



# Disaster Response, Management & Mitigation Plan - 2018

2019



HEALTH & FAMILY WELFARE DEPARTMENT  
GOVERNMENT OF ODISHA

# PREFACE

The disaster Management Act 2005 mandates to lay down policies, plans and Guidelines for disaster management and for ensuring timely and effective response to disasters. The relief centric approach in the past years have shifted its focus to more proactive approach in a coordinated manner with in a framework of timeline to achieve the goals.

Odisha is perennially affected by natural disasters like flood, cyclone, heat wave conditions & infectious disease outbreaks. I am pleased to present this guideline on disaster management & mitigation plan which is more relevant, practical and user friendly. The experience over the past years made us realize that the one guideline is essential to guide our health managers at district and sub district level. Thus to deliver improved health services in a coordinated manner, this will support them in implementing the programme components in tandem with related deptts. in the community during disaster. The constructed activities will result in reduction in avoidable loss of life and suffering of the people.

I take this opportunity to express my thanks to all who have extended their cooperation in formulating the guidelines.

Bhubaneswar

Commissioner cum Secretary to Govt.,  
Health & Family Welfare Department

# ACKNOWLEDGEMENT

I would like to thank the members of Core Group and the extended core group whose support has resulted in these guidelines on disaster management and mitigation plan.

I would like to place on record the significant contribution of made by Dr. Hara Prasad Pattnaik, DPH, Odisha, Dr. Shakti Prakash Padhi, Additional DHS (PH), Dr. Basanta Kumar Pradhan, Joint Director (Disease Control) in developing the guideline for Disaster Management and Mitigation Plan for Odisha.

The efforts of Sri Subhashish Jena, Sri Basanta Ku Swain, Mrs. Sasmita Mallick of SSU, IDSP in compilation of the guideline.

Bhubaneswar

Director of Public Health,  
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# CONTENTS

Sl. No.	Chapter	Page No.
1	CHAPTER I - INTRODUCTION	8 - 11
2	CHAPTER -2: HAZARD, RISK AND VULNERABILITY ANALYSIS	11 - 16
3	CHAPTER 3 : CAPACITY BUILDING MEASURES	16
4	CHAPTER 4. PREVENTION AND MITIGATION MEASURES	17
5	CHAPTER 5: PREPAREDNESS	17 - 26
6	CHAPTER 6: RESPONSE, PLAN & RELIEF	27 - 35
7	CHAPTER 7: RESTORATION & REHABILITATION	35
8	CHAPTER 8: RECOVERY	35 - 36
9	CHAPTER 9: MAINSTREAMING OF DRD	36 - 38
10	CHAPTER 10: PROVISION OF FUNDS	38
11	CHAPTER 11: KNOWLEDGE MANAGEMENT	38 - 44
12	ANNEXURES:-	45 - 95

## ABBREVIATIONS AND ACRONYMS

ADD	Acute Diarrhoeal Diseases
ADMO( PH)	Assistant District Medical Officer (Public Health)
ADMO(Med)	Assistant District Medical Officer (Medical)
ADMO (FW)	Assistant District Medical Officer (Family Welfare)
AIDS	Acquired Immuno Deficiency Syndrome
ASHA	Accredited Social Health Activists
AWW	Anganwadi Worker
ANM	Auxiliary Nurse & Mid-Wife
CDC	Centre for Disease Control
CDMO	Chief District Medical Officer
CHC	Community Health Sub Center
CNS	Central Nerves System
DHH	District Head Quarter Hospital
DHS	Director of Health Services
DMO	District Malaria Officer
DNA	Dioxy Ribo Nuclic Acid
DPH	Director of Public Health
DPM	District Programme Manager
DSMO	District Surveillance Medical Officer
DSU	District Surveillance Unit
DTO	District Tuberculosis Officer
ELISA	Enzyme Lined Immuno Sorbent Assay
FP	Family Planning
FRU	First Referral Unit
GKS	Gaon Kalayan Samiti
GoI	Government of India
H& FW	Health & Family Welfare
H & UD	Housing & Urban Development
HAZMAT	Hazardous Material
HEPA	High Efficiency Particulate Airfilter
HIV	Human Immuno deficiency Virus
IDSP	Integrated Disease Surveillance Project
ICMR	Indian Council of Medical research
IPD	In Patient Department

L Form	Reporting format for Laboratory
MO	Medical Officer
MCH	Medical College & Hospital
MISP	Minimum Initial Service Package
MPHS	Multi-Purpose Health Supervisor
NCDC	National Centre for Disease Control
NDMA	National Disaster Management Authority
NRHM	National Rural Health Mission
NVBDCP	National Vector Borne Disease Control Programme
OSDMA	Odisha State Disaster Mitigation Authority
OMDSS	Odisha Multi Disease Surveillance System
OPD	Out Patient Department
ORS	Oral Rehydration Solution
P Form	Reporting format for Health Facility
PAPR	Powered Air Purifying Respirator
PCR	Polymerase Chain Reaction
PHC	Primary Health Centres
PRI	Panchayat Raj Institution
RD	Rural Development
RMRC	Regional Medical Research Centre
RRT	Rapid Response Team
RWSS	Rural water Supply & Sanitation
SDH	Sub Divisional Hospital
SRH	Sexual & Reproductive Health
SC	Sub Centers
S Form	Reporting format for Sub Center
SSU	State Surveillance Unit
School & ME	School & Mass Education
SSU	State Surveillance Unit
SIHFW	State Institute of Health & Family Welfare
STI	Sexually Transmitted Infection
USA	United State of America
V. Cholera	Vibrio Cholera
VEE	Venezuelan Equine encephalomyelitis
WCD	Women and Child Development
WHO	World Health Organization

## EXECUTIVE SUMMARY

The 12 coastal districts of the State experience the unexpected super cyclone of October 29 in the year 1999. There was massive destruction of infrastructure related to house, road, rail link, electricity and all other forms of communication, loss of crops along with loss of human life. The Health & F.W Department faced in surmountable challenge to know the magnitude, devastation, logistic position, manpower deployment, functioning of health infrastructure with loss of all form of communication. That was a disaster in true sense. But within a very short period all forms of support provided in from GoI, UN Agencies, Development Partner, CBOs, NGOs and even individuals. The response operation was streamlined within a week in spite of all the obstacles. Simultaneously daily epidemic surveillance was established to know the disease incidence in the field and to our other disbelief there was no major outbreak in the cyclone affected districts. It was truly a model of development from disaster.

This experience laid the foundation for development of guidelines for preparedness for Flood / Cyclone / Epidemics etc. where and hazard mapping, prepositioning of supplies, contingency plan for manpower deployment, contingency plan for opening of relief centres and referral, Health Education etc was in place. The daily epidemic surveillance was extended to cover all the 30 districts with weekly mode and named as Odisha Multi Disease Surveillance System (OMDSS) the first of tis kind in the entire country. Subsequently, Govt. of India implemented Integrated Disease Surveillance Programme (IDSP) in the State during the year 2005-2006. Subsequently major flood were experienced during the year 2008, 2011 and 2013 but because effective, planning & implementation the morbidity & mortality was at par with the normal. Subsequently the planning & management of cyclonic storm “Phailin” 2012 bears testimony of activity response & mitigation of human suffering in the post cyclonic period.

## CHAPTER - 1 :

### INTRODUCTION

The State of Odisha located in Eastern India has a coastline of about 480 KMs and is bounded by Jharkhand on North, West Bengal on the Northeast, Chhattisgarh on the West, Telangana and Andhra Pradesh in the South and the Bay of Bengal in the East.

It experiences natural calamities like Heat wave /drought/Flood/Cyclone/Drought etc. from March to October due to its geo-climatic conditions which leads to communicable & non-communicable diseases, disabilities, injuries and deaths in the community. Frequent occurrences of natural calamities also stand as a barrier to the economic growth in the state.

The State experiences Heat wave conditions from March to June and sometimes the temperature recorded is above 45°C in 30 -40% of the districts.

Odisha is the fifth most flood prone State in our country followed by Uttar Pradesh, Bihar, Assam & West Bengal. The South West monsoon brings heavy rainfall within June to August every year which causes heavy flood/flash flood thereby causing enormous damage to the life and property.

#### Sustainable Development Goal

Goal 3: Ensure healthy Living and promote well being for all at all ages.

Target by 2030:

#### 1.1 Objective

- 1.The primary aim of Disaster Response ,Management & Mitigation Plan is to address the health related impacts of climate change and variability in terms of events such as Heat wave/ Flood/Cyclone/Hurricane/ Earthquake/ Rainfall/Epidemics/Mass Casualty Incidents and also to provide basic health care & support services that are being disrupted by the disasters.
2. To reduce the cases & deaths during & aftermath of the disasters/epidemics by adopting effective timely medical response activities.

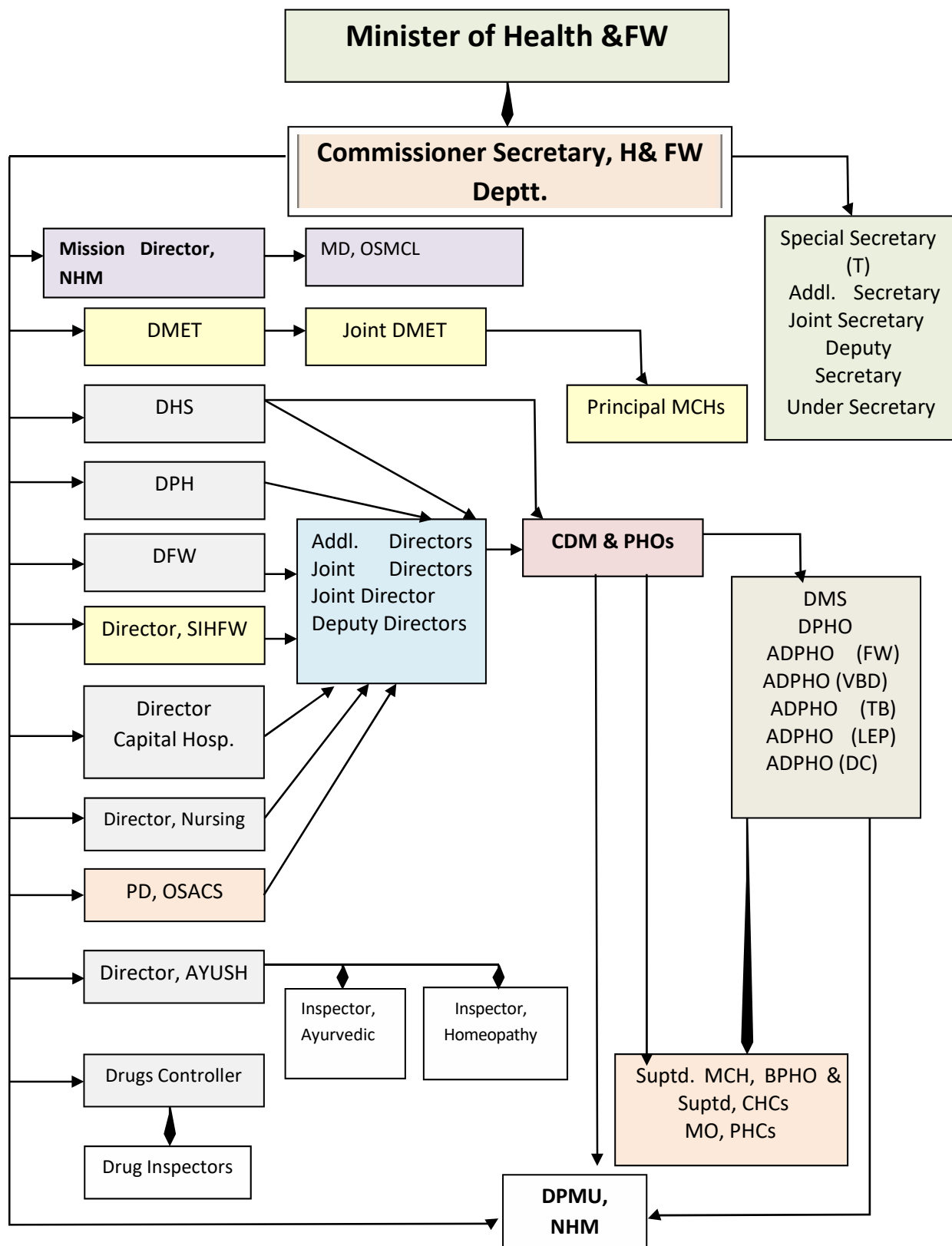
#### 1.2 Scope of the Plan

- To provide Emergency functional Support to all Health Care facilities (HCF) and the Rapid Response Team Members at State, District & Block level.

- To ensure that all Health facility can endure the actual disaster by adopting structural & non-structural measures and ensuring that all health facility have a Disaster Management Plan.
- Resource Planning :To keep all health Infrastructure, equipment, Instruments, drugs, logistics & personnel in the state of alert & readiness
- Preparation of Guidelines for State Health Contingency Plan (SOPs for Heat wave/Flood/Cyclones/Epidemics/disasters) & Disease Surveillance Systems.
- To conduct training & capacity building of all identified staff including new recruits & Quick Response Teams.
- Prompt Case management & effective treatment of the injured in disasters (Mass Causality Incident Plan).
- Quick Recovery mechanism from disaster impacts (Relief & Recovery)
- To prevent health related outbreaks and conduct Water Quality Monitoring.
- IEC / BCC Activities to spread the health messages awareness in the community.
- Conduct Media Advocacy during and post disaster.
- Monitoring & Supervision: To develop an Early Warning System (EWS) through Quick Response Team at village level.
- Providing minimal initial Service Package to the Pregnant Women & adolescent girls SRH services during disasters.
- Documentation, reporting and feedback to all related stakeholders in the pre disaster, during and aftermath of disaster.
- Inter-Sectoral convergence with related Deptt. such as W&CD, H&UD, RD, Energy, Transportation, S&ME, PRI, Revenue, Industry, SC&ST, ARD, Fire Services, Military, Aviation Deptt.
- Assessing the needs of population at risk and developing a preparedness plan for reducing the morbidity and mortality in the community.
- Reviewing the existing guidelines, protocols, policies of the department, conducting a SWOT analysis and addressing the challenges faced and reassessing the problem solving measures undertaken to bridge the gaps.

### 1.3 Overview of the Department

#### Organizational Frame work of Health Deptt.



#### 1.4 Acts, Rules and Policies governing the disaster management of the department.

1. Act of Epidemic 1887
2. Odisha Multi Disease Surveillance System in post 'TSUNAMI' 1999- weekly epidemiological surveillance
3. State contingency plan for Flood and Cyclone-2003-04 by H& FW Deptt.
4. Disaster Management Act 2005, GOI
5. State Disaster Response, management and Mitigation Plan 2014 by H & FW Deptt.

#### 1.5 Institutional Arrangement for disaster management.

No. of Medical College and Hospitals (Government)	7
No. of District Hospitals ,Capital Hospital & RGH Hospital)	32
No. of Sub-Divisional Hospitals	27
No. of Community Health Centers	377
No. of Other Hospitals	79
No. of Primary Health Centers (N)	1226
No. of Community Health Centres	377
No. of Urban Family Welfare Centers	10
No. of Postpartum Centers	79
No. of Sub-Centers	6688
No. of Health Offices (Bhubaneswar, Cuttack, RKL, Sambalpur) Berhampur,	6
No. of Health & Family Welfare Training Centers (Cuttack &Sambalpur)	2
No. of Rural Health Centres (Jagatsinghpur, Attabira & Digapahandi)	3
No. of A.N.M. Training Schools	16
No. of G.N.M. Training Schools	7
No. of M.P.H.W.(Male) Training School	3
No. of Ayurvedic Hospitals	5
No. of Ayurvedic Dispensaries	619
No. of Homoeopathic Hospitals	4
No. of Homoeopathic Dispensaries	560
No. of Unani Dispensaries	9
No. Of Urban Local Bodies	103
No. of Urban Health Centres	58

## Health Human Resources Profile:

Human Resource Status in 2016			
Category	Sanctioned	In position	Vacancy
Doctors including Specialist	6719	5203	1516
Specialists	2732	1495	1237
Dental Surgeon	233	164	69
Pharmacists	2604	2119	485
Staff Nurse	5622	1938	3684
Laboratory Technicians	808	676	132
MPHS(M)	1597	1235	362
MPHS(F)	1228	1046	182
MPHW (M)	4952	3344	1608
MPHW (F)	8793	7037	1756

### 1.6 Preparation and implementation of departmental disaster plan

The Disaster response, management and mitigation plan was prepared by H&FW Deptt. and is being implemented in our state by all HCFs as per situational needs. Also hoisted in the Govt. website for public viewership.

## Chapter -2: Hazard, Risk and vulnerability Analysis

### 2.1 Historical/past disasters/losses in the Deptt.

Table 1. Past History of Flood & damages in Odisha 2007-2016

Year	No. of Districts	No. of Blocks	No. of GPs	No. of Villages
2007	7	28	264	1737
2008	Phase-1 (5) Phase-2 (13)	Phase-1 (22) Phase-2 (67)	Phase-1 (224) Phase-2 (510)	Phase-1 (1494) Phase-2 (2209)
2009	No flood			
2010	No flood			
2011	Phase-1 (19) Phase-2 (10)	Phase-1 (102) Phase-2 (71)	Phase-1 (1012) Phase-2 (890)	Phase-1 (5200) Phase-2 (4060)
2012	No flood			
2013	Phase-1 (16) Phase-2 (17)	Phase-1 (128) Phase-2 (45)	Phase-1 (1924) Phase-2 (335)	Phase-1 (15578) Phase-2 (2276)
There was no flood after 2014 / 2015 & 2016 in the State				
2017	Phase-1 (2)	Phase-1 (5)	Phase-1 (23)	Phase-1 (228)
2018	Cyclone & Flood (4)	29 blocks	38 GPs	322 villages

Table 2. Past History of Heat Wave Condition in Odisha 2007-2017

YEAR WISE REPORTED CASES & DEATHS OF HEAT STROKE		
YEAR	Cases	Deaths
1998		2042
1999		91
2000		29
2001	102	25
2002	202	41
2003	682	68
2004	567	45
2005	2283	236
2006	159	21
2007	489	47
2008	1097	71
2009	1059	89
2010	1587	104
2011	163	22
2012	1689	83
2013	554	16
2014	744	40
2015	2072	60
2016	1222	47
2017	857	37

Table 2. Type of outbreaks experienced during disasters

Type of Disasters/Districts		Type of Disease / out breaks that occur
Natural	Flood	<ul style="list-style-type: none"> <li>Water-borne diseases (Diarrhoea, dysentery, Typhoid, Jaundice),</li> <li>Acute upper respiratory tract infections, Measles, skin diseases</li> <li>Vector borne diseases- Malaria, Dengue &amp; Chikunguniya, JE/AES</li> <li>Animal Bite- Dog bite, snake bite</li> <li>Mental disorder like post traumatic syndrome, anxiety neurosis etc.</li> </ul>
	Drought	Nutritional disorder like mal-nutrition, kwasiorkor, Marasmus, vitamin deficiency disorder
	Cyclone	<ul style="list-style-type: none"> <li>Water-borne diseases (Diarrhoea, dysentery, Typhoid, Jaundice),</li> <li>Acute upper respiratory tract infections, Measles, skin diseases</li> <li>Vector borne- Malaria, Dengue &amp; Chikunguniya, JE/AES</li> <li>Animal bite- Dog bite, snake bite</li> <li>Mental disorder like post traumatic syndrome, anxiety neurosis etc.</li> </ul>
	Heat Wave	Heat stress disorders like heat fatigue, heat cramps, heat syncope, heat stroke, heat exhaustion
	Hailstorm	Soft tissue injury, Head injury
	Flash Flood	<ul style="list-style-type: none"> <li>Water-borne diseases (Diarrhoea, dysentery, Typhoid, Jaundice),</li> <li>Acute upper respiratory tract infections, Measles, skin diseases</li> <li>Vector borne- Malaria, Dengue &amp; chikunguniya, JE/AES</li> <li>Animal bite- Dog bite, snake bite</li> </ul>
	Others	Leptospirosis, Diptheria, Meningitis, H5N1, H1N1, EBOLA

Fig 2. Map Showing flood prone areas of Odisha.

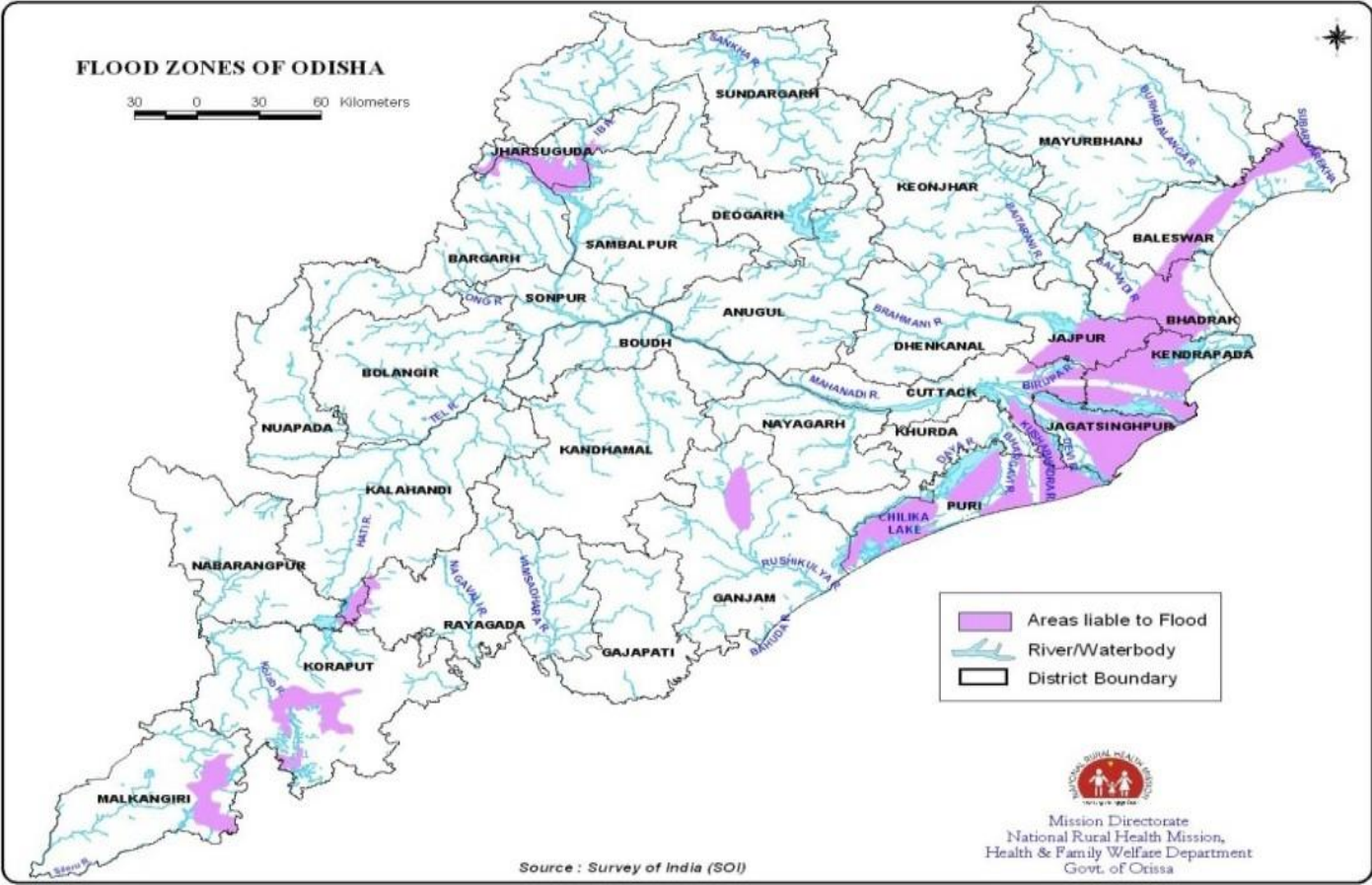


Fig 3. Map Showing Cyclone zones areas of Odisha.

