> <input type="checkbox"/> 3-4 Weeks <input type="checkbox"/> > 1 month	
7.3 What is the predominant source of food?	Before Crisis <input type="checkbox"/> Local shops/marketing <input type="checkbox"/> Government aid <input type="checkbox"/> Aid agencies <input type="checkbox"/> Own reserves <input type="checkbox"/> Others (Specify).....	Now <input type="checkbox"/> None..... <input type="checkbox"/> Local shops/marketing <input type="checkbox"/> Government aid <input type="checkbox"/> Aid agencies <input type="checkbox"/> Own reserves <input type="checkbox"/> Others (Specify).....
7.4 What percentage of households has access to cooking utensils?		
7.5 Does the community have access to fuel for cooking purposes?	Yes/ no	If yes, what type of fuel used (tick appropriate one) a) Firewood b) Charcoal c) Kerosene d) Gas e) Other specify) .....
7.6 As a result of the emergency, are any of the following coping strategies practiced in the community?		
<input type="checkbox"/> Reduce food intake <input type="checkbox"/> Eating seeds/wild food/ less preferred foods/ low quality food <input type="checkbox"/> Increase in borrowing for consumption purposes <input type="checkbox"/> Sale of household assets (cooking utensils, jewellery etc.) <input type="checkbox"/> Sale of productive assets (tools, animals, machinery, land) <input type="checkbox"/> Migration to other locations <input type="checkbox"/> Reliance on external support (eg food/cash assistance)	Estimated % of HH _____ _____ _____ _____ _____ _____	

<input type="checkbox"/> Use of grain bank/emergency community fund <input type="checkbox"/> No coping strategy available <input type="checkbox"/> Others (Specify) .....				
7.7 Who are the most vulnerable group of people to food insecurity?		<input type="checkbox"/> child headed households <input type="checkbox"/> female headed households <input type="checkbox"/> elderly headed households <input type="checkbox"/> the disabled/severely ill <input type="checkbox"/> Certain caste groups (Specify)..... <input type="checkbox"/> Others (Specify).....		
7.8 a. Are markets functioning? <input type="checkbox"/> Yes <input type="checkbox"/> No b. Are markets accessible? <input type="checkbox"/> Yes <input type="checkbox"/> No		If yes, what is the distance/ If no, what is the reason (describe)? If yes, what % of households has financial access?		
7.9 If available, what are the prices of main commodities? (please strike commodity if not available)		Unit	Now	Before disaster
Rice		_____	_____	_____
Wheat flour		_____	_____	_____
Oil		_____	_____	_____
Pulses		_____	_____	_____
Milk		_____	_____	_____
Maize		_____	_____	_____
Potato		_____	_____	_____
Other (Specify)		_____	_____	_____
7.10 a) What are the main livelihoods of this community? ; b) Estimate % of the community that sees this as main livelihood; c) What % families resumed their livelihoods?		<input type="checkbox"/> Crop farming <input type="checkbox"/> Livestock <input type="checkbox"/> Wage labour <input type="checkbox"/> Salaried Job <input type="checkbox"/> Fishing	If applicable, % of communities that see this as the main livelihood. _____% _____% _____% _____% _____% _____%	% resumed _____% _____% _____% _____% _____%

	<input type="checkbox"/> Trade <input type="checkbox"/> Business/i ndustry <input type="checkbox"/> Tourism <input type="checkbox"/> Forest products <input type="checkbox"/> Others (specify)	_____ % _____ %	_____ %
7.11 At what stage of the cropping calendar is the community currently in and what impact will the emergency have on this? Describe possible impacts:..... Suggestions for coping the situation.....			
7.12 What is the expected loss as a result of crisis?	a) Crop area (Ropani/Bigha) b) Irrigation infrastructure (number/meter of canal) c) Fish ponds (number and area) d) food storage facility e) Other significant loss (specify).....		
7.13 What is loss related to livestock? (Number)	a) cattle: _____ b) buffalo: _____ c) goats/sheep: _____ e) poultry: _____ d) pigs: _____ f) animal shelter: _____		
7.14 does this community have food for livestock?	if yes, how long will it last		
7.15 a. Has there been or any indication of animal disease outbreak? (yes or No) b. Is the animal health service accessible? .....			
7.16 Any other relevant comments or observations.....			

## 8. WASH

### 8.1 Water Supply

Availability of clean drinking water (15 liters /person/day)?:  0-24%  25-49%  50-74%

Means of Verification: Interview with local government, utility etc. Verify with community if possible and observation

<b>Primary water source:</b> <input type="checkbox"/> Open Well <input type="checkbox"/> Tunde Well/Hand pump <input type="checkbox"/> Stream/river <input type="checkbox"/> Storage/collection container <input type="checkbox"/> Piped water system <input type="checkbox"/> Other	<b>Condition:</b> <input type="checkbox"/> Working <input type="checkbox"/> Damaged (Repair required for minimum supply) <input type="checkbox"/> Contaminated <input type="checkbox"/> Destroyed <input type="checkbox"/> Water Turbid	<b>Alternate water source available?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, type/location/water clear or turbid (cloudy) or information available on water quality:  Facilities (material) required to supply minimum quality drinking water (e.g. repairs needed to water system):
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Do affected families have water container with lid available at household level used for drinking water storage?  Yes  No \_\_\_\_\_

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**8.2 Sanitary facilities**

Affected population with access to functioning sanitary facilities (e.g. Latrines):  0-24%  
 Means of Verification: Interview with local government, health dept etc. Verify with community if possible and through observation.

Adequate personal hygiene supplies available (soap, sanitary cloth/napkins)  Yes  
 Narrative (no. of family hygiene kit required):

**9. Protection**

9.1 Is there any displacement of the local population? If possible, note estimated number and where they have gone

9.2 Are there separated and unaccompanied children? (Y/N) , Numbers ( boys and girls)

9.3 Is there a registration / family tracing system in place? If so who is doing this?

9.4 What are the primary concerns of the most vulnerable groups at present (post disaster situation)?

	Shelter/ security	Food/ water	Health/ education	Physical safety / violence including SGBV	Psychosocial support	Child labour/ trafficking	Other
Children 0 – 5 years							
Children less than 18 years							
Adolescents (10-24)							
Persons with disabilities							
Older persons (aged 60+)							
Pregnant/lactating women							
Ethnic Minorities ???							
Other							

9.5 Any other protection issues identified such as dacoits, loot,SGBV.....

9.6 Are there any community support mechanisms that can provide or refer to services (example GBV watch group Women’s Federations, Child Clubs, Child Protection Committees etc.)? If so, which.....

**10. Nutrition (If possible ask Female Health Care Volunteers or local medical staff)**

10.1 What types and frequencies of foods are fed to infants and children under five years of age (most common first)?

6-12 months:	Now:	Before disaster:
	• Types: _____	• Types: _____
	• Frequencies: _____	• Frequencies: _____

12-59 months •	Now: • Types: _____ • Frequencies: _____	Before disaster: • Types: _____ • Frequencies: _____
10.2 Are there any changes in preparing the foods (hand washing, storage) and storage of foods? No or Yes, if yes, what are the changes?		
	Now: • Duration of storage: _____ • Hand washing : _____	Before disaster: • Duration of storage: _____ • Hand washing: _____
10.3 Is there indication of decreased/interrupted breastfeeding? No / Yes, If yes, what are the reasons?  What is replacing breastfeeding? • For the children below six months: • For the Children between 6-24 months:		
10.4 Have there been any donations of infant formula or commercial baby foods or bottles or teats: No or Yes, If yes, source of donation(s) if known:		

11. Health (Ask at health facilities and local communities)										
11.1 Main health concerns						11.2 Availability of medicines/medical supplies				
<input type="checkbox"/> Diarrhoea <input type="checkbox"/> Eye Infections <input type="checkbox"/> Vomiting <input type="checkbox"/> Dehydration <input type="checkbox"/> Snake Bites <input type="checkbox"/> Fever <input type="checkbox"/> Cough and Fever (ARI)			<input type="checkbox"/> Skin disease <input type="checkbox"/> Injuries/Trauma <input type="checkbox"/> Death of Mother and/or children following delivery <input type="checkbox"/> Any chronic conditions i.e. Diabetes, hypertension <input type="checkbox"/> psychosocial illness			Medicines: Equipments and supplies (including stretchers): <input type="checkbox"/> Adequate <input type="checkbox"/> Adequate <input type="checkbox"/> Inadequate <input type="checkbox"/> Inadequate Specify needs: _____ _____				
11.3 Functioning of the nearest health facilities in village:										
Type of facility	Damaged		Availability of staff		Accessible		Power Supply		Water Supply	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Health Post										
Sub Health Post										
Private Clinic/Nursing Home										
11.4 Who provides health care in that facility? _ Nurse, _ Doctor, _ Midwife, _ Other (specify) : traditional healers etc.										
11.5 Access to nearest health facility: _ Easy; _ With obstacles (Explain); _ Very difficult (Explain). Distance in km:										
11.6 Have there been any reports or rumors of any outbreaks or unusual increase in illness? ___No, ___Yes (Specify)										

11.7 Have there been reports of non-infectious agents (such biological, chemical, nuclear, radiation, poisons or toxins)? \_ No; \_ Yes (Specify)

<b>12. Education</b>	
12.1 % of school affected <input type="checkbox"/> 0-24% <input type="checkbox"/> 25-49% <input type="checkbox"/> 50-74% <input type="checkbox"/> 75-100% <input type="checkbox"/> Number of schools affected (optional & if possible) .....	
12.2 No. of children affected (disaggregate by gender) ECD            (Boy:        )            (Girl:        ) Basic School (Boy:        )            (Girl:        )	
12.3 No. of teachers affected (disaggregate by gender) ECD            (Male:       )            (Female:     ) Basic School (Male:       )            (Female:     )	
12.4 Are classes being taught and attended by the community? <input type="checkbox"/> Yes <input type="checkbox"/> No	
12.5 What is the status of the school in the community? <input type="checkbox"/> Fully damaged, cannot be used in present condition <input type="checkbox"/> Partially damaged, cannot be used <input type="checkbox"/> Partially damaged but can be used with some maintenance <input type="checkbox"/> Water logged but can be used with some maintenance <input type="checkbox"/> Not affected	
12.6 Have basic SCHOOL materials been affected? (Black boards / Teaching materials, books, stationeries, furniture, etc.) <input type="checkbox"/> Mostly lost <input type="checkbox"/> Partially lost <input type="checkbox"/> Not affected	
12.7 Have EDUCATIONAL materials of the children been affected? (Text books, Stationeries, schoolbags, etc.) <input type="checkbox"/> Mostly lost <input type="checkbox"/> Partially lost <input type="checkbox"/> Not affected	
12.8 Are school being used for any other purpose? <input type="checkbox"/> Yes <input type="checkbox"/> No (please specify if yes):	

<b>13. Emergency Telecommunications</b>		
13.1 What means of security telecoms and data services are available in the area?		
Means of Communication	Service Status (Yes/No)	Comments
Radio Room Coverage 24 x 7		
HF / VHF Radio		
Sat phone		
Internet		
Other (e.g. HAM radio)		
13.2 What means of public communication are available?		

Means of Communication	Service Status (Yes/No)	Comments
FM/AM Radio		
TV		
Mobile Phone (GSM, CDMA etc.)		
Landline		
13.3 Any alternate means of power backup available?		

14. Logistics					
13					
14					
14.1 Are all affected areas accessible for humanitarian agencies? (please tick as appropriate)					
No		Don't know		Partially Fully	
Remarks: Please describe in short if affected area partially or fully accessible and attach map as appropriate					
14.2 Are logistics basic services functioning post disaster? (please tick as appropriate)					
Logistics services	No	Don't know	Partially operational	Fully operational	Remarks
Fuel station					
Electricity					
Road service					
Transportation means					
Air service					
Others					
Remark: for detail please attach separate sheet					
14.3 Since the disaster, what is the biggest logistics concern to the community? (please tick as appropriate)					
Debris/rubble	stagnant water	Landslide	Bridge damage/collapses		
Non functionality of roads	Unavailability of fuel	Damage of airport runway	River crossing	Others:	
Remarks: Please attach separate sheet in detail as appropriate					
14.4 What is the severity of infrastructure damage in the area? (please tick as appropriate)					
Infrastructure	No damage	Partially & functional	Partially & not functional	Totally destroyed	Remarks
Warehouses					

Government Buildings					
Custom office					
Private buildings					
Business houses					
Fuel stations					
Power stations					
Airport					
Helipads					
Others...					
Remark: for detail please attach separate sheet					

### 15. Displaced Population and Camp Coordination and Camp Management (CCCM)

13			
14			
15			
15.1 Displaced Population			
Number of families:			
Male =	Female =	Children under 5 =	Elderly ( Over 60) =
Pregnant women =	Lactating Mother =	Differently able =	Total Population =
15.2 Location of IDP site			
a. Name of the IDP site: Altitude:		b. Latitude:	c. Longitude:
15.3 Type and Classification of Site			
Type	a. Spontaneous	b. Planned	
Classification of site	a. Camp	b. Settlement	c. Urban Scattered IDP location
Ownership of land of the site	a. Private	b. Public	c. Other (Specify)
15.4 Origin of IDP			
Where do most people originate from?			
a. Nearby neighbourhood (1000m radius).....		b. Other neighbourhoods (more than 1000m radius).....	
15.5 Registration of Displaced Population			



Registration conducted a. Yes b. No					
a. Number of registered HHs .....			b. Number of registered individuals.....		
15.6 Movement to and from the site -Yes -No					
How is population trend in the site? a. Increasing b. Decreasing c. Same as before					
15.7 Services Provided at IDP Site					
Toilet provided	Yes	No	Number: .....	Organisation: .....	Notes: .....
Drinking water	Yes	No	Quantity: .....	Organisation: .....	Notes: .....
Shower facility	Yes	No	Quantity: .....	Organisation: .....	Notes: .....
Garbage management	Yes	No	Quantity: .....	Organisation: .....	Notes: .....
Other services (Specify)					
15.8 Vulnerable Population					
Any Information suggesting that some <b>group</b> are underserved a. Yes b. No					
If yes, please specify.....					
<b>16. Prior Relief effort/assistance</b>					
16.1 Has the community received any assistance? Yes No					
If Yes, who is providing what?					
If No, are there any current plans to provide assistance?					
16.2 Have all community members informed (regularly) about the disaster and assistance/response?					

## अभिलेख र प्रतिवेदन

नेपाल सरकार  
स्वास्थ्य मन्त्रालय,  
स्वास्थ्य सेवा विभाग

### इपिडेमियोलोजी तथा रोग नियन्त्रण महाशाखा

सरुवा रोग प्रकोप अभिलेख फारम (Outbreak Recording Form)

जिल्ला: ..... स्वास्थ्य संस्था: ..... शंकास्पद रोग/सिन्ड्रोम: .....

मिति : .....

क्र.सं.	रोगीको नाम	उमेर	लिंग	गा.वि.स.	वडा नं.	टोल	रोग देखा परेको मिति	प्रयोगशाला जाँचका लागि लिएको नमूना	प्रयोगशाला जाँचको किसिम	प्रयोगशाला नतीजा	उपचार	भ्याक्सीन	नतिजा			कैफियत
													निको भएको	रेफर गरेको	मृत्यु भएको	

यो प्रतिवेदन जिल्ला स्वास्थ्य/जनस्वास्थ्य कार्यालयमा ब्यवस्थित रूपमा राख्नुपर्छ र माथिल्लो निकायले मागेको खण्डमा मात्र पठाउनु पर्छ ।

## सरुवा रोग प्रकोप अभिलेख फारम (Outbreak Recording Form) भर्ने निर्देशिका

जिल्लामा सरुवा रोगको प्रकोपको सूचना प्राप्त भई प्रकोप सुनिश्चित हुने बित्तिकै व्यापिड रेस्पोन्स टीम परिचालन हुन्छ । प्रकोप भएको स्थानमा पुगेपछि रोगीको जाँच/उपचार गर्दा व्यापिड रेस्पोन्स टीमले यो फारम प्रयोग गर्नुपर्छ ।

१. फारमको सिरानीमा जिल्ला, स्वास्थ्य संस्था, प्रकोपको रूपमा देखा परेको रोग /सिन्ड्रोमको नाम र मिति लेख्ने ।
२. फारमको पहिलो खण्डमा रोगीको क्रम संख्या लेख्ने ।
३. फारमको दोस्रो खण्डमा रोगीको नाम लेख्ने ।
४. फारमको तेस्रो खण्डमा रोगीको उमेर लेख्ने ।
५. फारमको चौथो खण्डमा रोगीको लिङ्ग लेख्ने ।
६. फारमको पाँचौ खण्डमा स्थानीय तहको नाम लेख्ने ।
७. फारमको छैठौँ खण्डमा रोगीको वडा नं. लेख्ने ।
८. फारमको सातौँ खण्डमा रोगीको टोलको नाम लेख्ने ।
९. फारमको आठौँ खण्डमा रोगीमा रोग देखा परेको मिति लेख्ने ।
१०. फारमको नवौँ खण्डमा प्रयोगशाला जाँचका लागि रोगीको रगत, दिसा, पिसाब, खकार के नमूना लिएको हो सो लेख्ने ।
११. फारमको दशौँ खण्डमा कुन किसिमको प्रयोगशाला जाँच गरेको जस्तै: Culture, AFB, Blood Smear के हो लेख्ने ।
१२. फारमको एघारौँ खण्डमा प्रयोगशाला जाँचको नतीजा पोजिटिभ वा नेगेटिभ के हो लेख्ने
१२. फारमको बाह्रौँ खण्डमा रोगीलाई के उपचार दिएको र औषधिको नाम लेख्ने ।
१३. फारमको तेह्रौँ खण्डमा रोगीलाई कुनै भ्याक्सीन दिएको भए लेख्ने ।
१४. फारमको चौधौँ खण्डमा रोगीको नतिजा -निको भयो, रेफर गरियो वा मृत्यु के भयो लेख्ने ।

नेपाल सरकार  
स्वास्थ्य तथा जनसंख्या मन्त्रालय, स्वास्थ्य सेवा विभाग  
**इपिडेमियोलोजी तथा रोग नियन्त्रण महाशाखा**  
सरुवा रोग प्रकोप प्रतिवेदन फारम (Outbreak Reporting Form)

जिल्ला: .....

स्वास्थ्य संस्था: .....

मिति .....

