

WHO/EHA

EMERGENCY HEALTH TRAINING PROGRAMME FOR AFRICA

1. Overview

1.8. Flow Charts for Emergency Management

Panafrican Emergency Training Centre, Addis Ababa, July 1998

1.8. Flow Charts for Emergency Management Overhead Transparencies

- 1.8.1. Disasters and Health, General Flow Chart
- 1.8.2. Earthquake and Disaster Response, Flow Chart
- 1.8.3. Drought and Health Response, Flow Chart
- 1.8.4. Floods and Health, Flow Chart
- 1.8.5. Landslide and Health, Flow Chart
- 1.8.6. Volcanic Eruption and Health Response, Flow Chart
- 1.8.7. Epidemic Emergencies, Flow Chart
- 1.8.8. Fires and Health, Flow Chart
- 1.8.9. Food and Emergencies, Flow Chart
- 1.8.10. Violence and Public Health, Flow Chart
- 1.8.11. Displacement and Health, Flow Chart
- 1.8.12. Refugee and Internally Displaced Populations, Flows, Occasions and Priorities for Assistance
- 1.8.13. Essentials for Contingency and Preparedness Planning for the Health Sector, Summary
- 1.8.14., 1.8.15. Essentials for Contingency and Preparedness Planning for the Health Sector, Hand out

1.8. Flow Charts for Emergency Management Trainers' Guide

Objectives:

To show that Epidemiology is relevant to emergency management; to clarify causal chain in disasters; to highlight elements of health preparedness and response. (Knowledge/Attitudes)

Key-message:

One can plan for emergency management, on the basis of good sense.

1.8.1. Disasters and Health, General Flow Chart

Introduce. This is a frame, which can be filled for any disaster. The result is a plan for health response activities. Each emergency has specific implications for the health sector, direct and indirect. Direct impact of floods is drowning and trauma. Indirect impact can be a diarrhoea outbreak due to pollution of water sources. Associated factors will be the displacement of population and the destruction of infrastructures that will hamper the delivery of health care. Health Response must consider all these different issues.

1.8.2. Earthquake and Disaster Response, Flow Chart (Present and discuss).

1.8.3. Drought and Health Response, Flow Chart (Present and discuss).

1.8.4. Floods and Health, Flow Chart (Present and discuss).

1.8.5. Landslide and Health, Flow Chart (Present and discuss).

1.8.6. Volcanic Eruption and Health Response, Flow Chart (Present and discuss).

1.8.7. Epidemic Emergencies, Flow Chart (Present and discuss).

1.8.8. Fires and Health, Flow Chart (Present and discuss).

1.8.9. Food and Emergencies, Flow Chart (Present and discuss).

1.8.10. Violence and Public Health, Flow Chart (Present and discuss).

1.8.11. Displacement and Health, Flow Chart (Present and discuss).

1.8.12. Refugee and Internally Displaced Populations, Flows, Occasions and Priorities for Assistance

Present and discuss. Population displacement caused by whatever hazard. All the phases are present. The response activities are shown in the boxes with round edges. Health care can be delivered in different measure and in different ways at all stages.

1.8.13. Essentials for Contingency and Preparedness Planning for the Health Sector, Summary

Explain. The summary can be shown in transparency, while the two- page table is distributed as handout. Underline the difference between the 'Primary Hazard', e.g. the Transport Incident, and the 'Primary Cause of Death or Illness', e.g. the Trauma. Clarify

that the first responsibility of the Health Sector is to address the Primary Causes of Death or Illness. The capacities needed can be Technical, i.e. human resources and training, and Institutional, i.e. equipment, supplies, legislation, clear procedures, etc.

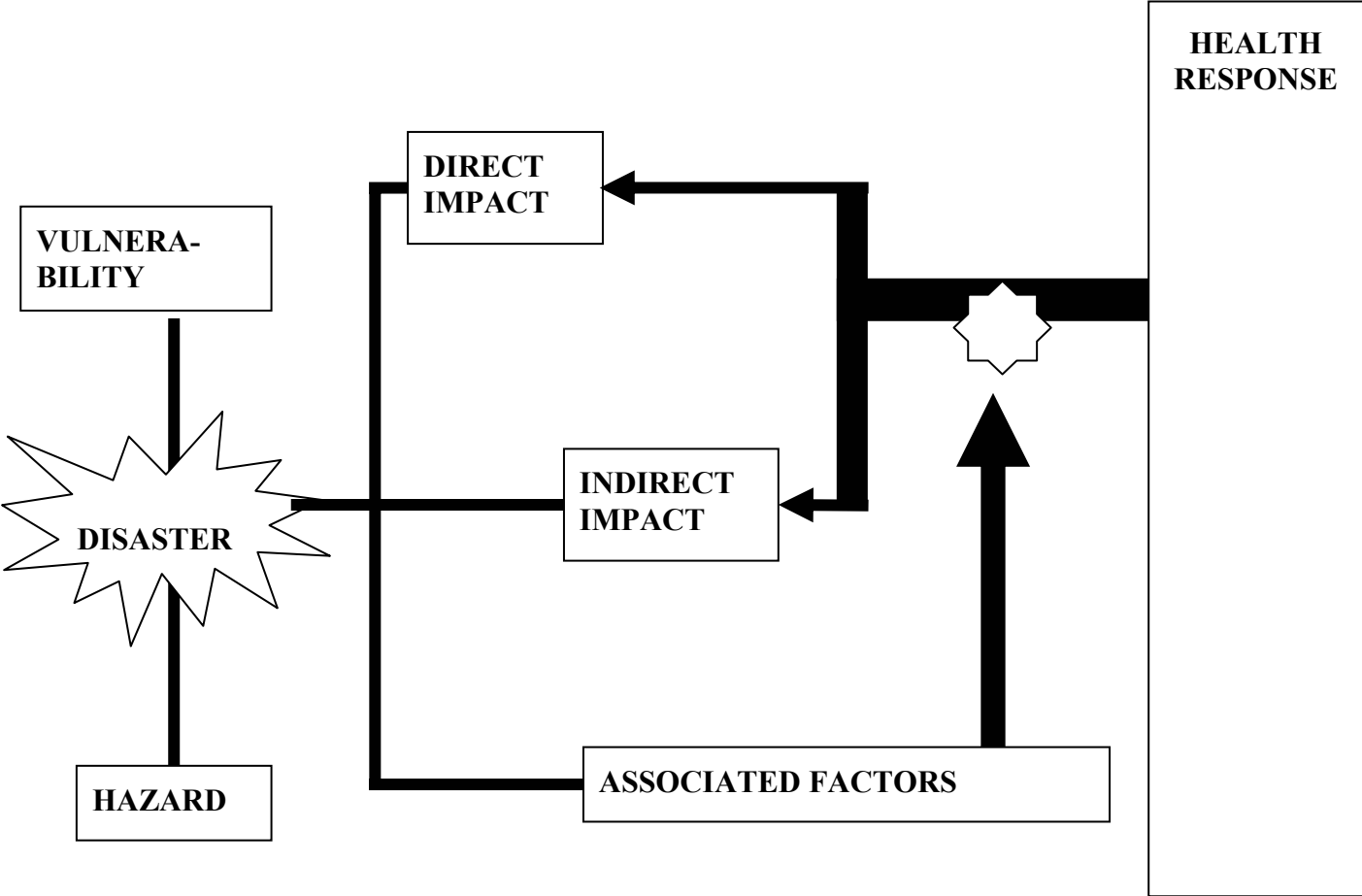
1.8.14., 1.8.15. Essentials for Contingency and Preparedness Planning for the Health Sector,
Hand-out
A two- page table, to be distributed as handout.