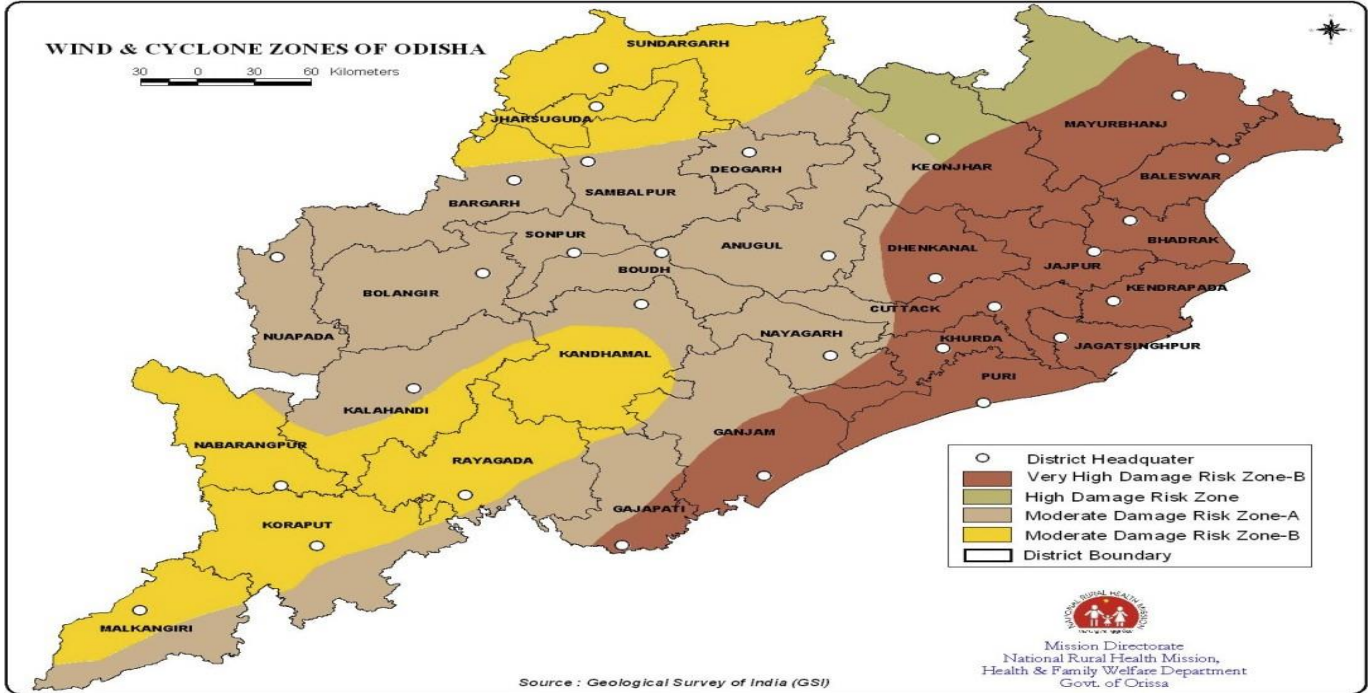
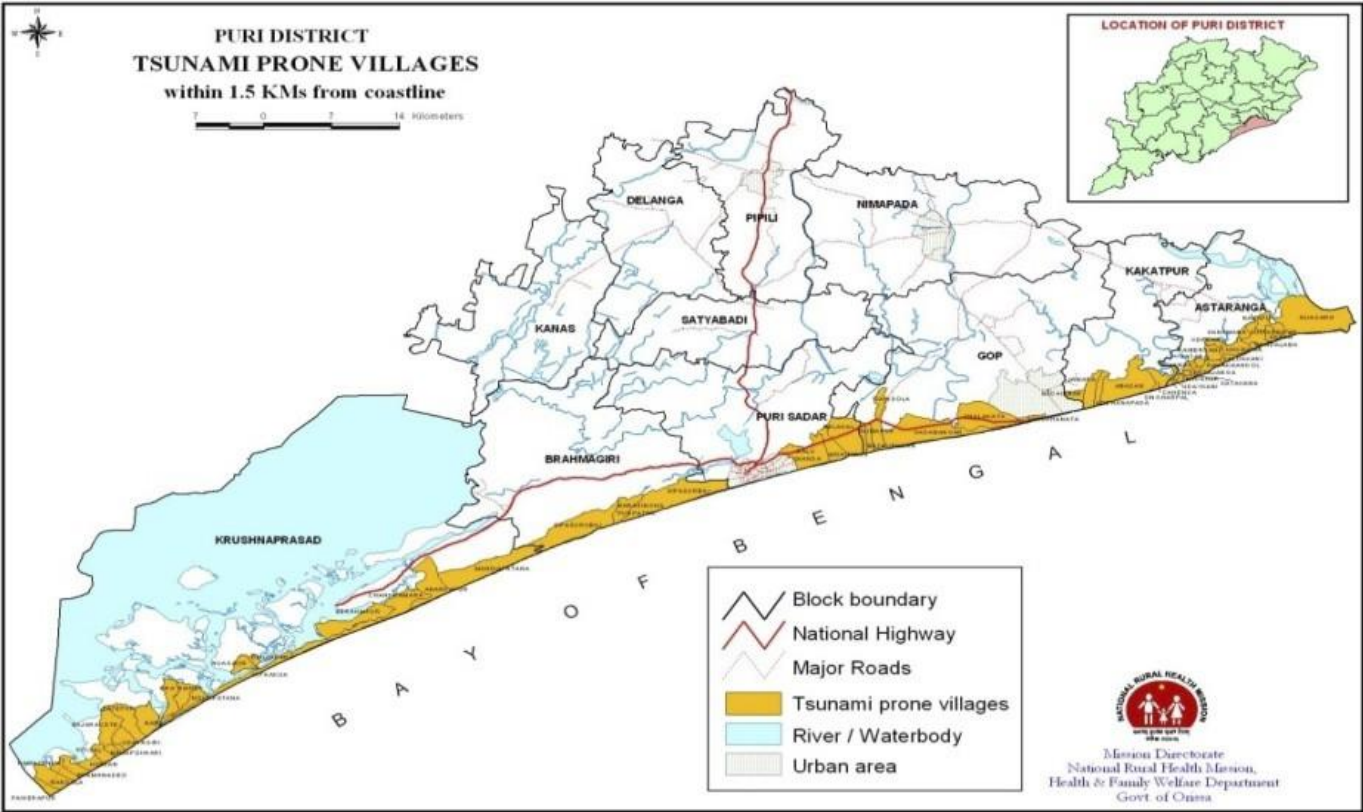


Fig 4. Map Showing Tusanmi Prone zones areas of Odisha.



Map of Health Institutions In Odisha

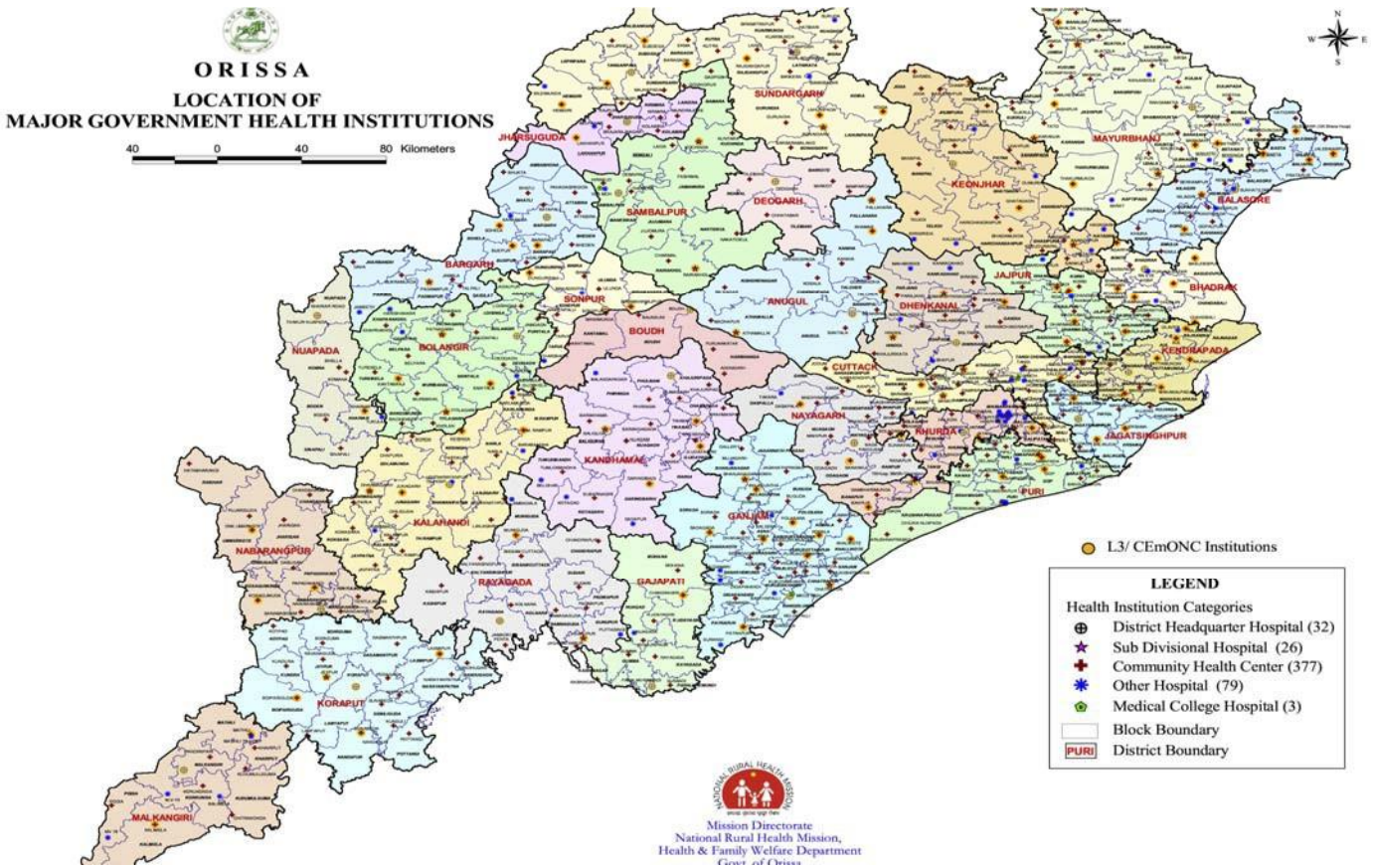


Fig. 4: Hazard Risk Vulnerability Mapping

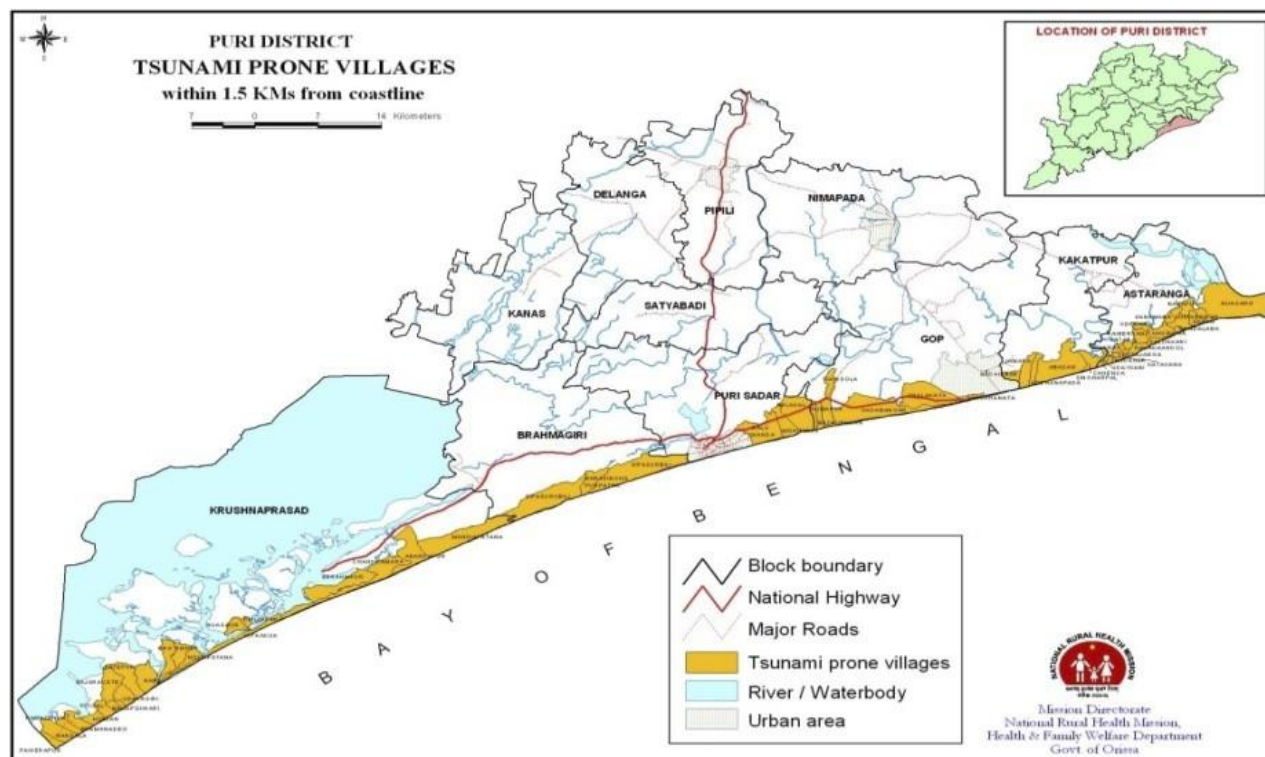


Table 3. DISASTER RISK ANALYSIS

Sl No	Hazards/Disaster	Risk
1.	Flood /Cyclone / Thunderstorm/ Flash-flood/Earth Quake/ Tsunami/ Cloud burst	High due to loss of life, injury, disability, waterborne& vector-borne disease outbreaks, snake bites, animal bites, psychosomatic disorders. Damage to health facilities, equipment, instruments, essential drugs & logistics.
2.	Heat wave & Drought	Climate change leads to rise of temperature that results in Heat Stress disorders, Scarcity of Food & water, Drought, Nutritional deficiency disorders, Water borne disease outbreaks & increased vector density.
3.	Infectious disease outbreaks	If not contained timely it may lead to high mortality & morbidity in a short time.
4.	Train derailment, Air Crash, Road Traffic Accidents, Explosions, Burn accidents	Mass Casualty Incidents, Extensive loss to Lives & Property, disability, Post Traumatic Stress Disorders(PTSD)
5	Spurious liquor and drug tragedy	Extensive loss to Lives
6	Chemical or Gas leaks/ poisoning	Respiratory distress, Acute emergency conditions and loss of life, Fluorosis, Skin Diseases
7.	Others( Bio-terrorism / wars/ civil unrest/ radiation leak	Mass Casualty Incident, Death disability, PTSD Extensive loss to properties)
8.	Pest Attacks eg. Locust	Extensive loss of crops leading to food shortage and nutritional deficiency

### 2.3.2 Vulnerability of the Deptt. to various hazards - Anticipated Public Health Problems during and aftermath of Disasters

1	Direct Impact - Death due to drowning, lightening, Trauma & mostly Orthopaedic
2	Disposal of Dead Bodies and Carcas
3	Rodent and Stray dog/animal problems, snakebites
4	Large scale migration
5	Disruption of Water Supply, Electricity & Sanitation
6	Overcrowding due to emergency housing situations with poor personal hygiene
7	Mass feeding without adequate food handling, storage and sanitary facilities
8	Occurrence of Epidemics - waterborne and vector borne diseases.
9	Psycho-social & Mental Health Problems
10	Scarcity of logistics & other Resources ( three 'M')
11	Lack of effective monitoring and Supervision

## CHAPTER 3 :

### CAPACITY BUILDING MEASURES

- One State Rapid Response Team at State level, 30 District RRT, 377 Block RRTs at State and district level are trained and kept in readiness to attend to any emergency arising out of disasters/epidemics or unusual health events.
- The network of surveillance units includes health facilities- MCH (5), DSU-32, SDH (27) CHC (377), PHC(1226), OH(79), IDH(5), Sub Centers (6688), 382 laboratories, 58 Urban Health Centers.
- 8442 surveillance units send routine surveillance reports on selected syndromic & presumptive diseases of public health importance such as Diarrhea, Dysentery, Typhoid, Jaundice, Measles, Malaria, Dengue, Chikungunya that are compiled and transmitted from Sub Center level to the State & Central level on fixed days every week.
- Analysis & Feedback
- During disasters, the existing Control Rooms at State, District & block converted into 24x7 and they communicate, receive feedback and report as per need of the situation.
- Review cum sensitization meetings are conducted by the directorate of public health for reorientation of different stakeholders.
- SWOT analysis reveals that the first line responders (Quick Response Team at Village Level) need to be oriented and trained from time to time. The annual training Calendar is worked out for this purpose.
- Mock Drills need to be conducted at HCFs in coordination with other related Deptt. to learn the gaps in the existing resources and capacity and undertake the problem solving measures.

## CHAPTER 4.

### PREVENTION AND MITIGATION MEASURES

#### 4.4.1 Existing Measures:

- State Disaster Management & Mitigation plan prepared and implemented in the State by all districts.
- One State Rapid Response Team, 32 District Rapid Response Teams & 377 Block Rapid response Teams function in tandem with each in different phases of disaster for management & mitigation purposes.

#### 4.4.2. Disaster specific prevention and mitigation Plan by the Deptt.

1. SOP for Incident Commands at State/DHQ during disasters
2. SOP for Heat Stress disorders
3. SOP for Flood/ Cyclone Contingency Plan
4. SOP for Water Quality Monitoring
5. SOP and treatment protocol for management of Outbreak Prone Diseases
6. SOP for Emerging and newly emerging infections.
7. SOP for evacuation of HCFs during Earth Quakes
8. SOP for conducting IEC/BCC activities
9. SOP for prepositioning of Drugs, logistics and consumables
10. SOP for documentation, reporting and media advocacy

### Chapter 5: Preparedness

#### 5.1 : Nodal Persons & their Roles and Responsibilities

Disaster Mitigation Preparedness Activities -Disaster response steering Committee formed and further strengthened at all levels such as- State level, Three Medical Colleges & Hospital, Capital hospital, RGH, Sundergarh and all the DHQs to review, assess and further plan for other activities quarterly.

##### 1. State Disaster Response Steering Committee

- 1) Commissioner cum secretary to Health & FW, Govt. of Odisha- Chairperson
- 2) MD, NRHM- Member
- 3) Additional Secretary - Member
- 4) Managing Director, OSMCL - Member
- 5) Director Health Services, Odisha - Member
- 6) Director Public Health - Member cum Convenor
- 7) Director, Medical Education & Training - Member

- 8) Dir. SIHFW -Member
- 9) Dir. Nursing - Member
- 10) Director Family Welfare -Member
- 11) Director Capital Hospital- Member
- 12) Director Food Safety - Member
- 13) Director of HI &VS - Member
- 14) Director, Veterinary - Member
- 15) General Manager - OSDMA- Member
- 16) Chief Engineer, RWSS, Bhubaneswar- Member
- 17) Commissioner, BMC, Bhubaneswar- Member
- 18) Additional Director (RH)- Member
- 19) Additional Director VBD- Member
- 20) Addtional Director Public Health - Member
- 21) Deputy Director (IDSP)- Member
- 22) The Project Officer, NPSP-WHO - Member
- 23) Regional Director, RMRC - Member
- 24) Representative from UNICEF / UNDP - Member

2. Disaster Response Committee at Medical College & Hospitals:

- 1) Dean cum Prinicipal - Chairman
- 2) Medical Superintendent - Member Convenor
- 3) Head of Deptts.(Surgery, Medicine, Orthopedic, Anesthesia, Neurosurgeon, Paediatric, Gynecology, Psychology, Radiology, critical care, transfusion Medicine,)- Members
- 4) Head of Ancillary Deptts. (Radiology, Blood Bank, Laboratory,)
- 5) Public Relation Officer or hospital administrator- Member
- 6) Officer I/C Medical Store- Member
- 7) Casualty Medical Officer- Member
- 8) Blood bank Officer - Member
- 9) CDM & PHO of Balasore, Bolangir, Mayurbhanj, Koraput, Cuttack, Ganjam, Sambalpur- Members
- 10) Nursing Superintendent- Member
- 11) Engineer PWD ( CIVIL)- Member
- 12) Engineer PWD (Elect.)- Member
- 13) Engineer PHED- Member
- 14) Municipality Health Officer - Member

### 3. Disaster Response Committee at District Head Quarters Hospital

- 1) Chief District Medical & Public Health Officer- Chairman
- 2) Asst. District Medical Officer (Medical)
- 3) Asst. District Medical Officer (PH)
- 4) Asst. District Medical Officer (FW)
- 5) District Medical Officer (TB)
- 6) District Medical Officer (Malaria)
- 7) District Medical Officer (Leprosy)
- 8) Casualty Medical Officer
- 9) Surgery Specialist
- 10) Orthopedics Specialist
- 11) Anesthetist
- 12) Medicine Specialist
- 13) Pediatrician
- 14) Blood bank Officer
- 15) Radiologist
- 16) Pathologist/Micro biologist 17)
- District Programme Manager 18)
- DRMCH Coordinator
- 19) GKS Coordinator
20. ASHA Coordinator
21. DPHCO
22. DAM or Account Officer
23. Nursing Superintendent
24. District Store Officer,
25. Radiographer
26. Hospital Manager
27. Municipality Health Officer

### 4. State Technical Task Force Team

Currently State Surveillance Unit of IDSP functioning in the Directorate of Public Health, Odisha doubles up as State health Control room during disasters/MCI. (Phone no- 0674239466, Toll Free No- 18003456776)

One special Task Force team comprising of faculty from Medicine & Paediatric, Community Medicine & Pathologist or Microbiologist is located at each of the MCHs to move to the field as and when required during emergency.

Additional two teams should be located at Capital Hospital/ RGH RKL and move to the site as and when required during emergency and the team would comprise of

- 1) Hospital Administrator
- 2) Spl in Surg/Ortho/Med/Gyn/Paed
- 3) Pathologist/Microbiologist
- 4) ADMO PH of CH, BBSR
- 5) Spl in Community Medicine

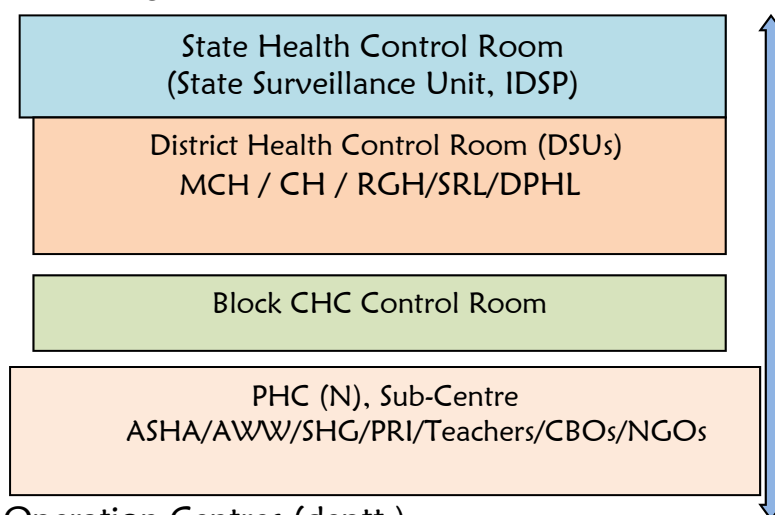
Framework of Activities followed by the Deptt :

	Activity	Point of Action	Responsible Nodal Persons	Time line
1	Hazard & vulnerability mapping, action plan development	One State & 30 District Surveillance unit, one urban health unit at BBSR	DPH, MD (NHM), ADHS (PH) and DD, IDSP at State Level, CDM & PHO and DPHO, DPM (NHM) at district level, SDMO, Block MO I/C, BPM, RRTs at sub-district level	April- May
2	Drugs, Essential medicines, Consumable, and logistics prepositioning	OSMCL/District Drug Store/Block drug store	DPH/ DHS/ MD, OSCML / General Manager (Logistics & Supply Management) OSMCL at state level, CDM&PHO, DMS, DPM(NHM) and TSK, Central store at District level & Suptd., BPHO I/C Block CHC at sub-district level	Prepositioning by end of May.
3	Readiness of RRT team	State/District/Block	DPH/ ADHS (PH) / CDM&PHO/ DD, IDSP / DPHO / DPM (NHM)/ Suptd. / BPHO	Constituted in April and kept in readiness
4	Functioning of Control Room	State, Districts & Block CHC	DPH/ MD(NHM) / CDM&PHO/ ADDHS (PH) / DD, IDSP / DPHO / DPM (NHM)/ Suptd. / BPHO	March to Oct 15th
5	Manpower deployment	State, district & blocks, Training Institutes, MCHs	DHS/ DPH/ MD(NHM) / DMET/ Dir (AYUSH)/ Principal MCHs/ Principal Training Institutes /CDM&PHOs/ Suptd./BPHO	As per need & whenever disaster happens
6	Mobility support & Fund provision for disaster prep & activities	State, district & blocks	DHS/ DPH/ MD(NHM)/ CDM&PHO/ Suptd. / DPHO/ ADPHO (VBD)/ DPM(NHM) / BPHO	Pre-disaster assessment, Preparedness, post-disaster follow up activities

7	Case management & Referral mechanism	MRC(Village, Sub-center)/ DTC (Village, Sub center) PHC/CHC/ SDH/ DHH/ MCH/ CH,BBSR/ RGH Rourkela/ Private accredited hospitals	CDM&PHO, DPHO, ADPHO (FW/ VBD/ RNTCP/ LEP), MOs, Specialists, RRTs, DPM ,BPM, RRTs, Paramedics, ASHA/ AWW,GKS	Real time case management and referral to identified centers.
8	IEC/BCC Activities	SIHFW, District PHEO, Block PHEO	DPH,DHS,MD NHM, Dir SIHFW, DD, IDSP, CDM&PHO, DPHO, ADPHO (FW/ VBD/ RNTCP/ LEP/ DC), DPM, District PHCO / Asst. PHCO, Block PHEO, MO, BPM, MPHS, HW, ASHA, AWW, RRTs	March-October (Development of messages for Electronic, print, Outdoor display media, folk media. During disaster dissemination of messages with use of different tools.
9	Disease Surveillance activities	State, District & block surveillance units	Front Line Workers, MPHWS,MPHS, Block PHEO or MPHS & Block RRT , Dist Surveillance Unit & RRT, SSU & State RRT	Perennial activity and intensified during June 15 <sup>th</sup> to Oct 15 <sup>th</sup> and during any disaster
10	Containment measures	State/District & Block RRTs, local health staff & health volunteers	DPH, DHS, DMET, Dir. SIHFW, SSO, District &Block Rapid Response Teams, MRC or DTC staff, District& Block local health units, Quick Response Team, CBOs, NGOs etc	During disasters /Epidemics
11.	Capacity building	State/District & Block RRTs, District & block local health unit & QRTs	DPH, MD NHM, SSO, CDM&PHO, DPHO, ADPHO (FW/ VBD/ RNTCP/ LEP) Dist& Block TSK, DPM, MO, Matron, PHCO, PHEO, BPM, MPHS, HW, Epidemiologist, Microbiologist, Data Manager, IDSP	November- May( Capacity building, reorientation, Sensitization,Review meetings, FGDs etc)
12	Reporting Feedback mechanism	State, District & block surveillance units	HW, Block PHEO & Block RRT , DSU & District RRT, State Health Control Room, NHM unit & State RRT	Perennial activity on weekly basis but boosted during disasters/epidemics may be on daily basis
13	Media Advocacy	State, District	Secretary Health H&FW, Spl Sec., DPH, DHS, CDM&PHO	Before and during disaster/Epidemics for awareness and preventingmortality and morbidity in coordination with OSDMA

14	Monitoring & supervision	State, District & Block Level	Secretary Health, Spl Secretary, Addl. Secretary, DPH, DHS,DFW, MD NHM, DMET, Dir Nursing, Dir SIHFW, RD ROH&FW, Principal of MCHs, SSO, CDM&PHO, DPHO, ADPHO (FW / VBD / RNTCP / LEP), DPM, Dist PHCO, PHEO, BPM, State, Dist & Block Control Rooms	Pre disaster assessment of preparedness, monitoring during disaster and epidemics and post disaster review and overall supervision
15.	Preventive measures water borne, vector borne, vaccine/unusual health events preventable diseases before monsoon season &	State, District & block level health facilities, MCHs	DPH, DHS, MD(NHM), Dir SIHFW, SSO, CDM&PHO, DPHO, ADPHO (FW/ VBD / RNTCP / LEP), DPM (NHM), Dist & Block TSK, MO, Dist PHCO, PHEO, BPM	Example: Indoor Residual Spray, vector reduction and distribution of Medicated Bed Nets during April- June and immunization against vaccine preventable diseases.

#### Flow of Information during flood / cyclone / epidemics



#### 5.1 Emergency Operation Centres (deptt.)

##### Preventive Action points for disasters at district level

- Control Room functions in the State Surveillance Unit, IDSP / District Surveillance Unit, IDSP fd/ Casualty for Epidemics/flood/Cyclones
- While Control room functions in the Office of ADMO (Med) during Mass Casualties.
- Emergency care services for mass casualty are being provided :24X7
- SOPs and Guidelines shared with the districts & blocks to be followed at the time of disasters
- 30 DHQs, 27 SDHs, 3 Govt. Medical Colleges & Hospital, one Capital Hospital & One RGH providing casualty services
- No. of functioning Casualty beds -1304 beds.