**१. प्रकोप सूचना तथा रेस्पान्स (Outbreak Information & Response)**

क्र.स.	स्थानीय तह (निश्चित समुदाय, टोल आदि भए खुलाउने)	शंकास्पद रोग/सिन्ड्रोम	अनुमानित रोगी तथा मृतक संख्या	प्रकोपको सूचना दिने व्यक्ति /संस्था	EWARS बाट सूचना पाएको हो/होइन	सूचना पाएको मिति	उपचार टोली गएको मिति		उपचार टोलीमा संलग्न व्यक्ति (पद)	पहिलो रोगी देखिएको मिति
							जिल्लाबाट	क्षेत्रबाट		

**२. प्रकोप अनुसन्धान (Outbreak Investigation)**

क्र.स.	स्थानीय तह	शंकास्पद रोग/सिन्ड्रोम	रोगको संभावित स्रोत	जोखिममा रहेका जनसंख्या	रोगी तथा मृतकको संख्या								नतिजा				अन्तिम रोगी देखिएको मिति				
					१ वर्ष मुनि		१- ४ वर्ष		५- १४ वर्ष		१५ वर्ष माथि		निको भएको (क)	रेफर गरेको (ख)	मृत्यु भएको (ग)	जम्मा (क+ख+ग)		नमूनाको किसिम	जम्मा नमूना संकलन	जाँचको किसिम	नतिजा
					रोगी	मृत्यु	रोगी	मृत्यु	रोगी	मृत्यु	रोगी	मृत्यु									

### ३. प्रकोप नियन्त्रणका उपायहरू (Outbreak control measures)

क्र.स.	स्थानीय तह	शंकास्पद रोग/सिन्ड्रोम	उपचार/नियन्त्रण शुरु गरेको र समाप्त गरेको मिति	उपचार/नियन्त्रण को विधि/किसिम (Mass drug distribution, Case by case treatment, Mopping up, Insecticide spraying etc) खुलाउने	खर्च भएको औषधि/भ्याक्सीन आदिको विवरण	प्रकोप नियन्त्रणमा संलग्न संघ संस्था र गतिविधि		माथिल्लो निकायबाट पाएको सहयोग		सुभाउ र टिप्पणी
						संस्था	सहयोग गतिविधि	क्षेत्रबाट	केन्द्रबाट	

प्रतिवेदन तयार पार्नेको नाम :

सदर गर्नेको नाम :

पद :

पद :

सही :

सही :

(यो प्रतिवेदन तत्कालै इपिडेमियोलोजी तथा रोग नियन्त्रण महाशाखाको फ्याक्स नं. ०१-४२६२२६६ मा फ्याक्स गर्नु होला (फोन नं. ०१-४२५५७९६) वा ईमेल : [ewarsedcd@gmail.com](mailto:ewarsedcd@gmail.com) तथा बोधार्थ सम्बन्धित क्षे.स्वा.नि.मा दिनुहोला)

## सरुवा रोग प्रकोप प्रतिवेदन फारम (Outbreak Reporting Form- 2)- नं. २ भर्ने निर्देशिका

यस प्रतिवेदनमा तीन भाग छन्: भाग १ मा प्रकोप सूचना तथा रेस्पोज, भाग २ मा प्रकोप अनुसन्धान, भाग ३ मा प्रकोप नियन्त्रणका उपायहरू। जिल्लामा प्रकोपको सूचना प्राप्त भई प्रकोप सुनिश्चित हुने बित्तिकै ज्यापिड रेस्पोज टीम परिचालन गरिन्छ। ज्यापिड रेस्पोज टीम परिचालन गर्ने बित्तिकै यस फारमको खण्ड १ प्रकोप सूचना तथा रेस्पोज भरेर तत्कालै इपिडेमियोलोजी तथा रोग नियन्त्रण महाशाखामा फ्याक्स गर्नु पर्छ तथा बोधार्थ सम्बन्धित क्षे.स्वा.नि.मा दिनुपर्छ।

१. फारमको सिरानीमा जिल्ला, स्वास्थ्य संस्थाको नाम र मिति लेख्ने।
२. फारमको भाग १ को पहिलो खण्डमा क्रम संख्या लेख्ने।
३. फारमको भाग १ को दोस्रो खण्डमा स्थानीय तहको नाम लेख्ने (निश्चित समुदाय, टोल, वडा नं. आदिको जानकारी भए सो पनि लेख्ने)।
४. फारमको भाग १ को तेस्रो खण्डमा सूचना प्राप्त भएको शंकास्पद रोग वा सिन्ड्रोमको नाम लेख्ने, रोगको लक्षणको मात्र सूचना प्राप्त भएको छ भने लक्षणहरू नै उल्लेख गर्ने अथवा यस महाशाखाद्वारा तयार पारिएको 'रोगी परिभाषा र सर्भिलेन्स मापदण्ड' पुस्तकको सहयोग लिने।
५. फारमको भाग १ को चौथो खण्डमा सूचना प्राप्त भए अनुसार अनुमानित रोगी तथा मृतक संख्या लेख्ने।
६. फारमको भाग १ को पाँचौं खण्डमा प्रकोपको सूचना कुनै व्यक्ति मार्फत आएको छ भने व्यक्तिको नाम तथा संस्था मार्फत आएको छ भने संस्था को नाम लेख्ने।
७. फारमको भाग १ को छैठौं खण्डमा EWARS बाट सूचना पाएको हो भने सो लेख्ने।
८. फारमको भाग १ को सातौं खण्डमा कुन मितिमा सूचना पाएको हो सो मिति लेख्ने।
९. फारमको भाग १ को आठौं खण्डमा ज्यापिड रेस्पोज टीम परिचालन भएको मिति लेख्ने।
१०. फारमको भाग १ को नवौं खण्डमा उपचार टोलीमा कुन कुन व्यक्ति संलग्न छन् तिनको पद उल्लेख गर्ने।
११. फारमको भाग १ को दशौं खण्डमा पहिलो रोगी देखिएको वा प्रकोप शुरु भएको मिति लेख्ने।

प्रकोप भएको स्थानमा ज्यापिड रेस्पोज टीम पुगेपछि प्रकोपको अनुसन्धान तथा नियन्त्रण गतिविधि शुरु हुन्छ, पहिले जिल्ला स्वास्थ्य/जनस्वास्थ्य कार्यालयमा प्राप्त कतिपय सूचनाहरू संशोधन गर्नु पर्ने हुन्छ, तसर्थ प्रकोप व्यवस्थापनमा खटिएको टोलीले यस फारमको भाग १ लाई संशोधन अनुसार भरेर तत्काल जिल्ला स्वास्थ्य/जनस्वास्थ्य कार्यालय मार्फत इपिडेमियोलोजी तथा रोग नियन्त्रण महाशाखामा पठाउनु पर्छ। तत्पश्चात् टोलीले फारम १ को उपयोग गरेर तथ्यांक संकलन गर्नुपर्छ र त्यसैको आधारमा फारम नं. २ को दोस्रो तथा तेस्रो भाग भर्नुपर्छ।

१. फारमको भाग २ को पहिलो खण्डमा क्रम संख्या लेख्ने।
२. फारमको भाग २ को दोस्रो खण्डमा स्थानीय तहको नाम लेख्ने।

३. फारमको भाग २ को तेस्रो खण्डमा सूचना प्राप्त भएको शंकास्पद रोग वा सिन्ड्रोमको नाम लेख्ने ।
४. फारमको भाग २ को चौथो खण्डमा रोगको संभावित स्रोत लेख्ने, जस्तै भन्डा पखाला भएमा इनार वा कुवाको पानी स्रोत हुन सक्छ ।
५. फारमको भाग २ को पाँचौं खण्डमा जोखिममा रहेका जनसंख्या लेख्ने, जस्तै भन्डा पखाला भएमा सो इनार वा कुवाको पानी उपयोग गर्ने जनसंख्या जोखिममा हुन सक्छन् ।
६. फारमको भाग २ को छैठौं खण्डमा उमेर अनुसार रोगी तथा मृतकको संख्या लेख्ने ।
७. फारमको भाग २ को सातौं खण्डमा रोगीको नतिजा: निको भएको, रेफर गरेको वा मृत्यु भएको लेख्ने ।
८. फारमको भाग २ को आठौं खण्डमा प्रयोगशाला जाँचमा कुन किसिमको नमूना लिएको लेख्ने ।
९. फारमको भाग २ को नवौं खण्डमा कुन किसिमको प्रयोगशाला जाँच गरेको जस्तै: Culture, AFB, Blood Smear के हो लेख्ने ।

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### Appendix 1:

#### Member of Core Team for revision of Integrated Training Package on Emergency Preparedness and Response for Rapid Response Team

SN	Name	Designation & Organization	Committee Designation
1.	Dr Guna Nidhi Sharma	Deputy Health Administrator, EDCD	Coordinator
2.	Dr Bhesh Raj Pokharel	Deputy Health Administrator, EDCD	Member
3.	Badri Nath Jnawali	Under Secretary, EDCD	Member
4.	Dr. Uttam Ghimire	IMO, EDCD	Member
5.	Bhim Prasad Sapkota	Public Health Administrator, MoH	Member
6.	Mr. Hari Karki	Humanitarian Coordinator, UNFPA	Member
7.	Damodar Adhikari	NPO, WHO	Member
8.	Sabin Adhikari	Program Coordinator, NRCS	Member
9.	Shambhu Kumar Mahato	PHI, EDCD	Member Secretary
	<b>Consultant</b>		
1	Dr. Bal Krishna Subedi		

#### Terms of reference for the committee

1. To guide on updating/ revising the Integrated Training package on Emergency and Disaster Preparedness
2. To support updating/revising the ITP
3. To finalize the ITP and recommend for endorsement

## Appendix 2

### List of Participants participating in Pre dissemination of integrated training package on emergency preparedness and response for RRT

Date: 29 December 2016

Venue: Swastik Foodland, Tahachal, Kathmandu

SN	Name	Designation	Office
1	Dr. Bhim Acharya	Director	EDCD
2	Dr. Guna Nidhi Sharma	Dep. Health Administrator	EDCD
3.	Hari Karki	Humanitarian Coordinator	UNFPA
4.	Bijay Bharati	Health Delegate	CRC/NRCS
5.	Badri Nath Jnawali	Under Secretary	EDCD
6.	Hari Prasad Acharya	PHI	EDCD
7.	Pradip Rimal	PHI	EDCD
8.	Dr. Uttam Ghimire	IMO	EDCD
9.	Dr. Sagar Raj Shakya	MSC	WHO/IPD
10.	Kunj Prasad Joshi	HEA	NHEICC
11.	Dr. Bhesh Raj Pokhrel	Dep. Health Administrator	EDCD
12.	Laxmi Devi Regmi	Account Officer	EDCD
13.	Dhan Prasad Paudel	MT	EDCD
14.	Dabal Bahadur BC	LT	EDCD
15.	Dhruba Kumar Adhikari	PHI	DPHO, Kathmandu
16.	Dr. Kedar Marhatta	MHC	WHO
17.	Dr. Sudan Panthi	NPO	WHO
18.	Damodar Adhikari	NPO	WHO
19.	Dr. Rajan Bikram Rayamajhi	NPO	WHO
20.	Madhav Raj Ojha	SO	EDCD

21.	Bhola Adhikari	Lab Technician	EDCD
22.	Jay Krishna Yadav	Lab Techncian	Teku Hospital
23.	Dhan Narayan Tamang	Na Su	EDCD
24.	Hari Narayan Shah	PHI	EDCD
25.	Rishi Ram Satyal	CA	EDCD
26.	Hari Prasad Wagle	OH	EDCD
27.	Sabin Adhikari	Program Coordinator	NRCS
28.	Bishnu Khadka	MS	NRCS
29.	Dr. Santoshanand Jha	MO	Teku Hospital
30.	Shambhu Kumar Mahato	PHI	EDCD
31.	Dr. Prakash Ghimire	NPO	WHO
32.	Minu Adhikari	CO	FHD
33.	Ram Sundar Yadav	PHO	EDCD
34.	Tanka Prasad Chapagain	Senior PHA	PHC-RD
35.	Mohan Kumar Rauniyar	Sr AHW	Teku Hospital
36.	Tek Raj DC	PHI	CHD
37.	Dijay Raj Nair	Accountant	EDCD
38.	Manju Joshi	Senior Program Assistant	NRCS
39.	Lalan Prasad Sah	PHI	LMD
40.	Nripa Chaudahary	HA	NPHL
41.	Deepak Subedi	Lab Technologist	NPHL

### **Appendix 3:**

#### **List of contents of kits needed for disaster response as part of teaching materials:**

- Diarrhoeal Disease Kit (DDK)
- Inter-agency Emergency Health Kit (IEHK)
- Reproductive Health (RH) kit- (Kit # 0-12)
- Dignity or hygiene kit
- Surgical Kit

## Unit 1.1: Basic Concept of Disaster/ Emergency

### Background

- Nepal is prone to natural and man-made disasters
- Natural disasters are predictable – occurs every year
- This Emergency Preparedness and Disaster Response Training is expected to prepare health workers for the emergencies and disasters in Nepal and is expected to have a bigger impact than in situations where preparedness is random.
- So that, ultimately, we can save lives!

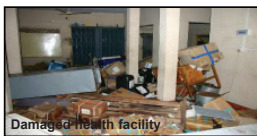
22

### Earthquake in Nepal

- 1934 Kathmandu Valley Earthquake:
  - Deaths: 8,000
  - Injuries: 25,000
- 2015 Earthquake:
  - Deaths: 8970
  - Injuries: 23,000
  - Buildings destroyed and damaged- more than 5 lakhs



Damaged buildings, 1934 KV EQ



Damaged health facility

### Types of Emergencies

- Natural
  - Earthquake
  - Flood
  - Landslide/ Avalanche
  - Drought
  - Fire
- Human Activity related
  - Conflict
  - Bandh/Strike

4

### Some important terminologies

<b>Hazard</b> Any potential threat to public safety and/or public health	<b>Risks</b> Anticipated consequences of a specific hazard interacting with a specific community (at a specific time)
<b>Emergency</b> An actual threat to public safety and/or public health	<b>Vulnerabilities</b> Factors which increase the risks arising from a specific hazard in a specific community (task, modifiers)
<b>Disaster</b> Any actual threat to public safety and/or public health where local government and the emergency services are unable meet the immediate needs of the community	<b>Capacities</b> An assessment of ability to manage to an emergency (a risk modifier) – total capacity is measured as readiness
<b>Community</b> is people, property, services, livelihood and environment i.e. the elements exposed to hazards	

5

### HAZARD

A rare or extreme natural or man made **trigger event** that threatens to adversely affect human life, property or activity to the extent of causing disaster.

### VULNERABILITY

The **level of disruption and loss** a hazard can **potentially** cause in a community / society.

### DISASTER

Any **event** that causes damage, ecological disruption, loss of human life, or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community

6

## EMERGENCY

A **state** demanding immediate and **extraordinary** action that may be due to epidemics, to natural or technological catastrophes, to civil strife or other man-made causes.

## PREPAREDNESS

**Arrangements to reduce suffering**, immediate and long-term avoidable mortality, morbidity and disability in any type of emergency **and to build a bridge to development**.

7

## RESPONSE

Actions taken **during and immediately after the occurrence of an event**, to ensure that disaster effects are minimized and people are given immediate relief and support.

8

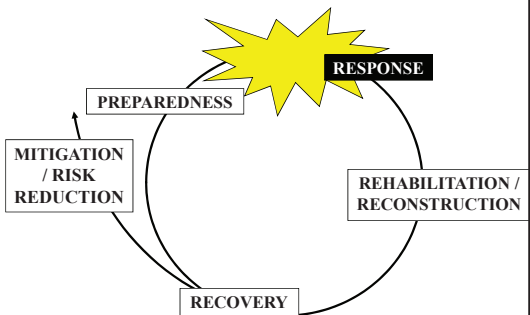
## DISASTER EQUATION

$$\text{Risk} = \frac{\text{Hazard} \times \text{Vulnerability} \times \text{Exposure}}{\text{Capacity}}$$

Human factors are at play in determining vulnerability and capacity and thus the magnitude of a disaster ("Earthquakes do not kill people but buildings do").

9

## The Disaster Management Cycle



## Consequences of Various Hazards in Nepal

Disaster	Number of casualties	Prone Regions	Effect on health facilities	Effect on health workers
Earthquake	Many	All regions of Nepal	Severe	Severe
Flood	Few/Many	Terai regions	Severe/Moderate	Severe/Moderate
Landslide/Avalanche	Few	Northern hilly regions	Moderate	Moderate
Drought	Few/Many	All regions of Nepal	Moderate	Severe/Moderate
Conflict	Few/Many	All regions of Nepal	Severe/Moderate	Severe/Moderate
Bandh	Low	All regions of Nepal	Moderate	Moderate
Fire	Few	All regions of Nepal	Severe/Moderate	Moderate

11

## Unit 1.2: Disaster Management Mechanism

1

## Sub Topic: (a) Disaster management policy and process in Nepal

### Background

- In Nepal, the Natural Calamity Relief Act was formulated in 1982 to coordinate, facilitate and manage the relief and rescue works during disaster.
- The Act, 1982 has already been amended twice in 1989 and 1992.
- The act is the milestone major guiding document for disaster management in Nepal.
- The Act has provisioned for Central Natural Disaster Relief Committee (CNDRC)
- National Strategy for Disaster Risk Management, 2009

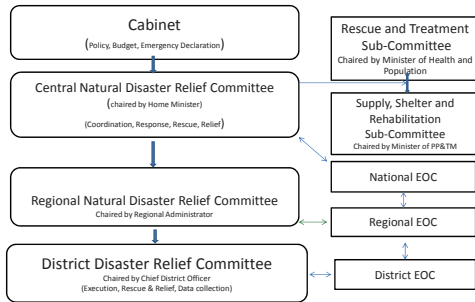
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### Central Natural Disaster Relief Committee (CNDRC)

- Minister of Home Affairs chairs the committee with members from line ministries, police, army, scouts, red cross etc
- The CNDRC takes overall responsibilities of coordination and policy decision regarding any disaster.
- The MOHA leads the current disaster management system in Nepal
- Defines the national disaster relief system with relief committees at the national, regional and district level to coordinate the implementation
- Meets as and when required in and after disasters, mainly following floods and landslides every year
- Main role is to coordinate disaster relief operations through District Disaster Relief Committees chaired by CDO in the District Administration Office

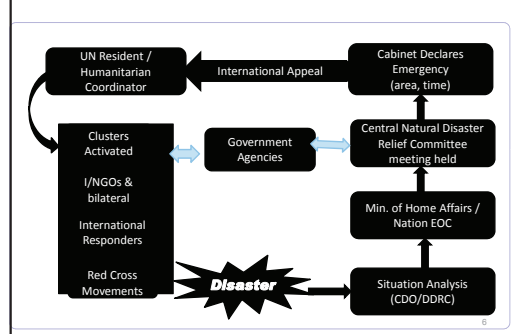
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### Institutional Framework (in line with 1982 Act)



5

### Emergency Response Mechanism (Government)



6



## **Clusters in Nepal**

Cluster Approach is one of the Coordination Mechanisms for an effective humanitarian response

Clusters	Cluster Leads	Cluster Co-Leads (UN and Humanitarian Organization)
1. Camp Coordination & Camp Management	• Ministry of Home Affairs	IOM
2. Education	• Ministry of Education	UNICEF / Save the Children
3. Shelter	• Ministry of Urban Development & (Nepal Red Cross Society)	IFRC /UN Habitat
4. Health	• Ministry of Health and Population	WHO (Where UNFPA is member)
5. Nutrition	• Ministry of Health and Population	UNICEF
6. Protection	• Ministry of Women, Children and Social Welfare and National Human Rights Commission	UNHCR /UNICEF/UNFPA –GBV Co-lead
7. Water, Sanitation & Hygiene	• Ministry of Physical Planning, Works and Transport Management	UNICEF
8. Food Security	• Ministry of Home Affairs during emergency and Ministry of Agricultural Development during preparedness phase	WFP and FAO (rotational)
9. Telecomm	• Ministry of Information & Communications	WFP
10. Logistics	• Ministry of Home Affairs	WFP
11. Early Recovery Network	• Ministry of Federal Affairs and Local Development	UNDP

7

## History of policy initiatives sectoral working groups 1993

After the severe floods in 1993, the Government, UN, donors and NGOs formed three sectoral working groups to strengthen co-ordination and cooperation:

- Logistic Working Group,
- Food & Agriculture Working Group, and
- Health Working Group

8

## Sectoral working groups 1993....

- EDCC with the technical assistance from WHO revitalized health sector working group in year 2000 to promote health sector emergency planning
- Developed TOR and established an active inter-agency DHWG Secretariat which drafted a health sector emergency plan
- DHWG incorporated in the health system in 2005 with DG as Chairperson and the Director of EDCC as Member Secretary

9

## Other initiatives

- A Emergency Health and Nutrition Working Group (EHNWG) established in 2005 with the facilitation from WHO and UNICEF
- WHO is providing technical support to MOHP/DHS/EDCC for health sector emergency preparedness and disaster management
- UNFPA is providing technical and financial support to MoH/DoHS/EDCC for health sector disaster preparedness including RRT training.
- NRCS, DP-Net, NSET-Nepal, NCDM are national organizations working on disaster management
- UNDP, ECHO, USAID, JICA and ICIMOD are main donor and international organizations supporting emergency preparedness and disaster response
- I/NGOs like OXFAM-GB, Action-Aid, World Vision, Merlin also are involved in Disaster Management.