Complementary to *The health sector* in Emergency Management (1.3.).

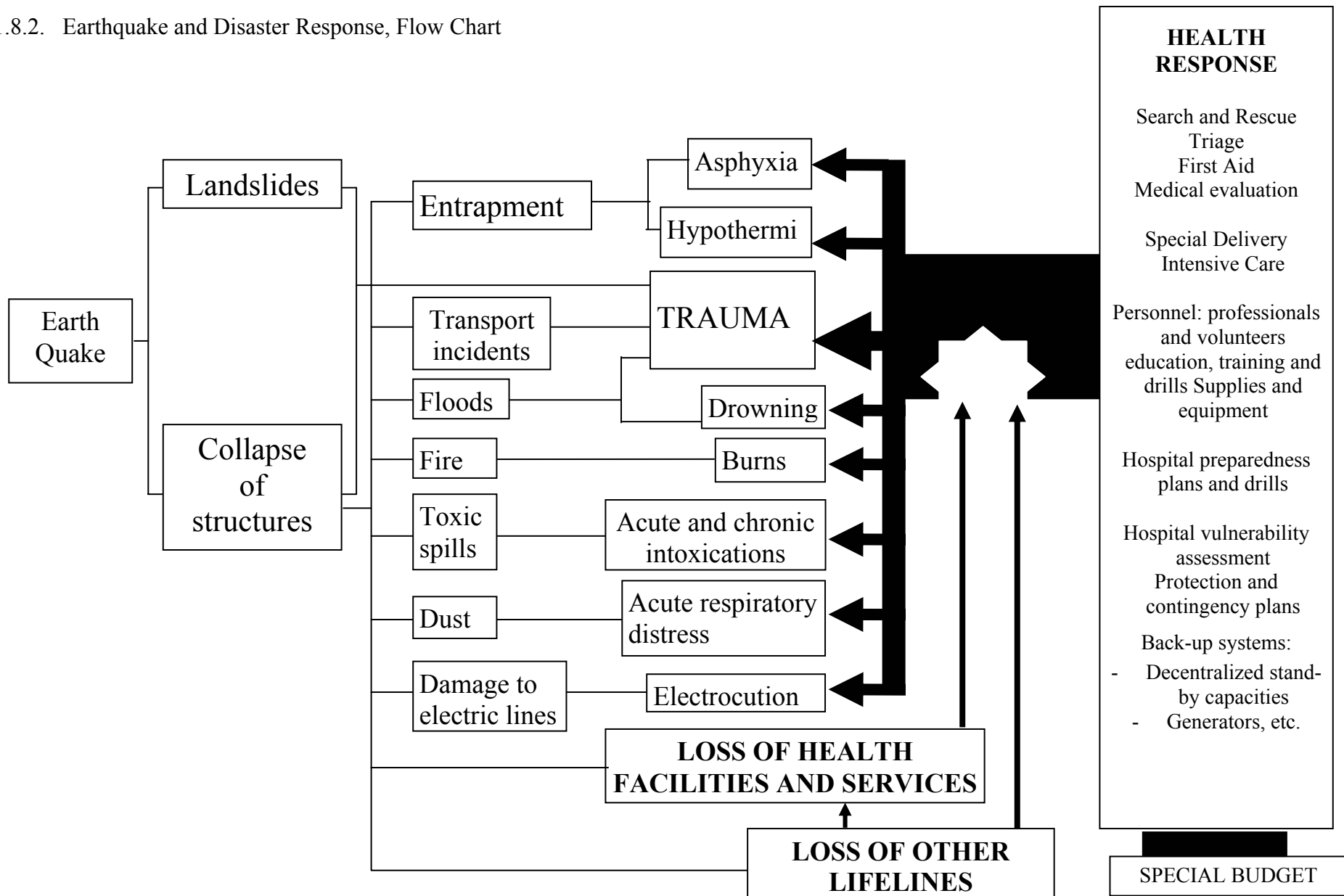
Essential Reading:

- EPR Handbook for Africa, WHO/PTC, 1992
- African Disaster Handbook, WHO/PTC, 1990
- The Public Health Consequences of Disasters, E. K. Noji, Oxford University Press, 1997