- Drugs & Logistic management for mass casualties is met from Buffer stocks of medicine which is made available at district level & simultaneously provision of local purchase is available with the CDMO.
- 108 Ambulances are deployed at strategic to transport cases to nearest health facilities.
- Additional makeshift beds & wards are arranged at all levels of hospital to accommodate the surge of casualties.
- Inter-sectoral coordination established with other related deptt. like Police, fire, Civil Defence, armed forces, Red Cross, Railway, Corporate & private hospital, ambulance services, NGOs, Voluntary Organization, RD, H&UD, PRI, W&CD, School Mass Education, SC & ST Deptt. Water Resources, Electricity, Sanitation Deptt. during emergency.
- There are 81 blood banks functional in the state with additional 28 nos. of blood storage units. There is provision of e-blood bank services to know the status of blood in each blood bank during the time of need. The Toll Free Number for e blood bank is 1800-345-7777
- Accredited Hospitals/Accredited Laboratories are in place for referral case management and laboratory diagnosis.
- Govt. Schemes like OSTF, RSBY, JSSK, VKKY are made available for the Below poverty line patients to meet the cost of treatment.
- Water Quality monitoring is being conducted in 15 districts at CHC level for preventive disinfection of water to prevent waterborne disease outbreaks during monsoon.
- Preventive steps like LLIN Distribution, Indoor residual spray, environmental sanitation measures is being conducted to prevent vector borne diseases during monsoon related disaster.
- Laboratory services at State Referral Laboratory centers, dengue sentinel sites, State district public health laboratories strengthened to carry out laboratory diagnosis of diseases having outbreak potential during the monsoon period.

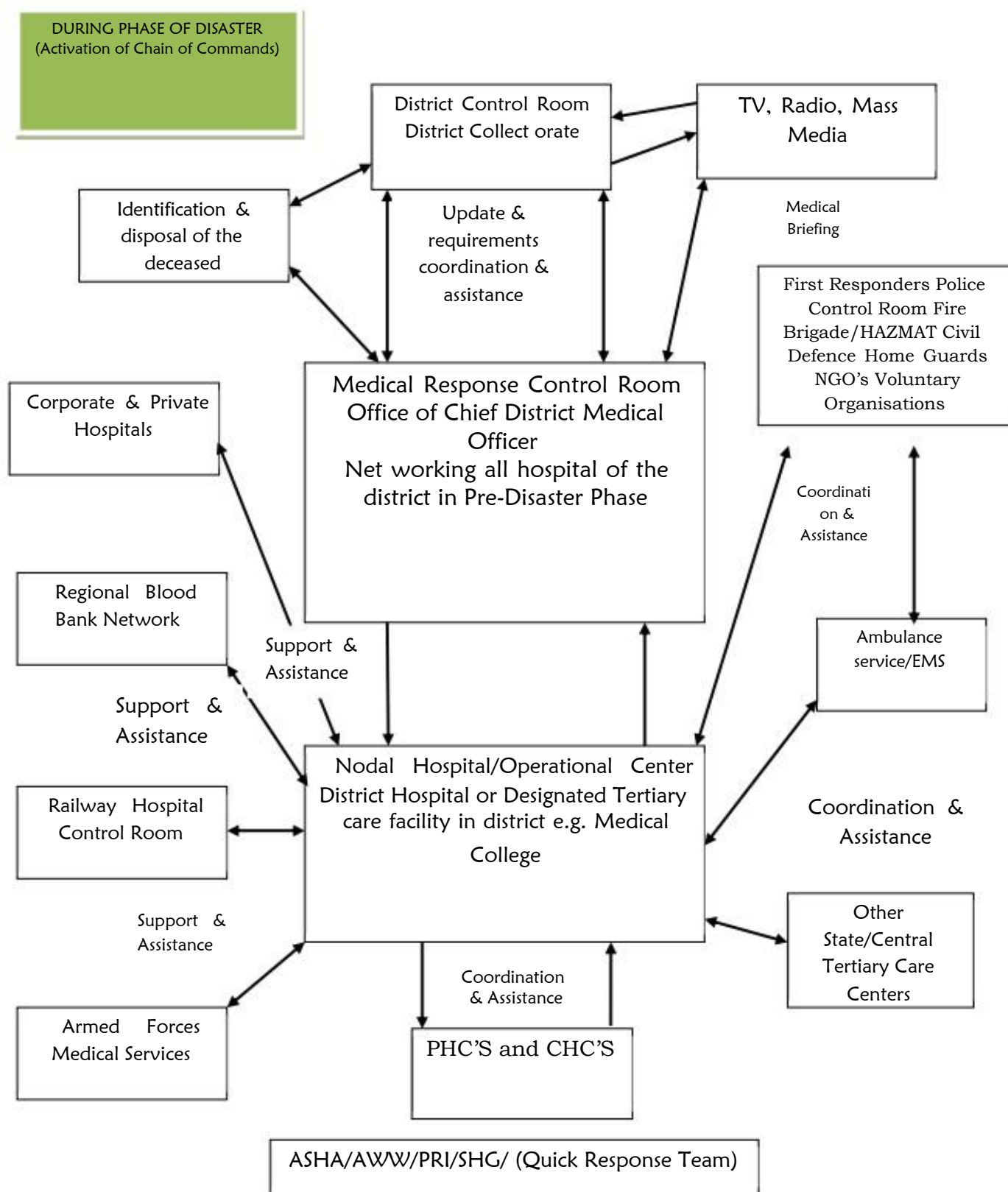
### 5.3 Contact details of Human Resources trained on Disaster Management (Annexure)

#### Roles & Responsibilities of State & Field Functionaries

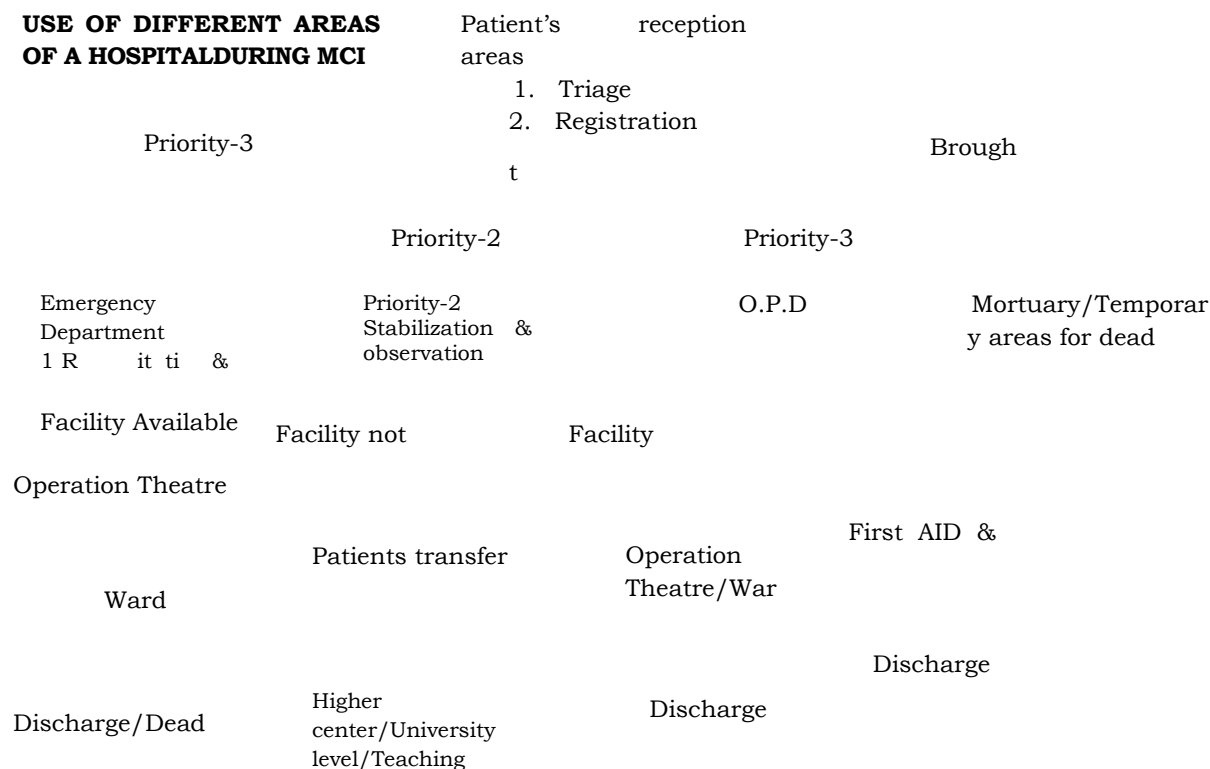
1. QRT( Quick Response Team)
2. MHU ( Mobile Health units)
3. Block RRTs( Block Rapid Response Teams)
4. District RRT ( District Rapid Response Team)
5. State Disaster & Mitigation Cell
6. National Health Mission( NHM)
7. Directorate of Family Welfare
8. Directorate of SIH FW

## 5.5 Resources

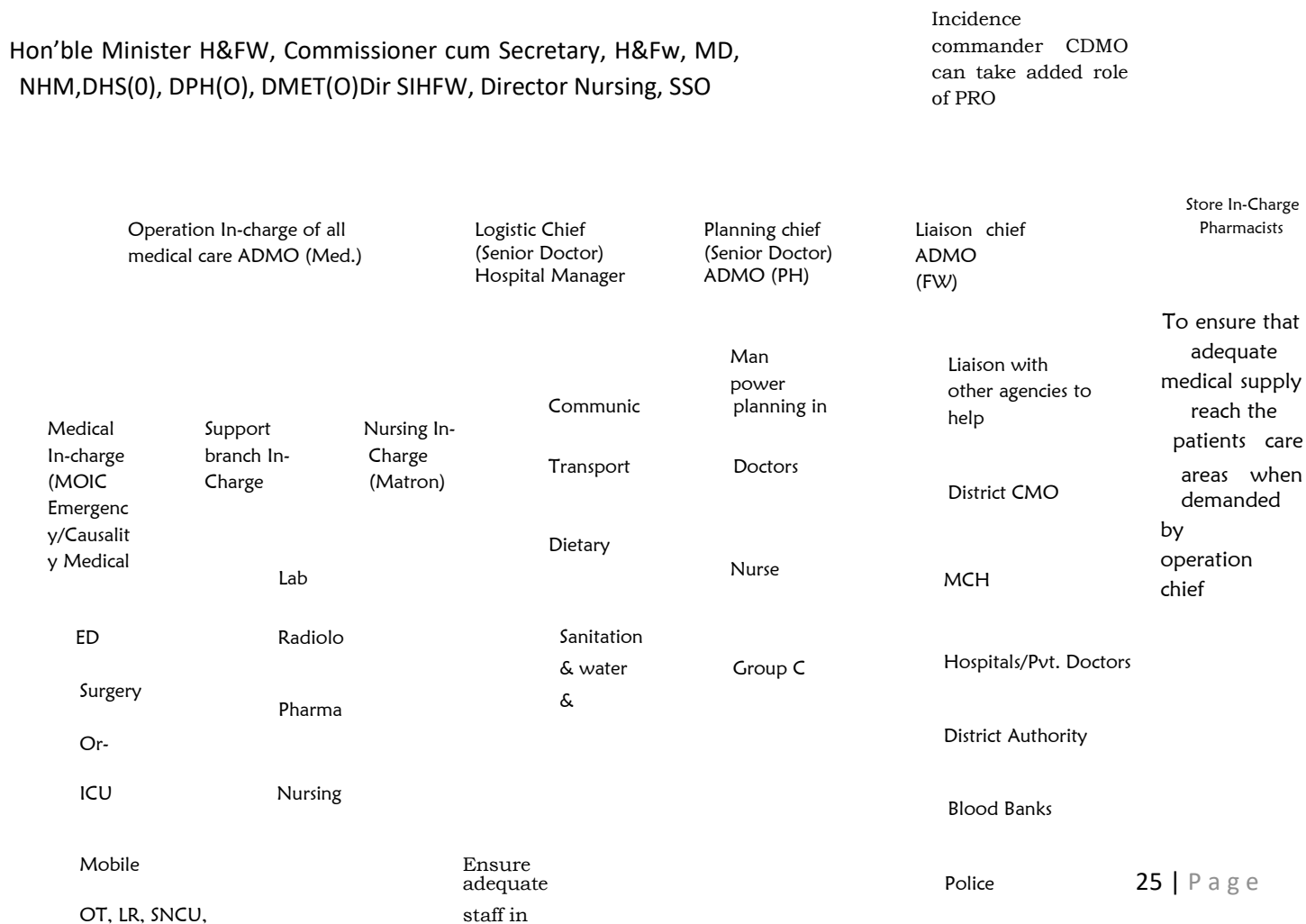
### 5.6 Activation of Chain of Command during disaster



## 5.7 Preparedness: Use of Nearest HCF during Mass Casualty Incident:



### 5.7.1: Deptt. Model Incident Command Structure



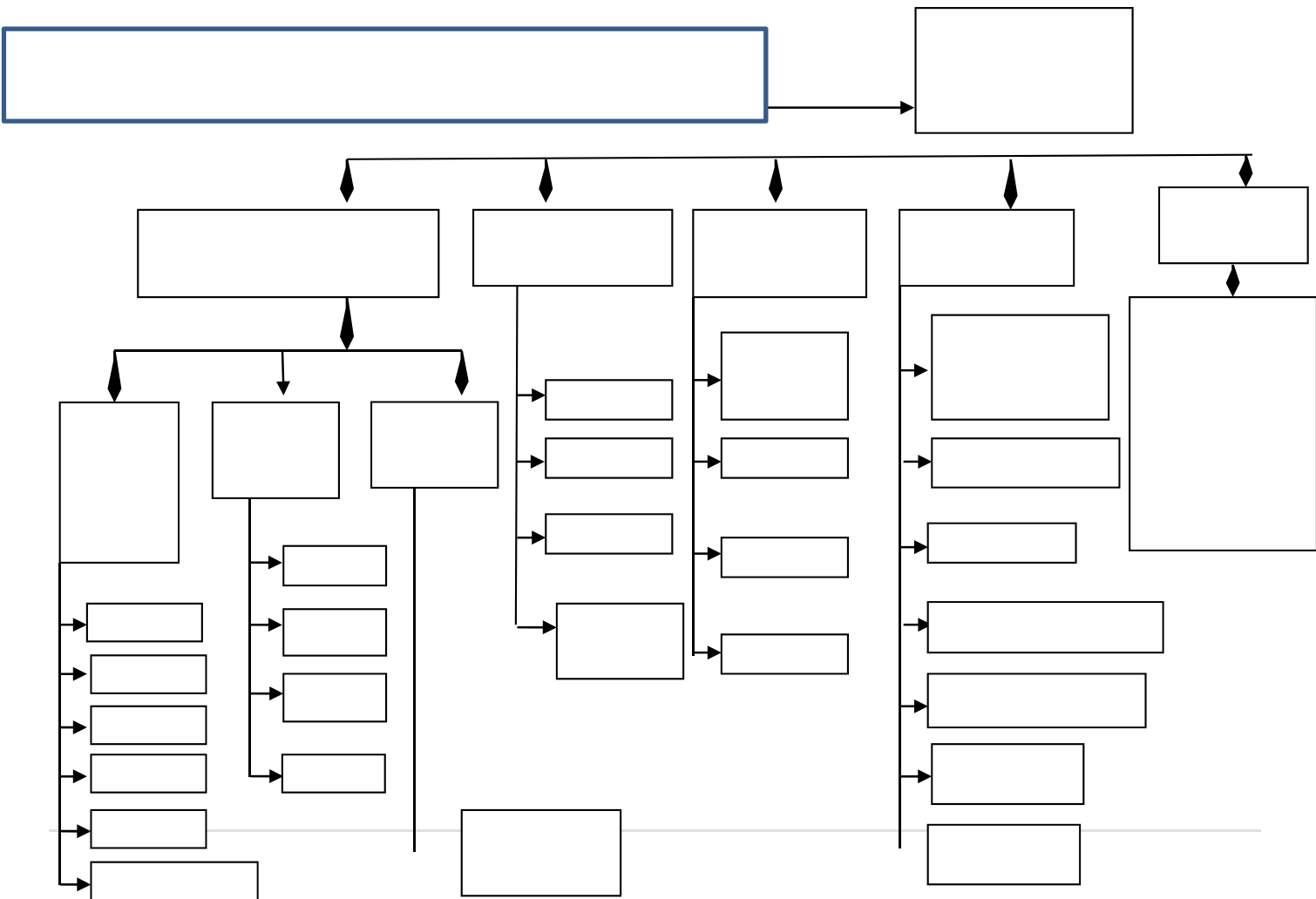


Table: Operational Planning at Hospital

Area	Person responsible / Consumables/logistics	Work assigned
Registration area/ Triage Area	<ul style="list-style-type: none"> <li>Registration Officer on desk</li> <li>Triage Doctors/Nurses</li> <li>Adequate nos of MOs in Emergency room</li> <li>Adequate trolleys/stretchers/wheel chair</li> <li>Hospital attendants</li> <li>Stocks of essential &amp; life saving drugs, IV fluids</li> </ul>	<ul style="list-style-type: none"> <li>Registration of case</li> <li>Screening by Triage Criteria (1,2,3)</li> <li>1. Severe injury</li> <li>2. Moderate Injury</li> <li>3. Mild injury</li> </ul>
2. Emergency Deptt	<ul style="list-style-type: none"> <li>Casualty MO/Doctor in Emergency Charge</li> <li>Oxygen, IV Fluids, lifesaving drugs</li> </ul>	Retriage, Emergency case management, referral of cases to related Deptt/ higher referral Centers
3. Definitive Care (OT ICU, SNCU, LR, NCU, WARDS)	Surg. Spl /Ortho. Spl/Neuro Surg /Cardiac Surg/other clinicians	Case management & referral to higher center
4. Intensive Treatment area Activation (ICUs)	Head of Anesthesiology/Critical Care /Medicine	Case management
5. Minor Treatment Areas	Nurses, attendants familiar with first aid, splinting & dressing	First Aid & Discharge
6. Holding areas for relatives/Non injured	Social service providers/NGOs/CBOs	Counseling and support in case referral, crowd management
7. Decontamination Area	If needed as per Protocol	As per guideline BMW/M
8. Essential ancillary services (Lab, Radiology, Pharmacy, radiology services, blood bank)	-Deployment or reallocation of HWs, Staff Nurses, radiographer Lab Tech, Pharmacist/ nursing staff from Other non-affected areas	
9. Mortuary Service	Mortuary In Charge, & a forensic Personnel	<ul style="list-style-type: none"> <li>Dead body preservation (Dead On Arrival), Disaster tagging</li> <li>Record maintenance</li> </ul>
10. Hospital Dietary System	Kitchen staff	Diet Provision to ambulatory in house patients
11. Sanitation Services	Ward attendants/Sweepers	Clean hospital linen, sterile dressing
12. Hospital Laundry & Sterile Supply	Laundry in charge	Clean hospital linen, sterile dressing
13. Water/electricity	Public Health Engineering Deptts. Electricity Department	Maintenance of Water & Electricity Supply
14. Staff education & Trg.	MOs, ADMO PH, State Health officials	
15. Disaster drills	DPH/CDM&PHO/DPHO	

## CHAPTER 6:

### RESPONSE, PLAN & RELIEF

Strategy -1: To provide emergency function support to Health Institutions & the Rapid Response Team Members at State, District & Block level

- One State Health Control Room at State Surveillance unit of IDSP and 32 district surveillance units at district level function throughout the year for overall monitoring of summer, monsoon & post monsoon period for unusual health events in the community.
- 8437 surveillance units are operational and communicate surveillance reports on selected diseases of public health importance such as Diarrhea, Dysentery, Typhoid, Jaundice, Measles, Malaria, Dengue, Chikungunya that are compiled and transmitted from Sub Center level to the State & Central level on fixed days every week.
- The network of surveillance units includes health facilities- MCH(5), DSU-32, SDH (27) CHC( 377), PHC(1226), OH(79), IDH(5), Sub Centers (6688), laboratories (439) and 58 Urban CHCs.
- These reports are received in three types of reporting formats - 'P' format from Health Facility, "S" format from Sub Centers, "L" format from Laboratories.
- Timeliness & Completeness of reporting is ensured each week at SSU for monitoring of disease trends to detect early warning signals of impending outbreaks.
- The state referral laboratories at three Medical Colleges & Hospitals, Capital Hospital, State Public Health Laboratory at Bhubaneswar, State Pathologist & Bacteriologists laboratory Cuttack, ICMR Institute (RMRC), Field unit at Kalahandi & Rayagada, District Public Health Laboratory at 23 District Head Quarters and dedicated IDSP laboratories at Koraput, Mayurbhanj, Kandhamal, Balasore, Angul, Kalahandi, Sundergarh support the state in laboratory confirmation of epidemic-prone diseases, routine lab surveillance and water quality monitoring .

State Control Room

- Instantaneously activates the chain of commands from State level to village level during Mass Casualty Incidents, Floods, Cyclones, epidemics, unusual health events.
- Support in functioning of Health Control Room 24X7 whenever there is any disaster/epidemic/unusual health event occurs.
- Listing of vulnerable /hazard prone blocks/SCs, Mapping Of District Control Rooms; list of state ,district & block RRTs with their numbers; Mobile Health Units(MHU)& their locations; district wise 108 ambulances; First Referral units(FRU) & their location; location of drug ware houses; nearest Intensive Care Units trauma care units & burn Centers, Blood Banks with Component Separation units; List of Cyclone shelters, list of alternative sites for storage of drugs, logistics and consumables, medical emergency equipment, case Management facilities probable list of Medical Relief Centers(MRC) and their location, boat ambulances, Road worthy vehicles in the district, contact numbers of Medical College & hospitals, Capital Hospital, RGH RKL, other referral accredited private Hospitals ,telephone nos (CUG)of key informants at district/Block/SC, list of Casualty functioning nearby with telephone numbers at MCH ,CH ,RGH ,DHQ ,SDH ,CHC, Pvt. Hospitals, telephone numbers of the nearest police station, fire station, related higher stakeholders of different Deptt. which are being kept in readiness to meet the challenges of disasters/ Epidemics at the state control room.
  - Timely & effective coordination is being done with Government of India and other related Departments such as PRI,W&CD, H&UD, SC&ST, S&ME, Forest & Environment, Industry& Mines, ARD, Agriculture, Works, Energy, Water Resources, Transport, Building, fire services, OSDMA, Home Deptt., from time to time as per demand of the situation with regard to resources, support & assistance, information sharing, drugs & logistic support, referral laboratory- support& technical expertise.
- Pre, during and post disaster assessment is quickly done with regards to HR, Funds, Logistics and Consumables with an aim to know the magnitude of the problem, population at risk, source of infection, vehicle of transmission and possible preventive, promotive and curative measures that will be undertaken for prevention of morbidity and mortality. Further this information is shared with the control room at state, districts and other relevant stake holders.
- Guidelines for epidemic management, disaster management, treatment protocols, SOPs for all field functionaries, Reporting &feedback formats communicated as per need of the situation.
  - Field review, spot assessment done for hands on training of the health staffs/Quick Response Team on the site to ensure provision of technical support to the field functionaries.

- Ensuring availability of drugs/consumables/WQM kits/equipment /instruments /mobility support to the district RRTs /MHUs /QRT, SRH kits and other health service providers for response measures during disasters/outbreaks.
- Ensuring deployment or reallocation of manpower in the affected areas of disaster as situation demands and keeping it in readiness.
- Ensuring timeliness in availability of funds at State, District, Block level and Sub-Centre level to meet contingency expenses during disasters/epidemics.
- Communicating the guidelines to districts for fund expenditure towards activities proposed & required for situations arising as per need basis during disasters/epidemics.
- Daily compiling of reports about the field level updates about cases, deaths, preventive measures, inter-sectoral convergence measures, IEC activities conducted, challenges faced, problem solving measures implemented to update the state database during the disaster.
- Maintain an inventory of all related guidelines, Treatment protocols, Standard Operative procedures, district action plans, district maps of vulnerable/hazard prone areas, mobile & telephone contact numbers of Key persons, financial records etc.
- Develop the media messages & update status of disaster mitigation and response work and share it with media advocates for further dissemination to the community to reduce panic & fear.
- To ensure spreading of health messages through local electronic, print & outdoor display media in the community.
- Document the lessons learnt from the disaster and share with higher stake holders & lower stake holders
- Review of district preparedness activities for disasters/epidemics such as prepositioning of stocks of essential drugs & logistics, manpower & training status, reporting mechanism, case management & referral mechanism, IEC/BCC activities, mobility support, coping mechanism for emergency services, mock drills, laboratory coordination activities, monitoring & supervision & feedback mechanisms.
- Develop action plan for providing Sexual & reproductive Health Services to women & adolescent girl child during disasters/epidemics/ unusual health events. Monitor & supervise provision of Sexual & reproductive Health Services to women & girls during disasters/epidemics/unusual Health events.
- Develop a training calendar & provide training to the RRT, TOT for MO, mobile health units(MHU), AYUSH & Paramedical workers, QRT for disaster/Epidemic/Sexual and reproductive health (SRH) management during crisis situation.
- To develop guidelines for epidemic management, disaster management, treatment protocols, SOPs for all field functionaries, Reporting & feedback formats.

- Monitoring the supply chain management of drugs logistics, SRH kits & support in mitigation services , location of Block & District RRTs, 108, Medical Relief Centers (MRCs)/Drug Treatment Centers(DTC) as per need basis, manpower deployment, mobility support, and coordination with other related Deptts. as & when required. •

Support to function the District/Block Health Control Room 24X7 whenever any disaster/epidemic/unusual health event occurs.

- Conduct media scan of Newspapers & electronic media daily and validate the information from district level regarding the incidence of cases & deaths due to outbreaks/disasters or any unusual events.
- Documentation and reporting to the higher Stakeholders in the Govt. on daily basis and communicating the feedbacks received to all HCFs.
- To collect and store disaster related information for post incident analysis
- Conduct trainings, monthly review meetings, and sensitization work shop to upscale awareness & strengthen response activities for flood/Cyclone/ Epidemic management of field functionaries.
- Water Quality Monitoring/ Lab Surveillance: Support in conducting random surveillance in vulnerable & endemic Block/SC villages in post disaster situations for follow up activities.

#### District Control Room

- Instantaneously activating the chain of commands from district level, Block level (RRT)& village level(QRT) during Mass casualty incidents, Floods, Cyclones, epidemics, unusual health events.
- Support in functioning of Health Control Room 24X7 and monitoring and supervising the activities whenever there is any disaster/epidemic/unusual health event occurs.
- Ensuring : Mapping of Block CHC control rooms, listing of marooned & partially marooned SCs and villages, availability of list of block RRTs & QRTs with their numbers; Mobile Health Units(MHU) & their locations; Block wise list of 108 ambulances and locations; First Referral units(FRU) & their locations with ambulance drivers & mobile nos; drug ware houses with pharmacist mobile nos; cyclone shelters with key informants mobile no; list of alternative sites for storage of drugs, logistics& consumables; Medical emergency equipment; alternate case management facilities; Medical Relief Centers(MRC), their location& mobile nos; boat ambulances; Road worthy vehicles in the district; nearest Medical College & hospitals & contact numbers; other referral accredited private Hospitals nos, telephone nos (CUG)of key informants at Block/ GPs/SC/village; list of nearest Intensive Care Units for adult & infants with telephone nos, trauma care units with telephone nos, Burn Centers with telephone nos, Blood Banks & Component Separation units with telephone nos, Casualty with

telephone nos functioning at MCH,DHQ,SDH,CHC, nearby Pvt. Hospitals, tribal residential schools, ILR points; block wise list of pregnant women with EDD; block wise list of Grade 3 & Grade 4 malnutrition children; Chronically ill patients; line list of physically challenged persons in the block; nearest telephone nos of Police control room, Fire services, Revenue control room, S&ME, W&CD, RD, H&UD, Water resources, home, fire services and electricity deptt. at district level/Block level to be kept in readiness to meet the challenges of disasters/ Epidemics.