10

## Proposed Organizational Structure for DRM

- National Disaster Management Council
  - Committees (Preparedness, Relief, Rehabilitation)
  - National Disaster Management Authority
- Regional Disaster Management Committee
- District Disaster Management Committee
- Local Disaster Management Committee

Source: National Strategy for DRM, 2009

11

## Preparedness Management Committee

- Coordinator: Minister for Local Development
- Co-coordinator: Member, NPC
- Members:
  - Secretaries (8 ministries)
  - DG- 8, Joint Secretary, AIG- 2, Colonel, MS
  - Chair persons 4
  - NGO (3 women, 2 Dalit and 2 Marginalized)
  - Experts- 2
- Member Secretary- Executive Director

12

### Regional Disaster Management Committee

- Chairperson: Regional Administrator
- Members:
  - Chiefs of all regional offices
  - NRCS
  - Nominated by Regional Administrator DDC Chairs
  - Women representative (Nominated by RA)
  - Representative of Preparedness committee
- Member Secretary- Deputy RA

13

### District Disaster Management Committee

- Chairperson: Chief District Officer
- Members:
  - Chairperson of DDC or designee
  - Chief of all district level offices
  - Chiefs of all security entities
  - NRCS
  - Representatives of National Political Parties
  - Chair, District Industry & Commerce Association
  - Chief of Municipality
  - Three representatives of VDC chairs
  - Women Representative 2 (Nominated by CDO)
  - Three Representative of NGO and social activists
  - Two representatives from experts
- Member Secretary- LDO- DDC

14

## 1.2 Disaster Management Mechanism

### Sub Topic b: Functional Mechanism of Rapid Response Team (RRT)

## Structure

- In 2000, the MoHP, DHS/EDCD established a mechanism for managing epidemics.
- This mechanism consists of establishment of Rapid Response Team (RRT) at three levels:
  - central (1),
  - regional (5) and
  - districts (75)

2

## Objectives of RRT

- To establish an early warning and reporting mechanism for potential epidemics.
- To make preparations for potential epidemics.
- To manage disease outbreaks.
- Support in disaster management.

3

## District Rapid Response Team

- Coordinator (DHO/DPHO)
- Focal person- HA/ Senior AHW
- Members:
  - Medical Officer,
  - PHN/SN/ANM,
  - Vector Control Assistant/MI,
  - EPI Supervisor,
  - AHW,
  - Lab Technician/Lab Assistant,
  - Health Education Technician,
  - Statistical Assistant,
  - RH focal person

4

## Role of Regional Rapid Response Team

- Support in effective coordination between
  - the center and districts
  - NGOs, INGOs, UN agency and relevant donors.
- Provide backup services for district RRT

5

## Role of Central Rapid Response Team

- Mobilize if the impact of the disaster is beyond the response capacities of the district and regional level RRTs.
- Facilitate in diagnosis of infectious diseases.
- Resource mobilization.
- Establish effective coordination for resources and additional assistance between
  - NGOs, INGO, UN agency and relevant donors other stakeholders

6

## **Disaster Management- Function**

1. Emergency Preparedness
2. Disaster Response
3. Rehabilitation Activities

7

### **1. Emergency Preparedness**

- Prepare Emergency Preparedness plan
- Institutionalize Early Warning and Reporting System (EWARS) and Information
- Capacity Building (Training)
- Keep buffer stock of medicines, kits, logistics
- Manage safe water and Sanitation

8

### **2. Disaster Response**

- Carry out Initial Rapid Health Assessment (RHA)
- Collection of health status information
- Provide Health Services
- Water and Sanitation
- Disease Surveillance

9

### **3. Rehabilitation Activities**

- Health Services Package: Health Education, measures for communicable disease control, RH Series, surveillance and monitoring.
- Mental Health (Counseling, reduce post disaster mental health consequences).

10

1.2:  
c) Setting of Priorities: Key Intervention Areas

1

**Question**

When something happens, what are the key areas of intervention that the health workers must look at?

2

- Probable Answers**
- Assessment
  - Coordination
  - Delivery of Essential Health Care Services
  - Outbreak control
  - Reproductive health
  - Nutrition
  - Immunization
  - HIV/AIDS
  - TB Control
  - Psycho-social Support
  - Others...
- 3

**Prioritization**

At times of disaster several activities need to be done. However limited time and resources do not permit to do all the activities. So, prioritization should be done to address the most needed actions.

4

- Rapid Health Assessment**
- Must be done immediately
  - Used to understand what are the main issues
  - A mechanism to activate and deploy the Rapid Response Teams (RRT)
  - Key areas to look at include:
    - Demographics
    - Potential health hazards among the affected population
    - Status of health facilities in the surrounding areas
    - The possible impact
- **Refer to the RRT assessment form**
- 5

- Coordination**
- In emergency situations, it is essential to have a mechanism to coordinate all response, to avoid confusion, overlap and/or gaps.
  - Coordination mechanisms might exist, but these need to be activated.
    - DDRC: CDO for overall disaster coordination
    - Health and Nutrition Cluster Coordination: D(P)HO
  - Different tools available: WWW tracking, logistics tracking, situation report etc.
- 6

### 1. Delivery of Essential Health Care Services

- Ensure to provide essential health care services
- In emergencies, multiple injuries might happen. So, expanding emergency units, setting up field hospitals at camp sites might be needed
- Besides, providing , ambulance services to send injured to the nearest health facility on time.
- Minimum Initial Service Package for Reproductive Health
- Referral services needs to be more active and systematic.

7

### 2. Outbreak Detection and Control

- In emergencies, people are often displaced and have to live in crowded conditions for a long time.
- In such conditions, outbreaks are prone to occur.
- To ensure the outbreaks are detected early and treated properly, an early warning system must be implemented immediately.
- Necessary medicines and equipments should be made ready for dispatching

8

### 3. Provide necessary service

- Reproductive Health including clean delivery services becomes important
- Immunization and nutrition services need to be continued
- Services for Tuberculosis control should be continued
- Treatment for HIV and STI should be continued
- Support for establishing services for psycho-social support

9

### 4. Obtain necessary support

- Collaborate with local NGO, clubs, pharmacies, IT media etc
- Request Regional RRT and Central RRT for more support

10

### 5. Regulate services

- Alerting about outbreak
- Reproductive health
- Nutrition
- Immunization services
- HIV and STI
- Tuberculosis
- Psycho-social support
- Logistics supply

11

## Unit 1.3: Rapid Health Assessment

### Background

Rapid Health Assessment helps in analysing the situation for appropriate and timely response.

2

### Source of information

- **Routine:**
  - Surveillance Systems (EWARS)
  - Health Management Information System (HMIS)
  - Civil registration (vital statistics)
- **Non-routine:**
  - Rapid Health Assessment (RHA)
  - Surveys

3

### Rapid Health Assessment (RHA)

RHA is a "collection of subjective and objective information in order to measure damage and identify those basic needs of the affected population that require immediate response" (From: RHA protocols for emergencies, WHO, 1999)

#### It helps in:

- Confirming the disaster/emergency
- Describing the type, impact and possible evolution of emergency
- Measuring present and potential health impact
- Assessing adequacy of response capacity and additional needs
- Recommending priority action for immediate response

4

### Types of Assessments

- Pre-disaster risk assessment
- Situation and damage assessment (Identifies the magnitude and extent of the disaster and its effects on the society.)
- Needs assessment (defines the level and type of assistance required for the affected population). Rapid health assessment (defines the magnitude of disasters and actors involved during response)
- Post-Disaster Syndromic Diseases Surveillance (defines the status of daily disease situation)- see annex II for reporting form

Note: The gathering of information for the situation assessment and needs assessment can be done at the same time. The information collected in the initial assessment is the basis for determining the type and amount of relief needed during the immediate response phase of the disaster.

### Pre-disaster Risk Assessment

- Risk is the probability of harm or loss
  - Requires two things:
    - Hazards: things that can cause harm
    - Vulnerability: things that can be harmed
- Know the hazards (potential to cause harm)
- Know what or who is vulnerable to hazards
- People & things exposed to hazards = risks
- Risks can be reduced
  - Change the hazard
  - Protect or move the vulnerable
  - Defer the risk (insurance or move the hazard)

5

### Pre-disaster Risk Assessment Cont...

- Pre-disaster assessments are important because they guide you in preparation
  - Mock/drills you practice in the hospital
  - Help you focus your medical staff training
  - Help you write a plan specific to a hazard
  - Help you project how many patients your health facility may have to treat and how many people may be exposed and require assistance

7

### Rapid Health Assessment (RHA)

- Initial situation report (see annex I for reporting form).
- Additional Rapid Health Assessment to define further response needs.

8

### Rapid Health Assessment Cont.

- Rapid Response Teams at the district level are key to initiate rapid health assessments.
- Rapid health assessments should be conducted immediately after the disaster in all impacted areas. Special attention should be paid to the most vulnerable groups.
- The information collection should be based on the attached format.
- The format should be filled in within 12 hours of any disaster and submitted to EDCD.

9

### Additional Needs Assessment

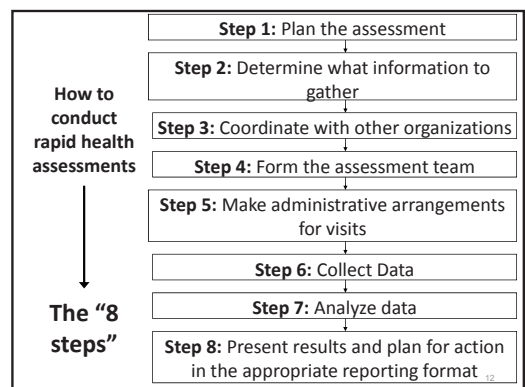
- Within the first 5 days following the disaster.
- The assessment should be made by a joint team including professionals of different sectors (i.e. health, logistics, infrastructure, water supply and sanitation).
- The assessment should be carried out in a way that allows transparent consistent decision-making and implementing response actions.
- Should reveal gaps in response and identify needs not covered.

10

### Key questions in a RHA

- Is there an emergency or not?
- What is the main health problem?
- What is the existing response capacity?
- What decisions need to be made?
- What information is needed to make these decisions?

11



12



### Main steps of a RHA

- Set the assessment priorities
- Collect the data:
  - review existing information
  - inspect the affected area
  - interview key people
  - carry out a rapid survey
- Analyse and interpret the findings
- Present results and conclusions

13

- **The population:**
  - numbers, characteristics, & trends
  - morbidity and mortality
- **The vital needs:**
  - security
  - food
  - water
  - shelter & sanitation
  - clothes and blankets
  - domestic utensils and fuel
  - health care including health response to GBV
- **The support systems:**
  - information
  - logistics
  - coordination
  - resource flow
- **Other relevant contextual issues**

**Which  
information?**

14

### Decide

- Are the current levels of mortality and morbidity above the average for this area and this time of the year?
- Are the current levels of mortality, morbidity, nutrition, water, sanitation shelter and health care acceptable by international standards?
- Is a further increase in mortality expected in the next two weeks?
- **ADVISE ACCORDINGLY and FOLLOW-UP INCLUDE STUDIES ON ANALYSIS BASED ON QUESTIONNAIRES**

15

### RHA: a few tips

- Don't be too ambitious: time is short
- Being roughly right is generally better than being precisely wrong or precisely late

**Beware: wrong conclusions from the RHA can do more harm than not taking any action**

16

## Unit 1.4 : Logistic Management in Emergency

### Types of Kit

- Diarrhoeal Diseases Kit (DDK) - WHO
- Inter-Agency Emergency Health Kit (IEHK) - WHO
- Reproductive Health Kit (RH Kit) – UNFPA
- Surgical kit - WHO

2

### What does the Diarrhoeal Diseases Kit Contain?

It contains:

- Oral Rehydration Solution
- Antibiotics
- Intravenous Infusions

It is intended for 100 severe cholera cases (cholera treatment unit), plus 400 moderate cholera cases (oral rehydration unit), and 100 adults plus 100 children affected by Shigella dysentery.

3

### Content/composition Diarrhoeal Diseases Kit cont

- Basic Module
  - Drugs
  - Renewal supplies
  - Equipment
  - Documents
- ORS Module
- Infusions Module
- Support Module

4

### What does an Inter-Agency Emergency Health Kit contain?

- The Interagency Emergency Health Kit is designed principally to meet the initial primary healthcare needs of a displaced population without medical facilities and is for use in the early phase of emergency.
- The kit is not designed and not recommended for the re-supply of existing healthcare facilities.
- The IEHK contains sufficient medical supplies to support at least 10,000 people for a period of 3 months.
- There are two units: Basic and Supplementary

5

### Content/composition Inter-Agency Emergency Health Kit cont...

- Each Basic Unit contains:
  - oral and topical medicines, (not injectables)
  - medical devices, renewable
  - medical devices, equipment
  - module: malaria items for the treatment of uncomplicated malaria

Note: BASIC UNIT is intended for primary health care workers with limited training.

6

## Content/composition IEHK...

- One Supplementary Unit contains:
  - medicines (MEDS)
  - essential infusions (INFS)
  - medical devices, renewable (RENEW)
  - medical devices, equipment (EQPT)
  - module: patient post-exposure prophylaxis (PEP)
  - module: malaria items
  - module: psychotropics (Pt)
  - module: narcotics (Nt) (can be replaced by tramadol)

Note: SUPPLEMENTARY UNIT is intended for professional health workers or physicians and should be used with at least one or more Basic Units

7

## Content/composition of Reproductive Health Kit

- The Reproductive Health Kits have been created to facilitate the implementation of reproductive health services during the early phase of a crisis.
- The Reproductive Health Kits need to be ordered during that phase.
- The RH Kits contain essential RH drugs, supplies and equipment to be used for a limited period of time and for a fixed number of people.

8

## Content/composition Surgical Kit

- The kit is estimated to cover the needs for medical disposable equipment for approximately 100 surgical inpatients for 10 days, particularly in the post operative phase.
- The kit contains all essential medical disposables; bandages, compresses, drains, tubes, syringes, needles, catheters, infusion accessories, gloves, sutures, burn dressings, hygiene equipment, plaster of Paris and sterilisation accessories.

9

## How to get it?

- Cluster lead (WHO) can coordinate with concerned agencies to get the kits
- And/or
- The MOH can directly request concerned agencies for supplying the kit

10

## Logistic estimation and Buffer Stocking

- Necessary logistics (medicines, materials etc) should be estimated beforehand and adequate quantity sent to the affected area
- A significant quantity should be kept at district/ local level as buffer stocking
- Advance request should be sent to region/center in case of large epidemic or disaster

11

## Financial Management

- The district (Public) Health Office is provided with some money every year to address the need in case of emergency and disaster, which can be used ASAP
- The District DRC also can support in such scenario
- The DDC/urban or rural municipalities can also support for addressing the emergency/ disaster

12

## Unit 1.5: Environmental Health and Sanitation in Emergency

*(Minimum standard based on Sphere Guidelines)*

### What is Sphere?

- The Sphere Project is a humanitarian Charter and Minimum standard in Disaster response. It represents the core principles regarding humanitarian assistance in disaster
- Sphere project aims to enhance the effectiveness and quality of humanitarian assistance in emergencies and thus a significance difference to the lives of people affected by disaster.

2

### Five Minimum Standards of Sphere

- Water supply and sanitation
- Nutrition
- Food aid
- Shelter and site planning
- Health services including reproductive health

3

### Environmental Health and Control of Communicable Diseases

- Water and sanitation
- Excreta disposable
- Vector control
- Solid waste management
- Control of communicable disease
  - prevention
  - diagnosis and case management
  - outbreak Preparedness
  - outbreak Response

4

### Key Indicators of water and sanitation

- Average water for cooking, drinking and personal hygiene:15 litre/day
- Distance from house to water source: 500 meter.
- At least 1 water point for 250 people
- Flow of water:7.5 litres/minutes, quing time:15 minutes to fill 20 litres of water

5

### Minimum standard of water and sanitation cont...

- Sanitary survey indicate-low faecal contamination
- People drink water from the protected source
- No negative health effect detected in short term use of water contaminated by chemical (including carry-over of treatment chemical or radiological sources.

6

<b>Water Related Technical Guidelines</b>	
Health centres and Hospital	5 litres/out patient/day 40-60 litres/inpatient/day
Cholera Centre	60 litres/patient/day 15 litres/carer/day
Therapeutic feeding centre	30 litres /in-patient/day 15 litres/carer/day
School	3litres/people/day for drinking &hand washing
Public toilet	1-2 litres/user/day for hand washing 2-8 litres/users/day for toilet cleaning

- Minimum standard of water and sanitation cont...**
- Each household has at least two clean water collection containers of 10-20 litres with narrow neck
  - At least 250 gm of soap available for personal hygiene /person/month
  - Sufficient bathing cubicles available with separate for male and female
  - At least two washing basin for 100 peoples.

- Excreta disposal standard**
- A maximum of 20 people use one toilet
  - Separate toilet for male and female
  - At least 50 meters from the dwelling
  - Should be built in such away that can be used by all including children and pregnant women
  - Easy to keep clean
  - Provides degree of privacy
  - Minimum fly and mosquito breeding

- Vector control standard**
- All displaced population are settled in locations that minimise their exposure to mosquito
  - Vector breeding and resting sites are modified
  - Intensive fly control is carried out
  - People infected with malaria are diagnosed early and received treatment

- Vector control standard cont...**
- Bedding and clothing are aired and washed regularly
  - People with treated mosquito nets (LLIN) use them effectively.
  - People are educated properly regarding the special attention and precaution

- Solid waste management standard**
- Refuse container-100 meter from communal refuse pit
  - At least 1(100litre) refuse container is available per 10 families
  - Medical waste is separated and disposed separately
  - No contaminated medical waste at any time in living areas
  - Clearly marked and appropriately fenced refuse pit

### **Drainage Standard**

- Drains are kept clean, dwelling are kept free of standing water
- Shelters, paths and water and sanitation facilities are not flooded by water
- Water point drainage is well planned, built and maintained
- Drainage water do not pollute existing surface or cause erosion

13

### **Communicable disease (a)Prevention**

- Water, sanitation and hygiene promotion
- Access to adequate food and management of malnutrition
- Community education
- Mass vaccination campaign and routine ongoing vaccination

14

### **Communicable disease (b)Diagnosis and case management**

- Use of standard guidelines and protocols
- Ensure availability of lab services
- Educate community to seek early treatment and care
- In malaria endemic region establish 24 hrs diagnosis of fever

15

### **Communicable disease (c)Outbreak Preparedness**

- Prepared outbreak investigation and control plan
- Investigation and control protocols available to relevant staffs
- Staffs received training on outbreak management
- Reserve stock of essential drugs and other supplied available

16

### **(c) Outbreak Preparedness cont...**

- Identified source of vaccination.
- Mechanism of rapid procurement established
- Sites for vaccination and treatment of infectious patients are identified
- A laboratory is identified for diagnosis
- Sampling materials and transport media for the infectious agents available.