Disasters and Health

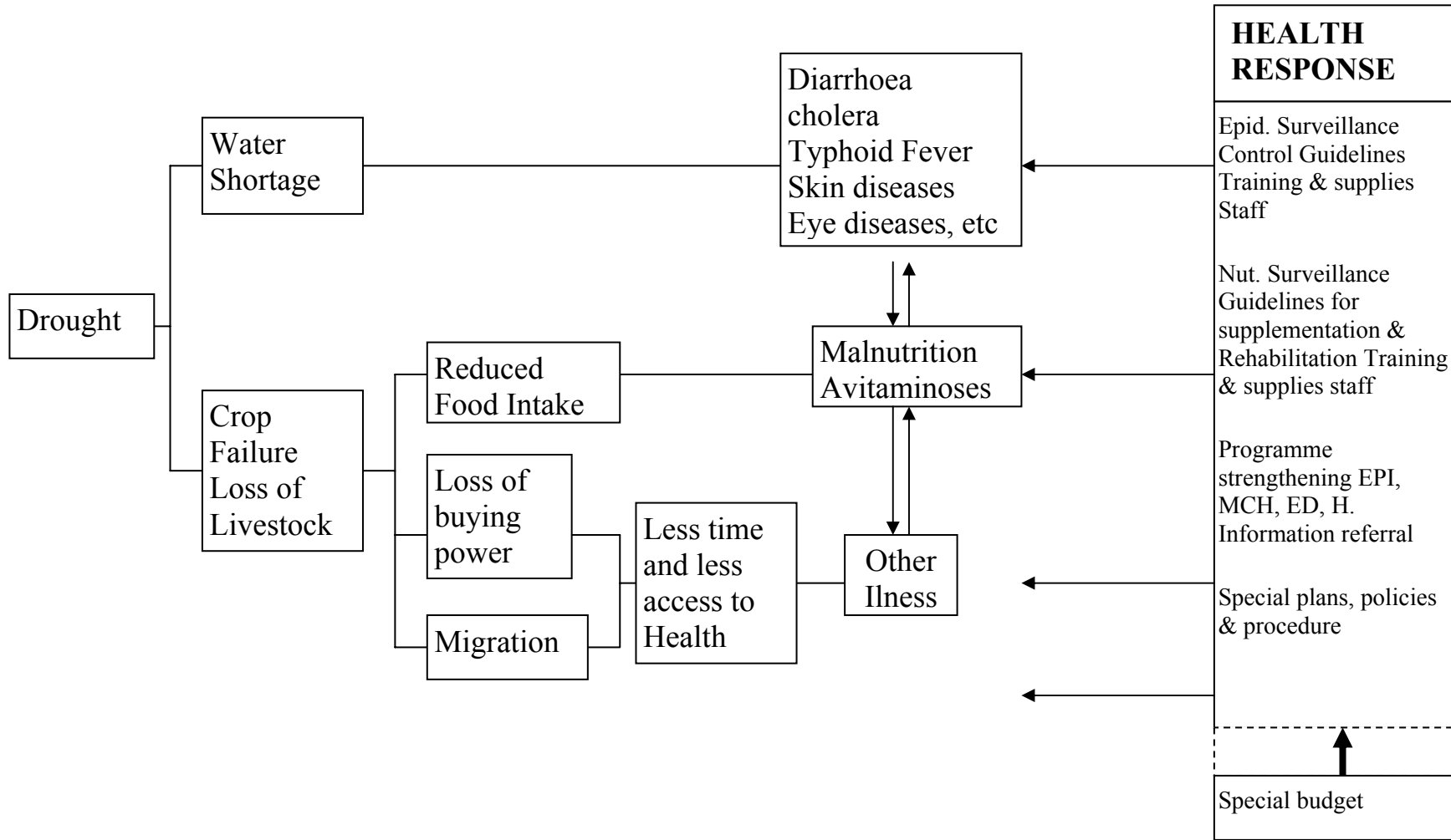


1.8.2. Earthquake and Disaster Response, Flow Chart



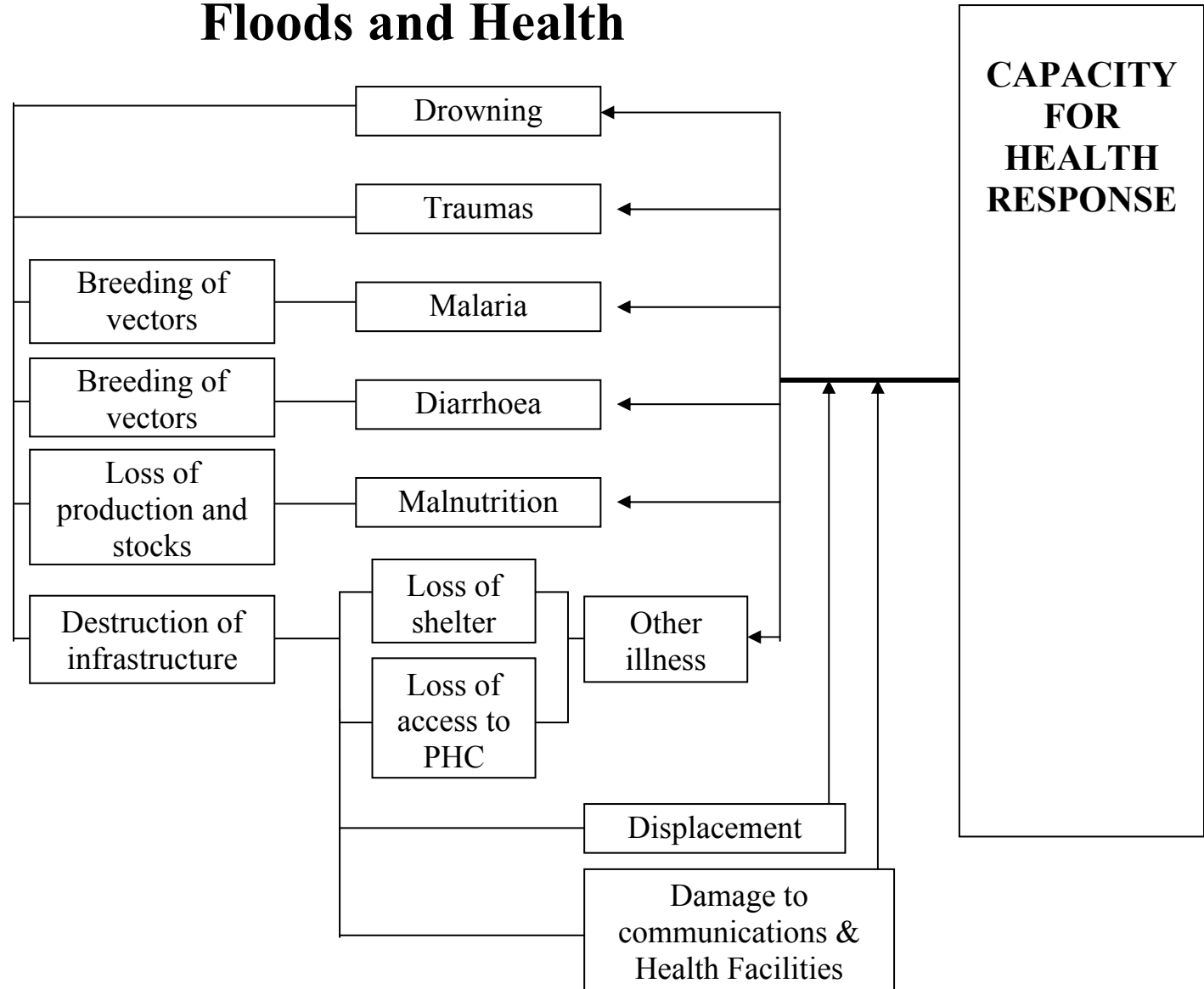
1.8.3. Drought and Health Response, Flow Chart