- Timely & effective coordination with State Health Directorate& related Departments. from time to time as per demand of the situation with regard to resources, support & assistance, information sharing, drugs & logistic & consumable support, referral laboratory support & technical expertise.
- District RRT visits to the field for assessing the magnitude of the problem, population at risk, source of infection, vehicle of transmission and identify cause of the disaster/epidemic. It also monitors the Block & Village Quick Response Teams (QRT) for conducting the containment activities.
- Communicating the relevant guidelines to the Blocks/SCs and other related stake holders for epidemic management, disaster management, treatment protocols, SOPs for all field functionaries, Reporting &feedback formats.
- Field monitoring with supportive supervision to the Block/SC health staffs/QRT on the site& whenever it is required as per situation.
- To ensure availability of drugs/ consumables/ Water Quality Monitoring(WQM) kits / equipment/ instruments/ mobility support to the Block RRTs/MHUs/QRT,
- To ensure preposition of Sexual & Reproductive Health Kits (SRH kits) at health facility and village level and other health service providers for response measures during disasters/outbreaks.
- Ensure deployment or reallocation of manpower in the affected areas of disaster as per situation demands.
- Ensure timeliness in availability of funds at Block level to meet contingency expenses during disasters/epidemics.
- To communicate the guidelines for fund expenditure to blocks/SCs/GKS of village towards activities proposed & required for situations arising as per need basis during disasters/epidemics.
- Rapidly prepare a contingency health aid plan and procure required resources locally for preventive and containment measures.
- Daily compiling of reports about the field level updates about cases, deaths, preventive measures, inter-sectoral convergence measures, IEC activities conducted, challenges

faced, problem solving measures implemented to update the District database during the disaster.

- Maintain an inventory of all related guidelines, Treatment protocols, Standard Operative procedures, district action plans, Blocks maps of marooned & partially marooned areas, mobile & telephone contact numbers of Key persons at blocks, SCs, GPs, GKS, financial records etc.
- To update status of disaster mitigation and response work and share it with media advocates for further dissemination to the community to reduce panic & fear.
- To ensure spreading of health messages through local electronic, print & outdoor display media in the community to reduce fear in the community.
- Review of block preparedness activities such as prepositioning of stocks of essential drugs & consumables, manpower & training status, reporting mechanism, case management & referral mechanism, IEC/BCC activities, mobility support, coping mechanism for emergency services, mock drills, laboratory coordination activities, monitoring & supervision & feedback mechanisms.
- Develop action plan for providing Sexual & reproductive Health Services (SRH) to women & adolescent girl child during disasters/epidemics/ unusual health events. Monitor & supervise provision of SRH Services to women & girls during disasters/epidemics/unusual health events.
- Develop a training calendar & provide training to the Block RRT, MO, MHU, AYUSH & Paramedical workers, QRT for disaster/Epidemic/SRH management during crisis situation.
- Monitoring the supply chain management of drugs, logistics & consumables, SRH kits & support in mitigation services during disaster, location of Block RRT, 108 Ambulance, Medical Relief Centers (MRC)/Diarrhoea Treatment Centers (DTC) as per need basis, manpower deployment, mobility support, and coordination with other related depts. as & when required .
- Conduct media scan of Newspapers & electronic media daily and validate the information collected from districts/block level regarding the incidence of cases, deaths and other unusual health events.
- To communicate Guidelines on prevention & management of Heat stress disorders, Acute Diarrhoeal Diseases, Jaundice, Dengue, Measles, swine flu, JE, Malaria, Chikungunya to Blocks sufficiently ahead to undertake preparedness activity by the districts during outbreaks.
- Conduct trainings, monthly review meetings, and sensitization work shop to upscale awareness & strengthen response activities for flood/Cyclone/ Epidemic management of field functionaries.

- Water Quality Monitoring/ Lab Surveillance: Support in conducting random surveillance in vulnerable & endemic SC villages.
- Documentation & feedback mechanism to be conducted on real time basis for post incident analysis.

#### Block Control Room

- Instantaneously activating the chain of commands from Block level to Village level during Mass Casualty Incidents, Floods, Cyclones / epidemics/unusual events.
- Functioning of Block CHC control Room & coordination with Medical Relief Centers & Diarrhoea Treatment centers at village/SC level 24x7.
- List & map of Vulnerable CHC/PHC/SC/Village with CUG nos of Health functionaries available with Block Control Room, enlist all the locations of 108 ambulances, MRCs/ DTCs positions (Community hall, Panchayat office, school), telephone nos of key informants, List of marooned villages, partially marooned villages, ILR points, pregnant women list to be available with Block Control Room. List of related Deptts such as Revenue, PRI, W&CD, S&ME, S T&SC, RD, ARD, Home, fire services, electricity services etc. telephone nos. must be available with Block Control Room.
- Conducting IEC/BCC Activities in print & outdoor display media to spread health messages regarding do's & don'ts during disasters & epidemics.
- Review of PHC/SC preparedness activities for disasters/epidemics such as prepositioning of stocks of essential drugs, logistics & consumables, manpower & training status, reporting mechanism, case management & referral mechanic, IEC/BCC activities, mobility support, alternative power supply, coping mechanism for emergency services, mock drills, laboratory coordination activities, monitoring & supervision & feedback mechanisms.
- Communicating guidelines for epidemic management, disaster management, treatment protocols, SOPs for all field functionaries, Reporting & feedback formats.
- Conducting IEC to spread health messages to prevent disease outbreaks.
- Provide Sexual & reproductive Health Services to women & girls during disasters/epidemics/unusual health events.
- Provide training and hand holding support to the QRT members for disaster/Epidemic/SRH management during crisis situation at SC level.
- Maintain the supply chain management of drugs logistics, SRH kits & support in mitigation services during disaster, opening of MRC/DTC, manpower deployment, mobility support, coordination with other related deptts. etc
- List of notified referral hospitals with various schemes of Govt for free treatment shall be displayed in the OPD for knowledge of the community.

- List of Blood banks, Blood storage units, notified referral hospitals, referral laboratories with various schemes of Govt for free treatment should be available with district & Block Control Room.
- Conduct trainings, monthly review meetings, and sensitization work shop to upscale awareness & strengthen response activities for flood/Cyclone/ Epidemic management of field functionaries.
- Water Quality Monitoring/ Lab Surveillance: Support in conducting random surveillance in vulnerable & endemic SC villages.
- Documentation & feedback mechanism to be conducted on real time basis for post incident analysis.
- Management of the overall response activities and providing hand holding support in the field
- To mobilize resources for response measures (Manpower /Mobility support/ drugs/ logistics/ funds/ others).

#### Quick Response Team

The Quick Response team is a new initiative by the Health Deptt. based on the post Cyclone 'Phallin' experience. The village will be created as the first contact point for disaster response and mitigation measures under the leadership of Health Workers. This team will comprise of six members like ASHA/AWW/SHG Member/Teacher/Youth Club Member of a village who will be trained as first responders in relief & rescue operations and act as key informants for disease incidences & deaths due to outbreak prone disease in the affected areas during disasters/epidemics.

#### Roles & Responsibilities

- Instantaneously activating the Quick Response team members or First Responders at Village level during Mass casualty incidents, Floods, Cyclones / epidemics/unusual health events.
- The telephone nos of MHU, HCFs, 108 ambulances, HW, MPHS, PHEO or nodal person of Block RRT must be available with QRT monitor. This needs to be displayed at a prominent place of congregation(village shop, Bhagabata Tungi ghara, Puja Ghara, Youth Club)
- Village Population, house hold numbers with list of Pregnant women, adolescent children, infants, neonates & old aged persons, Chronically ill cases, list of cyclone shelters, schools, community hall, Panchayat office, list of tube wells, community wells, PWS stand posts shall be available with the QRT.
- QRT modules about FAQ for disasters/epidemics/unusual events, SOPs, Do's & Don'ts shall be available with the QRT.

- List of telephone nos of nodal persons for contact at SC & block level CHC for stock replenishment & other necessary services during disaster available with QRT.
- Conducting IPC in the village/Ward to spread health messages about environmental sanitation, personnel hygiene, safe drinking water, use of mosquito net, hand washing, toilet use, first aid to prevent, injury, trauma waterborne & vector borne disease outbreaks.
- Provide Sexual & reproductive Health Services for women & adolescent girls during disasters/epidemics/unusual health events.
- Ensure solid waste management (Collection, segregation and transport) at all levels (village/ward) to prevent contamination of food, soil and water.

## CHAPTER 7

### RESTORATION AND REHABILITATION

- To ensure that all Health facility can endure the actual disaster by adopting structural & non-structural measures and ensuring that all health facility have a Disaster management and mitigation Plan.
- Damages and loss assessment is done aftermath the disaster and communicated to related higher stakeholders for immediate, short term and long term action and follow up measures.
- Resource Planning-To keep all health Infrastructure, equipment, Instruments, drugs, consumables, logistics & personnel in the state of readiness.
- Timely dissemination of Guidelines for State Health Contingency Plan (SOPs for Heat wave/Flood/Cyclones/Epidemics/disasters) & Disease Surveillance Systems.

## CHAPTER 8:

Recovery: Capacity building for Quick recovery mechanism from disaster impacts (Relief & Recovery)

Human Resources & Training for Disaster/Epidemic Preparedness & response

- One State Surveillance Unit (SSU) and 30 District Surveillance units (DSU) are functional with IT personnel, Hardware, Software & Video Conferencing set up.
- IDSP unit functions under the administrative control of State Surveillance Officer (SSO) at state level and ADMO (PH) at district level in all the 30 districts. In addition to this 30 District Surveillance Medical Officers, 21 Epidemiologists, 2 Microbiologists, one entomologist are trained and placed at SSU & DSU for monitoring and supervision of IDSP programme components at district & sub district level.
- 2355 MOs, 30 ADMO (PH), 14 DSMOs, 13354 paramedical staffs, 215(Spl in Paed. & Spl in Med.), 90 Medical Officers of three Medical Colleges, 16 Epidemiologists have been trained in Disease Surveillance & Out break Response & management.

- State Surveillance Unit, District Surveillance Units & 3 Govt. Medical Colleges & hospitals of the state have been identified as training centers for IDSP.
- Weekly reports on prescribed formats are received from about 8447 reporting units and 449 laboratories timely on fixed days every week.
- One state RRT & 30 RRTs are trained & kept ready to respond to any disasters/epidemics in the state.
- Disaster response, management & Mitigation Plan Document, Draft Training Module for MPHS, RRT developed for training, sensitization of MO & Paramedicals.

## CHAPTER 9:

### Mainstreaming DRD in Development Projects

9.1 Past Experience of Cyclone Phallin' : Odisha faced the Super Cyclone 'Phallin' on October 12<sup>th</sup> when 128 blocks in 18 districts with 1924 GPs, 15578 villages were affected. More than 10.5 lakh people were evacuated to nearest Cyclone shelters in the first phase. Subsequent heavy rainfall caused flood in 45 blocks in seven districts, 355 GPs 2276 villages were affected with evacuation of 5 lakh population. Pre-Disaster status review & preparedness & timely post-cyclone assessment & fulfillment of needs regarding HR, Drugs & logistics, emergency services at health facilities, power supply, water supply, food supply, blood banks of MKCG MCH, Mayurbhanj DHH along with provision of funds, mobility support, inter-sectoral coordination, preventive disinfection of drinking water sources, preventive RCH services, disease surveillance, monitoring & supervision, early warning signal response activities, lifesaving interventions could protect the lives of men, women & children in the affected 14 districts

### 9.2 Challenges Faced during the Cyclone Phallin' 2013

1. Role of Key informants at Village level not defined( ASHA/ AWW/ SHG/ PR/ Teacher/ CBO)
2. Preventive Disinfection of Private Dug Wells & Private Tube wells
3. Water quality monitoring in the affected areas in coordination with other Deptt.
4. Reporting by key informants about fever, diarrhea, measles, malaria, snake bite & skin diseases.
5. Monitoring & Supervision by Mid-level health managers at block level
6. Sexual and Reproductive health services to the pregnant women & adolescent girls in marooned villages.
7. Minimum SRH services like Clean Disposable delivery kits, Family planning services, HIV test kit, STI drug kit, ART drugs for three months.
8. Psychological & Medical Support to the Gender based violence victims during disasters at FRU level.

Problems faced during Flood /Epidemics

- Odisha is perennially affected by natural hazards like Heat wave/ Flood/Cyclones which lead to diseases, disability and deaths in the community. After the flood/Cyclone districts experience waterborne & vector borne diseases in the community.
- To reduce the risks of disaster related health events Health department undertakes preparedness activities at all levels in advance. This can mitigate the suffering of the people, loss of life, property & livelihood.
- To address such disasters/epidemics, health functionaries located at state, district, block level make an action plan in advance.



## 9.2 State Initiatives for integrating different schemes for Disaster Risk Reduction

1. Capacity building of front line workers in the village such as ASHA/ AWW/ SHG/ PR/ Teachers/CBO as Quick Response Team Members (QRT) as Key Informants for health surveillance, post disaster health relief measures & IEC activities.
2. Provision of Minimum Sexual & Reproductive Health Services to Pregnant Women & Adolescent girls during disasters.
3. Water Quality Monitoring at village level by providing water testing kits (OT test Kits, H2S Test Kits) to MPHS/HWs. Inter-sectoral coordination meeting with RWS&S and PHED at state and district level for ensuring provision of safe drinking water by monitoring quality using laboratory testing methods.
4. Establishing a State of Art Public Health Laboratory at State level, District Public Health Laboratory, FRU public health labs & SDH public health lab to ensure testing of water, stool, and blood samples for cholera, measles, Jaundice, dengue, Chikungunya, AES, Swine flu, leptospirosis, meningitis etc & Malaria at the field level.
5. Establishing additional Medical Colleges, ICUs, SNCUs, Trauma Care Centers, and Burn Care Centers for emergency case management during disasters.
6. Recruitment of additional 10000 posts of Paramedicals, such as Radiographers, LTs, Staff Nurses, 786 AYUSH, 400 BDS for surveillance, case management & M&S.
7. Intensifying IEC/BCC activities at GKS level for up scaling community ownership in case referral mechanism, provision of safe drinking water & environmental sanitation.
8. Fund provision by NHM enhanced to manage public health emergencies by provision of preventive and containment measures in the affected area through 'Rogi Kalyan Samitis' at DHH, SDH, Block CHCs and Medical Colleges.
9. Coordination with 108 vehicle, Janani Express and Mobile Health Unit vehicles for quick mobilization of patients to required health facilities.
10. Govt. schemes like OSTF, RSBY, JSY, 'Mamata', 'Biju Krusaka Kalyan Yojana' are operational for benefit of the community in rural and urban areas.



9.3: Integrating different schemes for Disaster Risk Reduction: To provide Minimum Initial Reproductive & Sexual Health Services to Pregnant Women & Adolescent Children during disasters. Why do we need to Integrate Minimal Initial Service Package (MISP) for and Reproductive & Sexual Health Of PW & Adolescent Girls along with Disaster & Mitigation plan of Odisha?

What is MISP?

MISP is a state initiative project towards protecting the health of women & adolescent girls who are vulnerable during disasters. It will specifically address the sexual & reproductive Health services & gender based violence during disasters at district & sub district level.

Objective

1. To improve upon the existing Sexual & reproductive health service delivery package for Women & Adolescent girls at the time of any disasters.
2. To reduce Gender based Violence (GBV) and support the GBV victims during the disasters.

Strategy

1. Capacity building of all MOs & paramedical Workers, Quick Response Team(QRT) or first responders( HW/ ASHA/AWW/SHG/PR/Teacher/CBO/Youth club member)
2. Inter-sectoral coordination with related deptt. like PR, RD, H& UD, School & Mass Education, ST & SC, W&CD, Water & Sanitation, Judiciary, Police & Revenue Deptt.
3. Prepositioning of Drug, consumables, Logistics - Clean Disposable Delivery Kit, FP measures like OC/EOC/IUD/Condom, HIV test kits, STI Drugs kits, ART drugs, Dignity kits for adolescent girls, women & men & SOPs for each of the kits etc
4. Creation of a Help-desk at DHHs/FRUs for examination of sexual violence victims & their counseling.

Action Plan

District Level: ADMO PH & ADMO FW will work in coordination with each other to implement this programme in the field. Sensitization of the nodal persons conducted at state level for implementation of the MISP plan roll out during disaster. The data required for development of the action plan are the following-

- Block/SC/ Village wise list of Pregnant women of the district , Eligible couple list
- Block / SC / village wise list of Adolescent Girls
- Block wise CHC Store Pharmacist name & Nos
- Block wise Mobile nos of MO I/C, PHEO, MPHS(M&F), BPM,BDM,DEO
- Block/SC wise list of marooned villages & partially marooned villages
- Village wise Front Line workers ( HW/ASHA/AWW/SHG/PR/Teacher) list & nos
- Block wise list of mobile nos of RRT, MHU & QRT teams, FRUs, DPs
- MHU /PHC(N) AYUSH Mobile Nos & List
- 108 Ambulances/Janani Express mobile nos & their location
- Related Deptt. Nodal Officers names & Nos to be available with district Control Room
- Prepositioning MISP drugs, consumables, diagnostic kits and their distribution in cyclone affected 12 districts.
- List of MOs & Paramedical workers with their CUG nos, Front Line workers (ASHA/AWW/SHG/PR/Teacher/HW/CBOs/Youth club Members) should be available with the control room at district & block Level.

## CHAPTER 10.

### Provision for financing activities

State has provisioned and sanctioned funds (Rs.10.0 Crore) for Public Health Response during the Year 2015-16 and Rs.5.0 Crore for the Year 2017-18 for different activities such as capacity building, district public health laboratory logistics/consumables, IEC/BCC activities, research & documentation and emergency corpus funds etc for disasters/epidemics or any unusual health events.

## CHAPTER 11.

### Knowledge Management

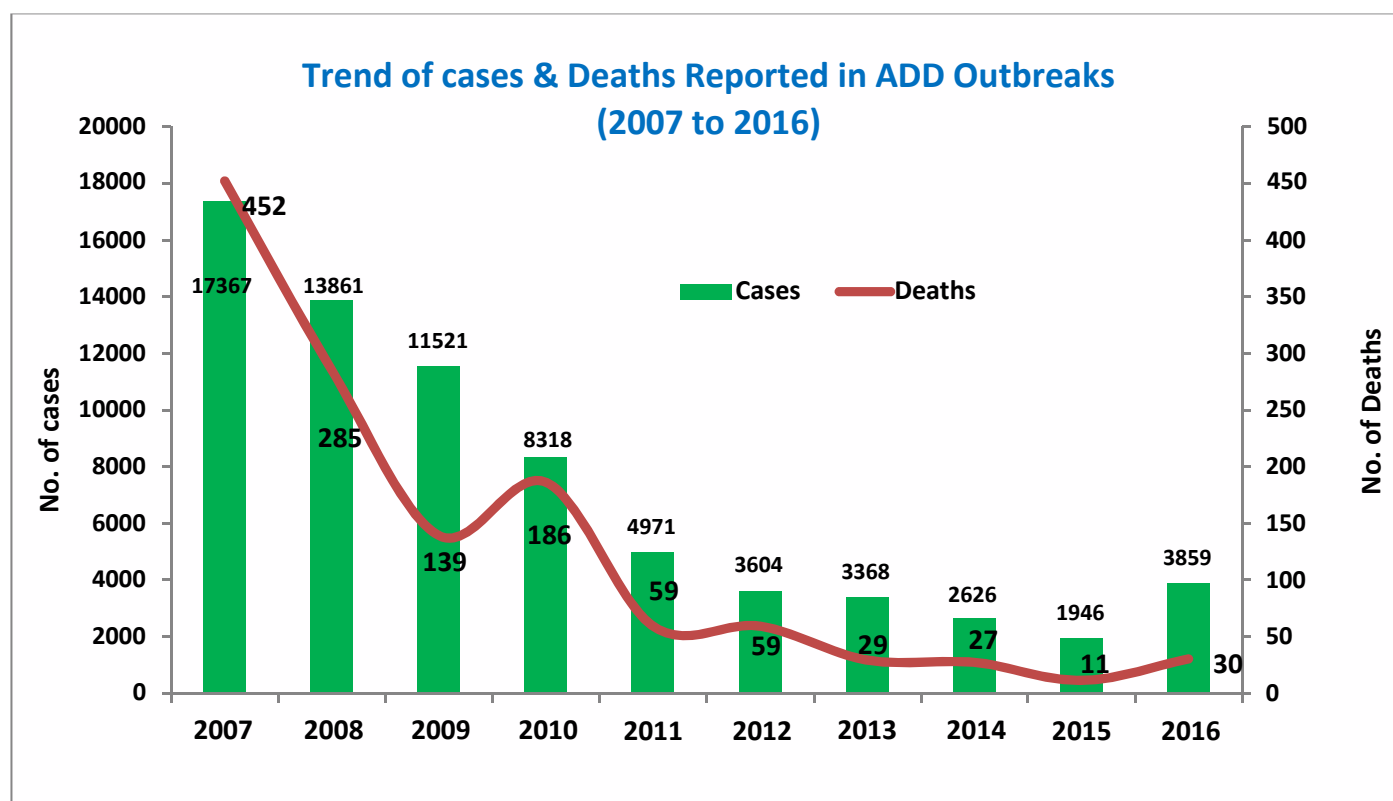
#### 1. Outbreak Investigation & Response

- State Surveillance Unit functions as state health control room during outbreaks/disasters.
- One State Technical Task Force team, 31 District RRTs, 377 RRTs conduct outbreak investigation as per situation for immediate containment measures.
- Guidelines for prevention of Acute Diarrhoeal Diseases, treatment protocols, standard operative procedures, do's & don'ts are circulated before monsoon to address the challenges of waterborne & vector borne diseases.
- FAQ on Diarrhea, Trigger events, Outbreak investigation Steps, weekly tally sheets are circulated to districts to upscale the knowledge of MOs & Paramedical workers.
- On receiving the information about clustering of cases; the RRT team at District & Block level immediately move to the site to conduct outbreak investigation to know the magnitude of the problem, identify the source of infection, source of transmission and recommend containment measures in the affected area.
- Suitable samples are collected for lab confirmation at State referral laboratory of MCHs, two State Public Health laboratories, ICMR laboratories at BBSR, Kalahandhi & Rayagada and 23 DPHL for confirmation of diseases causing organisms for the outbreak.
- Documentation of outbreaks in form of Early Warning Sign, Interim Report, Final Outbreak investigation report, death investigation report is submitted timely i.e., EWS(48hrs);interim report(<7 days); final outbreak report to include lab confirmation report(< one month), death investigation report within three days of death to SSU.
- During 2016-17, 315 outbreaks were reported with 16202 cases & 56 Deaths. ( ADD-47%, FP-20%,Measles-14%, Hepatitis- 5%, Chicken pox-6%, Anthrax-3%).
- Of these outbreaks 60% of them were laboratory tested for causative organisms.

- Daily media scan & district feedbacks about the cases & deaths in outbreaks are being shared with Hon'ble Health Minister, Principal Secretary, MD NHM, RD, DPH and DHS Odisha.

#### Laboratory Surveillance & Water Quality Monitoring

- The three Medical College & Hospitals, Capital Hospital, State Public Health Laboratory at Bhubaneswar, State Pathologist & Bacteriologists laboratory Cuttack, ICMR Institute (RMRC), Field unit at Kalahandi & Rayagada, 23 District Public Health Laboratory, 7 IDSP laboratories support the state in laboratory testing of epidemic-prone diseases as well as routine lab surveillance to confirm the diseases causing organisms.
  - Important Public Health diseases like cholera, Viral Hepatitis, Measles, Meningitis, Diphtheria, Dengue, Chikungunya, AES/JE, Anthrax & Leptospirosis are laboratory tested at these laboratories to support in immediate containment measures.
  - Guidelines for Laboratory sample collection & transportation circulated to districts during disasters/epidemics.
  - Water Quality test kits- Orthotoludine & H2S test kits are available with 30 districts to conduct water sample testing during the monsoon season to know the status of bacteriological quality of water. It also serves as a preventive step for proper water disinfection with bleaching powder.
- For Water & rectal swab sample collection during disasters/epidemics sterilized water bottles & Cary Blair Medium has been provided to the districts & CHCs.
- During 2016-17, 90 % of the outbreaks were laboratory tested.
  - In the year 2016-17, rectal swab samples, 372 watersamples, 148 blood samples for measles, seven thousand serum samples for dengue were laboratory tested for causative organism.



IEC/BCC activities & Media Advocacy to spread the health messages in the community during disasters.

- IEC/BCC activities are intensified through Electronic / print media/outdoor display media & folk media to upscale awareness in the community.
- One Special Health Awareness Campaign was conducted from 1<sup>st</sup> to 15<sup>th</sup> August 2013,2014,2015,2016 to upscale health awareness of the community through - Dengue, diarrhoea,

Malaria (Nidhi Ratha) through IPC &Folk media, & video shows.

- District level activities such as disinfection measures, case management and referral facilities, availability of anti-diarrheal, use of ORS, use of Halazone tab & Chlorine tab disinfection of drinking water sources with bleaching powder, personnel hygiene, environmental sanitation messages are being prioritized for IEC/IPC activities during the monsoon & post monsoon period at district level. GKS are being involved at village level for community ownership.
- Sensitization meetings of ADMO (PH)/DSOs/MOs/Epidemiologists /MPHS/DM were conducted to improve surveillance and outbreak response activities during disasters/epidemics.
- Sensitization of health service providers like ASHA/AWW/HWs regarding imparting health education on safe drinking water, personal hygiene, environmental sanitation, disinfection of drinking water sources etc.
- FAQs, Leaflets, posters, banners are provided to districts to spread messages regarding heat wave, flood, Cyclone/diarrhea/measles/ malaria/dengue etc.

Monitoring & Supervision: Aim to develop an Early Warning System (EWS) through Quick Response Team at village level.

Monitoring & Supervision:

- Regular monitoring and supervision is being under taken by the State and District Officials of the different IDSP Components implemented in the field level.
- State nodal Officers are identified for all the 30 districts to monitor and supervise the ongoing preventative measures for disasters/epidemics in the district.
- Commissioner Cum-Secretary Health & FW conducts reviews of Water borne & Vector Borne Disease each month to assess the districts for their preparedness.
- Hon'ble Minister conducted a review meeting of CDMOs through video Conferencing to assess the monsoon preparedness of districts to meet the challenges of disaster/Epidemics.
- Inter-sectoral Convergence meeting convened by Addl. Chief Secretary cum Development Commissioner to review state preparedness for activities to be conducted by different related Departments in view of coming monsoon.
- DHS (O),DPH (O) reviewed the activities of IDSP, SDMU, SIHFW for disaster & mitigation action plan to be implemented during coming season.
- The State Control room functioning for Heat Wave till June 15<sup>th</sup> will continue to function during monsoon uptill 30<sup>th</sup> October.
- The RRT teams, ambulances, drugs & consumables, telephone numbers of key persons are kept in readiness in the districts to meet the challenges of disaster.
- Reports are being received to State Control Room through E-mail/Fax. (Phone No - 0674-2390466 & Toll Free Number- 06742390466)

## MITIGATION

Mitigation is the effort to reduce loss of life and property by lessening the impact of disasters. In the face of increasing menace of various hazards, mitigation would remain the key and the most effective strategy to reduce the risks of various hazards. Structural mitigation measures generally refer to capital investment on physical constructions or other development works, which include engineering measures and construction of hazard resistant and protective structures and other protective infrastructure. Non-structural mitigation measures refer to awareness and education, policies, techno legal systems and practices, training, capacity development, public commitment, and methods and operating practices, including participatory mechanisms, and the provision of information, which can reduce risk with related impacts.