17

### **Communicable disease (d) Outbreak Response**

- HMIS includes an early warning components
- Initiation of outbreak investigation occurs within 24 hours of notification
- Outbreak should be described according to time, place and person
- Appropriate control measures that are specific to the disease and context are implemented
- Case fatality rate are maintained at acceptable levels:  
-Cholera-1%, Shigella (dysentery):1% or lower, Typhoid: 1% or lower

18

**Sub Topic:**

**(b) Importance of safe drinking water for prevention and control of water borne diseases**

**पानीजन्य रोगको रोकथाम र नियन्त्रणमा शुद्ध पानी को महत्व**

19

**भाडा पखाला बाट बच्ने उपाय**

20

**भाडा पखाला बाट बच्ने उपाय**

21

**“राष्ट्रिय खानेपानी गुणस्तर मापदण्ड - २०६२”**

- नेपाल सरकारले **“राष्ट्रिय खानेपानी गुणस्तर मापदण्ड - २०६२”** तोकेको छ ।
- यसमा खानेपानीका लागि भौतिक, रासायनिक र सूक्ष्म जैविक पारामिटरहरूको अधिकतम मात्रा तोकिएको छ ।

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**राष्ट्रिय खानेपानी गुणस्तर मापदण्ड - २०६२**

पानीमा पाइने विभिन्न तत्व र तिनीबाट उत्पान्न हुनसक्ने संज्ञापित समस्याहरू

परिचय	राष्ट्रिय कसोती गुणस्तर मापदण्ड (२०६२)	सम्बन्धित समस्याहरू
<b>१) भौतिक तत्व</b>		
घट्टिलेपना	५ (५०) NTU	पानी पीएनेले देखिने र खीचनुहुन नसक्ने गर्छे ।
रङ्ग	५ (५०) TCU	पानीमा अनावश्यक पदार्थ मिलाएको हुनसक्ने ।
रस र स्वाद	आयुक्तिकक हुन नहुने	नमियो लाग्नसक्ने ।
अम्ल (pH) स्तर	६.५-८.५	अम्ल पानीमा पाइए विद्यो र बढी मात्रा पिउनेले हुने तथा क्लोरिनको प्रभावकारीतामा असर आउने ।
<b>२) रासायनिक तत्व (mg/L, liter/L)</b>		
अम्लता	०-३ (३)	अम्लता, पीएनेले, पाइए बढिमा फोहो पानी ।
पाइए-मिथेन	०-२	आयो पानी ।
एल्मिनियम	५५	मन्थ ।
मन्थेट	५०	शिशुहरूमा Blue Baby Syndrome नामक रोग ।
क्लोरोफोम	०.५-५.५	बिटा, हाड कमजोर हुने ।
कुल क्लोरिन	५००	पाइए जाम हुने, साबुनबाट फिज नखाउने ।
असोडियम	०.०५	छला, मुनीला, कलेजो, मुत्रपेशी आदिको कामस्तर र अन्य असरहरू ।
<b>३) सूक्ष्म जीवाणु (MPN/100ML)</b>		
इ-कोली	०	क्रावाकना, पसला, आर्से, हैजा, जखिसा जस्ता पानीजन्य रोगहरू ।
कुल कोशिकी	० (१५५ नमुनामा)	क्रावाकना, पसला, आर्से, हैजा, जखिसा जस्ता पानीजन्य रोगहरू ।

23

**पानीलाई शुद्धीकरण गरी पिउने विधीहरू**

24

## १) क्लोरिनेसन

- खानेपानीमा क्लोरिन नामक रसायनको भोल मिलाई शुद्धीकरण गर्ने प्रक्रियालाई क्लोरिनेसन भनिन्छ ।
- जीवाणु नष्ट गर्नका साथै आइरन, म्याग्निज, हाइड्रोजन सल्फाइड जस्ता रासायनिक तत्वहरू पनि केही कम गर्दछ ।
- पीयूष : वातावरण र जनस्वास्थ्य संस्थाले (ENPHO) २०५१ देखि पीयूष नामक क्लोरिन भोल (०.५% सोडियम हाइपोक्लोराइट भोल) उत्पादन र बिक्री वितरण गर्दै आएको छ ।
- वाटरगार्ड : Population Services International/Nepal(PSI) नामक संस्थाले सन् २००५ मा वाटरगार्ड नेपाली बजारमा प्रवेश गराएको हो ।

25

## ध्यान दिनुपर्ने कुराहरू

- क्लोरिन भोल उल्लेख गरिएको मात्राभन्दा बढी वा कम राख्नु हुँदैन ।
- क्लोरिनको भोल राखेको ३० मिनेटपछि मात्र पानी खानुपर्छ ।
- क्लोरिन भोललाई हात, खुट्टा, जिउ र लुगामा पर्नु दिनुहुँदैन ।
- क्लोरिनको भोल केटाकेटीले नभेट्याउने ठाउँमा राख्नुपर्दछ ।
- केही गरी क्लोरिनको भोल शरीरमा परेमा तुरुन्त प्रशस्त पानीले पखाल्नुपर्दछ र नजिकैको स्वास्थ्य केन्द्रमा जानुपर्दछ ।



## २) उमाल्ने

- भरपदों र प्रचलित विधि
- तापक्रमले गर्दा पानीमा भएका रोगजन्य जीवाणु नष्ट हुन्छन् ।
- विश्व स्वास्थ्य सङ्गठनका अनुसार पानी उमाल्दा कम्तीमा एक भुल्को उमालेपछि खानेपानी जीवाणुरहित हुन्छ ।
- राम्रोसँग नउमालिएको मनतातो पानीमा रोगजन्य जीवाणुहरू हुन सक्दछन् ।

27

## ध्यान दिनुपर्ने कुराहरू

- धमिलो पानी उमाल्दा यसमा भएका ठोस पदार्थहरू (जस्तै, धूलो, माटो) आदि हट्दैनन् ।
- त्यसैले धमिलो पानीलाई थिगाएर छानेपछि मात्र उमाल्नुपर्दछ ।
- पानीलाई उमाली सकेपछि सफा भाँडोमा छोपेर राख्नुपर्दछ, जसले गर्दा पानी पुनः दूषित हुन पाउँदैन ।

28

## ३) फिल्टर

- फिल्टर भनेको पानीलाई छानेर सफा गर्ने एउटा सजिलो विधि हो ।
- बजारमा विभिन्न किसिमका फिल्टरहरू पाइन्छन्
  - क्याण्डल फिल्टर,
  - कोलाइडल सिल्वर फिल्टर
  - बायोस्यान्ड फिल्टर



## कोलाइडल सिल्वर फिल्टर



- कोलाइडल सिल्वर फिल्टर' खानेपानीमा भएका कीटाणु हटाउने एक प्रभावकारी उपाय हो ।
- यसको प्रमुख विशेषता भनेको चाँदि लेपन गरिएको माटोको ठूलो साइजको क्याण्डल/प्लेट (डिस्क) हो ।
- यो क्याण्डलले कीटाणुलाई छिनबाट रोक्दछ भने क्याण्डलमा लेपन गरिएको चाँदिले पानीमा भएका कीटाणुलाई मार्ने काम गर्दछ,

30



## ध्यान दिनुपर्ने कुराहरू

- फिल्टरको क्याण्डल नरम दाँत माभ्ने ब्रसले राम्रोसँग सफा गर्नुपर्दछ ।
- यसरी सफा गर्दा साबुनको प्रयोग कहिल्यै गर्नु हुँदैन ।
- फिल्टरको धारा र क्याण्डलको वासर, नट राम्रोसँग कस्नुपर्दछ ।
- फिल्टरलाई सूर्यको प्रकाश नपर्ने समथल स्थानमा राख्नुपर्दछ ।
- फिल्टरको क्याण्डललाई पानीमा कहिल्यै उमाल्नु हुँदैन ।
- फिल्टरको धारा फोहर हातले छुनु हुँदैन

31

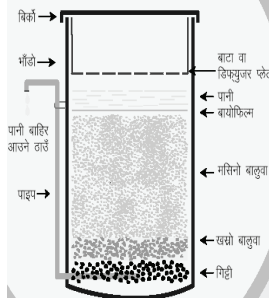
## बायोस्याण्ड फिल्टर

- खानेपानीमा भएका जीवाणु, धमिलोपन, आइरन र गन्ध हटाउने एक सरल घरेलु विधि हो ।
- कङ्क्रिट वा प्लाष्टिकको भाँडामा गिट्टी र बालुवालाई तह मिलाई राखेर स्थानीय तहमै तालिमप्राप्त व्यक्तिद्वारा बनाउन सकिन्छ ।
- फिल्टरमा पानी खन्याउँदा बालुवा र गिट्टीको तहबाट पानीमा भएका जीवाणु, धमिलोपन, आइरन आदि छानिन्छ र पानी पिउन योग्य हुन्छ ।



- कङ्क्रिटको बायोस्याण्ड फिल्टरले प्रति घण्टा २५-३० लिटर ।

- प्लाष्टिकको बायोस्याण्ड फिल्टरले प्रति घण्टा १५-२० लिटर पानी छान्छ ।



33

## ४) सोडिस

SODIS  
SOLAR DISINFECTION



- सौरशक्तिद्वारा पानी शुद्धिकरण
- सरल र सस्तो प्रविधि
- परावैजनी किरण र तापले सूक्ष्म जीवाणु नष्ट हुने तर रसायन नहटाउने
- खेर गएको बोतलको पुनः प्रयोग हुने
- सामान्य जानकारीको भरमा गर्न सकिने
- इन्धनमा लाग्ने खर्च बच्ने

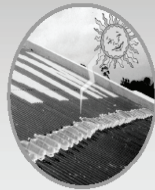
## सोडिस गर्ने तरिका



एकदेखि दुई लि.को पारदर्शी प्लाष्टिक बोतलहरूलाई लेबल निकेर भित्र बाहिर राम्ररी सफा गर्ने ।



सफा गरिसकेको बोतलमा टन पानी भरेर बिको लगाउने ।



पारिलो घाम लाग्ने ठाउँमा करिब सात घण्टा ढक्काएर राख्ने । बादल लागेमा दुई दिनसम्म राख्ने ।

यति गरेपछि सो पानी सूक्ष्म जीवाणुरहित भई पिउन योग्य हुन्छ ।

35

## सीमितता

- एकै पटकमा धेरै मात्रामा पानी शुद्धिकरण गर्न नमिल्ने ।
- मौसममा निर्भर हुने ।
- पानी धमिलो (30 NTU) भन्दा बढी भएमा प्रभावकारी नहुने ।

## ध्यान दिनुपर्ने कुराहरू

- बढीमा १० से.मि. (चौडाइ) भएको, नकोरिएको, नकुच्चिएको र पारदर्शी बोतलको प्रयोग गर्नुपर्दछ ।
- रङ्गिन तथा शिशाको बोतल प्रयोग गर्नु हुँदैन ।
- पारिलो घाम वा आंशिक बादल लागेमा एक दिन र पूरा बादल लागेमा दुई दिनसम्म बोतललाई घाममा राख्नुपर्दछ ।

36

## Unit 2.1: Communicable Disease Surveillance

1

### Surveillance

Surveillance is the *ongoing systematic* collection, analysis and interpretation of data; and the dissemination of information to those who need to know in order that action may be taken

***Surveillance is the systematic use of data for action***

### Process of Disease Surveillance

- Collection
- Analysis
- Interpretation
- Dissemination



**Public Health Action**

3

### Goal of Surveillance

The reduction of morbidity and mortality through the control and/or prevention of disease.

### Types of Surveillance

- Passive (Health facility – District – Region/Centre )
- Active (Designated Officer regularly looks for diseases of interest using standard case definition for notifiable diseases)

4

### Surveillance: Function

#### Core Function

- Detection
- Reporting
- Investigation & confirmation
- Analysis & interpretation
- Action / response

#### Support function

- Training
- Supervision
- Resources
- Standards case definitions /guidelines

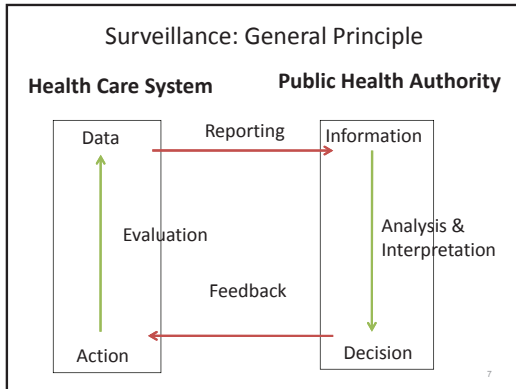


5

### Uses of Surveillance

- Epidemic (outbreak) detection
- Epidemic (Outbreak) prediction
- Monitoring trends in disease
- To identify changes in agent and host factors
- Evaluating an intervention
- Monitor progress towards a control objective
- Monitor programme performance
- Estimate future disease impact
- Generate hypotheses and stimulate public health research

6



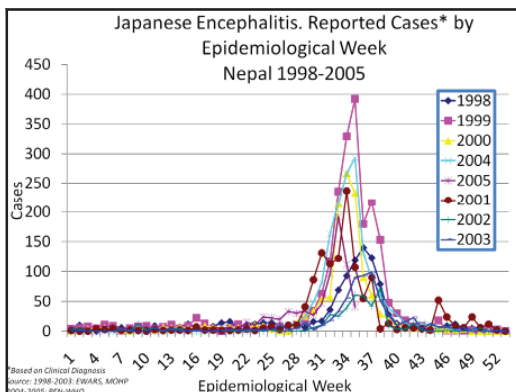
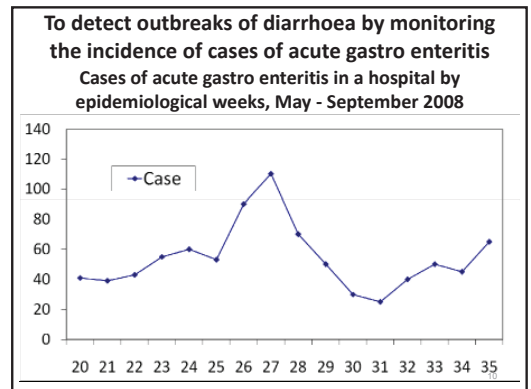
### Surveillance Reports

Purpose of surveillance reports:

- To communicate with people
- To disseminate information
- To educate the reader
- To direct, stimulate and motivate the person responsible for action

8

- ### Surveillance: Basic Component
- A good network of motivated people
  - Clear case definition and reporting mechanism
  - Efficient communication system
  - Basic but sound epidemiology
  - Laboratory support
  - Good feedback and rapid response



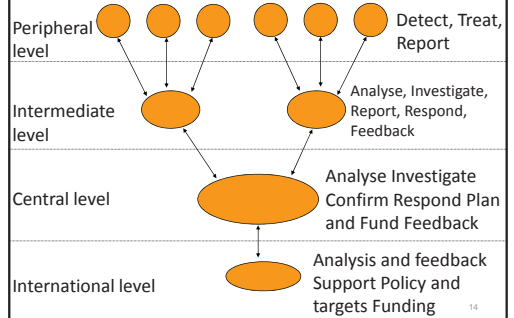
- ### Disease Indicators
- The measures that you use to monitor a disease e.g.
- Number
    - No of cases of malaria reported
    - No of cases of falciparum malaria reported
  - Rate
    - Number of cases of ARI in children under 5 years per 100,000 population
  - Ratio
    - Proportion of children with ARI who die
- 12

## Disease Indicators

- They may be indicators of
  - Disease incidence
    - Cases of Kala-azar per 100,000 population
- Effectiveness of treatment
  - Case fatality in measles

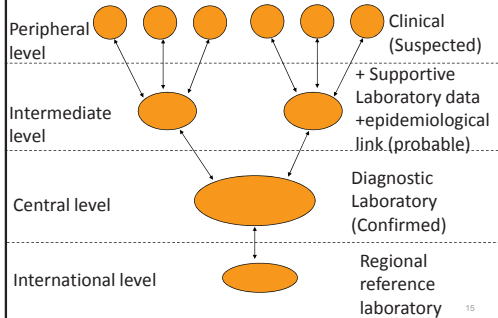
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## Surveillance: Tasks



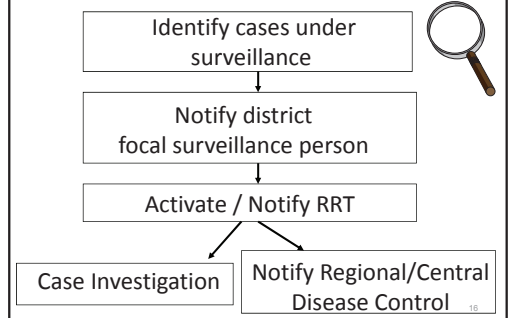
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## Surveillance: Data Flow



15

## Our Role in Surveillance



16

## Role of Clinicians

IMMEDIATELY NOTIFY HOSPITAL FOCAL SURVEILLANCE PERSON SO THEY CAN NOTIFY THE District Team

Advise parents about the case investigation, tell them health officials will take a history, take specimen for lab confirmation

Know where to refer patients for treatment

17

## At Health facilities:

- All health workers including RRT team should have a basic understanding of epidemiology, mainly communicable disease surveillance, thus district and below district level health workers should get trainings
- Pre-position of drugs and other essentials at district and sub-district levels

18

### **Role of Basic Health staff / Community Health Volunteers**

- Look for “suspect cases” of diseases under surveillance
- Immediately report these “suspect cases” to a clinician or alert the hospital focal surveillance person.

19

### **Role of the District Team**

- Make sure staff at health facilities in your district know how to identify and report cases
- Investigate every reported case
- Complete case investigation form, collect specimen. Complete line listing
- Ensure cold chain, and transport specimen to designated lab as soon as possible
- Provide feedback to healthcare staff on the laboratory results

20

### **Syndromic Surveillance during Disaster** (see annex II for syndromic surveillance form)

Rapid Response Teams – must coordinate with District Disaster Relief Committee + EDCD to reduce further morbidity and mortality.