Drought and Health Response



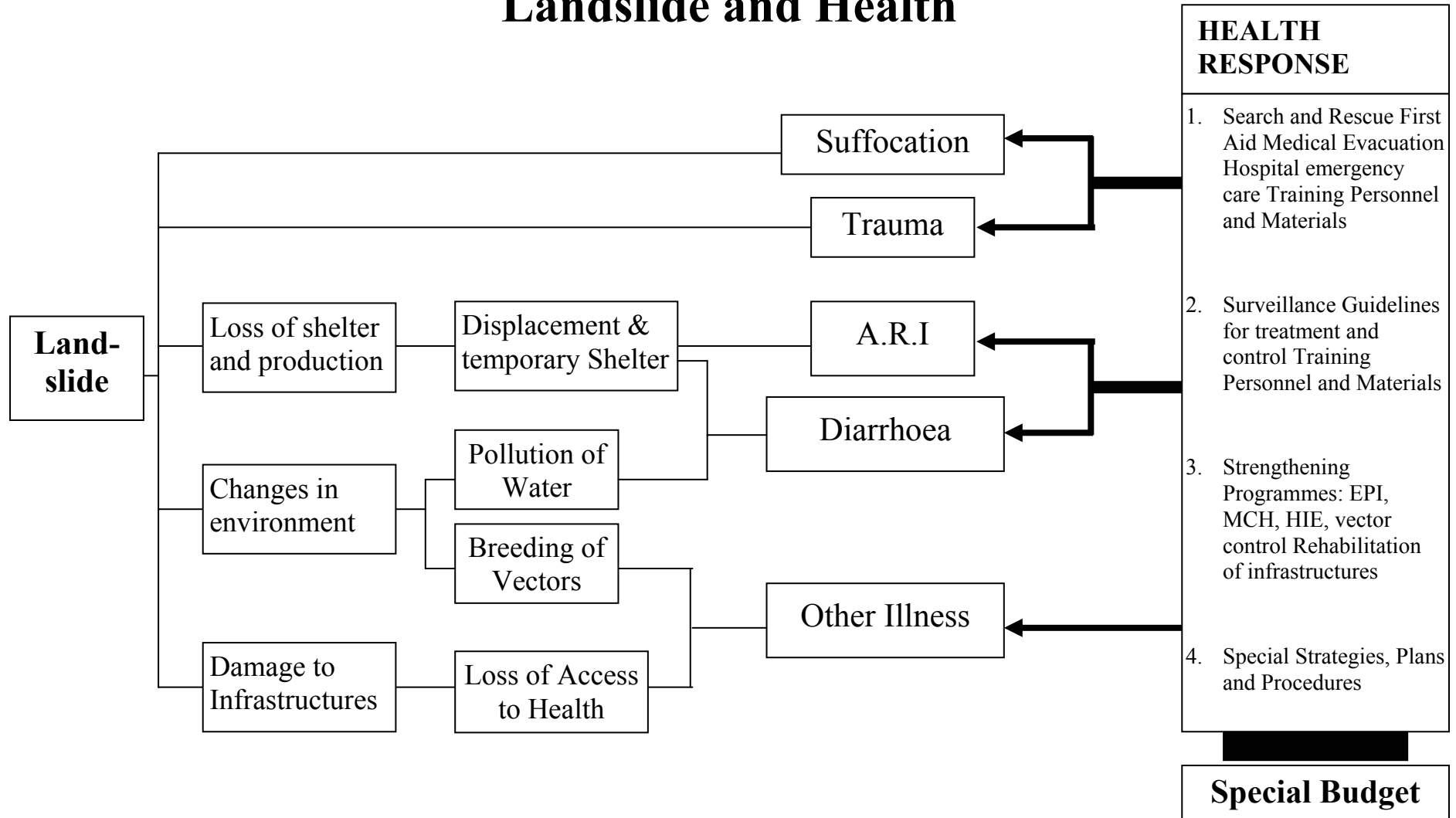
1.8.4. Floods and Health, Flow Chart

Floods and Health



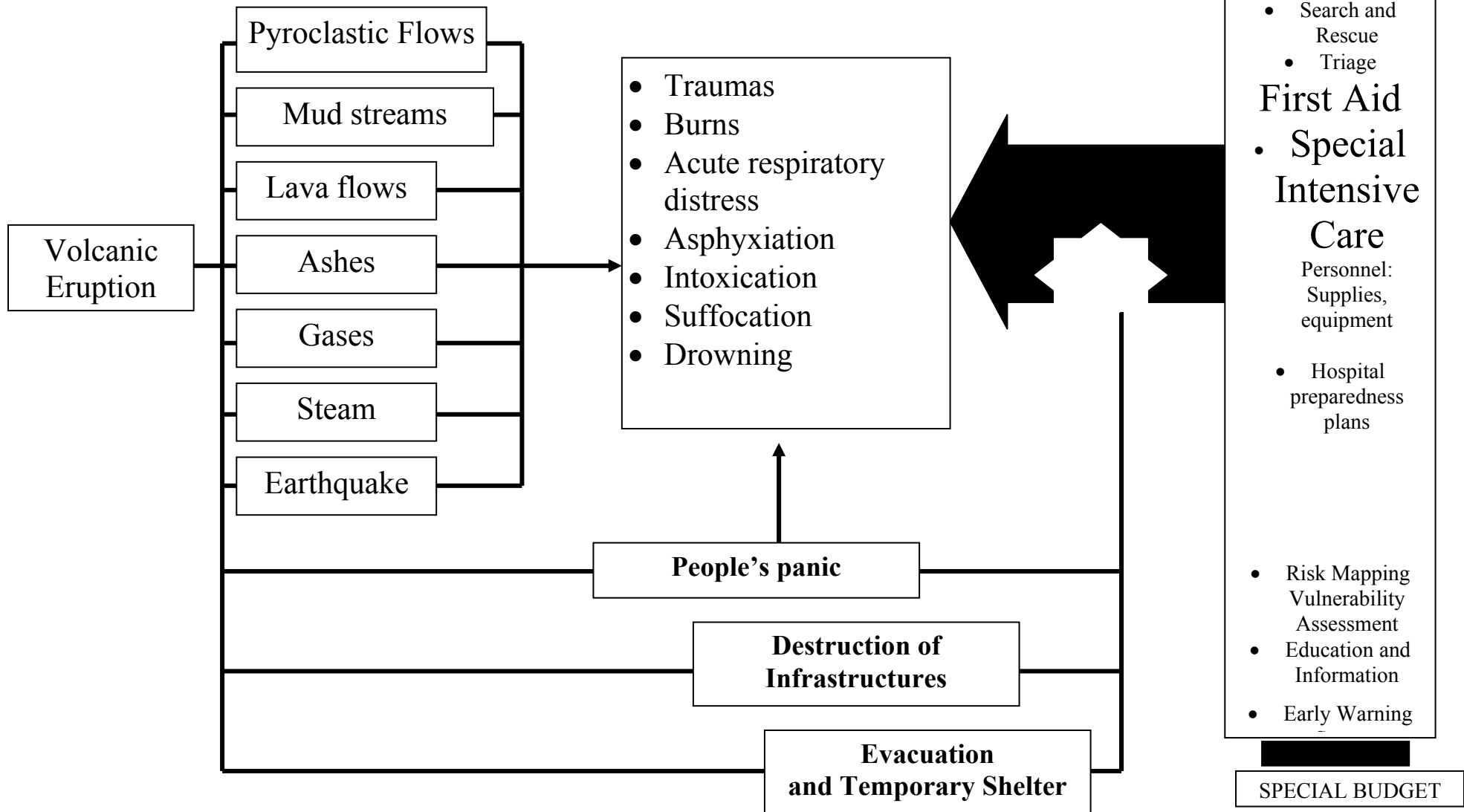