### Structural Mitigation Measures:

- All public buildings like schools, hospitals, and health centres should be multi hazard resilient, built on raised grounds and platforms with retrofitting and having adequate exit gates and fire extinguishers in place.
- Multipurpose community shelters should be constructed in all vulnerable areas.
- Houses built in the area should have multi hazard resilient features keeping in tune with cultural housing practices.
- Watershed management:
  - Periodical cleaning, de-silting and deepening of natural water reservoirs and drainage channels.
  - Construction of irrigation channels - Sluice gates may be linked with ponds, which could be used as a water resource for enhancing livelihood.
- Retrofitting of key structures buildings: Retrofitting reduces the vulnerability of damage of an existing structure during a future earthquake. It aims to strengthen a structure to satisfy the requirements of the current codes for seismic design. In this respect, seismic retrofit is beyond conventional repair or even rehabilitation. The principles of seismic retrofit refer to the goals, objectives and steps. The steps encompass condition assessment of the structure, evaluation for seismic forces, selection of retrofit strategies and construction. The applications include different types of buildings, industrial structures, bridges, urban transport structures, marine structures and earth retaining structures. The benefits of retrofitting include the reduction in the loss of lives and damage of the essential facilities, and functional continuity of the life line structures. For an existing structure of good condition, the cost of retrofitting tends to be smaller than the replacement cost. Thus, the retrofitting of structures is an essential component of long term disaster mitigation. The current earthquake codes of

practice are applicable to new buildings and cannot be applied to these existing buildings that do not have earthquake resistant features. Thus, the existing stock of important lifeline buildings is vulnerable and need to be retrofitted to raise their level of performance in earthquakes. This has to be taken up by the administration as a long term mitigation measure. Many buildings are considered critical or 'lifeline' buildings based on their role in a post disaster scenario as hospitals, command centres for relief operations, emergency shelters etc. Improved seismic performance of these buildings both protects the occupants of these buildings and enables them to respond more effectively to an earthquake disaster. The retrofitting of lifeline buildings should be taken on in a campaign mode and should be incremental. Institutions and NGOs working on shelter and housing may be asked to demonstrate retrofitting models for various buildings and learning may be disseminated to key stakeholders for scaling up.

#### Non-structural Mitigation Measures

- Risk transfer mechanisms should be created, i.e. establishment and strengthening of insurance schemes and policies, which would transfer losses due to hazard to a third party. Insurance schemes for crop, cattle, small businesses and life should be strengthened and promoted to minimize economic losses.
- Groups of architects, engineers and masons should be formed and trained on building safe infrastructure.
- Alternate safe housing technology along with rainwater harvesting structures should be constantly encouraged and mainstreamed for long-term vulnerability reduction. Policies and bye-laws could be developed for the same.
- Continued awareness campaign and encouragement for disaster-proof habitat planning at community level including shifting/relocating from hazard prone areas to safer places (with some incentives, if feasible).
- Disaster management may be included as a part of school, college, curriculum starting from primary level.
- Conducting research on alternative cropping to reduce adverse affect due to flood, water logging or drought.

## Hazard- Specific Mitigation Actions:

In addition to the multi-hazard mitigation actions the following hazard specific mitigation actions should be taken depending on the vulnerability of the village/ block/ district.

Hazard	Structural Mitigation	Non- Structural Mitigation
Flood	<ol style="list-style-type: none"> <li>1. Construction, maintenance and protection of flood control structures like embankments, ring bunds, etc.</li> <li>2. Dams and levees can also be constructed which can be used as temporarily storing space which reduce the chances of lower plains getting flooded.</li> <li>3. Critical buildings as well as private houses in flood-prone areas should be constructed on an elevated area and if necessary on stilts and platform.</li> <li>4. Construction of tube wells on raised platforms.</li> <li>5. Construction of seed bank on higher ground.</li> </ol>	<ol style="list-style-type: none"> <li>1. Well maintained boats available at all time at Gram Panchayat level.</li> <li>2. Crops that can be harvested before the onset of monsoon/flood season and crops that are flood friendly should be grown in the region</li> <li>3. Awareness on flood-proof habitat planning with long term goal of flood plain zoning and rehabilitating all to safer zones.</li> </ol>
Earthquake	<ol style="list-style-type: none"> <li>1. All buildings especially public building must have earthquake resilient features.</li> <li>2. Building bye laws applicable for the specific earthquake zone of the region should be followed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Awareness on building bye-laws applicable for the specific earthquake zone.</li> </ol>
Drought	<ol style="list-style-type: none"> <li>1. Construction of irrigation channels.</li> <li>2. Existing ponds to be cleaned and more ponds to be dug as part of MGNREGA activities in village</li> <li>3. Sluice gates to be linked with ponds</li> <li>4. Tube wells and dug wells to be built in villages</li> <li>5. Construction and maintenance of grain banks on safer locations</li> </ol>	<ol style="list-style-type: none"> <li>1. Promotion and support for rainwater harvesting.</li> <li>2. Awareness on government subsidy on bore wells and tube wells for irrigation purposes</li> </ol>
Fire	<ol style="list-style-type: none"> <li>1. Establishment of fire stations as per Fire Safety Bye-laws</li> </ol>	<ol style="list-style-type: none"> <li>1. Promotion of usage of fuel blocks during summers to minimize cases of fire during summer</li> <li>2. Awareness campaign on fire hazard and strategies to prevent fire incidents</li> </ol>

## ANNEXURE:

- Annexure 1: Contact details of Head Quarter
- Annexure 2: Contact details of Health Control Room at State/District
- Annexure 3: Contact details of State Reference Laboratory
- Annexure 4. List of Licensed Blood Banks functioning in the State •

Annexure 5. List of Delivery Points

- Annexure 6. List of first referral Units(FRUs)
- Annexure 7: District wise list of Ambulances & Motor Boats
- Annexure 8: District/Block wise list of Mobile Medical Teams
- Annexure 9: District wise list of Medical Relief Centers in the State
- Annexure 10: District wise List of Flood Prone Gram Panchyats •

Annexure 11: Format for Early warning Signals/Alert for Outbreaks •

Annexure 12: Format for reporting Out break ( final Report)

- Annexure 13: SOP for management of Flood
- Annexure 14: SOP for management of Heat Wave

Annexure :- 1

1. Contact details of the Heads of the Department/Division

Name & Designation	Mobile No	e-mail address
Commissioner -cum Secretary		orhealth@nic.in
Spl Secretary		
DHS(O)	9439991181	dhsodisha@gmail.com
MD NHM		missiondirector@nic.in
DPH(O)	9439991182	dph.orissa@gmail.com
DFW(O)	9439994863	dfwodisha@gmail.com
DMET		dmetbbsr@gmail.com
Dir. Nursing		dhsodisha@gmail.com
Dir SIHFW		sihfwodisha@gmail.com
Director, CH, BBSR	9439991143	dir.chb@gmail.com
Director RGH, RKL		cmo.rgh.rourkela@gmail.com
Principal Cum Dean SCBMCH		scbmctc@gmail.com
Principal Cum Dean MKCG MCH		mkcgmc.bam@gmail.com
Principal Cum Dean VIMSAR, Burla		vssmcburlaorissa@gmail.com
Spuptd. SCBMCH		scbsuperintendent@yahoo.com
Suptd. MKCG MCH		mkcgmc.bam@gmail.com
Suptd. VIMSAR		superintendent.vssmch@gmail.com

2. Contact Details of State /District Health Control Rooms

Sl No.	Name of the District/Division	Name of the Nodal /Head	Contact No	
			Mobile No	e-mail
1.	State HQ	Deputy Director, IDSP	9439994857	ssuodisha@gmail.com
2.	Angul	CDMO	06764-232291 / 232507	dsuangul@gmail.com
3.	Balasore	CDMO	06782-262184	dsubalasore@gmail.com
4.	Baragarh	CDMO	06646-233084	dsubaragarh@gmail.com
5.	Bhadrak	CDMO	06784-251706	dsubhadrak@gmail.com
6.	Bolangir	CDMO	06652-232638	dsubolangir@gmail.com

7.	Boudh	CDMO	06841-222225	dsuboudh@gmail.com
8.	Cuttack	CDMO	0671-2307283	dsucuttack@gmail.com
9.	Deogarh	CDMO	06641-226428	dsudeogarh@gmail.com
10.	Dhenkanal	CDMO	06622-226818	dsudhenkanal@gmail.com
11.	Gajapati	CDMO	06815-222205 / 223834	dsugajapati@gmail.com
12.	Ganjam	CDMO	0680-2224798	idspdsuganjam@gmail.com
13.	Jagatsinghpur	CDMO	06724-221011	dsujagatsinghpur@gmail.com
14.	Jajpur	CDMO	06728-222597	dsujajpur@gmail.com
15.	Jharsuguda	CDMO	06645-273105	dsujharsuguda@gmail.com
16.	Kalahandi	CDMO	06670-230022	dsukalahandi@gmail.com
17.	Kandhamal	CDMO	06842-253229	dsukandhamal@gmail.com
18.	Kendrapara	CDMO	06727-233301	dsukendrapara@gmail.com
19.	Keonjhar	CDMO	06766-255426	idspdsukeonjhar@gmail.com
20.	Khurda	CDMO	06755-223178	dsukhordha@gmail.com
21.	Koraput	CDMO	06852-25061 / 251381	dsukoraput@gmail.com
22.	Malkangiri	CDMO	06861-230277 / 230331	dsumalkangiri@gmail.com
23.	Mayurbhanj	CDMO	06792-252671 / 252702	dsumayurbhanj@gmail.com
24.	Nawarangapur	CDMO	06858- 222459/222057	dsunawarangapur@gmail.com
25.	Nayagarh	CDMO	06753-253392	dsunayagarh@gmail.com
26.	Nuapada	CDMO	06678-223346 / 223745	dsunuapada@gmail.com
27.	Puri	CDMO	06752-22175	dsupuri@gmail.com
28.	Rayagada	CDMO	06856-235606 / 236212	dsurayagada@gmail.com
29.	Sambalpur	CDMO	0663- 2520035/2533536	dsusambalpur@gmail.com
30.	Sonepur	CDMO	06654-221299	dsusonepur@gmail.com
31.	Sundergarh	CDMO	06622-272889	dsusundergarh@gmail.com
32.	DHS, Odisha	DHS	0674-2391536	dhsodisha@gmail.com
33.	DPH, Odisha	DPH	0674-2391230	dsukalahandi@gmail.com
34.	DMET, Odisha	DMET	0674-2393847	dph.orissa@gmail.com
35.	DFW, Odisha	DFW	0674-2391625	dfwodisha@gmail.com
36.	Capital Hospital	Director	0674-2391983	dir.chb@gmail.com
37.	RGH, Rourkela	CMO	0661-2400161 / 2400039	cmo.rgh.rourkela@gmail.com

### Annexure 3. Contact Details of SRLs and DPHLs

SRL/DPHL	Nodal Person	E.Mail ID
SCBMCH, Cuttack	Dr. Nirupama Chayini	directordcms.c.b@gmail.com
MKCGMCH, Berhampur	Dr. Banojini Parida	mkcgmicrobiology@yahoo.in
VIMSAR, Burla	Dr. Sudhir Ku. Ghose	skghosh.dr@gmail.com

- Annexure 4. List of Licensed Blood Banks functioning in the State

### LIST OF LICENSED BLOOD BANKS FUNCTIONING IN THE STATE

Sl.no	Name of the District	Name of the Blood Bank
1	Angul	Orissa Red Cross Blood Bank,DHH, Angul
2	Angul	Orissa Red Cross Blood Bank, SDH,Talcher, Angul
3	Angul	Blood Bank, Nalco Hosp, Angul
4	Angul	Blood Bank, Neheru Shatabdi Hosp,Talcher,Angul
5	Angul	Orissa Red Cross Blood Bank, SDH,Athamallick, Angul
6	Balasore	Orissa Red Cross Blood Bank,DHH, Balasore
7	Balasore	Orissa Red Cross Blood Bank,SDH, Nilagiri , Balasore
8	Balasore	M/sJyoti Hopital Blood Bank,Balasore
9	Baragarh	Orissa Red Cross Blood Bank,DHH, Baragarh
10	Baragarh	Orissa Red Cross Blood Bank,SDH, Padmapur, Baragarh
11	Baragarh	M/s . Catholic Mission Hospital, Baragarh
12	Bhadrak	Orissa Red Cross Blood Bank,DHH, Bhadrak
13	Bolangir	Orissa Red Cross Blood Bank,DHH, Bolangir
14	Bolangir	Orissa Red Cross Blood Bank,SDH, Patnagarh, Bolangir
15	Bolangir	Orissa Red Cross Blood Bank, SDH, Titlagarh
16	Bolangir	Orissa Red Cross Blood Bank, CHC, Kantabanji
17	Boudh	Orissa Red Cross Blood Bank, DHH, Boudh
18	Cuttack	Central Red Cross Blood Bank,Infront SCB Medical College , Cuttack
19	Cuttack	Orissa Red Cross Blood Bank,SCB Medical College , Cuttack
20	Cuttack	Orissa Red Cross Blood Bank, SDH, Athagarh, Cuttack
21	Deogarh	Orissa Red Cross Blood Bank,DHH, Deogarh
22	Dhenkanal	Orissa Red Cross Blood Bank,DHH, Dhenkanal
23	Gajapati	Orissa Red Cross Blood Bank,DHH, Paralakhemundi,Gajapati
24	Ganjam	Orissa Red Cross Blood Bank, MKCG Medical College, Berhampur
25	Ganjam	Orissa Red Cross Blood Bank, SDH, Bhanjanagar,Ganjam
26	Ganjam	Orissa Red Cross Blood Bank, SDH, Chatrapur,Ganjam
27	Jagatsinghpur	Orissa Red Cross Blood Bank,DHH, Jagatsinghpur
28	Jagatsinghpur	Orissa Red Cross Blood Bank, Paradeep Port Trust Hosp. BloodBank,Jagatsinghpur
29	Jajpur	Orissa Red Cross Blood Bank, DHH, Jajpur
30	Jajpur	Orissa Red Cross Blood Bank, AH, Jajpur Road
31	Jharsuguda	Orissa Red Cross Blood Bank,DHH, Jharsuguda
32	Jharsuguda	Blood Bank., Tata Refractories Ltd,Belpahada, Jharsuguda

33	Jharsuguda	CENTRAL HOSP. (MCL), Brajaraj nagar,
34	Kalahandi	Orissa Red Cross Blood Bank,DHH, Bhawanipatna, Kalahandi
35	Kalahandi	Orissa Red Cross Blood Bank, SDH, Dharmagarh,Kalahandi
36	Kandhamal	Orissa Red Cross Blood Bank,SDH, Baliguda,Kandhamala
37	Kendrapara	Orissa Red Cross Blood Bank,DHH, Kendrapara
38	Keonjhar	Orissa Red Cross Blood Bank,DHH, Keonjhar
39	Keonjhar	Orissa Red Cross Blood Bank, SDH, Anandapur, Keonjhar
40	Keonjhar	Orissa Red Cross Blood Bank, SDH, Champua, Keonjhar
41	Keonjhar	Blood Bank,Tisco Hosp, Joda, Keonjhar
42	Keonjhar	Blood Bank,Central Hosp,Joda, Keonjhar
43	Khurda	Orissa Red Cross Blood Bank, Capital Hospital, Bhubaneswar
44	Khurda	Orissa Red Cross Blood Bank, Municipality Hospital, Bhubaneswar
45	Khurda	Orissa Red Cross Blood Bank,DHH, Khurda
46	Khurda	Blood Bank , Kalinga Hosp.Bhubaneswar
47	Khurda	M/s. Apollo Hospital, Bhubaneswar
48	Khurda	M/s Hi-Tech Medical College & Hospital Blood Bank, Bhubaneswar
49	Khurda	M/s Sum Medical College & Hospital Blood Bank, Bhubaneswar
50	Khurda	M/s. Kalinga Institute of Medical Sciences (KIMS), Bhubaneswar
51	Koraput	Orissa Red Cross Blood Bank, DHH, Koraput
52	Koraput	Orissa Red Cross Blood Bank,SDH, Jaypore, Koraput
53	Koraput	Blood Bank, Nalco, Damanjodi
54	Koraput	Blood Bank, HAL,Sunabeda, Koraput
55	Koraput	Blood Bank , M/s Asha Kiran Hops, Lamtaput , Koraput
56	Malkangiri	Orissa Red Cross Blood Bank, DHH, Malkangiri
57	Mayurbhanj	Orissa Red Cross Blood Bank, DHH, Baripada, Mayurbhanj
58	Mayurbhanj	Orissa Red Cross Blood Bank, SDH, Udala, Mayurbhanj
59	Mayurbhanj	Orissa Red Cross Blood Bank,SDH, Karanjia, Mayurbhanj
60	Mayurbhanj	Orissa Red Cross Blood Bank, SDH, Rairangpur, Mayurbhanj
61	Nawarangpur	Orissa Red Cross Blood Bank, DHH, Nawrangpur
62	Nawarangpur	Blood Bank, Christian Hosp, Nawarangpur
63	Nayagarh	Orissa Red Cross Blood Bank,DHH, Nayagarh
64	Nuapara	Orissa Red Cross Blood Bank,DHH, Nuapara
65	Nuapara	Blood Bank,Evagelical Hospital, Khariar, Nuapara
66	Phulbani	Orissa Red Cross Blood Bank, DHH, Phulbani
67	Puri	Orissa Red Cross Blood Bank,DHH, Puri (Acharya Harihar)
68	Rayagada	Orissa Red Cross Blood Bank,DHH, Rayagara
69	Rayagada	Orissa Red Cross Blood Bank,SDH, Gunupur,Rayagada
70	Rayagada	Blood Bank, Christian Hosp,BissamCuttack
71	Sambalpur	Orissa Red Cross Blood Bank,VSS Medical College, Burla ,Sambalpur
72	Sambalpur	Orissa Red Cross Blood Bank,DHH, Sambalpur
73	Sambalpur	Orissa Red Cross Blood Bank, SDH,Kuchinda, Sambalpur
74	Sambalpur	Blood Bank, J.M.J. Hops., Barapali, Sambalpur
75	Sambalpur	Orissa Red Cross Blood Bank, SDH,Rairakhol, Sambalpur
76	Sonepur	Orissa Red Cross Blood Bank,DHH, Sonepur
77	Sundergarh	Orissa Red Cross Blood Bank,DHH, Sundergarh

78	Sundergarh	Orissa Red Cross Blood Bank,SDH, Bonai,Sunderagarh
79	Sundergarh	Orissa Red Cross Blood Bank,Govt Hos.Campus RGH,Rourkella , Sundergarh
80	Sundergarh	Blood Bank,IGH,Rourkella , Sundergarh
81	Sundergarh	M/s Vesaj Patel Hosp & Research Center , Rourkela
82	Sundergarh	M/s. Community Welfare Society Hospital, Jagda, Rourkela, Sundargarh
83	Sundergarh	M/s Hi-Tech Medical College & Hospital Blood Bank, Rourkela, Sundargarh

### LIST OF APPROVED BLOOD STORAGE CENTRES

Sl No.	Name of the District	Blood Storage Centres	Mother Blood Bank
1	Balasore	CHC, Jaleswar	RCBB, DHH, Balasore
2	Balasore	CHC, Soro	RCBB, DHH, Balasore
3	Balasore	CHC, Basta	RCBB, DHH, Balasore
4	Angul	UGPHC, Khamar	RCBB, DHH, Angul
5	Angul	SDH, Pallahara	RCBB, DHH, Angul
6	Dhenkanal	SDH,Hindol	RCBB, DHH, Dhenkanal
7	Dhenkanal	SDH,Kamakhyanagar	RCBB, DHH, Dhenkanal
8	Dhenkanal	CHC,Bhuban	RCBB,DHH,Dhenkanal
9	Kalahandi	CHC, Junagarh	RCBB, DHH, Kalahandi
10	Sonepur	UGPHC, Birmaharajpur	RCBB, DHH, Sonepur
11	Nuapada	UGPHC, Khariar	RCBB, DHH,Nuapada
12	Nayagarh	CHC,Dasapalla	RCBB,DHH,Nayagarh
13	Rayagada	CHC,Muniguda	RCBB,DHH,Rayagada
14	Bargarh	CHC,Sohela	RCBB,DHH,Bargarh
15	Keonjhar	UGPHC, Ghatagaon	RCBB,DHH,Keonjhar
16	Bhadrak	CHC, Basudevpur	RCBB, DHH, Bhadrak
17	Bhadrak	CHC,Dhamnagar	RCBB, DHH, Bhadrak
18	Nabarangpur	AH,Umerkote	RCBB, DHH, Nabarangpur
19	Jharsuguda	CHC, Lakhanpur	RCBB, DHH, Jharsuguda
20	Sundergarh	CHC, Rajgangpur	RCBB, DHH, Sundergarh
21	Sundergarh	CHC, Bargaon	RCBB, DHH, Sundergarh
22	Sundergarh	CHC, Sargipalli	RCBB, DHH, Sundergarh
23	Sundergarh	UGPHC, Subdega	RCBB, DHH, Sundergarh
24	Kendrapada	UGPHC, Patkura	RCBB, DHH, Kendrapada
25	Kendrapada	UGPHC, Patamundai	RCBB, DHH, Kendrapada
26	Puri	AH,Sakhigopal	RCBB, DHH, Puri
27	Puri	AH,Nimapada	RCBB, DHH, Puri
28	Kandhamal	CHC, G.Udaygiri	RCBB, DHH, Kandhamal



• Annexure 5. List of Delivery Points

Sl. No	District	Block	Institution Name	CAT
1	ANUGUL	Angul	Bantala CHC	CHC
2		Angul	Purunagarh PHC(N)	PHC(N)
3		Angul	Bentapur SC	SC
4		Angul	Ikarbandha SC	SC
5		Angul	Purunagarh SC	SC
6		Angul DHH	Angul DHH	DHH
7		Athamallik	Madhapur CHC	CHC
8		Athamallik	Thakurgarh PHC(N)	PHC(N)
9		Athamallik SDH	Athamallik SDH	SDH
10		Banarpal	Banrapal CHC	CHC
11		Chhendipada	Chhendipada CHC	CHC
12		Chhendipada	Jarapada PHC(N)	PHC(N)
13		Chhendipada	Kosala CHC	CHC
14		Chhendipada	Nuagaon SC	SC
15		Kaniha	Kaniha CHC	CHC
16		Kaniha	Bajrakote PHC(N)	PHC(N)
17		Kaniha	Bijigola SC	SC
18		Kaniha	Julibandha SC	SC
19		Kaniha	Parabili SC	SC
20		Pallahada	Khamar CHC	CHC
21		Pallahada SDH	Pallahada SDH	SDH
22		Rajakishorenagar	Rajakishorenagar CHC	CHC
23		Rajakishorenagar	Boinda PHC(N)	PHC(N)
24		Rajakishorenagar	Hondpa PHC(N)	PHC(N)
25		Talcher	Godibandha CHC	CHC
26		Talcher	Kalamchhuin SC	SC
27		Talcher SDH	Talcher SDH	SDH
28	BALASORE	Bahanaga	Gopalpur CHC	CHC
29		Bahanaga	Khantapada CHC	CHC
30		Balasore	Rupsa CHC	CHC
31		Balasore	Kasafal PHC(N)	PHC(N)
32		Balasore DHH	Balasore DHH	DHH
33		Baliapal	Baliapal CHC	CHC
34		Baliapal	Langaleswar PHC(N)	PHC(N)
35		Basta	Basta CHC	CHC
36		Basta	Punsukull PHC(N)	PHC(N)
37		Basta	Mukulsi SC	SC
38		Bhogarai	Jaleswarpur CHC	CHC
39		GKB-Hospital CHC	GKB-Hospital CHC	CHC
40		Jaleswar	Hatigarh CHC	CHC
41		Jaleswar	Paschimabad PHC(N)	PHC(N)
42		Khaira	Khaira CHC	CHC
43		Nilagiri	Berhampur CHC	CHC
44		Nilagiri SDH	Nilagiri SDH	SDH
45		Oupada	Iswarpur CHC	CHC
46		Remuna	Remuna CHC	CHC
47		Simulia	Simulia CHC	CHC
48		Soro	Soro CHC	CHC
49		Soro	Manipur PHC(N)	PHC(N)
50		Soro	Mangalpur SC	SC
51	BARGARH	Ambabhona	Bhukta CHC	CHC

52		Ambabhona	Dunguri SC	SC
53		Attabira	Atabira CHC	CHC
54		Attabira	Kadobahal PHC(N)	PHC(N)
55		Attabira	Paharsrigida SC	SC
56		Bargarh DHH	Bargarh DHH	DHH
57		Barpali	Barpali CHC	CHC
58		Bhatli	Bhatli CHC	CHC
59		Bhatli	Sulsulia SC	SC
60		Bheden	Bheden CHC	CHC
61		Bijepur	Bijepur CHC	CHC
62		Bijepur	Jaring SC	SC
63		Bijepur	Pahandi SC	SC
64		Gaisilet	Talpali CHC	CHC
65		Gaisilet	Gaisilet PHC(N)	PHC(N)
66		Jharabandha	Dava CHC	CHC
67		Jharabandha	Jharabandha PHC(N)	PHC(N)
68		Jharabandha	Jagdapur SC	SC
69		Jharabandha	Kurma SC	SC
70		Padmapur SDH	Padmapur SDH	SDH
71		Paikamal	Mandosil PHC(N)	PHC(N)
72		Paikamal	Paikamal PHC(N)	PHC(N)
73		Paikamal	Lakhamara SC	SC
74		Paikamal	Palsada SC	SC
75		Sohela	Sohela CHC	CHC
76		Sohela	Ghess PHC(N)	PHC(N)
77		Basudevpur	Basudevpur CHC	CHC
78		Basudevpur	Eram SC	SC
79		Basudevpur	Sugo1 SC	SC
80		Bhadrak DHH	Bhadrak DHH	DHH
81		Bhandaripokhari	Bhandaripokhari CHC	CHC
82		Bonta	Agarpada CHC	CHC
83		Bonta	Bonth PHC(N)	PHC(N)
84		Chandabali	Chandabali CHC	CHC
85		Chandabali	Dhamara PHC(N)	PHC(N)
86		Chandabali	Motto PHC(N)	PHC(N)
87		Dhamnagar	Dhamnagar CHC	CHC
88		Dhamnagar	Dhusuri OH	OH
89		Purunabazar OH	Purunabazar OH	OH
90		Tihidi	Tihidi CHC	CHC
91		Belapara	Belpada CHC	CHC
92		Bolangir DHH	Bolangir DHH	DHH
93		Gudvella	Gudvella CHC	CHC
94		Gudvella	Tusra OH	OH
95		Khaparakhole	Khaprakhol CHC	CHC
96		Khaparakhole	Lathor PHC(N)	PHC(N)
97		Loisinga	Loisingha CHC	CHC
98		Muribahal	Muribahal CHC	CHC
99		Patnagad SDH	Patnagad SDH	SDH
100		Patnagarh	Ghasian CHC	CHC
101		Patnagarh	Jogimunda SC	SC
102		Saintala	Saintala CHC	CHC
103		Saintala	Tikrapada PHC(N)	PHC(N)
104		Titilagad SDH	Titilagad SDH	SDH
105		Turiekela	Kantabanjhi CHC	CHC