ALL HEALTH EVENTS RELATED TO DISASTERS SHOULD BE REPORTED PROMPTLY AND REGULARLY, WITH SUBSEQUENT ACTION

21

Functioning disease surveillance system and intact environmental health services are crucial in protecting public health and in responding to the outbreaks

**Well prepared, least affected**

22

**Unit 2.2:  
Outbreak Investigation and Response**

**Sub Topic:  
(a) Importance of outbreak investigation and its steps**

1

**Definition of outbreak**

- Occurrence of more cases of disease than expected in a given area among a specific group of people over a particular period of time
- or
- Two or more linked cases of the same illness

2

**Objectives of Outbreak investigations**

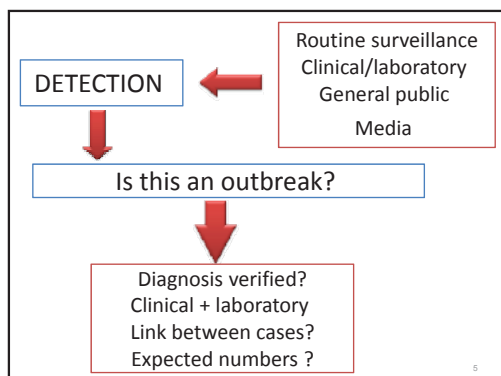
1. To control ongoing outbreaks
2. To prevent future outbreaks
3. To provide statutorily mandated services
4. To strengthen surveillance at local level
5. To advance knowledge about a disease

3

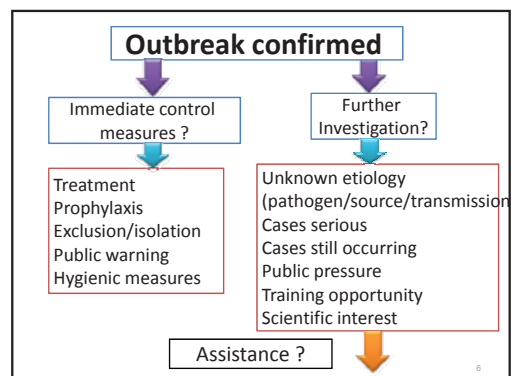
**Steps of an outbreak investigation**

- Confirm existence of an outbreak/epidemic (clinical & laboratory) – confirm diagnosis
- Establish a working case definition for the outbreak
- Identify, count number of cases & determine size of population at risk (to calculate attack rate)
- Look for additional cases & follow up contacts
- Develop and test hypothesis
- Implementation of control measures
- Write a report with recommendations

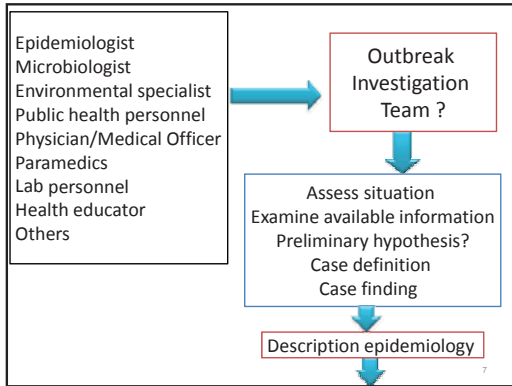
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5



6



### Case definition

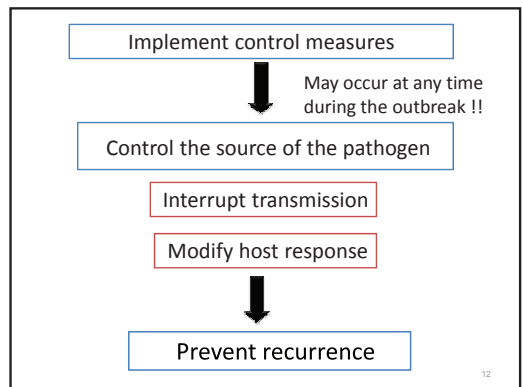
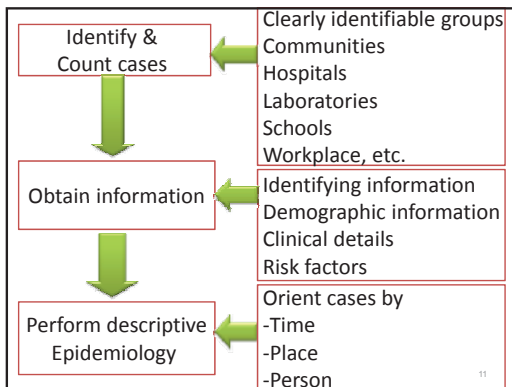
- Standard set of criteria for deciding if a person should be classified as suffering from the disease under investigation
- Clinical criteria, restrictions of time, place, person

### Example case definition- Cholera

**Suspect**  
 Acute watery diarrhea (passage of 3 or more loose or watery stools in the past 24 hours), with or without vomiting in a patient aged 5 years or more

### Example case definition- Cholera...

- Probable
  - Not applicable
- Confirmed
  - Isolation of *Vibrio cholerae* from stool of patient



### **Response /control**

- Treat cases according to recommended treatment guidelines
- Implement disease specific control & preventive measures
- Prevent further exposure (isolation, quarantine, contact tracing)
- Prevent infection (e.g. vaccination, Public awareness, enhanced surveillance)

13

### **Control the source of pathogen**

- Remove the source of contamination
- Remove persons from exposure
- Inactivate/neutralise the pathogen
- Isolate and/or treat infected persons

### **Interrupt transmission**

- Interrupt environmental sources
- Control vector transmission
- Improve personal sanitation

### **Modify host response**

- Immunize susceptible
- Use prophylactic chemotherapy

### **Post outbreak evaluation**

- Assess timeliness of outbreak detection and response
- Assess appropriateness & effectiveness of control intervention
- Integrate/translate lessons learnt into policy
- Write and disseminate outbreak report

16

### **At the end**

- Prepare written report and disseminate (see annex III for reporting form)
- Communicate public health messages
- Evaluate performance

17



**Unit 2.2**  
**Outbreak Investigation and Response**

**Sub-unit B. Prevention and Control  
of Outbreak in Disaster**

**Control of Communicable Diseases**

- Control of communicable disease
  - prevention
  - diagnosis and case management
  - outbreak Preparedness
  - outbreak Response

2

**Communicable disease**  
**(a)Prevention**

- Water, sanitation and hygiene promotion
- Access to adequate food and management of malnutrition
- Community education
- Mass vaccination campaign and routine ongoing vaccination
- Vector Control measures

3

**Communicable disease**  
**(b)Diagnosis and case management**

- Use of standard guidelines and protocols
- Ensure availability of lab services
- Educate community to seek early treatment and care
- In malaria endemic region establish 24 hrs diagnosis of fever

4

**Communicable disease**  
**(c)Outbreak Preparedness**

- Prepared outbreak investigation and control plan
- Investigation and control protocols available to relevant staffs
- Staffs received training on outbreak management
- Reserve stock of essential drugs and other supplied available

5

**(c) Outbreak Preparedness cont...**

- Identified source of vaccination.
- Mechanism of rapid procurement established
- Sites for vaccination and treatment of infectious patients are identified
- A laboratory is identified for diagnosis
- Sampling materials and transport media for the infectious agents available.

6

### **Communicable disease (d) Outbreak Response**

- HMIS includes an early warning components
- Initiation of outbreak investigation occurs within 24 hours of notification
- Outbreak should be described according to time, place and person
- Appropriate control measures that are specific to the disease and context are implemented
- Case fatality rate are maintained at acceptable levels:
  - Cholera-1%, Shigella (dysentery):1% or lower,
  - Typhoid: 1% or lower

### **Vector Control**

- It is important to control vectors during emergencies and disaster to safeguard people
- Various measures can be applied
- Use of bed net is very important to ward off the vectors
- Hygienic measures are all important

Unit 2.2:  
Outbreak Investigation and Response

Sub Topic:  
(c) Laboratory investigation in outbreak

Laboratory Preparedness for Outbreak Investigation

- Information collection
- Planning for lab. activities
- Formation of laboratory team
- Individual role & responsibility
- Accessories management
- Working together with outbreak investigation team

Procedure

Steps of laboratory procedure for outbreak investigation:

1. Patient's registration & Outbreak investigation/requisition form fill-up
2. Patient preparation & specimen collection
3. Preservation & storage of the specimen
4. Transportation/shipment of the specimen

Laboratory form for outbreak investigation

(see annex IV for form)

Each specimen must be accompanied by a request form which details:

- Address: Dist/VDC/Municipality/Ward No./Tole/Phone no.
- Occupation
- Patient's name, age, gender, outpatient or inpatient number, ward or health center.
- Type and source of specimen
- Investigation required.
- Specimen storage temperature
- Specimen transferred in
- Date and time of collection.
- Sample collected by:
- Name-----signature-----date & time of collection---

Proper specimen collection

- Proper collection technique.
- Appropriate time of collection.
- A sufficient quantity of specimen.
- Appropriate collection devices and container.
- Appropriate transfer media.
- Whenever possible, obtain sample prior to administration of antibiotics.
- For respiratory sample collect as soon as possible once symptoms occurs.
- Transport time/ temperature.
- Proper labeling.

Sample Transport Medium

- VTM ( virus transport medium) for Nasal, throat and respiratory specimen.
- Alkaline peptone water to transfer rectal swab and fresh stool sample for cholera like diarrhoeal cases.
- Cary-blair medium- for the preservation and transportation of salmonella, shigella, vibrio and yersinia species.

## Storage of Specimen

- All specimen must be kept at 2-8<sup>o</sup> C after collection.
- All specimen must be transported at 2-8<sup>o</sup> C in cold box within 24 hours of collection.
- If delay in transportation, ice pack must be changed in every 24 hours for maintaining proper cold chain.

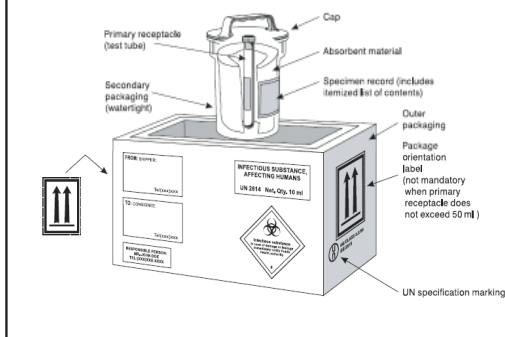
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## Transport of Specimen

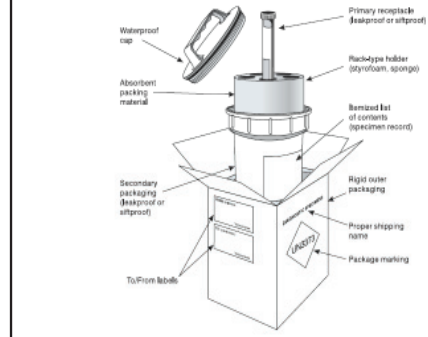
- Use triple layer packaging system for specimen packing.
- The transport time should be kept to a minimum.
- Transport specimen in cold box with ice packs as soon as possible.
- Include detail information of sender and receiver with name and mobile phone number
- Co-ordinate with reference laboratory before and after sample transportation.

8

### Packing and labelling of Category A infectious substances



### Packing and labelling of Category B infectious substances



## Importance of Bio-safety & waste disposal

- Wear personal protective equipment (PPE) eg- mask, gloves and gown during sample handling.
- Apply aseptic technique for sample collection and packing.
- Dispose infected materials in disinfectant solutions or incinerate.

11

## Rapid diagnostic test kits

- Dengue
- Malaria- *pv/pf*
- Kala-azar
- Leptospirosis
- Influenza

Available of transfer media

- NPHL
- 5 regional health directorate
- Regional hospital

12

## Field Kit for specimen collection

- Cold box with ice pack
- VTM: for influenza like illness or respiratory sample collection
- Alkaline peptone water: to transport stool sample (cholera case)
- Cary-blair media: to transport stool sample for diarrhoeal disease outbreak
- Marker / laboratory form for outbreak investigation
- Packing tape
- Sterile disposable swab stick/syringe
- Gloves
- Gown
- Mask
- 70% alcohol
- Plain sterile vials/ test tubes
- Zip-lock bag

13

## Unit 2.4: Communication and Coordination During Emergencies

### Line of Communication and Coordination

▪ District RRT: DHO/DPHO



▪ Regional RRT: RHD



▪ Centre RRT: EDCC

2

### Communication during Disaster

- Very important function during disaster
  - To obtain necessary support
  - To provide services
  - To collaborate and coordinate activities

3

### Best Practices for effective communication

- Build trust
- Announce early
- Be transparent
- Respect public concern
- Plan in advance

4

### Important communicating steps during a disaster

- Report early
- Always use the identified focal person (spokesperson) to communicate public messages.
- Use any pre developed template on reporting
- Ensure the information is accurate. If no information- say so and why.
- Update the information on a regular basis.
- Provide consistent reports.
- Be sensitive to cultural differences.
- Identify credible modes of communication.
- Always follow up on the media reports to ensure accuracy.

5

### Communication before a natural disaster/outbreak

Before the hazard/outbreak communicate about risks of the disaster

- External communication (through the media or direct social mobilization)
  - To warn about risk or hazard
  - To educate about prevention measures
  - To cope with public health issues arising during a natural disaster or outbreak
- Internal communication
  - To draw a plan on disaster risk communication plan,
  - Identifying the focal persons (spokesperson), lines of communication, mode of communication etc

6

### Communication during a natural disaster/ outbreak

External communication (through media briefings, press releases or interviews)

- To provide information about the event
- To warn people most likely to be affected
- To motivate public, political and institutional response
- To deny false rumors

Internal Communication

- To link scientists, disaster mitigation officials, and the public
- To alert authorities
- To assess damage
- To coordinate rescue and relief activities
- To account for missing people

7

### Communication after a natural disaster/outbreak

- Communication is important during the rehabilitation stage
- RRTs may not be involved to a large extent at this stage
- Report on the situation of the affected areas, particularly progress of rehabilitation and reconstruction efforts
- Provide guidance on how the community can collaborate with rehabilitation efforts

8

Public Health Messages for Outbreak Situations

#### Outbreak Investigation Messages

Base your message on the three four components of descriptive epidemiology

- Person
- Place
- Time
- Response

9

#### Coordination during Emergencies

- Coordinate all the activities with DDRC
- Inform higher authorities as early as possible and seek help if needed
- Conduct RRT meeting as required and mobilize the team
- Identify a focal person to coordinate the activities
- All staff under D(P)HO might need to be mobilized, so make list of all the staff, their contact number and call back if out of station
- Coordinate with local authorities and civil society as necessary

## 2.5 Nutrition in Emergency

### Sub Topics:

- (a) Basic concept of nutrition in emergency
- (b) Assessing the severity of crisis
- (c) Measuring malnutrition
- (d) Responding to the crisis

2

### (A) BASIC CONCEPT OF NUTRITION IN EMERGENCIES

#### What is Nutrition in Emergencies

- Severity of nutritional crisis.
- An emergency using acute malnutrition or wasting in the population as one indicator of distress.
- Crisis threshold of acute malnutrition as defined by WHO to set thresholds above which particular emergency interventions should be started.
- Severe impact of diseases, food crisis in an extreme stages as malnutrition and mortality are so severe as to be labelled 'famine'.

#### What are the causes of nutrition emergencies?

- Emergencies where acute malnutrition rates rise are usually directly caused by severe shortages of food combined with disease epidemics.
- Some populations are vulnerable as a result of underlying factors such as poverty, chronic food insecurity and poor infrastructure, e.g., nutrition emergencies are much more likely to occur in developing countries than in the developed world.
- HIV and AIDS, global climate change, natural disasters, conflict, acute food and livelihood crisis, political crisis or economic shocks can trigger a nutrition emergency.

4

#### Who are most nutritionally vulnerable in emergencies?

- Physiological vulnerability (e.g., young children, pregnant and lactating women, older people, the disabled and people living with chronic illness such as HIV and AIDS)
- Geographical vulnerability (e.g., people living in drought- or flood-prone areas or in areas of conflict)
- Political vulnerability (e.g., oppressed populations)
- Internal displacement and refugee status (e.g., those who have fled with few resources)

5

#### What is malnutrition?

**"A state in which the physical function of an individual is impaired to the point where he or she can no longer maintain an adequate bodily performance processes such as growth and development, pregnancy, lactation, physical work, and resisting and recovering from disease"**

6



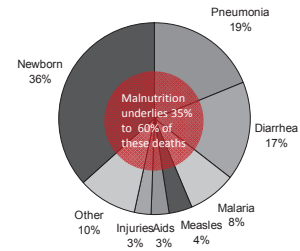
## What types of malnutrition occur in emergencies?

The main nutritional problems of concern in emergencies are:

- acute malnutrition (wasting), especially in young children – the clinical forms of this are *kwashiorkor* characterized by *oedema* (swelling due to fluid retention) and *marasmus*
- micronutrient deficiencies especially iron, vitamin A and iodine deficiencies (common in disadvantaged populations) and vitamin C, thiamine and niacin deficiencies (outbreaks have occurred in emergency-affected populations).

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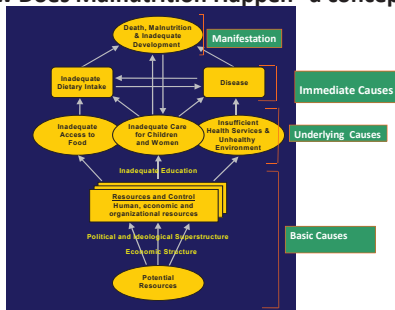
## The Impact of Malnutrition Malnutrition & Child Mortality



Source: Lancet Child Survival Series

8

## How Does Malnutrition Happen "a concept"



9

## Nutrition Indices - Review

UN recommends continued use of WHD new growth standard

	Stunting (Chronic)	Underweight (Both)	Wasting (Acute)
<b>Index</b>	Height for Age	Weight for Age	Weight for Height or MUAC
<b>Moderate</b>	< -2 SD	< -2 SD	< -2 SD
<b>Severe</b>	< -3 SD	< -3SD	< -3SD

10

## Nutrition Indices – Review Emergency Contexts

	Stunting (Chronic)	Underweight (Both)	Wasting (Acute)
<b>Index</b>	H/A	W/A	W/H or MUAC
<b>Moderate</b>	< -2 SD	< -2 SD	< -2 SD, 70 - 80% Median, or MUAC 115 mm – 125 mm*
<b>Severe</b>	< -3 SD	< -3SD	< -3SD, <70% Median, or MUAC <115mm*, or Oedema

\*Cut off points for MUAC have differed from agency to agency – these cut offs are consistent with cluster guidance

11

## Nutrition Indices – Review Emergency Contexts

Moderate Acute Malnutrition

	Stunting (Chronic)	Underweight (Both)	Wasting (Acute)
<b>Index</b>	H/A	W/A	W/H or MUAC
<b>Moderate</b>	< -2 SD	< -2 SD	< -2 SD, 70 - 80% Median, or MUAC 115 mm – 125*
<b>Severe</b>	< -3 SD	< -3SD	< -3SD, <70% Median, or MUAC <115mm*, or Oedema

\*Cut off points for MUAC have differed from agency to agency – these cut offs are consistent with cluster guidance

12

### Nutrition Indices – Review Emergency Contexts

	Stunting (Chronic)	Underweight (Both)	Wasting (Acute)
<b>Index</b>	H/A	W/A	W/H or MUAC
<b>Moderate</b>	< -2 SD	< -2 SD	< -2 SD, 70 - 80% Median, or MUAC 115 mm – 125 mm*
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13

### Nutrition Indices – Review Emergency Contexts

	Stunting (Chronic)	Underweight (Both)	Wasting (Acute)
<b>Index</b>	H/A	W/A	W/H or MUAC
<b>Moderate</b>	< -2 SD	< -2 SD	< -2 SD, 70 - 80% Median, or MUAC 115 mm – 125 mm*
<b>Severe</b>	< -3 SD	< -3SD	< -3SD, <70% Median, or MUAC <115 mm*, or Oedema

\*Cut off points for MUAC have differed from agency to agency – these cut offs are consistent with cluster guidance

14

Unit 2.5:  
Nutrition in Emergency

Sub-Topic C. Measuring Malnutrition

- Technique of measurement of Malnutrition
- Various techniques can be used to measure malnutrition in emergencies. The most used are:
    - Weight for Height
    - Mid-Upper Arm Circumference (MUAC)
    - Measurement of Body Mass Index (BMI)

**(c) Measuring Malnutrition**

Indicator Cutoffs: Weight-for-Height, MUAC, Bilateral Pitting Oedema

*Note: cutoffs might vary according to the context, agency and national guidelines.*

**Weight for Height Cutoffs, Children 6-59 Months**

**Weight for height as a percentage of the median**

WFH < 70% of the median: Severe Acute Malnutrition  
 WFH < 80% and ≥ 70% of the median: Moderate Acute Malnutrition

**Weight for height Z-scores**

WFH < -3 z: Severe Acute Malnutrition  
 WFH < -2 z and ≥ -3 z: Moderate Acute Malnutrition

Weight-for-height as a percentage of the median is based on the NCHS (National Center for Health Statistics) 1978 references and is the measure most commonly used in /CMAM programmes. Some countries may require use of z-scores, which may be based on the WHO 2006 Growth Standards.