1.8.5. Landslide and Health, Flow Chart

Landslide and Health



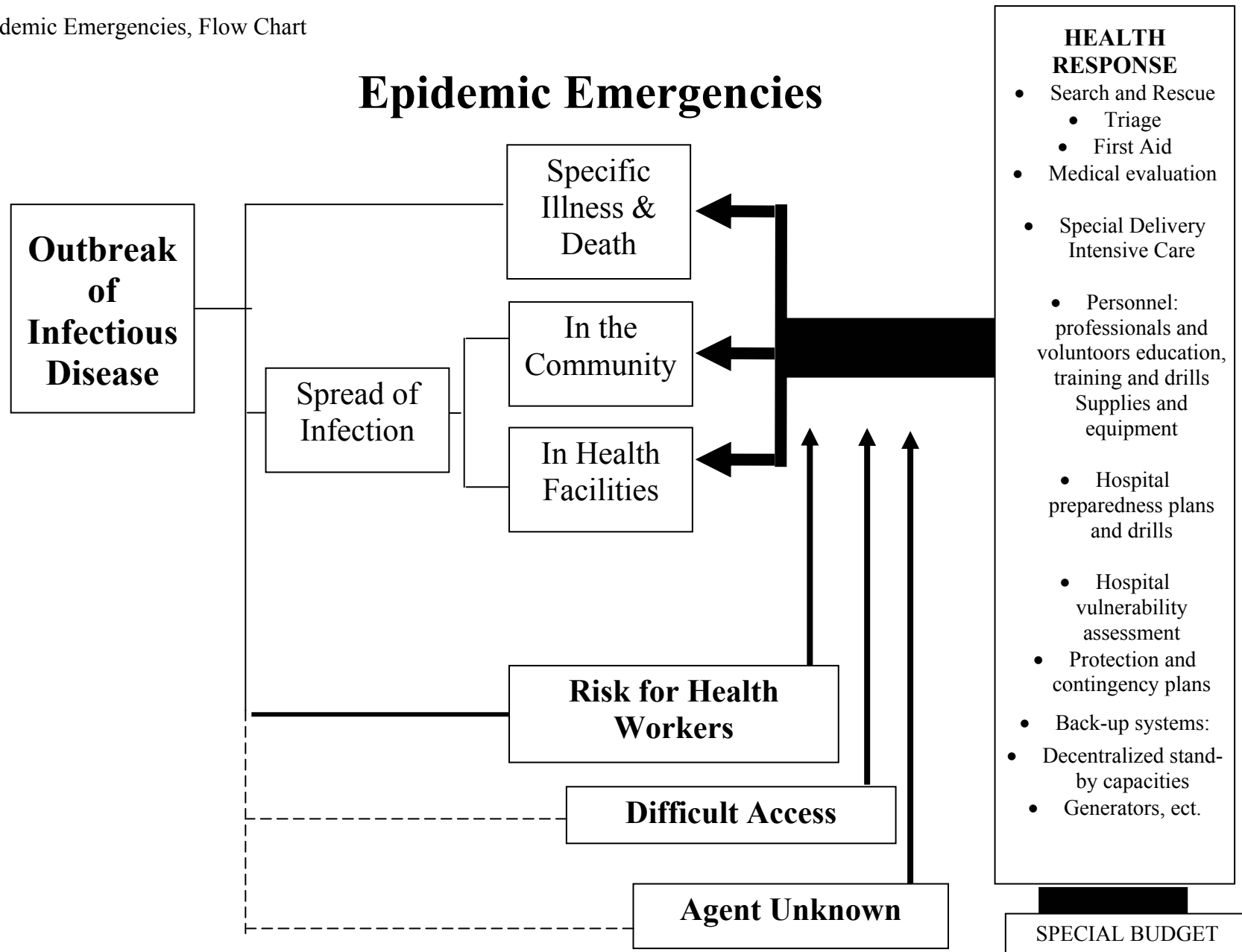
1.8.6. Volcanic Eruption and Health Response, Flow Chart