106		Turiekela	Tureikela CHC	CHC
107	BOUDH	Boudh	Baunsuni CHC	CHC
108		Boudh	Janhapank PHC(N)	PHC(N)
109		Boudh DHH	Boudh DHH	DHH
110		Harabhanga	Harabhanga PHC(N)	PHC(N)
111		Harabhanga	Puruna-Katak CHC	CHC
112		Kantamala	Manamunda CHC	CHC
113		Kantamala	Kantamal CHC	CHC
114	CUTTACK	Athagarh	Gurudijhatia PHC(N)	PHC(N)
115		Athagarh SDH	Athagarh SDH	SDH
116		Banki	Kalapathar PHC(N)	PHC(N)
117		Banki SDH	Banki SDH	SDH
118		Baramba	Maniabandha CHC	CHC
119		Baramba	Baramba CHC	CHC
120		Baranga	Mahidharpada CHC	CHC
121		Cuttack	Bentakar CHC	CHC
122		Cuttack-City-Hosp.	Cuttack-City-Hosp. DHH	DHH
123		Kantapada	Adaspur CHC	CHC
124		Mahanga	Mahanga CHC	CHC
125		Narsinghpur	Kanpur CHC	CHC
126		Narsinghpur	Narasingpur CHC	CHC
127		Niali	Niali CHC	CHC
128		Nichintakoili	Nishchintakoili CHC	CHC
129		Salepur	Salepur CHC	CHC
130		Tangi Choudwar	Tangi CHC	CHC
131		Tigiria	Tigiria CHC	CHC
132	DEBAGARH	Barkote	Kantapalli PHC(N)	PHC(N)
133		Barkote	Barkote CHC	CHC
134		Deogarh DHH	Deogarh DHH	DHH
135		Reamal	Chhtabar CHC	CHC
136		Tileibani	Laimura SC	SC
137	DHENKANAL	Bhuban	Mathkargola CHC	CHC
138		Bhuban	Baruan SC	SC
139		Bhuban	Goradia SC	SC
140		Bhuban	Jiral SC	SC
141		Bhuban CHC	Bhuban CHC	CHC
142		Dhenkanal	Bhapur OH	OH
143		Dhenkanal	Dhirapatna PHC(N)	PHC(N)
144		Dhenkanal DHH	Dhenkanal DHH	DHH
145		Gandia	Sriramchandrapur CHC	CHC
146		Hindol SDH	Hindol SDH	SDH
147		Kamakshyanagar	AnlabarenI CHC	CHC
148		Kamakshyanagar	Kamakshyanagar SDH	SDH
149		Kankadahada	Birasal CHC	CHC
150		Kankadahada	Kankadahada OH	OH
151		Kankadahada	Mahabir-Road OH	OH
152		Odapada	Odapada CHC	CHC
153		Odapada	Meramandali OH	OH
154		Parajanga	Parjang CHC	CHC
155		Parajanga	Saranga SC	SC
156	GAJAPATI	Gosani	Garabandha PHC(N)	PHC(N)
157		Gumma(T)	Gumma CHC	CHC
158		Kashinagar	Kasinagar CHC	CHC
159		Mohana (T)	Chandragiri CHC	CHC

160		Mohana (T)	Mohana CHC	CHC
161		Mohana (T)	Birikot PHC(N)	PHC(N)
162		Nuagada(T)	B.Khajuripada CHC	CHC
163		Paralakhemundi DHH	Paralakhemundi DHH	DHH
164		R.Udayagiri (T)	R.Udayagiri CHC	CHC
165		R.Udayagiri (T)	Ramagiri. PHC(N)	PHC(N)
166		Rayagada (Tribal)	Rayagada CHC	CHC
167		Rayagada (Tribal)	Narayanpur SC	SC
168		Aska	Aska CHC	CHC
169		Aska	Balisira CHC	CHC
170		Beguniapada	Kodala CHC	CHC
171		Beguniapada	Sumandal CHC	CHC
172		Belaguntha	Belaguntha CHC	CHC
173		Belaguntha	Gobara CHC	CHC
174		Bhanjanagar. SDH	Bhanjanagar. SDH	SDH
175		Bhanjanganar	Gallery CHC	CHC
176		Buguda	Buguda CHC	CHC
177		Chhatrapur. SDH	Chhatrapur. SDH	SDH
178		Chikiti	Girisola CHC	CHC
179		Chikiti	Chikiti CHC	CHC
180		Dharakote	Dharakot CHC	CHC
181		Digapahandi	Bamakoi CHC	CHC
182		Digapahandi	Digapahandi CHC	CHC
183		Digapahandi	Gandagaon PHC(N)	PHC(N)
184		Digapahandi	Talasingi PHC(N)	PHC(N)
185		Ganjam	Khandadeuli CHC	CHC
186		Ganjam	Khandadeuli PHC(N)	PHC(N)
187		Ganjam DHH	Ganjam DHH	DHH
188	GANJAM	Hinjilicut	Belagaon CHC	CHC
189		Hinjilicut	Hinjilikut CHC	CHC
190		Jaganathprasad	JagannathPrasad CHC	CHC
191		Kabisuryanagar	KabisuryaNagar CHC	CHC
192		Khallikote	Khalikot CHC	CHC
193		Khallikote	Khalikote Mc SC	SC
194		Kukudakhandi	Kukudakhandi CHC	CHC
195		Kukudakhandi	Balipada PHC(N)	PHC(N)
196		Kukudakhandi	Bendalia SC	SC
197		Patrapur	Patrapur CHC	CHC
198		Patrapur	Jaradagada PHC(N)	PHC(N)
199		Polasara	Polasara CHC	CHC
200		Purusottampur	Bhatkumuruda CHC	CHC
201		Purusottampur	Purshottampur CHC	CHC
202		Rangeilunda	Sunadei PHC(N)	PHC(N)
203		Sanakhemundi	Adapada CHC	CHC
204		Sanakhemundi	Dengaustha PHC(N)	PHC(N)
205		Sanakhemundi	Pudamari PHC(N)	PHC(N)
206		Seragada	Sergada CHC	CHC
207		Sorada	Badagada CHC	CHC
208		Sorada	Sorada CHC	CHC
209		Balikuda	Balikuda CHC	CHC
210		Erasama	Ersama CHC	CHC
211	JAGATSINGHAPUR	Jagatsinghpur	Mandasahi CHC	CHC
212		Jagatsingpur DHH	Jagatsingpur DHH	DHH
213		Kujanga	Kujanga CHC	CHC

214		Paradeep CHC	Paradeep CHC	CHC
215		Raghunathpur	Raghunathpur CHC	CHC
216	JAJAPUR	Barachana	Barachana CHC	CHC
217		Barachana	Gopalpur OH	OH
218		Bari	Bari CHC	CHC
219		Binjharpur	Binjharpur CHC	CHC
220		Dangadi	Dangadi CHC	CHC
221		Dasarthpur	Mangapur CHC	CHC
222		Dharmasala	Dharmasala CHC	CHC
223		Dharmasala	Jenapur PHC(N)	PHC(N)
224		Dharmasala	Kabatabandha PHC(N)	PHC(N)
225		Jajpur	Markandapur CHC	CHC
226		Jajpur DHH	Jajpur DHH	DHH
227		Jajpur-Road CHC	Jajpur-Road CHC	CHC
228		Korei	Korei CHC	CHC
229		Rasulpur	Madhuban CHC	CHC
230		Rasulpur	Brahmabarada PHC(N)	PHC(N)
231		Sukinda	Sukinda CHC	CHC
232	JHARSUGUDA	Jharasuguda	Brajarajagar CHC	CHC
233		Jharsuguda DHH	Jharsuguda DHH	DHH
234		Kirimira	Kirmira CHC	CHC
235		Kolabira	Kolabira CHC	CHC
236		Laikera	Mundrajore CHC	CHC
237		Lakhanapur	lakhanpur CHC	CHC
238		Lakhanapur	Kumarbandha SC	SC
239		Lakhanapur	Kusuralio SC	SC
240		Lakhanapur	Muralipali SC	SC
241		Lakhanapur	Sarandamal SC	SC
242	KALAHANDI	Bhawanipatna	Borda CHC	CHC
243		Bhawanipatna	Artal SC	SC
244		Bhawanipatna	Kuttrukhamar SC	SC
245		Bhawanipatna	Seinpur SC	SC
246		Bhawanipatna DHH	Bhawanipatna DHH	DHH
247		Dharamagada	Parla CHC	CHC
248		Dharmagarh SDH	Dharmagarh SDH	SDH
249		Golamunda	Chapuria CHC	CHC
250		Golamunda	Bordi PHC(N)	PHC(N)
251		Golamunda	Faranga PHC(N)	PHC(N)
252		Golamunda	Golamunda PHC(N)	PHC(N)
253		Jaipatna	Jaipatna CHC	CHC
254		Junagarh	Junagarh CHC	CHC
255		Kalampur	Kalampur CHC	CHC
256		Karlamunda	Karlamunda CHC	CHC
257		Kesinga	Pastikudi CHC	CHC
258		Kesinga	Kesinga CHC	CHC
259		Koksara	Koksara CHC	CHC
260		Koksara	Ladugaon PHC(N)	PHC(N)
261		Lanjigarh(T)	Biswanathpur CHC	CHC
262		M.Rampur	M.Rampur CHC	CHC
263		Narla	Narla CHC	CHC
264		Narla	Tulapada SC	SC
265		Th. Rampur(T)	Th.Rampur CHC	CHC
266	KANDHAMAL	Baliguda	Barkhama CHC	CHC
267		Baliguda	Bataguda SC	SC

268		Baliguda SDH	Baliguda SDH	SDH
269		Chakapada	Brhmanpad CHC	CHC
270		Daringibadi	Daringibadi CHC	CHC
271		Daringibadi	Bamunigam PHC(N)	PHC(N)
272		Daringibadi	Dasingbadi SC	SC
273		Daringibadi	Simanbadi SC	SC
274		G.Udayagiri	G.Udayagiri CHC	CHC
275		Khajuripada	Khajuripada CHC	CHC
276		Kotagada	Subarnagiri CHC	CHC
277		Kotagada	Kotagada OH	OH
278		Nuagaon	Nuagaon CHC	CHC
279		Nuagaon	Sarangagada CHC	CHC
280		Phiringia	Phiringia CHC	CHC
281		Phiringia	Balandapada OH	OH
282		Phiringia	Gochhapara PHC(N)	PHC(N)
283		Phiringia	Rabingia1 SC	SC
284		Phulbani	Gumagarh CHC	CHC
285		Phulbani DHH	Phulbani DHH	DHH
286		Raikia	Raikia CHC	CHC
287		Tikabali	Tikabali CHC	CHC
288		Tumudibandha	Tumudibandha CHC	CHC
289	KENDRAPARA	Aul	Aul CHC	CHC
290		Derabish	Derabish CHC	CHC
291		Garadapur	Patakura CHC	CHC
292		Kendrapara	Indupur CHC	CHC
293		Kendrapara DHH	Kendrapara DHH	DHH
294		Mahakalapada	Mahakalpada CHC	CHC
295		Mahakalapada	Babar PHC(N)	PHC(N)
296		Mahakalapada	Ramnagar PHC(N)	PHC(N)
297		Marshaghai	Marshaghai CHC	CHC
298		Marshaghai	Kurutang PHC(N)	PHC(N)
299		Pattamundai	Patamundai CHC	CHC
300		Rajakanika	Rajakanika CHC	CHC
301		Rajakanika	Kandiahath PHC(N)	PHC(N)
302		Rajnagar	Rajnagar CHC	CHC
303		Rajnagar	Talchua PHC(N)	PHC(N)
304	KENDUJHAR	Anandapur SDH	Anandapur SDH	SDH
305		Bansapal(T)	Bansapal CHC	CHC
306		Bansapal(T)	Phuljhar PHC(N)	PHC(N)
307		Bansapal(T)	Suakati PHC(N)	PHC(N)
308		Champua SDH	Champua SDH	SDH
309		Champua(T)	Bhanda CHC	CHC
310		Ghasipura	Sainkul CHC	CHC
311		Ghasipura	Kesudarapal CHC	CHC
312		Ghatagaon(T)	Ghatagaon CHC	CHC
313		Ghatagaon(T)	Basantapur1 SC	SC
314		Ghatagaon(T)	Bholabeda SC	SC
315		Ghatagaon(T)	Pandapada SC	SC
316		Ghatagaon(T)	Patilo SC	SC
317		Harichandapur(T)	Harichandanpur CHC	CHC
318		Harichandapur(T)	Rebanapalasapal PHC(N)	PHC(N)
319		Hatadihi	Salania CHC	CHC
320		Hatadihi	Hatadihi OH	OH
321		Hatadihi	Boniapanka SC	SC

322		Hatadihi	Soso PHC(N)	PHC(N)
323		Jhumpura(T)	Jhumpura CHC	CHC
324		Joda(T)	Basudevpur-Keonjhar CHC	CHC
325		Joda(T)	Barbil CHC	CHC
326		Joda(T)	Jajanga SC	SC
327		Keonjhar DHH	Keonjhar DHH	DHH
328		Keonjhar(T)	Padmapur CHC	CHC
329		Keonjhar(T)	Maidankela SC	SC
330		Patana(T)	Patana CHC	CHC
331		Patana(T)	Childa SC	SC
332		Patana(T)	Khereitangri SC	SC
333		Saharpada(T)	Udayapur CHC	CHC
334		Saharpada(T)	Domabuda SC	SC
335		Saharpada(T)	Machhagada SC	SC
336		Telkoi(T)	Telkoi CHC	CHC
337	KHORDHA	Balianta	Balakati CHC	CHC
338		Balipatna	Balipatna CHC	CHC
339		Banapur	Banapur CHC	CHC
340		Begunia	Botalama CHC	CHC
341		Begunia	Begunnia PHC(N)	PHC(N)
342		Bhubaneswar	Mendhasala CHC	CHC
343		Bolagarh	Bankoi CHC	CHC
344		Bolagarh	Bolagada CHC	CHC
345		Capital-Hosp BBSR	Capital-Hosp BBSR DHH	DHH
346		Chilika	Balugaon CHC	CHC
347		Chilika	Haripur4 SC	SC
348		Jatani	Jatani CHC	CHC
349		Khurda Block	Unit-IV CHC	CHC
350		Khurda. DHH	Khurda. DHH	DHH
351		Tangi	Tangil CHC	CHC
352		Tangi	Nirakarpur PHC(N)	PHC(N)
353	KORAPUT	Bandhugaon	Bandhugaon CHC	CHC
354		Boipariguda	Baipariguda CHC	CHC
355		Boipariguda	Ramagiri PHC(N)	PHC(N)
356		Borigumma	Borigumma CHC	CHC
357		Borigumma	B.Singpur PHC(N)	PHC(N)
358		Borigumma	Kumuli PHC(N)	PHC(N)
359		Dasmantapur	Dasmantapur CHC	CHC
360		Jeypore SDH	Jeypore SDH	SDH
361		Jeypur	Rabanaguda CHC	CHC
362		Koraput	Mathalput CHC	CHC
363		Koraput DHH	Koraput DHH	DHH
364		Kotapad	Kotpad CHC	CHC
365		Kundra	Kundra CHC	CHC
366		Kundra	Digapur PHC(N)	PHC(N)
367		Lamtaput	Lamtaput CHC	CHC
368		Laxmipur	Laxmipur CHC	CHC
369		Laxmipur	Kakiriguma PHC(N)	PHC(N)
370		Nandapur	Nandapur CHC	CHC
371		Nandapur	Padwa PHC(N)	PHC(N)
372		Narayanpatna	Narayanpatna CHC	CHC
373		Pattangi	Pottangi CHC	CHC
374		Semiliguda	Kunduli CHC	CHC
375		Semiliguda	Semiliguda PHC(N)	PHC(N)

376		Sunabeda CHC	Sunabeda CHC	CHC
377	MALKANGIRI	Kalimela	Kalimela CHC	CHC
378		Kalimela	Bejangiwada PHC(N)	PHC(N)
379		Khairaput	Khairaput CHC	CHC
380		Korkunda	Balimela.Govt-Hosp. OH	OH
381		Korkunda	Korkunda CHC	CHC
382		Korkunda	Chitrakonda CHC	CHC
383		Korkunda	MV-19 OH	OH
384		Kudumuluguma	Kudumulugumma CHC	CHC
385		Malkangiri	Pandripani CHC	CHC
386		Malkangiri	Padmagiri PHC(N)	PHC(N)
387		Malkangiri DHH	Malkangiri DHH	DHH
388		Mathili	Mathili CHC	CHC
389		Podia	Podia CHC	CHC
390		Podia	MV-79 OH	OH
391	MAYURBHANJ	Bahalada	Bahalda CHC	CHC
392		Bahalada	Jharadihi CHC	CHC
393		Bangriposi	Bangiriposi CHC	CHC
394		Barasahi	Barasahi CHC	CHC
395		Barasahi	Manitri OH	OH
396		Baripada	K.C.Pur CHC	CHC
397		Baripada DHH	Baripada DHH	DHH
398		Betanoti	Betanoti CHC	CHC
399		Betanoti	Baisinga OH	OH
400		Bijatola	Bijatola CHC	CHC
401		Bisoi	Manada CHC	CHC
402		Bisoi	Bisoi PHC(N)	PHC(N)
403		Gopabandhunagar	Khunta CHC	CHC
404		Gopabandhunagar	Kuamara OH	OH
405		Jamada	Jamada CHC	CHC
406		Jasipur	Jasipur CHC	CHC
407		Kaptipada	Kaptipada CHC	CHC
408		Kaptipada	Sarat PHC(N)	PHC(N)
409		Karanjia	Tato CHC	CHC
410		Karanjia SDH	Karanjia SDH	SDH
411		Khunta	Dukura CHC	CHC
412		Kuliana	Kuliana CHC	CHC
413		Kusumi	Badampahara CHC	CHC
414		Kusumi	Hatabhadra PHC(N)	PHC(N)
415		Morada	Kisantandi CHC	CHC
416		Morada	Morada OH	OH
417		Rairangapur	Gorumahisani CHC	CHC
418		Rairangpur SDH	Rairangpur SDH	SDH
419		Raruan	Raruan CHC	CHC
420		Rasgobindapur	Rasgobindpur CHC	CHC
421		Samakhunta	Rangamatia CHC	CHC
422		Sarasakana	Sirsa CHC	CHC
423		Sarasakana	Paktia PHC(N)	PHC(N)
424		Sarasakana	Saraskana PHC(N)	PHC(N)
425		Sukurli	Sukruli CHC	CHC
426		Suliapada	Kostha CHC	CHC
427		Thakuramunda	Thakurmunda CHC	CHC
428		Tiringi	Tiringi CHC	CHC
429		Udala	Sri-Ramachandrapur CHC	CHC

430		Udala SDH	Udala SDH	SDH
431	NABARANGAPUR	Chandahandi	Chandahandi CHC	CHC
432		Chandahandi	Baidapara SC	SC
433		Chandahandi	Bhendia SC	SC
434		Chandahandi	Gambhariguda2 SC	SC
435		Dabugaon	Dabugaon CHC	CHC
436		Jharigaon	Jharigaon CHC	CHC
437		Jharigaon	Dhodra PHC(N)	PHC(N)
438		Jharigaon	Ichhapur PHC(N)	PHC(N)
439		Kosagumuda	Kosagumuda CHC	CHC
440		Kosagumuda	Asang PHC(N)	PHC(N)
441		Kosagumuda	Badambada PHC(N)	PHC(N)
442		Kosagumuda	Katagaon PHC(N)	PHC(N)
443		Kosagumuda	Kodinga PHC(N)	PHC(N)
444		Nandahandi	Nandahandi CHC	CHC
445		Nawarnagapur	Sanmasigaon CHC	CHC
446		Nawarngpur DHH	Nawarngpur DHH	DHH
447		Papadahandi	Papadahandi CHC	CHC
448		Papadahandi	Biriguda-Papadhandi	PHC(N)
449		Papadahandi	Maidalpur PHC(N)	PHC(N)
450		Papadahandi	Dangaguda SC	SC
451		Papadahandi	Khutubai SC	SC
452		Papadahandi	Mokya SC	SC
453		Raighar	Hatabarandi CHC	CHC
454		Raighar	Gona PHC(N)	PHC(N)
455		Raighar	Jodinga PHC(N)	PHC(N)
456		Raighar	Raighar PHC(N)	PHC(N)
457		Tentulikhunti	Tentulikhunti CHC	CHC
458		Tentulikhunti	Patraput PHC(N)	PHC(N)
459		Umerakote	Pujariguda CHC	CHC
460		Umerakote	Sunabeda PHC(N)	PHC(N)
461		Umerakote	Umerkote CHC	CHC
462	NAYAGARH	Bhapur	Bhapur CHC	CHC
463		Dasapalla	Madhyakhanda CHC	CHC
464		Dasapalla	Dasapalla CHC	CHC
465		Gania	Gania CHC	CHC
466		Khandapada	Khandapada CHC	CHC
467		Khandapada	Kantilo PHC(N)	PHC(N)
468		Nayagarh DHH	Nayagarh DHH	DHH
469		Nuagaon.	Mahipur CHC	CHC
470		Odagaon	Sarankul CHC	CHC
471		Odagaon	Odagaon CHC	CHC
472		Ranapur	Rajsunakhala CHC	CHC
473		Ranapur	Majhiakhanda PHC(N)	PHC(N)
474		Ranapur	Ranapur CHC	CHC
475		Ranapur	Darpanarayanpur SC	SC
476	NUAPADA	Boden	Boden CHC	CHC
477		Boden	Bhaisadani SC	SC
478		Boden	Nagpada SC	SC
479		Khariar	Khariar CHC	CHC
480		Khariar	Bargaon SC	SC
481		Khariar	Bhullasilkuan SC	SC
482		Komna	Komna CHC	CHC
483		Komna	Bhella CHC	CHC

484		Komna	Tarbod PHC(N)	PHC(N)
485		Nuapada	KhariarRoad CHC	CHC
486		Nuapada	Darlimunda PHC(N)	PHC(N)
487		Nuapada	Dharambandha PHC(N)	PHC(N)
488		Nuapada DHH	Nuapada DHH	DHH
489		Sinapali	Sinapali CHC	CHC
490	PURI	Astaranga	Astaranga CHC	CHC
491		Brahmagiri	Reban-Nuagaon CHC	CHC
492		Delanga	Delanga CHC	CHC
493		Gopa	Gopa CHC	CHC
494		Kakatapur	Bangurigaon CHC	CHC
495		Kakatapur	Kakatpur OH	OH
496		Kanas	Kanas CHC	CHC
497		KDMM-Puri OH	KDMM-Puri OH	OH
498		Krushnaprasad	Chilika-Nuapada CHC	CHC
499		Nimapara	Charichhak CHC	CHC
500		Nimapara	Balanga OH	OH
501		Nimapara	Nimapara CHC	CHC
502		Pipili	Pipili CHC	CHC
503		Puri	Chandanpur CHC	CHC
504		Puri DHH	Puri DHH	DHH
505		Satyabadi	Sakhigopal CHC	CHC
506	RAYAGADA	Bissamacuttack	Bissamacuttack CHC	CHC
507		Bissamacuttack	Hatmuniguda SC	SC
508		Bissamacuttack	KumarDhamunil SC	SC
509		Chandrapur	Chandrapur CHC	CHC
510		Chandrapur	Hanumantapur SC	SC
511		Gudari	Gudari CHC	CHC
512		Gunupur	Jagannathpur CHC	CHC
513		Gunupur SDH	Gunupur SDH	SDH
514		K.Singpur	K.Singhpur CHC	CHC
515		Kasipur	Kasipur CHC	CHC
516		Kasipur	Tikiri-Kasipur PHC(N)	PHC(N)
517		Kolanara	Kolanara CHC	CHC
518		Muniguda	Muniguda CHC	CHC
519		Muniguda	Ambadala OH	OH
520		Padmapur	Padmapur. CHC	CHC
521		Ramanaguda	Ramanaguda CHC	CHC
522		Rayagada DHH	Rayagada DHH	DHH
523	SAMBALPUR	Bamara (T)	Garaposh CHC	CHC
524		Bamara (T)	Govindpur CHC	CHC
525		Bamara (T)	Keseibahal PHC(N)	PHC(N)
526		Jamanakera (T)	Fashimal CHC	CHC
527		Jamanakera (T)	Jamankira PHC(N)	PHC(N)
528		JP Maternity OH	JP Maternity OH	OH
529		Jujmura	Jujumura CHC	CHC
530		Jujmura	Padiabahal PHC(N)	PHC(N)
531		Kuchinda. SDH	Kuchinda. SDH	SDH
532		Naktideul	Naktideul CHC	CHC
533		Rairkhol SDH	Rairkhol SDH	SDH
534		Rengali	Rengali PHC(N)	PHC(N)
535	SONEPUR	Sambalpur DHH	Sambalpur DHH	DHH
536		Binika	Binika CHC	CHC
537		Biramaharajpur	Biramaharajpur SDH	SDH