- SD or Z score:

SD =  $\frac{\text{Measured weight} - \text{median weight of reference population}}{\text{Standard deviation of the reference population}}$

e.g.  $\frac{9.9 \text{ kg} - 11.7 \text{ kg}}{0.906}$

-1.98 SD score  
[WFH and weight gain tables for lamination.xls](#)

- Percentage of the Median:

Percentage of the Median =  $\frac{\text{Measured weight} \times 100}{\text{Median weight of reference population}}$

e.g.  $\frac{9.9 \text{ kg} \times 100}{11.5 \text{ kg}}$

86.1% of the median

- Mid-Upper Arm Circumference (MUAC):

**Target Children:** Children 6 months to 5 years

**MUAC assessment:**

- Normal: >12.5 cm
- Moderate acute malnutrition: >11.5 cm to < 12.5 cm
- Severe acute malnutrition: <11.5 cm

[WFH and weight gain tables for lamination.xls](#)

- Percentage of the Median:

Percentage of the Median =  $\frac{\text{Measured weight} \times 100}{\text{Median weight of reference population}}$

e.g.  $\frac{9.9 \text{ kg} \times 100}{11.5 \text{ kg}}$

86.1% of the median

Measurement of Body Mass Index (BMI)

BMI =  $\frac{\text{Measured weight (kg)}}{\text{height}^2 \text{ (m}^2\text{)}}$

e.g.  $\frac{50 \text{ Kg}}{1.6 \text{ m}^2}$

BMI =19.5

Status	Edema	BMI
Well nourished	No	≥ 18.5
Mildly malnourished	No	18.4 to 17
Moderately malnourished	No	16.9 to 16
Severely malnourished	May be yes	< 16

## 2.6 b IFE Guidance Note

(Sub section of 2.6 Basic Nutrition Intervention in Emergencies)

## (e) IFE Guidance Note - Nepal



Guidance Note on Infant and Young Child Feeding in Emergencies



आपतकालिन स्थितिमा स्तनपान संरक्षण गर्ने गराउने सम्बन्धमा स्वास्थ्य तथा जनसंख्या मन्त्रालय, विरब स्वास्थ्य संगठन र युनिसेफको संयुक्त विज्ञापित

संशोधन संस्था :  
विश्व स्वास्थ्य संगठन, नेपाल शाखा  
वडा नं. १०, काठमाडौं, नेपाल



### Recommendations from guidance note

- Provide fortified foods to all families with under-five children and/or pregnant and lactating women
- Strive to provide cooking facilities and fuel to all displaced families for food preparation, including preparation of complementary foods.
- Only where individual cooking facilities are not available joint cooking facilities should be considered to ensure appropriate complementary feeding for infants in a hygienic manner.
- Provide high-energy biscuits (BP5) as supplementary feeding to children aged 2-5 years.
- Ensure early initiation and continuation of breastfeeding of infants and young children up to the age of 24 months.

9

### Recommendations cont...

- Those responsible for the care of mothers and children should be provided with adequate information to support breastfeeding and appropriate complementary infant and young child feeding.
- For those infants and young children whose mothers are absent or incapacitated, as much as possible, ways should be identified to breastfeed.
- There should be no distribution of breast-milk substitutes, even to infants whose mothers are absent or incapacitated; in order to feed orphans, or infants separated from their mothers, please refer to the contact persons at DHO for the current guidance from CHD/MoHP. (see also joint statement on protection of breastfeeding in emergencies)
- Special attention should be given to feeding pregnant and lactating mothers (supplementary and nutritional balanced rations) in order to encourage success breastfeeding.

10

## Unit 2.5 Nutrition in Emergency

Sub-Topic B: Assessing and Responding to Severity of Crisis

### (b) Assessing the Severity of Crisis

#### Severity of a Crisis Three Criteria

1. Prevalence of malnutrition in relation to internationally defined benchmarks and thresholds
2. Trends in rates of malnutrition over time – pre-crisis including seasonality
3. The relationship between malnutrition and mortality

2

### Severity of Crisis Benchmarks and Thresholds

Severity	Prevalence of GAM
Acceptable	< 5%
Poor	5 – 9 %
Serious	10 – 14 %
Critical	> = 15 %

Emergency Threshold

WHO, Management of Malnutrition in Major Emergencies, 2000

3

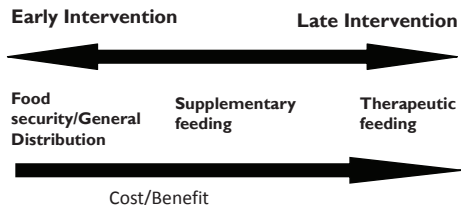
### Severity of Crisis Malnutrition-Infection Cycle



4

### (c) Responding to Crisis

Responding to Crisis Prevention Before Cure



5

### Responding to Crisis Prevention Before Cure

- Early Warning Systems
- **Agricultural production** such as crop production and livestock farming
- **Markets** such as domestic and international trade (import/export), prices of key staples and livestock
- **Vulnerable groups** such as monitoring poverty
- **Nutrition and health** status of populations

6

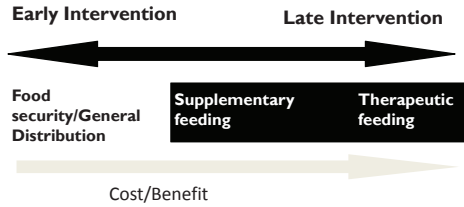
## Responding to Crisis Prevention Before Cure

Ensure the population has adequate access to appropriate quantities of quality food (SPHERE = 2100 kcal/day)

- Market-based interventions
- Cash transfers
- General food distribution or blanket supplementary feeding
- Nutritional Surveillance

7

## Responding to Crisis Selective Feeding



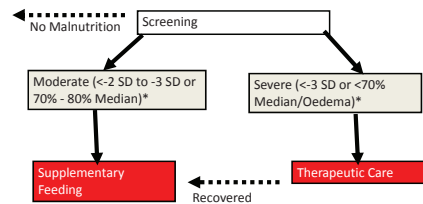
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## Responding to Crisis Screening



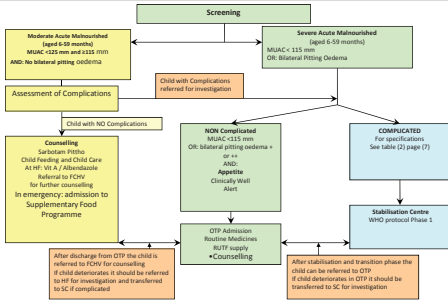
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## Responding to Crisis Traditional approach



10

## DESIGN NUTRITION PROGRAMME IN EMERGENCY SITUATIONS



11

## Responding to Crisis Traditional Approach

	Phase I Stabilization	Phase II Rehabilitation
<b>Treatment</b>	Antibiotic, Anti-malarial, Vitamin A, etc.	
<b>Care</b>	Attend to complications (e.g. shock, hypoglycemia)	
<b>Feed</b>	F-75 Therapeutic Milk	F-100 Therapeutic Milk
<b>Quantity</b>	135ml/kg/day	200ml/kg/day
<b>Time</b>	1-7 Days,	3 to 4 Weeks

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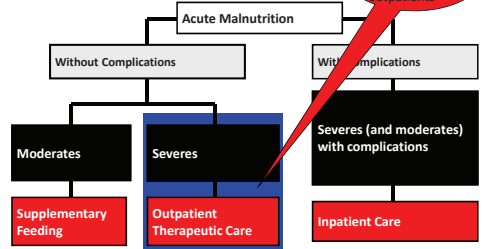
## Responding to Crisis Traditional Approach

○ Highly effective in reducing case specific mortality, BUT...

- Extremely labor intensive – Costly
- High potential for cross infection
- Child & caretaker are away from family for 20+ days – high opportunity cost
- Poor Coverage

13

## Responding to Crisis Screening – New Approach



\*Anorexia, LRI, High fever, Severe dehydration, anemia, not alert, hypoglycaemia, or hypothermia

## Responding to Crisis Supplementary Feeding

### “Blanket”

- Prevent malnutrition by providing a food supplement to all members of vulnerable groups such as children <5 and pregnant and lactating women (alluded to earlier)

### “Targeted”

- Prevent moderately malnourished women and children from becoming severely malnourished by providing a food supplement to malnourished individuals

15

## Responding to Crisis Supplementary Feeding

### “Wet” Rations

- Food is prepared and consumed on-site (ration is determined according to child's nutritional requirements)

### “Dry” Rations

- Food is taken home and consumed with family (ration often increased to account for intra-household allocation)



16

## Responding to Crisis Supplementary Feeding



- A Retrospective study of Emergency Supplementary Feeding Programmes notes only 41% achieve objectives. Carlos Navarro-Colarado. June 2007. ENN and SC UK. Available at [www.ennonline.net/research](http://www.ennonline.net/research)

- Fortified blended foods inadequate in both caloric and micronutrient content - Ready to Use foods are far superior
- Potential use of RUFs in supplementary feeding programs – both in prevention of malnutrition, and in treatment of moderate malnutrition

17

## Responding to Crisis OTP - Screening

### Complications:


- anorexia or
- severe oedema (3+) or
- marasmus with any level of oedema, or
- the presence of associated complications (e.g. extensive infections, severe dehydration, severe anaemia, hypothermia, hypoglycaemia or the patient not being alert).



Uncomplicated

Complicated

## Responding to Crisis OTP – First Contact



- Medical Assessment
- Appetite Assessment
- Presumptive treatment: Antibiotic (amoxicillin), Anti-malarial, and Vitamin A and/or Folic Acid in cases presenting with deficiency symptoms
- Ready to Use Therapeutic Food (RUTF)


**Uncomplicated**

19

## Responding to Crisis OTP - Weekly Follow Up

- Medical exam
- RUTF
- De-worming for children above 1 year of age – Week 2
- Measles immunization for all children above 9 months of age – Week 4

**Uncomplicated**



**Complicated**

20

## Responding to Crisis Inpatient Care

	Phase I Stabilization	Phase II Rehabilitation
<b>Treatment</b>	Antibiotic, Anti-malarial, Vitamin A, etc.	
<b>Care</b>	Attend to complications (e.g. shock, hypoglycemia)	
<b>Feed</b>	F-75 Therapeutic Milk	F-100 Therapeutic Milk
<b>Quantity</b>	135ml/kg/day	200ml/kg/day
<b>Time</b>	1-7 Days,	3 to 4 Weeks

WHO, Management of Severe Malnutrition, 1999

21

## Responding to Crisis Inpatient Care

Outpatient  
Care

	Phase I Stabilization	Phase II Trans/Rehabilitation
<b>Treatment</b>	Antibiotic, Anti-malarial, Vitamin A, etc.	
<b>Care</b>	Attend to complications (e.g. shock, hypoglycemia)	
<b>Feed</b>	F-75 Therapeutic Milk	RUTF
<b>Quantity</b>	135ml/kg/day	200ml/kg/day
<b>Time</b>	1-7 Days,	3 to 4 Weeks

WHO, Management of Severe Malnutrition, 1999

22

## Responding To Crisis Simplified Decision Tool

Finding	Action required
Food availability at household level < 2100 kcal/person/day	Improve <b>general rations</b> until local food availability and access can be made adequate
Malnutrition rate (GAM) under 10 % with no aggravating factors	- Attention to malnourished individuals through regular community services <sup>122</sup> .
Malnutrition rate (GAM) 10 – 14 % or 5 – 9 % plus aggravating factors	- <b>Supplementary feeding</b> targeted to individuals identified as malnourished in vulnerable groups - <b>Therapeutic feeding</b> for SAM individuals
Malnutrition rate (GAM) ≥ 15 % or 10 – 14 % with aggravating factors <sup>123</sup>	- <b>General rations</b> plus - <b>Supplementary feeding</b> for all members of vulnerable groups. - <b>Therapeutic feeding</b> for SAM individuals

<sup>122</sup> Aggravating factors are: 1) Critical food status below the mean energy requirement (2100 kcal/kg/person); 2) Child Death Rate greater than 10/1000/day and 3) Frequency of deaths or wasting events.  
<sup>123</sup> This may include therapeutic care integrated into primary health system, hospitals and health centres.

24

- ## Micronutrients The Silent Killer
- Over 2 billion people affected in the world
  - Increases the general risk of infectious disease and of dying from diarrhea, measles, malaria and pneumonia
  - Emergency affected populations are at increased risk of deficiency



## **Micronutrients Prevention Before Cure**

- Ensure the population has access to key micronutrients
  - Local foods
  - Fortified foods
  - On-site fortification
  - Supplements
  - Multiple Micronutrient Powders

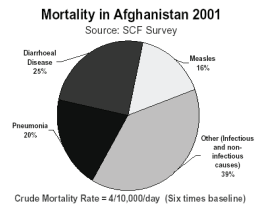
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## Unit 2.6: Child Health in Emergency

### Sub-Topic a): Child Health in Emergency

## The facts... show a much higher mortality of children in emergencies

- Children under 5 made up 17% of the population, but contributed to 65% of all age deaths - Kurdish Refugees (MMWR, 91)
- Under 5 mortality was 5 times the crude mortality rate - Mozambican refugees in Malawi (MMWR, 93)
- Death rates among unaccompanied children, mostly orphans, among Rwandan refugees was 20-80 times higher than the U-5 mortality rate before the crisis (Dowell, 95)



## Reasons for continued high mortality among children in complex emergencies

- Inadequate food aid, shelter, water, sanitation
- Inappropriate infant and child feeding
- Preventive measures against outbreaks not sufficient (e.g. immunization, clean drinking water).
- Case management of sick children not appropriate

## Special Pediatric Considerations in Disaster Preparedness

- Children are more vulnerable : Medically, psychological vulnerabilities and response to illness e.g. susceptibilities to dehydration and shock.
- Children need special management plans e.g. require different dosages or different antibiotics and antidotes to many agents.
- Emergency responders, medical professionals, and children's health care institutions require special expertise and training to ensure optimal care of those exposed to chemical, biological, or nuclear agents.
- Children's developmental ability and cognitive levels may impede their ability to escape danger.

## Childhood morbidity in complex emergencies

- Morbidity may vary by phases of emergency. During acute emergency, the most common causes are: diarrhoeal diseases, acute respiratory infections, measles, malaria, and severe malnutrition
- Outbreaks of other infectious diseases are also common: polio in Angola (Valente 2002), pertussis (WHO 2003), leishmaniasis (Rowland 1999, Ahmad, 2002) in Afghanistan, meningococcal meningitis in Sudan (Newton 2000), and typhoid fever in Bosnia and Herzegovina (Bradacic 1996)
- Complex emergencies can disrupt disease control programmes and facilitate the transmission of diseases by exacerbating crowded conditions and poor nutritional status and contribute to resistance

## Major causes of under 5 morbidity and mortality in humanitarian emergencies

- Diarrhoeal diseases
- Measles
- Malaria
- Acute respiratory infections and pneumonia
- Malnutrition
- Micronutrient deficiencies

## Role of Malnutrition and micronutrient deficiencies

- Prevalence of acute malnutrition (weight-for-height 2 standard deviations below the reference mean) among children < 5 years of age in internally displaced and conflict-affected populations between 1988 and 1995 was 31% among 11 surveys, and was as high as 80% in the Sudan in 1993 (Toole 1997).

## Problem of unaccompanied children

- Korean War or Nigerian Civil War many were abandoned infants (Sapir 1993).
- (Rwandan refugee) Most deaths (85%) occurred more than 2 days after arrival at the centers, suggesting that early and appropriate care could have significantly reduced mortality in this group of children.

Other health problems, that need to be addressed, include HIV/AIDS, physical and sexual abuse, psychosocial health problems and trauma.

## Other communicable diseases

- Polio in Angola
- Cutaneous leishmaniasis in Afghanistan
- Meningococcal meningitis in Sudanese Refugees
- Typhoid in Bosnia
- TB/HIV

## Neonatal Health

- Burundian refugees in Tanzania accounted 16% deaths in neonates and mothers
- Problem of LBW
- 19% Neonatal mortality in Pakistan

## Diarrhoea-Prevention in Emergency

- 27% fewer diarrhoeal episodes in Malawi refugees with soap distribution
- Covered container with spout reduced diarrhoeal disease by 31%

## Challenges: ensuring good practices

\*How to achieve universal standards of care?

\*Training

- need for pre-emergency training
- how best to conduct training in an emergency?
- what levels of health workers should be targeted?

\*Implementation and quality assurance

- develop guidelines
- modify existing guidelines (e.g. IMNCI, ETAT)
- work with governments to endorse standards
- distribute guidelines through partners

## Priority interventions for Children

- Diarrhea Prevention, Oral rehydration therapy (ORT)
- Ensuring food security and feeding programmes for severely malnourished infants,
- Measles immunization and Vitamin A supplementation.

## Differences in the Care of Children in Complex Emergencies & Stable Situations

- Rapid assessment and treatment of large numbers of severely ill children
- Less uniform health care delivery
  - multiple organizations
  - different types of health care worker
  - high staff turnover
- Inadequate referral services and supply delivery system

13

## Strengths of IMCI Guidelines

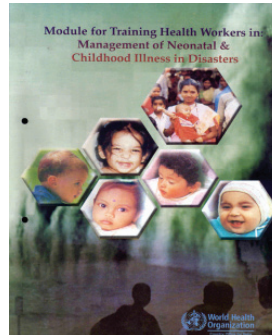
- Address major causes of child mortality
- Integrate case management & prevention
- Targeted to clinical officers and Workers
- Potentially combined with Emergency Triage Assessment and Treatment
- Can be simplified for CHWs and village volunteers

14

## Limitations of Standard IMNCI Guidelines

- Training course too long to be implemented in complex emergencies
- Referral facilities to manage severe disease frequently not in place
- Time required for single patient encounter too long in acute phase of emergency
- No community outreach
- Disease surveillance not addressed

15



Detection of sick child and newborn  
Management of Diarrhea  
Management of Pneumonia  
Feeding Counseling  
Immunization specially Measles  
Pre Referral Care

16

## Material & Learning Principle



- Learners module with Photographs
- Laminated Charts as job aid
- Facilitator guide
- Video clippings (optional)
- Interactive process
- Drills
- Learning by doing
- Video, photographs and role plays

17

UP 2 MONTHS		
ASSESSMENT	SIGNS	TREATMENT
<p>Step 1: Check for Signs of severe illness</p>	<ul style="list-style-type: none"> <li>• Ask the mother if young infant has complications</li> <li>• If a mother says that the infant is not able to drink, eat or has diarrhea or vomit, ask the mother if the infant is unable to feed</li> <li>• Ask about fever (temperature is measured by young infant because they do not walk to ask). Severe illness (diarrhea) is quite easy to identify</li> <li>• Ask about cough</li> <li>• The breathing rate of full-term babies (see module) is taken as 'fast breathing' for young infant. If the first count is not accurate, repeat the count. If the second time also the breathing rate is fast, it means the young infant has fast breathing</li> <li>• Rapid breathing</li> <li>• Rapid breathing is warning of the severity of fast breathing. If the count is fast, but the infant is not breathing fast, it may be a warning of a fast but not so severely fast</li> <li>• Fast infant's stomach or belly is distended and distended if it feels hot or unusually cold</li> <li>• If an infant, when picked up or held, is crying and when she should be and is difficult to awake for stimulation or has unconscious face than normal, the unconscious infant cannot be awakened at all</li> <li>• Blood in stool</li> </ul>	<ul style="list-style-type: none"> <li>• Refer the child                             <ul style="list-style-type: none"> <li>• Explain the need for referral</li> <li>• Call her first and discuss possible solutions for any difficulty in referral</li> <li>• Advise the mother to continue to breast feed the baby and keep her sick young infant warm</li> <li>• Write a referral slip</li> </ul> </li> </ul>
<p>Step 2: Check for Signs of local infection</p>	<ul style="list-style-type: none"> <li>• Unfilled or swollen or scabbed draining pus</li> <li>• Otitis</li> <li>• Skin pustules (less than 10 skin pustules)</li> </ul>	<ul style="list-style-type: none"> <li>• Give oral cotrimoxazole for amoxicillin for 5 days</li> <li>• Teach the mother to give local treatment for skin pustules and scabbed infections</li> <li>• Advise mother to give home care for the young infant</li> </ul>



### 3.1: Reproductive Health (RH) in Emergency

Sub Topic:  
(a) Overview of RH in Emergency

### Reproductive Health in Emergency or Crises



### Learning Outcomes

By the end of the session, the participants should be able to:

- Explain why SRH and the MISP are important in crises
- Know where to access key tools and resources to support implementation of SRH in crises

### Start with MISP video

- Project the video on MISP
- Explain to participants that they will now watch a short video to provide a vivid examples of the context.
- Take approximately 5 minutes and invite participants to share their impressions of the video
- Discuss on the participants ideas around why it is important to address SRH needs to people in crisis situations such as shown in the video.