Volcanic Eruption and Health Response

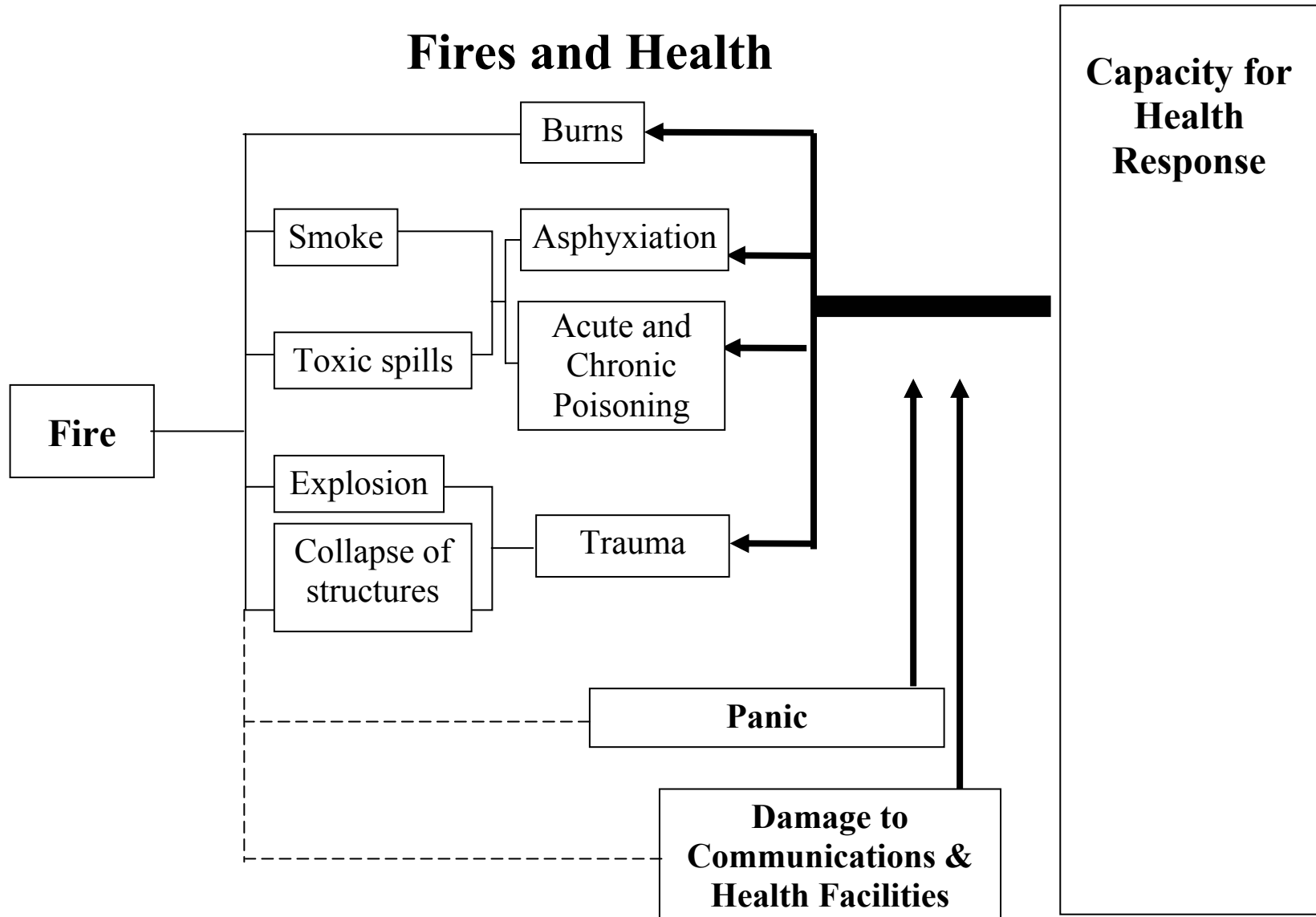


1.8.7. Epidemic Emergencies, Flow Chart

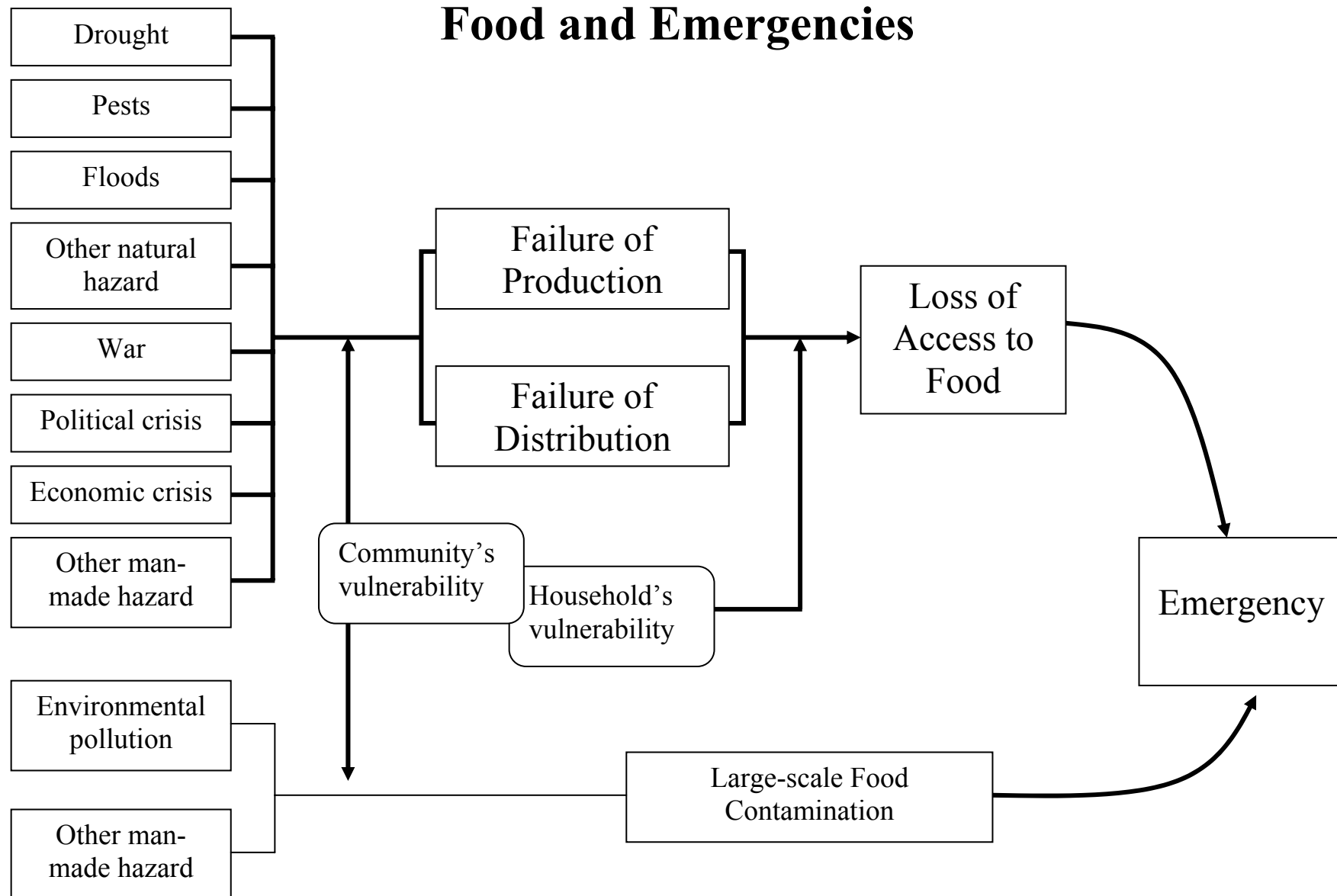
Epidemic Emergencies



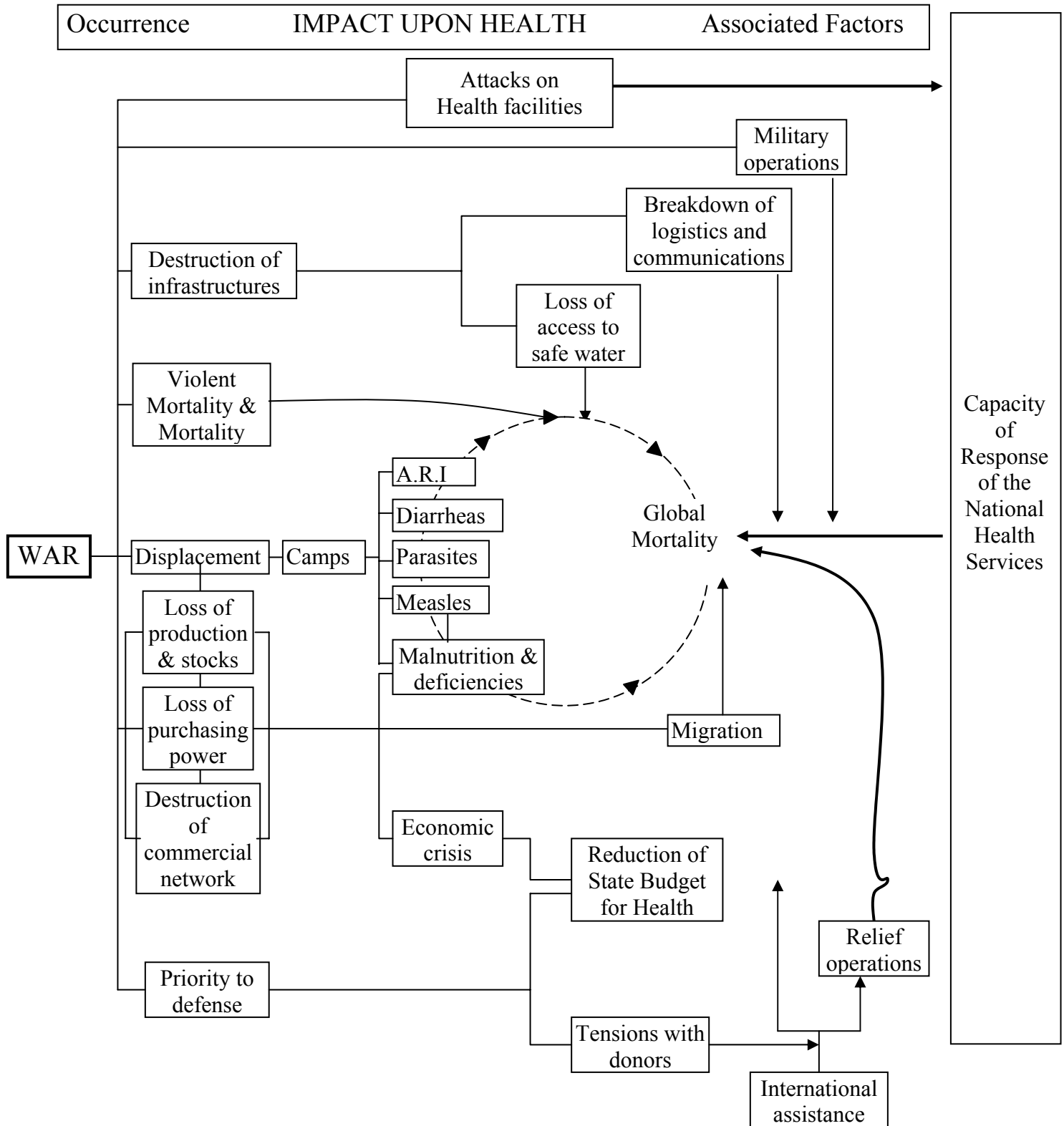
1.8.8. Fires and Health, Flow Chart



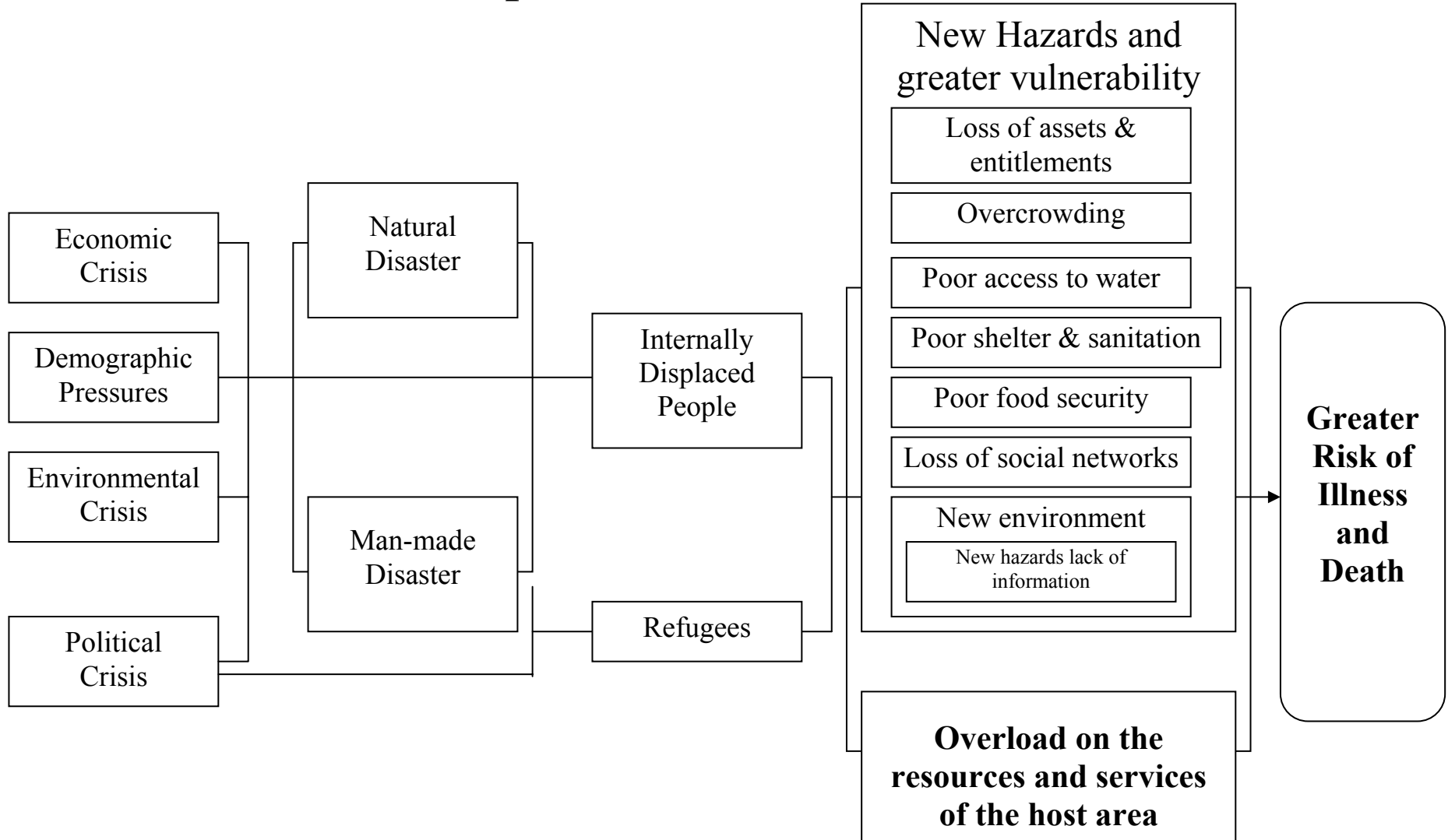
1.8.9. Food and Emergencies, Flow Chart



Violence and Public Health: scenario in complex emergencies and conflicts

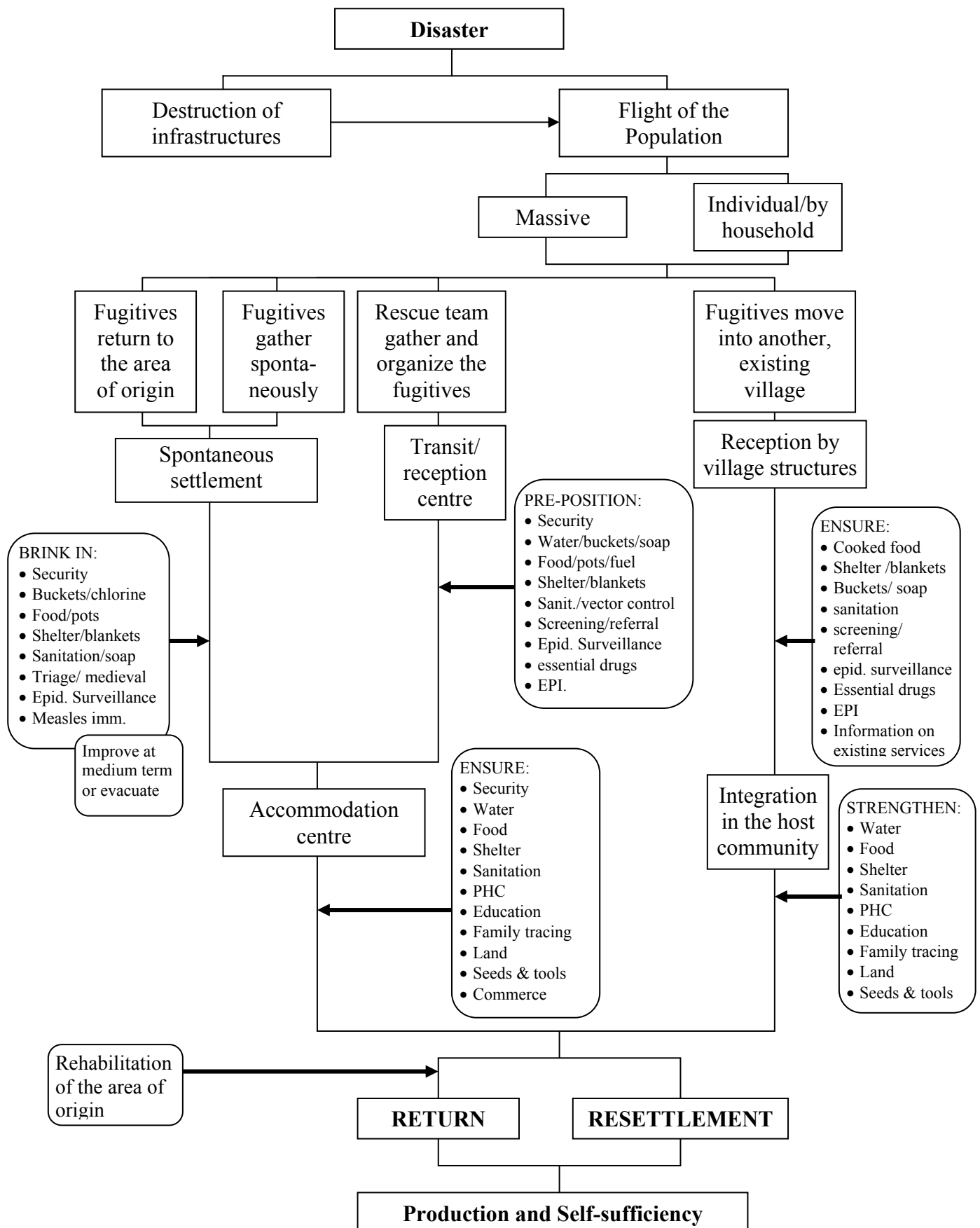


Displacement and Health



—

1.8.12. Refugee and Internally Displaced Populations, Flows, Occasions and Priorities for Assistance



1.8.13. Essentials for Contingency and Preparedness Planning for the Health Sector, Summary

Essentials for Contingency Planning and Preparedness Planning for the Health Sector

Type of Emergency	Primary Hazard	Primary Causes of Death & Illness	Main Responsibility of the Health Sector	Risk to Health Network	Capacities Needed	
					Technical	Support
Epidemics of Infectious Origin	Known disease	Agent-specific	Alert & Assessment, Case management, Outbreak control	+	Epidemiology & Disease control, Medical/Nursing care, Environmental health,	Communications, Laboratory facilities & supplies, Inter-sectoral collaboration, Funds
Emergencies by Other Natural Causes	Floods	Drowning, Trauma, Diarrhoea, ARI, Vector-borne diseases	Search & Rescue, Triage, Need assessment, Disease control, Assistance in temporary shelter	+	Mass casualty management, Environmental health & Vector control, Health care in temporary shelter	Special training for staff & volunteers, Inter-sectoral collaboration, Coordination of relief
Emergencies from Technological Causes	Transport Incident (Road, railways, air, sea etc.)	Trauma, Drowning, Burns, Suffocation	Search & Rescue, Triage, Casualty Management	+	Mass casualty management	Intensive care facilities
Complex Emergencies	Armed Conflict	Trauma, Malnutrition, ARI, Diarrhoea, Measles, Meningitis, Vector-borne Diseases	Need assessment & advocacy, Disease control, Nut. surveillance & Selective feeding, Injury management	+++	Epidemiology & Disease control, Nutrition, War surgery, Health care in temporary shelters	Special agreements & procedures, War surgery facilities/capacities, Safe transfusion facilities, Coordination, International aid