538		Dunguripalli	Dunguripalli CHC	CHC
539		Soenpur DHH	Soenpur DHH	DHH
540		Sonepur	Naikenapalli CHC	CHC
541		Tarava	Tarava CHC	CHC
542		Ullunda	Ullunda CHC	CHC
543		Balisankara (T)	Kinjirikela CHC	CHC
544		Balisankara (T)	Kurei SC	SC
545		Balisankara (T)	Sagbahal SC	SC
546		Baragam (T)	Bargaon CHC	CHC
547		Biramitrapur CHC	Biramitrapur CHC	CHC
548		Bisra(T)	Bisra CHC	CHC
549		Bonei SDH	Bonei SDH	SDH
550		Boneigarh (T)	S.Balanga CHC	CHC
551		Boneigarh (T)	Bandhabhuin SC	SC
552		Gurundia (T)	Ramachhinda SC	SC
553		Hemagiri (T)	Hemagiri CHC	CHC
554		Hemagiri (T)	Bileimunda OH	OH
555		Koira(T)	Koira CHC	CHC
556		Koira(T)	K.Balang PHC(N)	PHC(N)
557		Koira(T)	Bimilagarh SC	SC
558		Koira(T)	Gopana SC	SC
559		Koira(T)	Tensa SC	SC
560		Kunaramunda (T)	Kuanrmunda CHC	CHC
561		Kunaramunda (T)	Andalijamabahal PHC(N)	PHC(N)
562		Kunaramunda (T)	Salangabahal SC	SC
563		Kutra (T)	Kutra CHC	CHC
564		Lahunipada(T)	Lahunipada CHC	CHC
565		Lahunipada(T)	Khuntagaon PHC(N)	PHC(N)
566		Lathikata (T)	Birkera CHC	CHC
567		Lathikata (T)	Bahijodi PHC(N)	PHC(N)
568		Lephripa (T)	Sargipalli CHC	CHC
569		Lephripa (T)	Gundiadihi PHC(N)	PHC(N)
570		Nuagaon (T)	Hatibari CHC	CHC
571		Nuagaon (T)	Baribeda SC	SC
572		Nuagaon (T)	Barilepta SC	SC
573		Nuagaon (T)	Chitapedi SC	SC
574		Rajgangpur-Hospital	Rajgangpur-Hospital CHC	CHC
575		RGH-Rourkela	RGH-Rourkela DHH	DHH
576		Subdega (T)	Subdega CHC	CHC
577		Subdega (T)	Tangargam PHC(N)	PHC(N)
578		Sundargarh (T)	Majhapara CHC	CHC
579		Sundargarh DHH	Sundargarh DHH	DHH
580		Tangarpalli (T)	Pithabhuin SC	SC

• Annexure 6. List of first referral Units(FRUs)

List of First Referral Unit (FRU)

Sl. No	District	Block	Institution Name	CAT
1	ANUGUL	Angul DHH	Angul DHH	DHH
2		Athamallik SDH	Athamallik SDH	SDH
3		Pallahada SDH	Pallahada SDH	SDH
4		Talcher SDH	Talcher SDH	SDH
5	BALASORE	Balasore DHH	Balasore DHH	DHH

6		Basta	Basta CHC	CHC
7		GKB-Hospital CHC	GKB-Hospital CHC	CHC
8		Nilagiri SDH	Nilagiri SDH	SDH
9		Soro	Soro CHC	CHC
10	BARGARH	Bargarh DHH	Bargarh DHH	DHH
11		Padmapur SDH	Padmapur SDH	SDH
12		Sohela	Sohela CHC	CHC
13	BHADRAK	Basudevpur	Basudevpur CHC	CHC
14		Bhadrak DHH	Bhadrak DHH	DHH
15		Bonta	Agarpada CHC	CHC
16	BOLANGIR	Bolangir DHH	Bolangir DHH	DHH
17		Patnagad SDH	Patnagad SDH	SDH
18		Titilagad SDH	Titilagad SDH	SDH
19		Turiekela	Kantabanjhi CHC	CHC
20	BOUDH	Boudh DHH	Boudh DHH	DHH
21	CUTTACK	Athagarh SDH	Athagarh SDH	SDH
22		Banki SDH	Banki SDH	SDH
23		City-Hosp	City-Hosp	DHH
24		Kantapada	Adaspur CHC	CHC
25		Mahanga	Mahanga CHC	CHC
26	DEBAGARH	Deogarh DHH	Deogarh DHH	DHH
27	DHENKANAL	Dhenkanal DHH	Dhenkanal DHH	DHH
28		Hindol SDH	Hindol SDH	SDH
29		Kamakshyanagar SDH	Kamakshyanagar SDH	SDH
30	GAJAPATI	Paralakhemundi DHH	Paralakhemundi DHH	DHH
31	GANJAM	Aska	Aska CHC	CHC
32		Beguniapada	Kodala CHC	CHC
33		Bhanjanagar. SDH	Bhanjanagar. SDH	SDH
34		Chhatrapur. SDH	Chhatrapur. SDH	SDH
35		Ganjam DHH	Ganjam DHH	DHH
36		Khallikote	Khalikot CHC	CHC
37		Polasara	Polasara CHC	CHC
38	JAGATSINGHAPUR	Balikuda	Balikuda CHC	CHC
39		Erasama	Erasama CHC	CHC
40		Jagatsingpur DHH	Jagatsingpur DHH	DHH
41	JAJAPUR	Barachana	Barachana CHC	CHC
42		Dangadi	Dangadi CHC	CHC
43		Jajpur DHH	Jajpur DHH	DHH
44		Jajpur-Road CHC	Jajpur-Road CHC	CHC
45	JHARSUGUDA	Jharsuguda DHH	Jharsuguda DHH	DHH
46	KALAHANDI	Bhawanipatna DHH	Bhawanipatna DHH	DHH
47		Dharmagarh SDH	Dharmagarh SDH	SDH
48		Kesinga	Kesinga CHC	CHC
49	KANDHAMAL	Baliguda SDH	Baliguda SDH	SDH
50		Phulbani DHH	Phulbani DHH	DHH
51	KENDRAPARA	Garadapur	Patakura CHC	CHC
52		Kendrapara DHH	Kendrapara DHH	DHH
53		Pattamundai	Patamundai CHC	CHC
54	KENDUJHAR	Anandapur SDH	Anandapur SDH	SDH
55		Champua SDH	Champua SDH	SDH
56		Ghatagaon(T)	Ghatagaon CHC	CHC
57		Keonjhar DHH	Keonjhar DHH	DHH
58	KHORDHA	Banapur	Banapur CHC	CHC
59		Capital-Hosp_BBSR	Capital-Hosp_BBSR	DHH

60		Jatani	Jatani CHC	CHC
61		Khurda Block	Unit-IV CHC	CHC
62		Khurda. DHH	Khurda. DHH	DHH
63		Tangi	Tangi CHC	CHC
64	KORAPUT	Jeypore SDH	Jeypore SDH	SDH
65		Koraput DHH	Koraput DHH	DHH
66		Laxmipur	Laxmipur CHC	CHC
67	MALKANGIRI	Kalimela	Kalimela CHC	CHC
68		Malkangiri DHH	Malkangiri DHH	DHH
69	MAYURBHANJ	Baripada DHH	Baripada DHH	DHH
70		Jasipur	Jasipur CHC	CHC
71		Karanjia SDH	Karanjia SDH	SDH
72		Rairangpur SDH	Rairangpur SDH	SDH
73		Udala SDH	Udala SDH	SDH
74	NABARANGAPUR	Nawarngpur DHH	Nawarngpur DHH	DHH
75		Papadahandi	Papadahandi CHC	CHC
76		Umerakote	Umerkote CHC	CHC
77	NAYAGARH	Dasapalla	Dasapalla CHC	CHC
78		Nayagarh DHH	Nayagarh DHH	DHH
79	NUAPADA	Khariar	Khariar CHC	CHC
80		Nuapada DHH	Nuapada DHH	DHH
81	PURI	Nimapara	Charichhak CHC	CHC
82		Nimapara	Niamapara CHC	CHC
83		Puri DHH	Puri DHH	DHH
84		Satyabadi	Sakhigopal CHC	CHC
85	RAYAGADA	Gunupur SDH	Gunupur SDH	SDH
86		Rayagada DHH	Rayagada DHH	DHH
87	SAMBALPUR	Kuchinda. SDH	Kuchinda. SDH	SDH
88		Rairkhol SDH	Rairkhol SDH	SDH
89		Sambalpur DHH	Sambalpur DHH	DHH
90	SONEPUR	Dunguripalli	Dunguripalli CHC	CHC
91		Soenpur DHH	Soenpur DHH	DHH
92	SUNDARGARH	Bonei SDH	Bonei SDH	SDH
93		Rajgangpur-Hospital	Rajgangpur-Hospital	CHC
94		RGH-Rourkela DHH	RGH-Rourkela DHH	DHH
95		Sundargarh DHH	Sundargarh DHH	DHH

• Annexure 7: District wise list of Ambulances & Motor Boats

District wise list of Ambulances & Motor Boats

Particularly in coastal areas where villages are completely cut off medical relief is provided through motor boats / country boats regularly. In some instances patients are also transferred to health institutions for appropriate medical care.

The district health authorities place their requisition to the district administration for providing motor boats/country boats for the medical relief operation.

Name of the district	Name of the block	No. of Ambulance	No. of Motor boats required
Anugul	Angul	1	2
	Athamallik	1	3
	Pallahara	1	
	Chhendipada	1	
	Talcher	1	
	Kaniha	1	
Balasore	Sadar	1	1
	Basta	1	1

	Bhogarai	1	1
	Remuna	1	1
	Jaleswar	1	1
	Nilagiri	1	
	Baliapal	1	1
	Soro	1	
Baragarh	Ambabhana		
	Bheden	1	
	Attabira	2	
	Padmapur	2	
	Gaisilat		
	Paikmal		
	Jharbandh	1	
Bhadrak	Basudevpur	8	27
	Bhandaripokari		
	Barapada		
	Chandabali		
	Dhamanagar		
	Tihidi		
Bolangir	Gudvella	4	1
	Saintala	3	
	Titlagarh	3	
	Deogaon	3	
Boudh	Kantamal	1	
	Boudh	1	
	Harbhanga	1	
Cuttack	Berhampur	14	16
	Subarnapur		
	Bindhanima		
	Maniabandha		
	Kanpur		
	Dompada		
	Niali		
	Adaspur		
	Mahidharpada		
	Bentkar		
	Tangi		
	Salepur		
	Mahanga		
	Nischintokoili		
Deogarh	Barkote	1	
	Tileibani	1	
	Reamal	1	
	Deogarh Town	1	
Dhenkanal	Gandia	1	
	Sadar	1	
	Odapada	1	
	Kamkhyanagar	1	
	Parjanga	1	
	Bhuban	1	1
Gajapati	Kasinagar	1	
Ganjam	Digapahandi	2	
	Sanakhemundi	2	
	Hinjulicut	1	

	Patrapur	1	
	Chikiti	1	
	Rangeillunda	3	
	Sergarh	1	
	Purusottampur	1	
	Polasara	1	
	Chatrapur	3	
	K.S Nagar	1	
	Ganjam	1	
	J.N Prasad	1	
	Bhanjanagar	3	
	Bellagunta	2	
	Aska	2	
	Sorada	2	
	Dharakote	1	
Jagatsinghpur	Biridi	1	1
	Ballikuda	1	2
	Jagatsinghpur	1	2
	Tritol	1	1
	Naugaon	1	1
	Kujanga	1	1
	Erasama	1	2
	Raghunathpur	1	1
Jajpur	Barachana	2	4
	Bari	2	2
	Binjharpur	1	1
	Korei	2	3
	Dharmasala	1	
	Dasarathpur	2	2
	Jajpur	2	3
	Rasulpur	1	1
	Danagadi	1	
	Sukinda	1	1
Jharsuguda	Lakhanpur	2	
Kalahandi	Jaipatna	29	2
	Kalampur		
	Koksara		
	Karlamunda		
	Kesinga		
Kandhamal		17	
Kendrapara	Rajakanika	1	2
	Rajnagar		
	Aul	1	
	Pattamundai	1	
	Mahakalpara	1	
	Marsaghai	1	
	Patkura		
	Indupur		
	Derabishi	1	
Keonjhar	Hatadihi	15	
	Anandapur		
	Ghasipura		
Khurda	Balipatna	1	3
	Khurda		2

	Balianta		3
	Tangi	1	
	Begunia		2
	Jatni	1	2
	Bhubaneswar		1
Koraput	Kotpad	2	1
Malkangiri	Mathili	4	
	Korkunda	11	
	K. Gumma	8	2
	Podia	4	
	Kalimela	6	
Mayurbhanj	Kaptipada		1
	G.B Nagar	5	1
	Betnoti	4	2
	Badasahi	5	1
	Rasgovindpur	3	2
	Morada	4	1
	Baripada Municipality		
Nawarangpur			
Nayagarh	Bhapur	5	1
	Khandapara		
	Gania		
	Nayagarh		
Nuapada	Khariar Road	1	
	Komna	1	
	Khariar	1	
	Sinapali	1	
	Boden	1	
Puri	Satyabadi	11	2
	Astaranga		4
	Kakatpur		3
	Puri Sadar		3
	Nimapada		4
	Krushnaprasad		1
	Delanga		5
	Gop		3
	Kanas		5
	Pipili		2
	Brahmagiri		2
Rayagada	Rayagada	24	
	Gunupur		
	Gudari		
	Chandrapur		
	Ramanguda		
	Bissamcuttack		
	Muniguda		
	Padmapur		
	K. Singpur		
Sambalpur	Dhankauda	19	1
	Maneswar		
	Jujumura		
	Rengali		
	Kuchinda		
	Rairakhol		

	Bamra		
	Naktideul		
	Jamankira		
	Sambalpur Municipality		
Subarnapur	Tarva	3	
	Binika	3	
	Naikenpali	3	
	Birmaharajpur	3	
	Ullunda	3	
Sundargarh	Sadar (Sundargarh)	21	
	Tangerpali		
	Subdega		
	Balisankara		
	Laphripara		
	Kutra		
	Kuarmunda		
	Nuagaon		
	Bisra		
	Lathikata		
	Bonai		
	Lahunipara		
	Gurundia		
	Koida		
	Bargoan		
	Rajgangpur		

#### Annexure 8: District/Block wise list of Mobile Medical Teams

District/Block wise list of Mobile medical Teams

Name of the district	District Level	Block Level
Anugul	4	6
Balasore	2	12
Baragarh	1	7
Bhadrak	1	8
Bolangir	1	4
Boudh	1	3
Cuttack	1	14
Deogarh	1	4
Dhenkanal	1	8
Gajapati	1	1
Ganjam	4	22
Jagatsinghpur	1	8
Jajpur	1	11
Jharsuguda	1	1
Kalahandi	1	5
Kandhamal	1	14
Kendrapara	2	11
Keonjhar	1	3
Khurda	1	10
Koraput	1	1
Malkangiri	1	8
Malkangiri	1	6
Mayurbhanj	1	7

Nawarangpur	1	11
Nayagarh	1	8
Nuapada	1	4
Puri	1	15
Rayagada	1	10
Sambalpur	1	10
Subarnapur	1	7
Sundargarh	4	24

• **Annexure 9: District wise list of Medical Relief Centers in the State**

- District wise List of Medical Relief Centers in the State
- Medical Relief Centers are opened at existing Sub Centre or any health institutions, other Govt. premises like AWC, Schools, Panchayats office as per the situation and manned mostly by paramedics and Medical Officers in mobile teams visits the MRC in rotation. Wherever workload is more Medical Officers are also deployed. As the water recedes staff from MRCs visit the affected villages to provide relief & recovery.

Name of the district	Name of the block	No. of MRC planned	Total
Anugul	Angul	3	16
	Athamallik	5	
	Pallahara	2	
	Chhendipada	3	
	Talcher	1	
	Kaniha	2	
Balasore	Sadar	4	40
	Basta	7	
	Bhogarai	7	
	Remuna	4	
	Jaleswar	8	
	Nilagiri	4	
	Baliapal	4	
	Soro	2	
Baragarh	Ambabhana	6	27
	Bheden	4	
	Attabira	2	
	Padmapur	5	
	Gaisilat	3	
	Paikmal	3	
	Jharbandh	4	
Bhadrak	Basudevpur	2	19
	Bhandaripokari	3	
	Barapada	1	
	Chandabali	5	
	Dhamanagar	4	
	Tihidi	4	
Bolangir	Gudvella	12	21
	Saintala	5	
	Titlagarh	2	
	Deogaon	3	
Boudh	Kantamal	9	20
	Boudh	5	
	Harbhanga	6	
Cuttack	Berhampur	5	56
	Subarnapur	3	

	Bindhanima	3	
	Maniabandha	4	
	Kanpur	3	
	Dompada	4	
	Niali	4	
	Adaspur	4	
	Mahidharpada	4	
	Bentkar	4	
	Tangi	3	
	Salepur	4	
	Mahanga	5	
	Nischintokoili	6	
Deogarh	Barkote	3	15
	Tileibani	7	
	Reamal	4	
	Deogarh Town	1	
Dhenkanal	Gandia	5	30
	Sadar	5	
	Odapada	5	
	Kamkhyanagar	5	
	Parjanga	5	
	Bhuban	5	
Gajapati	Kasinagar	4	4
Ganjam	Digapahandi	5	109
	Sanakhemundi	5	
	Hinjulicut	15	
	Patrapur	5	
	Chikiti	4	
	Rangeillunda	4	
	Sergarh	3	
	Purusottampur	6	
	Polasara	4	
	Chatrapur	4	
	K.S Nagar	4	
	Ganjam	10	
	J.N Prasad	5	
	Bhanjanagar	7	
	Bellagunta	8	
	Aska	6	
	Sorada	10	
	Dharakote	5	
Jagatsinghpur	Biridi	5	38
	Ballikuda	5	
	Jagatsinghpur	3	
	Tritol	5	
	Naugaon	5	
	Kujanga	5	
	Erasama	5	
	Raghunathpur	5	
Jajpur	Barachana	5	93
	Bari	15	
	Binjharpur	11	
	Korei	11	
	Dharmasala	8	

	Dasarathpur	6	
	Jajpur	17	
	Rasulpur	11	
	Danagadi	5	
	Sukinda	4	
Jharsuguda	Lakhanpur	3	3
Kalahandi	Th Rampur	3	18
	Lanjigarh	4	
	Koksara	2	
	Dharmagarh	2	
	Kalampur	7	
	Junagarh	6	
	Bhawanipatna	5	
Kandhamal			
Kendrapara	Rajakanika	3	38
	Rajnagar	4	
	Aul	6	
	Pattamundai	4	
	Mahakalpara	4	
	Marsaghai	10	
	Patkura	5	
	Indupur	1	
	Derabishi	1	
Keonjhar	Hatadihi	9	14
	Anandapur	4	
	Ghasipura	1	
Khurda	Balipatna	3	23
	Khurda	3	
	Balianta	6	
	Tangi	3	
	Begunia	3	
	Jatni	3	
	Bhubaneswar	2	
Koraput	Kotpad	5	15
Malkangiri	Mathili	4	
	Korkunda	2	
	K. Gumma	1	
	Podia	2	
	Kalimela	1	
Mayurbhanj	Kaptipada	1	9
	G.B Nagar	1	
	Betnoti	1	
	Badasahi	1	
	Rasgovindpur	2	
	Morada	1	
	Baripada Municipality	2	
Nawarangpur		2	11
Nayagarh	Bhapur	9	24
	Khandapara	4	
	Gania	6	
	Nayagarh	5	
Nuapada	Khariar Road	13	49
	Komna	11	
	Khariar	7	

	Sinapali	11	
	Boden	7	
Puri	Satyabadi	5	81
	Astaranga	5	
	Kakatpur	10	
	Puri Sadar	6	
	Nimapada	9	
	Krushnaprasad	4	
	Delanga	5	
	Gop	8	
	Kanas	23	
	Pipili	2	
	Brahmagiri	6	
	Rayagada	17	
	Gunupur	11	
Rayagada	Gudari	8	94
	Chandrapur	6	
	Ramanguda	13	
	Bissamcuttack	7	
	Muniguda	12	
	Padmapur	8	
	K. Singpur	12	
	Dhankauda	2	
	Maneswar	2	
	Jujumura	2	
Sambalpur	Rengali	2	27
	Kuchinda	1	
	Rairakhol	1	
	Bamra	1	
	Naktideul	2	
	Jamankira	2	
	Sambalpur Municipality	12	
	Tarva	7	
	Binika	12	
	Naikenpali	3	
Subarnapur	Birmaharajpur	6	30
	Ullunda	2	
	Sadar Block Sundargarh	5	
	Tangerpali	5	
	Subdega	3	
Sundargarh	Balisankara	5	64
	Laphripara	3	
	Kutra	1	
	Kuarmunda	5	
	Nuagaon	4	
	Bisra	2	
	Lathikata	6	
	Bonai	5	
	Lahunipara	2	
	Gurundia	6	
	Koida	3	
	Bargoan	5	
	Rajgangpur	4	

• Annexure 10: District wise List of Flood Prone Gram Panchyats

District wise list of Flood Prone Gram Panchyats

District	Name of the block	No. of the flood prone (GPs)	Total flood prone GPs
1. Anugul	Angul	1	31
	Athamallik	14	
	Pallahara	3	
	Chhendipada	2	
	Talcher	4	
	Kaniha	7	
2. Balasore	Sadar	18	98
	Basta	7	
	Bhogarai	9	
	Remuna	11	
	Jaleswar	20	
	Nilagiri	7	
	Baliapal	16	
	Soro	5	
3. Baragarh	Ambabhana	3	18
	Bheden	4	
	Attabira	1	
	Padmapur	3	
	Gaisilat	2	
	Paikmal	3	
	Jharbandh	2	
4. Bhadrak	Basudevpur	8	65
	Bhandaripokari	9	
	Barapada	6	
	Chandabali	8	
	Dhamanagar	23	
	Tihidi	11	
5. Bolangir	Gudvella	7	14
	Saintala	1	
	Titlagarh	2	
	Deogaon	4	
6. Boudh	Kantamal	25	34
	Boudh	5	
	Harbhanga	4	
7. Cuttack	Athagarh	6	126
	Subarnapur	18	
	Tigiria	5	
	Baramba	9	
	Kanpur	20	
	Dompada	20	
	Kantapada	8	
	Baranga	7	
	Sadar	6	
	Tangi	2	
	Salepur	9	
	Mahanga	6	
	Nischintokoilli	10	
8. Deogarh	Barkote	3	17

	Tileibani	7	
	Reamal	4	
	Deogarh Town	Ward No. 5 / 6 & 10	
9. Dhenkanal	Gandia	4	25
	Sadar	1	
	Odapada	4	
	Kamkhyanagar	8	
	Parjanga	3	
	Bhuban	5	
10. Gajapati	Kasinagar	4	4
11. Ganjam	Digapahandi	7	112
	Sanakhemundi	12	
	Hinjulicut	4	
	Patrapur	7	
	Chikiti	6	
	Rangeillunda	5	
	Sergarh	5	
	Purusottampur	6	
	Polasara	6	
	Chatrapur	5	
	K.S Nagar	3	
	Ganjam	5	
	J.N Prasad	5	
	Bhanjanagar	8	
	Bellagunta	5	
	Aska	8	
	Sorada	6	
	Dharakote	9	
12.Jagatsinghpur	Biridi	7	83
	Ballikuda	6	
	Jagatsinghpur	8	
	Tritol	11	
	Naugaon	9	
	Kujanga	8	
	Erasama	20	
	Raghunathpur	14	
Jajpur	Barachana	14	120
	Bari	29	
	Binjharpur	11	
	Korei	13	
	Dharmasala	9	
	Dasarathpur	11	
	Jajpur	20	
	Rasulpur	8	
	Danagadi	4	
	Sukinda	1	
Jharsuguda	Lakhanpur	4	4
Kalahandi	Jaipatna		43
	Kalampur		
	Koksara		
	Karlamunda		
	Kesinga		
Kandhamal			
Kendrapara	Rajakanika	29	117

	Rajnagar	7	
	Aul	15	
	Pattamundai	13	
	Mahakalpara	12	
	Marsaghai	19	
	Patkura	18	
	Indupur	3	
	Derabishi	2	
Keonjhar	Hatadihi	9	14
	Anandapur	4	
	Ghasipura	1	
Khurda	Balipatna	5	27
	Khurda	4	
	Baliana	10	
	Tangi	1	
	Begunia	1	
	Jatni	2	
	Bhubaneswar	4	
Koraput	Kotpad	5	5
Malkangiri	Mathili	9	44
	Korkunda	5	
	K. Gumma	13	
	Podia	12	
	Kalimela	5	
Mayurbhanj	Kaptipada	4	25
	G.B Nagar	5	
	Betnoti	3	
	Badasahi	5	
	Rasgovindpur	5	
	Morada	1	
	Baripada Municipality	Ward No. 5, 9 & 14	
Nawarangpur			
Nayagarh	Bhapur	6	25
	Khandapara	4	
	Gania	5	
	Nayagarh	10	
Nuapada	Khariar Road	10	26
	Komna	4	
	Khariar	2	
	Sinapali	5	
	Boden	5	
Puri	Satyabadi	16	128
	Astaranga	8	
	Kakatpur	13	
	Puri Sadar	11	
	Nimapada	18	
	Krushnaprasad	7	
	Delanga	13	
	Gop	7	
	Kanas	22	
	Pipili	5	
	Brahmagiri	8	
Rayagada	Rayagada	17	94
	Gunupur	11	

	Gudari	8	
	Chandrapur	6	
	Ramanguda	13	
	Bissamcuttack	7	
	Muniguda	12	
	Padmapur	8	
	K. Singpur	12	
Sambalpur	Dhankauda	4	47
	Maneswar	7	
	Jujumura	2	
	Rengali	3	
	Kuchinda	2	
	Rairakhola	4	
	Bamra	1	
	Naktideul	8	
	Jamankira	4	
	Sambalpur Municipality	13 wards	
Subarnapur	Tarva	14	39
	Binika	6	
	Naikenpali	5	
	Birmaharajpur	7	
	Ullunda	7	
Sundargarh	Sadar Block Sundargarh	4 GP 3 Wards of Municipality	76
	Tangerpali	6	
	Subdega	3	
	Balisankara	5	
	Laphripara	6	
	Kutra	3	
	Kuarmunda	5	
	Nuagaon	8	
	Bisra	5	
	Lathikata	7	
	Bonai	7	
	Lahunipara	4	
	Gurundia	8	
	Koida	5	
	Bargoan	3	
	Rajgangpur	4	

- Annexure 11: Format for Early warning Signals/Alert for Outbreaks

### Format for Early Warning Signal / Alert for outbreaks

(should be sent within 48 hrs. of an outbreak)

1. State:        District:        Date of reporting:        Week No.
2. Is there any unusual increase in Cases/Deaths or unusual event in any area? Yes/No
3. If yes, provide the following information:

I.	Name of the Disease/ Syndrome (Provisional/Confirmed)	
II.	Name of the affected area (Block, PHC, Sub-center, Village, Ward/Town)	
III.	No of cases	
IV.	No of deaths	
V.	No. of cases referred	
VI.	Date of start of the outbreak	
VII.	Total population of affected area (Village/Ward)	
VIII.	Salient epidemiological observations	
IX.	Lab results (type of sample, number of samples collected and tested, What tests, where, results)	
X.	Control measures undertaken	
XI.	Investigation of outbreak by District/Blocks RRT or not)	
XII.	Present status	
XIII.	Any other information	

ADMO (PH)/DSMO  
Mobile No:-

- Annexure 12: Format for reporting Out break ( final Report)

## OUTBREAK INVESTIGATION FORMAT (Final Report)

(Must be sent after the outbreak is contained)

### 1. General Information

- Disease - Suspected/ Lab Confirmed
- District -
- Town/CHC -
- Sub-Centre -
- Village -
- Population -
- Holdings -

### 2. Background Information

- Person reporting the outbreak -
- Date of reporting -
- Date of investigations started -
- Person(s) investigating the outbreak -

### 3. Details of investigation

- Describe how the cases were found (may include):
- House-to-house searches in the affected area:
- Visiting blocks/village adjacent to the affected households: •

#### Conduct Environmental survey

- No. of wells in village/ward
- No. of tube wells in village/ward
- No. of pipe water supply points
- Probable source of infection
- Conducting interviews with other stakeholders (treating physicians, AW/W, ASHA, teachers, PRI members, NGOs etc.)
- Conducting record reviews at local hospital(OPD & IPD):
- Reviewing Current guidelines and SOP:
- Requesting health workers to report similar cases in their areas, etc:

### 4. Descriptive epidemiology by time, place and person

#### a. Cases by time, place and person (attach summary tables and relevant graphs and maps)-

	No. of Cases			Insert Graph
Age Group	M	F	Total	
Total				

#### b. Spot map of the affected area

Spot map
Epicurve

### 5. Laboratory investigation:

6. Test

Nature of Samples collected	Blood/Serum	Rectal swab	Skin smear	Other tissue	Water Samples
Total no. of samples collected					

Result of samples tested at State Referral Lab

7. Description of control measures taken

a. Case Management and Referral

Total cases	Total death	No. of Cases referred	Name of the referral Health Institutions

b. IEC/BCC activity

- No. of Sensitization meeting conducted-
- No. of participants-
- Category of meeting- Urban/ NAC/ Block/Sector/SC/ Village-
- No. of leaflet or posters etc. distributed-

8. Description of Measures taken during follow-up visits-

- No. of MAT ( Minor Ailment Treatment) given
- Advt. through electronic media/print media •
- MRC/ DTC opened or not
- Daily surveillance by HW/ASHA conducted or not
- Preventive disinfection of drinking water source done or not •
- No. of wells/ tube wells disinfected with date

9. Brief Description of Problem encountered-

10. Factors, which, in your opinion, contributed to the outbreak

- Source of infection
- Steps undertaken by RRT to identify source of infection

11. Conclusions and Recommendation

Signature of DSMO

Signature of ADMO (PH)

Signature of Epidemiologist

- Annexure 13: SOP for management of Flood

## Guidelines on Development of Action Plan to combat Flood / Cyclone / Epidemics

Odisha is perennially affected by natural hazards like Flood/Cyclone/Earthquakes and manmade hazards etc. which leads to diseases, disability and deaths in the community. During flood / cyclone and its aftermath, water borne diseases & vector borne diseases commonly occurred in the community. To reduce the risks of disaster related health events departments should undertake preparedness activities at all levels in advance. This can mitigate the suffering of the people, loss of life, property & livelihood.