### Why RH in emergencies ?

- Mandatory provision as a right
- duty of state (as per its commitments expressed through international treaties, conventions ....)
- Need fulfillment ( both biological and psychosocial)



### Right to SRH

ADVOCACY

“All migrants, refugees, asylum seekers and displaced persons should receive basic education and health services”



Chapter 10, ICPD Programme of Action, 1994

### Emergency Halts Other Lifelines but....

- People won't stop being pregnant
- People won't stop having sexual life (even in shelters)
- People can't stop giving birth
- Exploitation, violence rather increases
- ....



### RH needs continue ... in fact, increase during crisis

- Risk of sexual violence may increase during social instability
- STI/HIV transmission may increase in areas of high population density
- Lack of FP increases risks associated with unwanted pregnancy
- Malnutrition and epidemics increase risks of pregnancy complications
- Childbirth occurs on the wayside during population movements
- Lack of access to comprehensive emergency obstetric care increases risk of maternal death

8

### Why Maternal and Newborn Health in Crisis and Post-Crisis Situations



### Newborn Mortality in Nepal



- Globally, 9 to 33 babies out of every 1000 born die in the perinatal period.
  - In Nepal 33 babies out of every 1000 born die in the perinatal period.
  - Every hour 2-3 newborn die
  - Major causes of newborn death are:
    - Asphyxia,
    - Infection,
    - Hypothermia and
    - low birth weight

Neonatal and perinatal mortality : country, regional and global estimates, WHO 2006

10

### Reproductive Health (RH) in Emergency

Can't predict or prevent complications...  
... but can prevent deaths by reducing DELAY:

#### "The three delays"

- 1. First Delay:** Delay in decision to seek care
- 2. Second Delay:** Delay in reaching health facility
- 3. Third Delay:** Delay in receiving appropriate treatment or Emergency Obstetric Care Services

Can you think about [three delays](#) during crisis/  
Disaster?

11

### How long does it take to die? Estimated average interval from onset to death for major obstetric complications, in the absence of medical intervention

Complications	Hours	Days
• Hemorrhage	2	12
- Postpartum		
- Antepartum		
• Ruptured Uterus		1
• Eclampsia		2
• Obstructed labor		3
• Infection		6

Source: Maine et al, 1991

## What should be of Primary Focus during Emergency?

Continuum promoting healthy mothers and babies through:

Care during pregnancy  
(Antenatal Care – ANC).....Yes or No?  
**Pitfalls: ANC not part of MISP!**



Care at the time of delivery,  
Including Emergency Obstetrics

**MISP**



Care after delivery  
(Postnatal Care – PNC).....Yes or No?  
**Not part of MISP**

13

## Referral mechanisms: challenges and solutions

What if ensuring 24/7 referral services may not be possible due to insecurity in the area?



- Ensure that staff qualified in basic EmONC are available at all times at the primary health care level to stabilize patients with basic EmONC
- Establish system of communication (radio) to communicate with more qualified personnel for medical guidance and support

14

## Challenges to meeting SRH needs in Crises

- Lack of prioritisation of SRH in emergencies;
- Limited of awareness of the MISP amongst local, national, development & humanitarian actors;
- Poor implementation of the priority services outlined in the MISP;
- Lack of responders qualified or trained to implement the MISP;
- Inadequate coordination;
- Inadequate dedicated funding to implement the MISP;
- Lack of awareness among beneficiaries about benefits & location of MISP services

## “Standard” population

• Adult males	20%
• Women of reproductive age (WRA)	25%
• Crude birth rate	4%
➢ Number of pregnant women	
➢ Number of deliveries	
• Complicated abortions/pregnancy	20%
• Vaginal tears/delivery	15%
• Caesarean sections/delivery	5%
• WRA who are raped	2%
• WRA using contraception	15%
➢ Oral contraception	30%
➢ Injectables	65%
➢ IUD	5%

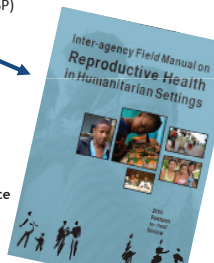
**In displaced population, 4% of the total population will be pregnant at a given time**

## Inter-Agency Working Group on RH in Refugee Situations (IAWG)

Formed in 1995: >30 UN, NGO, Academic, Donors

- Minimum Initial Service Package (MISP)
- Inter-agency Field Manual (IAFM)

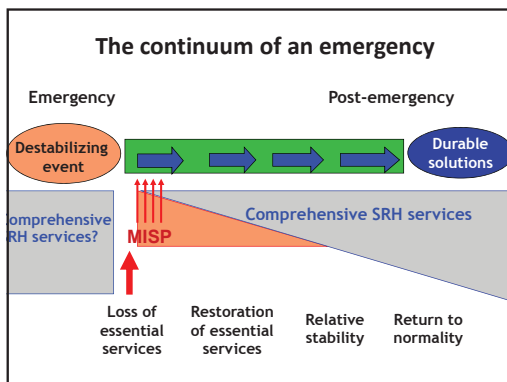
- The MISP
- Comprehensive RH
  - Maternal Health
  - Family Planning
  - Gender-based Violence
  - STI, HIV/AIDS



## What is the MISP?

- |                 |  |
|-----------------|--|
| <b>M</b> inimum | • basic, limited reproductive health                                   |
| <b>I</b> nitial | • for use in emergency, <i>without site-specific needs assessment</i>  |
| <b>S</b> ervice | • services to be delivered to the population                           |
| <b>P</b> ackage | • supplies (e.g. RH kit) and activities<br>• coordination and planning |





- ### Comprehensive SRH care services
- Family planning programme
  - Safe motherhood: abortion care, ANC/delivery/newborn/PNC
  - STI/HIV prevention and management
  - GBV prevention and management
  - Gynaecology: infertility, fistula, cervical and breast cancer screening/treatment
  - Urology: infertility, male sexual dysfunction, male reproductive cancer screening/treatment
  - Active discouragement of harmful traditional practices; FGM, early marriage, selective abortions...
  - Accessible for all: adolescents, elderly, sex workers/clients, ex combatants, uniformed staff, IDUs...
  - Integrated in PHC and public health packages
  - Links to other service sectors



### Exercise

**THE SITUATION**

- After flooding 20,000 people displaced to a improvised camp in a mountainous region.
- Some overwhelmed health centres scattered in the district
- The nearest town with a hospital is 20 km away.
- Women fetch water in the river and walk for 2 hours to find firewood
- There are reports of rapes and abductions

**THE RESPONSE**

- What are the immediate needs of these people?  
**Water; food; shelter; basic health care**
- You are participating as the **RH coordinator** in the first health coordination meeting. Which RH interventions should be implemented as a priority?

**The MISP**

- ### What is NOT MISP?
- Extensive RH needs assessment before starting services
  - Comprehensive RH services:
    - Ante- and post-natal care
    - Family planning
    - STI program
    - Prevention of other forms of GBV (not SV)
  - Training (CHWs, midwives, TBAs, doctors)
  - IEC campaigns (i.e. for condom distribution)

**The Sphere Project**  
Humanitarian Charter and Minimum Standards in Humanitarian Response

**Minimum Standards in Health Action**

**Essential health services – sexual and reproductive health standard 1:**

People have access to the priority RH services of the Minimum Initial Service Package (MISP) at the onset of an emergency and comprehensive RH as the situation stabilizes.

**ADVOCACY**



**Inter-Agency RH Kits for Crisis Situations**

**13 Kits**

- Kit 0 to 5**  
*Primary health care/health centre level*  
10 000 people for 3 months
- Kit 6 to 10**  
*Health centre level or referral level*  
30 000 people for 3 months
- Kit 11 and 12**  
*Referral level hospital*  
150 000 people for 3 months

**Other important SRH interventions**

- Ensure availability in health facilities of
  - ✓ contraceptive methods to meet demand
  - ✓ syndromic treatment of STIs
  - ✓ Anti-retrovirals (ARV) for continuing users, incl. PMTCT
- Meet the need for menstrual protection
  - ✓ “Hygiene” or “dignity” kits

**MISP implementation in Nepal : Progress so far**

- Koshi Flood Response-2008/2009
- Mid-western Flood-2014-RH kits distribution
- Earthquake response-2015
  - ✓ RH services since beginning
  - ✓ RH Camps
  - ✓ Maternity home/transition homes
  - ✓ RH Kits and supplies
  - ✓ Training on CMR
  - ✓ Support to birthing centres
- MISP Evaluation-2015-Kathmandu and Sindhupalchowk
- Integrated the MISP components in 20 districts DPRPs
- Adapted the MISP training package by NHTC
- Adapted the ASRH toolkit in humanitarian Settings
- Trained almost 500 health Service Providers and stakeholders on MISP and ASRH toolkit in humanitarian Setting
- Prepositioning of RH kits since 2013

**Key finding of MISP implementation in Nepal**

- All MISP services and priority activities were largely available in both Kathmandu and Sindhupalchowk
- Some services were only partially available based on the availability at a limited number of facilities in the district
- Comprehensiveness/quality is concerned in some health facilities of the remote areas
- Major gap in community knowledge about culturally sensitive reproductive health issues, the benefits of seeking care, and the location of services for sexual violence, STIs, and HIV
- Many key informants were not aware of what services were available at each health facility for the CMR, specifically the use of EC and PEP

### Lessons learned

- Identify a strong and respected coordinator
- Transparent collaboration facilitates implementation
- Prevention of GBV requires a concerted effort, sensitivity and staff preparation
- People use condoms during an emergency
- Clean delivery kits provide essential supplies for deliveries outside health facilities
- Referral Center requires strong 24/7 referral centers to provide comprehensive RH services
- Logistics preparedness is essential for prompt use of RH kits
- Satisfactory implementation requires pre-planning

### Key Messages

- MISP is an inter-agency standard
- MISP ensures basic RH services in crises
- Promptly implemented MISP saves lives



## RH in Emergency

### Unit 3.2: Sub Topic: b) Major Components of MISP

## Learning Outcomes

By the end of the session, the participants should be able to:

- Describe the components of the MISP including key actions
- Know the role of RRT in preparedness and implementation of MISP during disaster/emergency

## Components of MISP

There are 5 components of MISP:

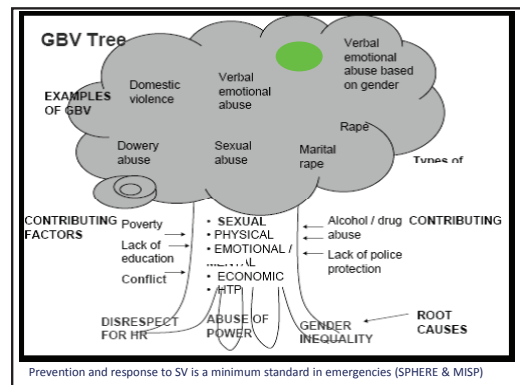
- Component # 1: Identify agency/persons to facilitate Coordination and Implementation
- Component # 2: Prevent and manage the consequences of sexual violence
- Component # 3: Reduce transmission of HIV/STIs in Crises
- Component # 4: Prevent excess neonatal and maternal morbidity and mortality
- Component # 5: Plan for comprehensive SRH services, integrated into primary health care, as soon as possible

## Component # 1: Identify agency/persons to facilitate COORDINATION & IMPLEMENTATION

- ✓ Organization
- ✓ Individual
- RH issues will be taken up by Health Cluster
- Lead by DHO/DPHO
- Health cluster will be the working platform for all RH related actors
- The focal person/coordinator will be identified

## Component # 2: Prevent and manage the consequences of sexual violence

- Prevent and manage the consequences of sexual violence
- ✓ plan camp design
- ✓ medical response (Emergency Contraceptives (EC), STI/HIV prevention)
- ✓ inform the community and other actors
- ✓ protection of at risk groups
- All community health workers need to be aware of GBV in crisis
- Seek multi-sectoral support; involving police, watch group, volunteers, Women Human Rights Defenders (WHRD)

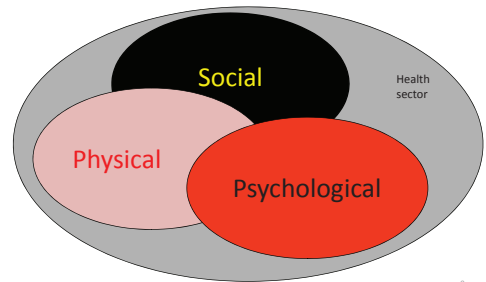


### Guiding principles in responding to Sexual Violence (SV)

- Safety
- Confidentiality
- Respect
- Non-discrimination

7

### Health Consequences of Rape



8

### Role of the Health Sector

- **Respond** to sexual violence
  - Provide clinical care
  - Collect forensic evidence
  - Refer for further crisis intervention
- **Prevent** sexual violence and stigmatisation, in collaboration with other sectors

9

### Clinical Care

#### Tips for history taking and examination

- Compassionate and non-judgemental
- Survivor's own pace, no unnecessary repeating
- Explain everything you are going to do
- Do not do anything without consent
- Follow History and Examination forms
- Document everything thoroughly

10

### Medical management: forensic evidence

#### Forensic evidence is collected during the clinical examination

- to confirm recent sexual contact
- to show that force or coercion was used
- to possibly identify the assailant
- to corroborate the survivor's story

#### Types of evidence that can be collected

- **Medical documentation**
  - Injuries
  - Presence of sperm (<72 hours)
  - State of clothes
- Clothes
  - Foreign materials
  - Foreign hairs?
  - DNA analysis?
  - Blood or urine for toxicology testing?

11

### Clinical care: treatment

- Treat life threatening complications first
- STI prevention
  - Syphilis, chlamydia, gonorrhoea (other infections if common)
  - Use local treatment protocols
  - Hepatitis B vaccination, if indicated
- Prevent HIV transmission (PEP)
  - If incident **<72 hours** and risk of transmission:
  - Zidovudine (AZT) + Lamivudine (3CT) for **28 days**

12

### Considerations when providing Post exposure prophylaxis (PEP)

- HIV testing is **not a requirement** for supplying PEP
- PEP if survivor presents < 72 hours of rape, but: **first dose the sooner the better**
- Provide one-week, then three-week supply but: **full supply if the survivor cannot return**
- Schedule return visit one day prior to last dose
- For recurrent exposures requiring repeat PEP: **Crisis intervention. Offer protection**

13

### Clinical care: treatment

- Prevent pregnancy:
  - < 5 days
  - Preferred: levonorgestrel 1.5 mg *single dose*
  - Or: ethinylestradiol 100 mcg + levonorgestrel 0.5 mg, two doses 12 hours apart (Yuzpe)
  - Alternative: IUD (very effective, but need skills!)
- Injury care
  - Clean and treat wounds
  - Provide tetanus prophylaxis and vaccination
- Refer for higher level care if needed

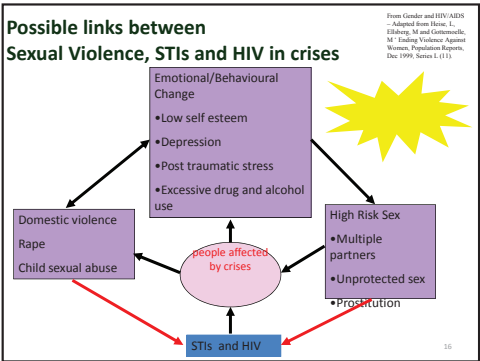
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### Component # 3: Reduce transmission of HIV in Crises

Reduce HIV transmission by

- standard precautions
- free condoms
- Safe and rational blood tranfusion

15



### Waste management

17

### Instrument processing

It is important to perform the steps in the appropriate order for several reasons:

- Decontamination kills viruses (HIV and Hep B) and should always be done first to make items safer to handle
- Cleaning should be done before sterilization. HLD to remove debris
- Sterilization (eliminates all pathogens) should be done before use or storage to minimize the risk of infections during procedures. (HLD may not eliminate spores)
- Items should be used or properly stored immediately after sterilization

18

### Ensure rational and safe blood transfusion

- In order to ensure safe blood transfusion services during crisis or emergency or disaster, need to link with Nepal Red Cross Society (NRCS) and Blood Bank.

This part will be taken care of by NRCS/ Blood Bank



19

### Guarantee availability of free condoms

- Condoms are an effective method for prevention of HIV and STI transmission
- Make good quality condoms available
- Ensure sufficient supplies
- Distribution strategy
- Humanitarian staff also use condoms
- Where possible include existing IEC materials
- Monitor uptake (≠ “use”)
- Re-order based on uptake

20

### Component # 4:

#### Prevent excess neonatal and maternal morbidity and mortality

Prevent excess neonatal and maternal morbidity and mortality

- Emergency obstetric and newborn care (EmONC)
  - ✓ Basic EmONC in primary health care facilities
  - ✓ Comprehensive EmONC in referral hospitals
- Referral system for emergencies (transport/communication)
- Clean home deliveries

21

### Maternal and Newborn Health (MNH)

Continuum promoting healthy mothers and babies through:

Care during pregnancy (Antenatal Care – ANC)

Pitfalls: ANC not part of MISP!



Care at the time of delivery, including Emergency Obstetric Care services



MISP

Newborn care



MISP

22

### The 3 Delays: What can be done in your setting?

#### 1) Delay in the decision to seek care:

Teach CHWs, women, men about the complications that need emergency treatment

NOT PART OF THE MISP



#### 2) Delay in reaching health facility:

- Initiate establishment of 24/7 referral system to manage EmONC (Emergency Obstetrics and Neonatal Care)
- Communication system (radio, mobile phone, medical record)
- Transportation (stretchers, vehicle, security, transport at night)
- Clean delivery kits distributed to all visibly pregnant women in case 2<sup>nd</sup> delay cannot be overcome and women need to deliver outside the health facility

#### 3) Delay in receiving appropriate care at the health facility:

- Equip health centers and hospitals
- Train health workers in emergency obstetric procedures

Kits  
6, 8, 9, 10, 11, 12

23

### Referral mechanisms: challenges and solutions

What if ensuring 24/7 referral services may not be possible due to insecurity in the area?