Major Public Functions	Pilgrimage	Epidemic diseases, Illness among spectators, Crowd incidents (stampede etc.)	Disease control, Readiness for crowd incidents, Back-up for increased demand	-	Epidemiology & Disease control, Environmental health, Mass casualty management	Intensive care facilities, Temporary outreach facilities

1.8.14, 1.8.15. Essentials for Contingency and Preparedness Planning for the Health

Essentials for Contingency Planning and Preparedness Planning for the Health Sector

Type of Emergency	Primary Hazard	Primary Causes of Death & Illness	Main Responsibility of the Health Sector	Risk to Health Network	Capacities Needed	
					Technical	Support
Epidemics of Infectious Origin	Known disease	Agent-specific	Alert & Assessment, Case management, Outbreak control	+	Epidemiology and Disease control, Medical/Nursing care, Environmental health,	Communications, Laboratory facilities & supplies, Inter-sectoral collaboration, Funds
	New Emerging Disease	Agent-specific	Alert & Assessment, IDENTIFICATION OF AGENT Case management, Outbreak control	+++	As above, plus field research, crash training of personnel, new, specific health education possibly Cordon Sanitaire	As above , plus access to more sophisticated Reference Centers, greater capacity for Isolation, special drugs or vaccines
Emergencies by Other Natural Causes	Mass Floods Poisoning by nature causes	Agent-specific	Assessment identification of cause case management information and education	-	Epidemology Medical/Nursing care Education	Communications, Logistics and Funds for Outreach. Supplies inter-sectoral collaboration and coordination of relief
	Drought	Diarrhoea, Malnutrition , Any other cause, by decreased access to health services and higher vulnerability	Need assessment disease control Nutritional surveillance	+	Epidemiology Disease control, Nutrition.	Communication. Logistics & Funds for Outreach. Supplies Inter-sectoral collaboration and coordination of relief
	Floods	Drowning, Trauma, Diarrhoea, ARI, Vector – borne diseases	Search & Rescue/Triage Need assessment Disease Control Assistance in temporary shelters	+	Mass Casualty Management Env.Health/Vector Control Health Care in temporary shelters	Special training for staff and volunteers Inter-sectoral collaboration and coordination of relief