To address such disasters, health functionaries located at state, district, block level need to make the following arrangements in advance.

### Framework of Activities

	Activity	Point of Action	Responsible Nodal Person	Time line
1.	Hazard analysis & vulnerability mapping	State & District Surveillance unit	SSO & ADMO (PH)	May
2.	Functioning of Control Room	State, Districts & Block CHC	SSO,ADMO(PH),MO I/C	June 15 <sup>th</sup> - Oct 15 <sup>th</sup>
3.	Drugs & logistics placement	OMSCL / District Drug Store/Block drug store	Managing Director, ADMO (Med&PH), TSK, Block Pharmacist, PHEIO	Prepositioning from May to June 15 <sup>th</sup> and as when required
4.	Manpower deployment	State, district & blocks, Trg Institutes, MCHs	DHS/ DPH/ MD NHM/ DMET/ DFW/ Dir Nursing/ Principal MCHs/ Principal Training Institutes	As per need & whenever disaster happens
5.	Mobility support	State, district & blocks	DHS/DPH/MD NHM/CDMO/ADMO PH/Block MO I/C	Pre disaster assessment, post disaster follow up activities
6.	Case management & referral	MRC (vill, SC)/DTC (Vill, Sc) PHC/CHC/ SDH/ DHH/ MCH/ CH,BBSR/ RGH Rkl/ Private accredited hospitals	ASHA/AWW/Paramedical worker/MOs/Specialists	Between Nov to May (Capacity building, reorientation, Sensitization, Review meetings, FGDs etc)

7.	Surveillance	State, District & block surveillance units	FLW, Block RRT , District RRT & State RRT	June 15 <sup>th</sup> to Oct 15 <sup>th</sup> and during any disaster occurrence
8.	Containment measures	State/District & Block RRTs, local health staff & health volunteers	Quick Response Team, Rapid Response Teams, MRC, DTC, local health units, CBOs etc	During Disasters

### 1. Identification of Flood / Cyclone Prone areas (Hazard Mapping) & Formation of Zones

- The district authorities should identify flood / cyclone prone areas of the district (Block, G.P & Village wise with population) and the list of the affected health institutions based on the last flood / cyclone.
- While hazard mapping, the areas completely submerged / marooned during the last flood / cyclone should be mentioned.
- The districts may be divided into suitable zones keeping in view the operational aspects & each zone is to be assigned to an officer of the rank of ADMO/SDMO for supervision and monitoring and to ensure inter - departmental coordination for smooth implementation of activities.
- Coordination with revenue division needs to be done for identification of marooned/partially marooned areas, shelter homes, high land & low land areas

### 2. Functioning of Control Rooms

- From 15<sup>th</sup> June, the control Room will be operational 24X7 at the State, District & Block Head Quarter level.
- During normal time control room should monitor the preparedness activities during pre-disaster, disaster & post disaster, dissemination of early warning on flood situation received from Revenue Authorities.
- Ensuring initiation of implementation of public health measures, monitoring trend of diseases and cope with any situation arising out of disaster.
- The line list of district RRT & block RRT with mobile nos. of key nodal persons in the cut off areas should be available at district level.

### 3. Casualty Services & Contingency Plan for Medical Relief Centre:-

- During disasters arrangements should be made to provide casualty services 24X7 at all health institutions.
- Contingency plan to open medical relief centers (MRC) at strategic places to be planned in advance. Those centers should be located at strategic places, so that they can render services to disadvantaged population where existing infrastructures are likely to be ineffective.

- State experiences disasters/ flood/cyclone/epidemic each year, the contingency planning should be based on the previous years experience & made in such a way that we need not repeat the same plan each year & people should be made aware about the plan.
- Mobile Health Teams & Mobile Medical team should render the services regularly to displaced persons at their place of shelter and in marooned villages.
- Steps may be taken to make the people aware about the availability of services of

108

ambulances & 102 ambulances in the districts where ever it is available.

- During disaster the case management costs & other entitlements to be borne by the

Govt. of Odisha as per existing guidelines of OSTF,RSBY & VKK scheme etc

#### 4. Contingency Plan for Mobile Health Team & Deployment of staff:-

- Mobile health teams consisting of one M.O & one Paramedic are to be mobilized from DHH, SDH and non affected Blocks within the districts. The teams should be kept in readiness for deployment in the flood / cyclone affected areas.
- At State HQ contingency plan is in force for deployment of medical teams from Medical colleges & Training Institutions and other non flood / cyclone prone districts within a short notice. Keeping in mind the manpower required during the previous flood, the districts may intimate about the requirement of personnel from outside the district, in case of high flood.

#### 5. Supply of Drugs, logistics & Disinfectants:-

Taking into account the available stock & store position and utilization of drugs during the last flood / cyclone, the anticipated requirements of stock & store can be estimated. Accordingly the District Authorities should take necessary steps to procure medicine & disinfectants etc. from SDMU and ensure that adequate life saving drugs / disinfectants are available with all the health institutions and paramedical workers under their control. Ensure that stock & store are pre positioned sufficiently ahead in the areas likely to be marooned.

- Make available ORS sachets at SC, PHC (N) and Block PHC/CHC of the district. A minimum of 100 sachets with Health Worker at Sub Centre level, 400 sachets at PHC (N) and 1500 sachets at Block CHC level. ASHAs to be provided with 25 nos of ORS sachets wherever stock is exhausted the stocks need to be replenished.
- As both large packets & small sachets of ORS are made available at all health facilities; they must be provided in the proportion of 60:40 respectively.
- Halazone/ Chlorine tablets- 1000 tabs at each SC, 3000 tabs at PHC (N) and 5000 tabs at Block CHC level may be stored before the monsoon period for disinfection of water at community level.



- To maintain the quality of Bleaching powder at grass root level - one kg bleaching powder are made available at SC level while at PHC (N)- 1 bag (25 kg), Block CHC- 3 bags of bleaching powder need to be stored to disinfect the source of drinking water.
  - In case of health institutions likely to be affected and the areas likely to be cutoff, bleaching powder as per requirement need to be stocked at identified/alternate sites .
- Antidiarrhoeals, Zinc tablets, IV fluids & other essential drugs are made available at the health facility level.
- Ensure availability of a minimum of five injection ASV vials (Anti Snake Venom) at PHC (N) and 10 injection ASV vials at Block CHC. The patient may be administered Inj. ASV as per the need without any ceiling.
  - Stock & store need to be replenished at all levels as & when required.

#### 6. Ambulance Services:-

- All the Ambulances of different health institutions of the districts should be kept in readiness.
- Simultaneously, other vehicles have got to be repaired & kept in road worthiness as far as practicable so that they can be pressed in to service during emergency situation. .

In case of non-availability of institutional ambulances, the ambulances may be hired using Untied/ RKS fund of NHM.

- Wherever 108 & 102 ambulance services are available it must be utilized for referral of cases.

#### 7. Disinfection of Drinking Water Sources:-

- Ensuring safe drinking water is of paramount importance to prevent outbreak of water borne diseases.
- Disinfection of all drinking water sources by bleaching powder must be undertaken routinely and frequently.
- Water quality analysis of different sources and distribution points is another important activity to be pursued in coordination with RD & RWSS etc.
- Preventive maintenance & preventive disinfection of Tube wells/defunct tube wells can be undertaken by the Self Employed Mechanic (SEM) at village level.
- Adequate measures may be taken to distribute Halazone tabs/Chlorine tab and make people conversant about its use.
- Disinfectant (Bleaching power bag) should also be stored in cutoff areas at SC level in advance that are likely to be completely or partially marooned in flood.
- Orthotoludine Test Kits (OT test kit) to ensure chlorination & Hydrogen Sulphide Test kits (H<sub>2</sub>S) to confirm contamination of water are available in the districts to be utilized for Water Quality Monitoring at community level.

#### 8. Disease Surveillance (IDSP)

- During emergency weekly surveillance system should adopt itself to a daily mode. Prescribed formats are made available to the districts to be used at the time of disaster situation.
- Please ensure daily flow of information from different villages, SCs & health institutions of the districts.
- The epidemiological situation of communicable diseases, flood/cyclone should be analyzed daily at Block, District and State level to take immediate effective containment measures.
- Compliance reports of news items (morbidity & mortality) published in the daily newspapers should be immediately sent to State HQ through fax / e. mail, after undertaking proper investigation.

#### 9. Health Education:-

- District Mass Media organization (electronic, print, outdoor display), health service providers like M.O., AYUSHs, PHEIOs, MPHS (M & F), MPHw (M & F) should propagate the messages relating to personal hygiene, hand washing, safe drinking water, use of ORS large & small packets, Halazone & Chlorine tabs, water disinfection with bleaching Powder, food hygiene & environmental sanitation to AWWs/ASHAs/SHGs/Villagers.
- 'NIDHI RATHA' campaign is being conducted since 2012 to upscale health awareness in the community for Malaria, Dengue & Diarrhoea.
- The IEC campaign can be made successful & effective with the active participation of local GKS, NGOs, CBOs, teachers, elected panchayat members and involvement of private sector units.

#### 10. Daily Reporting:-

- The days report in the prescribed format need to be sent to State HQ through E.Mail & Fax by 3 P.M of the next day.

#### 11. Inter Sectoral Coordination:-

District natural calamity committee meeting to be conducted in the districts in the month of May

- To ascertain the requirement of boats, life jackets and other local requirements if any.
- To address the Gaps such as- Contaminated water, mosquito menace & waterborne & vector borne disease outbreaks
- The need to address sexual & reproductive health of the vulnerable population during disasters/epidemics.
- Work flow management to provide minimum initial service package to women & children during disasters

- Roles & responsibility of related deptts like Police, Judiciary, Social welfare, Water & sanitation, PR & Health to address gender based violence during disasters.
- To keep liaison with District Magistrate - cum - Collector & Officials of related line departments & NGOs for smooth management of medical relief operation.

## 12. Additional Safety Measures:-

- In case of requirement of motor boats by the district for Medical Relief Operations, CDMOs to place requisition for motorboats from respective revenue authorities in advance.
- The life jackets supplied to the districts earlier should be utilized by Health personnel while rendering services in the flood / cyclone affected areas.
- The list of functional blood banks (Govt & Private) and blood Storage units in your districts.
- The line list of Cyclone/flood shelters to available with the districts Control Room to provide health care services to the displaced population at the time of disaster.
- The estimated list of Pregnant Women of the district to be available with District Control room to provide them with minimum RCH services during the disaster.
- The list of ILR points & CHC/PHC/SC likely to be submerged to be available with District RRT.
- The list of RD & RWSS field level Functionaries mobile nos. and location map to be available with the district.
- The list of Block Level Revenue, Police HQs I/C, Law Officer, Social Welfare Officer, School CI, Residential School, CBOs, Mother NGOs, Water & sanitation Deptt. Mobile nos to available with the district control.
- They logistics like delivery kits, Family planning kits, HIV & AIDS medicines under Minimal Initiative Service Package(MISP) to be prepositioned before the monsoon period to ensure better improved health care of women & adolescent children.

## 13. Minimal Initiative Service Package (MISP)

### What is MISP?

MISP is a state initiative project towards protecting the health of vulnerable group such as women & children during disasters. It will specifically address the sexual & reproductive Health services & gender based violence during disasters at district & sub district level.

### Objective

- To improve upon the existing health service delivery package for Women & Children at the time of any disasters
- To reduce Gender based Violence(GBV) and support the GBV victims during the disasters

## Strategy

- Capacity building of all MOs & paramedical Workers, Quick Response Team or first responders( HW/ ASHA/AWW/SHG/PR/Teacher/CBO/Youth club member)
- Intersectoral coordination with related deptt. like PR, RD, H& UD, School & mass, ST & SC, W&CD, Water & Sanitation, Judiciary, Police & Revenue Deptt.
- Prepositioning of Drugs & Logistics - Delivery Kit, FP measures like OC/EOC/IUD/Condom, HIV & STI Drugs & Dignity kits for adolescent girls, women & Men & SOPs for each of the kits etc
- Creation of a help desk Center at DHQs/FRUs for examination of Gender Based Violence Victims

## Action Plan

District Level: ADMO PH & ADMO FW will work in coordination with each other to implement this programme in the field. Sensitization of the nodal persons will be done at state level for detailing of the MISP plan roll out during disaster. The data required for this purpose are detailed below-

- Block/SC list of Pregnant Women of the district , Eligible couple list
- Block & SC wise list of Adolescent Girls
- Block wise CHC Store Pharmacist name & Nos
- Block wise Mobile nos of MO I/C, PHEIO, MPHS(M&F), BPM,BADA,DEO
- Block/SC wise list of marooned villages & partially marooned villages
- Front Line workers ( HW/ASHA/AWW) list & nos
- Block wise list of Pharmacist mobile nos
- MHU /PHN AYUSH Mobile Nos & List
- 108 & 102 Ambulances mobile nos & their location
- Related Deptt. Nodal Officers names & Nos to be available with district Control Room
- Requirement of the districts for MISP logistics & kits.
- List of MOs & Paramedical workers, Front Line workers (ASHA/ AWW/ SHG/ PR/Teacher/HW/CBOs/Youth club Members)

The above mentioned data base will be utilized to develop a action plan to roll out MISP in your district across the state.

NB: Enclosed:

- Annexure I - Format for enumeration of flood prone areas, opening of MRC etc.
- Annexure II - Daily reporting format.

**FLOOD PRONE AREAS (Attach map of floor prone areas of the district).**

Sl No	Name of Block	No of flood prone GP	No of villages likely to be affected		Total population likely to be affected	No of institution likely to be affected		
			Marooned	Partially Marooned		CHC/BPHC	PHC-N	SC

**Contingency Plan for Opening MRC**

Sl. No	Name of Block	Mention name of places for functioning of MRC					Total
		1	2	3	4	5	

**Plan for Formation of Mobile Team**

No of Team	
From within district	
From outside district	
Total Nos	

**No 108 Ambulances/MHU sites in Flood Prone areas**

Sl No	Name of the Block	No Of Ambulances ( specify the nos of 108 & MHUs and their location)	Where stationed

### Requirement of Estimated Stock/Anticipated Stock

Sl No	Item	Quantity
1.	ORS pkt large	
2.	ORS pkt Small	
3.	Halazone tablets	
4.	Chlorine Tablets	
5	Bleaching powder pkts	
6	Bleaching powder bags	
7.	Metronidazole tabs	
8.	Tetracycline cap	
9.	Norflx Tab	
10.	Ciproflox tab	
11.	IV fluid	
12.	Inj ASV	
13.	Doxy cycline	
14.	Gentian Violet	
15	Paracetamol Syrup	
16	Antidiarrhoeal syrup	
17	Antiallergic Syurp	
18	OT Test Kit	
19	H2s Test Kit	
20	Other essential drugs	

No of Community Dug wells in the Flood prone area ( Block wise)

Sl No.	Name of the Block CHC	No Of CommunityDug Well	No Of Tube Well

Requirement of No Of Motor Boats & their Station

Name of the Block	Name of the station	Nos Required

## Daily Information Sheet on Flood / Cyclone - 2016

District : _____			Date : _____			Reporting Date : _____														
1. Details of the Areas Affected																				
Name of the affected Block																	Total			
No of GPs affected																				
No of Villages affected																				
Total Population affected																				
No. of Marooned / partially marooned Villages																				
No. of Marooned Villages covered till date																				
2. Stock & Store Position																				
						3.														
Name of the Items		Quantity last receipt from SDMU with Date	Quantity at the District Warehouse on the Day	Qty issued to Perripheral institutions on the Day	Balance in the District Warehouse	Immediate Addl. Requirement	Name of the Block	Total No. Wells in the block (Govt. + Private)	Wells Disinfected											
Bleaching Powder									1st Round	2nd Round	3rd Round	4th Round	5th Round	6th Round	7th Round					
ORS																				
Halazone Tabs																				
IV Fluids																				
Anti Snake Venom																				
Anti Rabies Vaccine																				
4. Manpower Deployed				5. Containment Measures Taken				6. Disinfection of Water Sources												
No of Medical Teams Deployed on the day																				
From Within District																				
From Other District																				
No. of Medical Relief Centres Opened																				

## 6. Daily Report on Disease Condition

Name of the District :																				Dated			
Name of the Block	Severe Diarrhoea				Blood y Dysentery				V iral Hep atitis				Malaria				A.R.I						
	Cases		Deaths		Cases		Deaths		Cases		Deaths		Cases		Deaths		Cases		Deaths				
	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5			
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Name of the Block	Snake Bites				Skin Diseases				Measles				Block Wise IPD admitted (Severe Diarrhoea) cases only	Rectal Swab		Water Sample							
	Cases		Deaths		Cases		Deaths		Cases		Deaths			No.	Result	No.	Result	Result in H2S	Result in OT				
	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5	< 5	>= 5											
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
N.B: - The days report in the prescribed format need to be sent by 3.00 P.M														Signature of the Rep orting Officer									

- Annexure 14: SOP for management of Heat Wave

## GUIDELINES FOR PREPAREDNESS ACTIVITIES FOR HEAT WAVE CONDITION: -

### HEAT WAVE

#### Introduction:

In the year 1998, our state faced an unprecedented heat wave condition as a result of which about 2042 persons lost their lives. Though extensive awareness campaign have largely reduced the numbers of deaths during post 1998 period still casualties are being reported each year due to Heat Stress Disorders across different districts. The state experiences heat wave conditions from April to June causing insurmountable human suffering. Farmers, workers, Labourers and travelers mostly suffer from the Heat stress disorders those who are vulnerable for exposure to high atmospheric temperature. Therefore preplanned preventive measures reduce cases and death that need to be undertaken at district & sub district level.

#### Definition:

Heat wave can be defined as a condition of atmospheric temperature that leads to physiological stress which can cause loss of human life by disrupting the body's thermal equilibrium. The factors which influence heat stress are metabolic rate, air temperature, humidity, air movement and radiant temperature. The amount of heat gained by the body must be equaled by the amount of heat loss from it.

There will be no harm to human body if the environmental temperature remains at 37° C. whenever the environmental temperature increases above 37°C the human starts gaining heat from atmosphere. In case of humidity being high along with the temperature the person can suffer from heat stress disorders even with temperature of 37°C or above.

Heat wave can be defined as a condition of atmospheric temperature that leads to physiological stress, which sometimes can claim human life.

Quantitatively heat wave can be defined as follows:

1. Usually the normal temperature is less than  $<40^{\circ}\text{C}$ . Any increase from the above normal temperature is called heat wave.
  - $+ (5 \text{ or } 6)^{\circ}\text{C}$  : Moderate Heat Wave or Simply Heat Wave Days (HWD)
  - $7^{\circ}\text{C}$  or more : Severe Heat Wave Day (SHWD)
2. The normal temperature is less than  $\geq 40^{\circ}\text{C}$ . Any increase from the above normal temperature is called heat wave.
  - $+ (3 \text{ or } 4)^{\circ}\text{C}$  Moderate Heat Wave (or HWD)
  - $+5^{\circ}\text{C}$  or more - Severe Heat Wave Day (SHWD)
3. If the maximum temperature of any place continues to be  $45^{\circ}\text{C}$ . Consecutively for two days ( $40^{\circ}\text{C}$  for coastal areas), it is also called a Heat Wave Condition or HWD.

(Source: Indian Meteorological Department)

## Heat stress Disorders

### Definition:

A case with history of exposure to working in a hot environment with high to very high body temperature associated with any of the following - vomiting, headache, dizziness, fainting and altered or lower consciousness may be included as suffering from Heat stress disorder.

### Types of Heat Stress disorders

- i. Heat Cramps: - Muscle pains / Spasm associated with strenuous activity in a hot and humid environment.
- ii. Heat Exhaustion :- Heavy sweating / weakness / tiredness / dizziness/ headache / vomiting/ muscle cramps / fainting /Moist and Cool Skin and rapid weak pulse.
- iii. Heat Stroke :-  
Extremely high body temperature (above 103°F / 39.4°C orally or 105.8 ° 41°C rectally).  
Absence of sweating, red hot& dry skin. Rapid and strong pulse, throbbing headache, dizziness, nausea, confusion, seizures, comma, unconsciousness.

### State / District level preparedness

- i. Review Meeting: - Meetings of Nodal officers at State / District / Block level to be convened for review of the preparedness activities to meet the challenges of Heat Stress disorders.
- ii. Pre-position of Drugs / Logistics: - Provision of adequate supply of ORS, IV Fluids, and essential medicines to be ensured at all the health institutions. The stock to be available with MPHW (F) & (M), ASHA & Anganwadi workers as per the suitability and sufficiently ahead.
- iii. Sensitization meetings: All categories of health personnel's should be sensitized on heat stress disorders, its prevention and management.

### Infrastructure Preparedness:-

- a. Ear marked beds should be kept in readiness at a cool well-ventilated space in all health institutions.
- b. In the DHH, SDH & CHC / PHC wherever possible A.C / Coolers are to be made available & to utilize in the heat stroke room.
- c. Provision of Ice & Ice cold water at DHH / SDH / Block CHC & PHC as per requirement & availability.
- d. Cold water should be stored in earthen pots in each health institutions.
- e. ORS corner should be opened at all health institutions at OPD / IPD / other places.
- f. All Ambulances & other CHC vehicle to be kept in roadworthiness for referral of patients.

### Monitoring:-

- a. Control Room to be operational at State HQ / District HQ / Block HQ from 1<sup>st</sup> March to 15<sup>th</sup> June.

- b. Daily reporting of cases and deaths to be done through the prescribed format. (Reporting format enclosed). Even a Nil report is required to be sent. Daily report should be collected from all health institution by evening. Compiled & transmitted it to the state health control room by Fax or E-mail by 12 noon of next day. This report is being transmitted by State Control Room daily to the Revenue Control Room.
- c. Death Inquiry: Reports regarding death of a person due to heat stress disorder either at work place or any other area when received should be jointly inquired by local Revenue Officer and local Medical Officer of a PHC, CHC, SDH & DHH ( to be nominated by SDMO & CDMO in case of SDH & DHH). The report to that effect should be sent to District Magistrate cum Collector & the copy of the report need be sent immediately to State Health Control Room over Fax or e-mail.

#### IEC Activities -

An intensive IEC campaign to be launched to keep people inform about Do's & Don'ts as regards exposure to heat wave, fluid intake, regulation of work, clothing, protective device & work environment during the heat wave period.

- Health Worker (M & F), Supervisors (M & F), PHEIO, Medical Officer should resort to Inter personal communication to propagate the messages as this is the most effective media with maximum reach. During field visit group discussions can be initiated & emphasis should be given on preventive aspect.
- Signage in respect of Do's & Don'ts of Heat Stroke need to be displayed in the strategic places.
- Leaf lets to be distributed & Poster displayed at strategic places of people
- IEC campaign through print & electronic media to be conducted through Deptt. of SIH & FW.

#### Inter Sectoral Coordination

Coordination between Revenue, PRI, H & UD, W & CD Deptt., RWSS, Education, ST & SC Deptt. & Health is of utmost importance to focus the attention, mobilize resources, manage the heat wave condition & minimize the suffering of the community. The Officials at their respective places are expected to have close liaison with different department.

#### Activities undertaken by other line Departments -

- Sinking of Hand Pumps. Drilling of Wells, Repair of Tube wells & PWS.
- Opening of Jala Chatras & Mobile Water Tankers to render service in water scarcity areas.
- Press note advertising against engagement of labour at worksite between 11.30 A.M to 3.30 P.M to avoid exposure.
- Bus Owners are requested to avoid overcrowding, restrict plying during the hours of intense heat. Provision of drinking water, posters to be displayed.
- Timing of School may be changed and duration reduced.
- Doordarshan & A.I.R may be requested to conduct Phone in, TV & Radio talks.

# Form for Daily Reporting of Heat Stress Disorders

Health Facility: Sub-Centre : CHC/PHC : SDH : \_\_\_\_\_ DHH: \_\_\_\_\_ Block : District : \_\_\_\_\_ IDSP Reporting Week No. Date \_\_\_\_\_

Maximum recorded Room/ External temperature: \_\_\_\_\_ °C/ °F

Place of Identification / Care	DAILY			PROGRESSIVE		
	Number of Cases			Number of Deaths		
	<5 Yrs	>=5Yrs	Total	<5 Yrs	>=5Yrs	Total
Institutional						
Non-institutional						
Total						

## Details of Death:

Sl No	Name of the person	Address	Age	Sex (M/F)	Place of death	Date of death	Time of death	* Maximum Temperature recorded (°C/°F)		Date & time of post mortem (if conducted)	Date and time of joint enquiry conducted with a revenue authority	Cause of death	Remarks	
								Rect-al	Oral				Related to post-mortem	Related to joint enquiry

\* Ideally rectal temperature should be recorded. If it is not possible to record rectal temperature, oral temperature can be recorded.

Signature with Date:

Name and Designation of the reporter:

## N.B.:

- The days report should reach at State Health Control Room on or before 12 noon the next day.
- To be used for the collection of data relating to heat disorders at Sub-centers, PHC(N), BPHC, CHC, Area Hospitals, SDH & DHH.