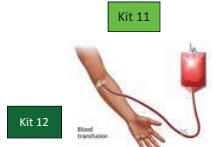
- Ensure that staff qualified in basic EmONC are available at all times at the primary health care level to stabilize patients with basic EmONC
- Establish system of communication (radio) to communicate with more qualified personnel for medical guidance and support
- Utilize ambulance network mobilization

24

### Comprehensive EmONC (CEmONC)

#### At hospital with operating theater (1 per 150,000 – 200,000 people)

- Provided by team of doctors, anesthetists, midwives and nurses
- BEmONC (steps 1-6), plus
- Perform surgery (Cesarean section, laparotomy for ectopic pregnancy, anesthesia)
- Perform safe blood transfusion



### Summary: MNH Crisis Situations

- Establish referral system
- Supply referral level (CEmONC)
- Midwife delivery kits (health facility, BEmONC)
- Clean delivery kits (home deliveries in case access to health facility not possible)
- Plan for antenatal care (ANC) and postnatal care (PNC) integrated into primary health care (PHC) services as soon as possible

26

### Component # 5:

#### Plan for comprehensive SRH services

- Plan for comprehensive RH services, integrated into PHC
- ✓ collect background information
- ✓ plan to integrate RH in health system reconstruction

Health systems building blocks	Plan for comprehensive RH services, e.g.
Service delivery	- Identify RH needs - identify suitable sites for RH service delivery
Health workforce	- assess staff capacity and train
Health information system	- Include RH information in HIS
Medical commodities	- support/strengthen RH commodity supply lines
Financing	- identify RH financing possibilities
Governance, leadership	- review RH-related laws, policies, protocols

### Role of RRT in implementing MISP during Disaster

#### Preparedness

- Integrate MISP for SRH in Health Sector disaster Preparedness Plans (e.g. Five components)
- Ensure the capacity building of service providers
- Ensure the prepositioning or availability of RH Kits
- Strengthening coordination mechanism (Health & Protection Clusters, inter-cluster and DDRC)
- Establish strong co-ordination with existing partners
- Continue advocacy on the importance of SRH during emergency

#### Response

- Ensure the coordination through established mechanism
- Early identification of RH needs
- Ensure the RH services including the GBV
- Collect the information and availability of data



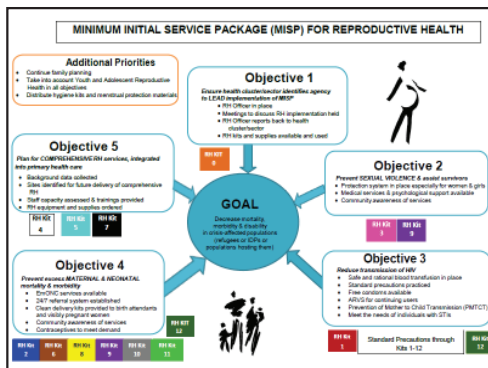
## RH in Emergency

### Unit 3.3: Sub Topic: c) RH Kits in Emergency

## Learning Outcome

By the end of the session, the participant will be able to:

- Prepare a rational order of RH kits for the provision of RH services in crises or emergencies
- Know where to access key resources to support implementation of RH in crises



## “Standard” population

- Adult males 20%
- Women of reproductive age (WRA) 25%
- Crude birth rate 4%
  - Number of pregnant women
  - Number of deliveries
- Complicated abortions/pregnancy 20%
- Vaginal tears/delivery 15%
- Caesarean sections/delivery 5%
- WRA who are raped 2%
- WRA using contraception 15%
  - Oral contraception 30%
  - Injectables 65%
  - IUD 5%

## RH kits for emergency situations

13 Kits:

- Block 1 (kit 0 to 5)  
Primary health care/health centre level  
Supplies for 10 000 people for 3 months
- Block 2 (Kit 6 to 10)  
Health centre level or referral level  
Supplies for 30 000 people for 3 months
- Block 3 (kit 11 and 12)  
Referral level  
Supplies for 150 000 people for 3 months

## Rapid assessment & SRH

- Number and location of target population
- Number and location of health facilities
- Number and types of health care personnel
- SRH supplies logistics

### RH Kits for emergency situations

#### Block 1

*Primary health care/health centre level  
10 000 people for 3 months*

#### Kit

- 0 • Training and administration
- 1 A & B • Condoms (male & female)
- 2 A & B • Clean delivery (individual & attendant)
- 3 A • Post-rape (EC/STI prevention)
- 3 B • Post-rape (PEP)
- 4 • Oral and injectable contraception
- 5 • STI drugs

7

### Kit 2: Clean Delivery Kit



8

### Kit 3: Rape Treatment Kit



9

### RH Kit 5: STI Drugs



10

### RH kits for emergency situations

#### Block 2

*Health centre level or referral level  
30 000 people for 3 months*

#### Kit

- 6 • Delivery (Health Centre)
- 7 • IUD insertion
- 8 • Management of complications of abortion
- 9 • Suture of cervical and vaginal tears
- 10 • Vacuum extraction

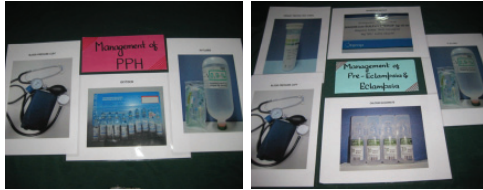
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### Kit 6: Clinical Delivery (Health Facility)



12

### Management of Obstetric Complications such as PPH, eclampsia



13

### Kit 8: Management of Complications of abortion (MVA set)



14

### Kit 10: Vacuum Extraction for Delivery (Manual) Kit



15

### RH kits for emergency situations

Block 3  
Referral level  
150 000 people for 3 months

- Kit
- 11A • Surgical (reusable equipment)
  - 11B • Surgical (consumable items and drugs)
  - 12 • Blood transfusion (HIV testing)

16

### Kit 12: Blood Transfusion



17

### Important to remember

- RH Kit 6 & 11 : Diazepam and pentazocin are controlled substances- required import licence from the country of destination prior to shipment, therefore should be procured locally
- RH Kit 6, 8, 11B & 12: Oxytocin and tests for blood group, HIV and Hepatitis as well as the Rapid plasma reagin (RPR) test need to be kept cool.
- Cold chain must be maintained during transportation and storage

18

### Provide other important supplies

- Meet pre-existing family planning needs
  - Basic FP methods to meet spontaneous demand (Kit 4 & 7)
- Ensure syndromic treatment for STIs
  - Antibiotics to treat people presenting with an STI symptom (Kit 5)
- Meet needs for menstrual protection
  - “Hygiene” or “dignity” kits

19

### Hygiene Supplies

- There is no “global” kit, it is community specific
- For women:
  - sanitary supplies for 3 months
  - Underwear ( 3 large)
  - soap, soap powder, toothpaste, toothbrush, aspirin
  - bucket for washing
  - what else? ASK!
- For men
  - shaving supplies, soap, toothbrush, toothpaste
  - condoms

20

### Hygiene supplies

- No “global” kit, community specific
- For women: Dignity Kits (17 items)
- Reusable sanitary Napkins, underwear, Petticoat, Maxi, T-shirt, Sari/Dhoti, Sweater, Shwal, Thin Towel (Gamchha), Flash Light, Cloth washing soap, Comb, Nail Cutter, Tooth Brush, Tooth Paste, Bathing Soap, Bag to keep Clothes or Bucket
  - what else? ASK!
- For men
  - shaving supplies, soap, toothbrush, toothpaste
  - condoms
  - what else? ASK!



### In-country transport and distribution



### RH kits for emergency situations Who does what?

- Determine needs and make a distribution plan
- Contact UNFPA Country Office or HQ (HRB or PSB)
- Funding: NGO’s own funds, Flash, CERF, CAP
- UNFPA - HRB can assist in determining needs
- UNFPA Procurement Services: pro-forma invoice, contacts shipping agents, shipping arrangements
- Supplies shipped within 48 hours

[www.womenscommission.org](http://www.womenscommission.org)

[www.rhrc.org](http://www.rhrc.org)

(Reproductive Health Response in Conflict)



24

## RH in Emergency

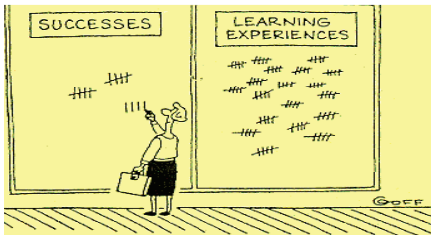
Unit 3.4:  
Sub Topic:  
d) Monitoring and Evaluation of  
MISP Indicators

### Learning outcomes

By the end of the session, the participant should be able to:

- Conduct basic monitoring and evaluation for the MISP implementation
- Outline existing needs assessment tools to plan for comprehensive SRH

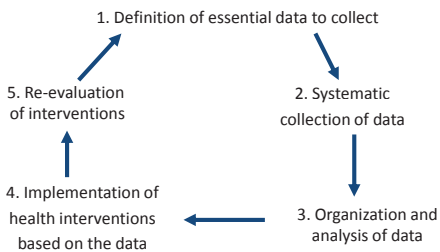
### Monitoring and Evaluation of MISP Indicators



### Plan for COMPREHENSIVE SRH services, integrated into Primary Health Care

- Baseline SRH information and Monitoring and Evaluation
- Identify sites for future delivery of comprehensive SRH
- Assess staff and identify training protocols
- Procurement channels

### Five essential components of Monitoring and Evaluation



### MISP Basic Demographic and Health Information

Basic demographic and health information	1 <sup>st</sup> month	2 <sup>nd</sup> month	3 <sup>rd</sup> month
Total Population			
# of women of reproductive age (age 15-49, estimated at 25 percent population)			
# Number of adult male (estimated at 20% of population)			
Crude birth rate (estimated at 4% of population)			
Age specific mortality rate (including neonatal death 0-28 days)			
Sex specific mortality rate			

### MISP Indicators for M & E

Coordination	1 <sup>st</sup> month	2 <sup>nd</sup> month	3 <sup>rd</sup> month
Overall RH coordinator in place and functioning under health coordination team or health cluster			
Material for implementation of the Kit available and used			
Sexual Violence			
Coordinated multi-sectoral systems to prevent sexual violence in place			
Confidential health services to manage cases of sexual violence in place			
Staff trained (retrained) in sexual violence prevention and response			
HIV Transmission			
Sufficient materials in place for universal precautions by trained knowledgeable health workers			
Condom procured and made available			
Blood for transfusion consistently screened ( Link with NRCS and Blood Bank)			

### MISP Indicators for M & E

Maternal and neonatal mortality and morbidity	1 <sup>st</sup> month	2 <sup>nd</sup> month	3 <sup>rd</sup> month
Clean home delivery kit (CHDK) available and distributed			
Calculate the # of CHDK needed to cover got births for 3 months (estimated population x 0.04x25)			
RH including EmOC kits available in the health centres			
Referral hospital assessed and supported for adequate number of qualified staff, equipments and supplies			
Referral system for Obstetric emergencies functioning 24/7			
Post referral/ services shelter provisioned			
Planning for Comprehensive RH			
Basic background information collected			
Sites identified for future delivery of comprehensive RH services			
Staff assessed, training protocols identified			
Procurement channels identified and monthly drug consumption assessed			

### MISP Indicators for M & E cont...

Maternal and Neonatal Mortality and Morbidity
% of Obstetric complication
# of maternal death
# of neonatal death
SGBV integrated in to health care delivery mechanism
-

### MISP monthly data collection linking with HMIS

Monthly data collection	1 <sup>st</sup> month	2 <sup>nd</sup> month	3 <sup>rd</sup> month
# of condom distributed			
# of CHDK distributed			
# of sexual violence cases reported in all sectors			
# of health facilities with supplies for universal precautions			
Basic demographic and health data collected			

### District Disaster (RH) Action Plan

MISP checklist activity	Current status (WHAT, WHO, WHERE)	Gap/s identified (WHAT, WHERE, WHO)	Action to be taken (WHAT, WHERE, WHEN, WHO)		Budget	Remarks
			Response	Preparedness		

## Unit 3.5: Mental Health in Disaster

### CONTENT

- Introduction
- Mental health Consequences of Disaster
- Nepal Perspective
- Intervention : Prevention/ Treatment
- Q & A

### OBJECTIVE

- Increase awareness
- Motivation for all stakeholders
- “Do No Harm”

### INTRODUCTION

- Disaster = **Distress**
  - Physical/ economic/ecological dimension
  - Emotional
  - Psychological /social/ Cultural
  - Spiritual

### Who are Affected?

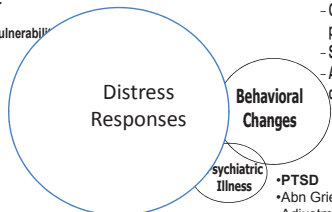
- “No people who experience disaster is untouched by it”
- Directly affected people
- Indirectly affected:
  - Witnessing a traumatic event (eye witness or television)
  - Learning of a family or friend’s traumatic experience
- *Responders* also experience stress

### Psychological Consequences of a

#### Disaster

For Example:

- Insomnia
- Sense of vulnerability



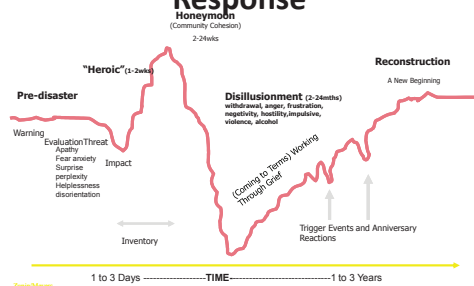
For Example:

- Change in travel patterns
- Smoking
- Alcohol consumption

- PTSD
- Abn Grief
- Adjustment Disorder
- Acute Psychosis
- Major Depression
- Anxiety disorder
- Alcohol & Sub use

### Phases of Disaster: Emotional

#### Response



Common Responses to a Traumatic Event			
Cognitive	Emotional	Physical	Behavioral
• poor concentration	• shock	• nausea	• suspicion
• confusion	• numbness	• lightheadedness	• irritability
• disorientation	• feeling overwhelmed	• dizziness	• arguments with friends and loved ones
• indecisiveness	• depression	• gastro-intestinal problems	• withdrawal
• shortened attention span	• feeling lost	• rapid heart rate	• excessive silence
• memory loss	• fear of harm to self and/or loved ones	• tremors	• inappropriate humor
• unwanted memories	• feeling nothing	• headaches	• increased/decreased eating
• difficulty making decisions	• feeling abandoned	• grinding of teeth	• change in sexual desire or functioning
	• uncertainty of feelings	• fatigue	• increased smoking
	• volatile emotions	• poor sleep	• increased substance use or abuse
		• pain	
		• Hyper-arousal	
		• jumpiness	

- ### Factors Influencing Response to Traumatic Events:
1. The Disaster:
    - Degree and nature of exposure
  2. The community
    - Level of preparedness, available resources and social support, past experience, culture, *leadership*
  3. The Victims
    - Developmental level: **Age**, education
    - Mechanisms or coping strategies/ personality
    - Ability to understand what has happened
    - Personal meaning of the event:
      - *perceived disruption, support and benefit*

Typical Reactions-children	
fears and anxieties	irritability
crying, whimpering, screaming	confusion
excessive clinging	disobedience
fear of darkness or animals	depression
fear of being left alone	refusal to go to school
fear of crowds or strangers	reluctance to leave home
problems going to sleep/bedwetting	behavior problems in school
nightmares	poor school performance
sensitivity to loud noises	fighting
alcohol and other drug use	

- ### Populations at Risk for Psychiatric Problems
- Those exposed to the dead and injured
  - The elderly or the very young
  - People with a history of previous exposure to traumatic events
  - Previous history of mental illness.

- ### Help: General Principle
- Reassurance: verbal support
  - Correct Information: honest but discrete frightening details. When viewing news better together, with volunteers to answer questions
  - Encourage to express emotions . Listen attentively
  - Try to maintain a normal household , social and recreational activities when appropriate.
  - Acknowledge reactions associated with the traumatic event, and help take steps to promote physical and emotional healing (appropriate help seeking)

- ### Some Do's
- Do Say-
  - These are normal reactions to a disaster.
  - It is understandable that you feel this way.
  - You are not going crazy.
  - It wasn't your fault, you did the best you could.
  - Things may never be the same, but they will get better, and you will feel better.



### **Don't say:**

- It could have been worse.
- You can always get another pet/house.
- It's best if you just stay busy.
- I know just how you feel.
- You need to get on with your life.

### **Psychological First Aid (PFA)**

#### **Definition.....**

- An approach designed to
  - provide basic comfort and support
  - reduce the initial stress caused by traumatic events
  - foster short and long term adaptive functioning

### **Psychological First Aid Who? When? Where?**

- Used during and immediately after trauma/disaster
- PFA can be used by anyone
- May be used for everyone, adults and children
- May be used anywhere
- Provides immediate emotional and practical support

### **Psychological First Aid Basic Objectives**

- Listen
- Help people feel safe
- Offer practical assistance
- Connect to social supports
- Provide information on response, recovery, stress and coping
- Enable to take care of self

### **Psychological First Aid Delivery...**

- Be visible
- Maintain confidentiality
- Operate within your organizational rules of survivor engagement
- Be calm, courteous, organized and helpful
- Be sensitive to cultural, ethnic and community concerns
- Operate within your comfort level

### **Psychological First Aid Behaviors To Avoid**

- Never presume to know everything what the person is experiencing
- Do not assume that everyone is traumatized
- Do not label/diagnose or patronize

## DISASTER COUNSELING SKILLS

- Disaster counseling involves both listening and guiding, but *not imposing* !
- **ESTABLISHING RAPPORT**
- Conveying respect and being nonjudgmental are necessary ingredients for building rapport.
- **ACTIVE LISTENING**
- Some tips for listening are:
  - **Allow silence** - time to reflect and become aware of feelings, prompt the survivor to elaborate. Simply "being with" the survivor and their experience is supportive.
  - **Attend nonverbally** - Eye contact, head nodding, caring facial expressions, and occasional "uh-huhs" let the survivor know that the worker is in tune with them.

## DISASTER COUNSELING SKILLS cont...

- **Paraphrase** –
  - repeat portions of what the survivor has said, understanding, interest, and empathy are conveyed
  - checks for accuracy, clarifies misunderstandings, and lets the survivor know that he or she is being heard.
- **Reflect feelings** –
  - notice that the survivor's tone of voice or nonverbal gestures suggests anger, sadness, or fear
  - helps the survivor identify and articulate his or her emotions.
- **Allow expression of emotions** –
  - tears or angry venting is an important part of healing; I
  - work through feelings so that better engage in constructive problem-solving.
  - let the survivor know that it is OK to feel

## When to Refer to Mental Health Services?

- **Disorientation** - dazed, memory loss, inability to give date or time, state where he or she is, recall events of the past 24 hours or understand what is happening
- **Mental illness** - hearing voices, seeing visions, delusional thinking, excessive preoccupation with an idea or thought, pronounced pressure of speech (e.g., talking rapidly with limited content continuity)
- **Inability to care for self** - not eating, bathing or changing clothes, inability to manage activities of daily living
- **Suicidal or homicidal thoughts or plans/ acts**
- **Problematic use of alcohol or drugs**
- **Domestic violence, child abuse or elder abuse**

## POST-TRAUMATIC STRESS DISORDER

Following S/S present for longer than one month:

- **Re-experiencing** the event trauma-specific nightmares or flashbacks, or distress over events that resemble or symbolize the trauma.
- Routine **avoidance** of reminders of the event or a general lack of responsiveness
- **Autonomic Arousal:** Increased sleep disturbances, irritability, poor concentration, startle reaction , regressive behavior

## Post Traumatic Stress Disorder cont...

- Rates : 2 -29%
- May arise weeks or months after the event
- May resolve without treatment, but some form of therapy by a mental health professional is often required
- Vulnerability to developing PTSD:
  - characteristics of the trauma exposure itself
  - characteristics of the individual
  - post-trauma factors (e.g., availability of social support, emergence of avoidance/numbing, hyper-arousal and re-experiencing symptoms)

## Prevent Suicide

- **Get help from professionals.** Ask for help from doctors or other leaders who are trained to help
- **Stay in touch with family.**
- **Stay active**
- **Keep busy.** Help others in need, community or school etc
- **Suicide HELPLINE..**

### Key Messages

- Many mental health consequences:
  - Disaster stress and grief reactions are normal responses to an abnormal situation
  - Several Mental disorder may be precipitated
  - The burden/ morbidity not less than any physical illness
- Social support systems are crucial to recovery
- Mental health intervention must be incorporated along with other health plans:
- Preventable+ treatable with proper intervention

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