	Cyclone	Trauma, Drowning, Diarrhoea, , ARI, Vector – borne diseases	Same as above	++	Same as above	Same as above
	Tidal Surge and Tsunami	Drowning, Trauma, Diarrhoea, , ARI, Vector – borne diseases	Same as above	+	Same as above	Same as above
	Earthquake	Trauma, Suffocation, Burns	Search & Rescue/Triage Need assessment Casualty management Assistance in temporary shelters	+++	Mass Casualty Management Health Care in temporary shelters	Intensive Care facilities Hospital vulnerability assessment and reduction
	Landslide	Trauma, Suffocation	Same as above	+	Same as above	Same as above
	Volcanic Eruption	Trauma, Suffocation, Burns, Acute Respiratory Distress	Need assessment Casualty management Assistance in temporary shelters	+	Mass Casualty Management Health Care in temporary shelters	Intensive Respiratory Care Unit
Bush Fire	Burns Trauma, suffocation	Same as above	-	Same as above	Burns Care facilities	

1.8.15. Essentials for Contingency and Preparedness Planning for the Health

Type of Emergency	Primary Hazard	Primary Causes of Death & Illness	Main Responsibility of the Health Sector	Risk to Health Network	Capacities Needed	
					Technical	Support
Emergencies from Technological Causes	Transport Incident (road, railways, air, sea, etc)	Trauma, Drowning, Burns, Suffocation	Search & Rescue/Triage Casualty Management	+	Mass Casualty Management	Intensive care facilities
	Fire in Human Settlement	Burns, Trauma, Suffocation	Search & Rescue/Triage Casualty Management	+++	Mass Casualty Management Intensive Care Unit	Burns Care facilities Hospital vulnerability assessment and reduction
	Industrial Explosive, fire, Spill, Radiation	Blast, trauma, Burns, Acute respiratory Distress, Suffocation, Agent-specific	Search & Rescue/Triage Casualty Management	+	Mass casualty Management Specific medical/nursing care	Intensive Care facilities Special Decontamination facilities Access to special Reference Centre
	Collapse of man-made Structure	Trauma, Suffocation Drowning, other, according to type of structure	Search & Rescue /Triage casualty Management Assistance in temporary shelters	+++	Mass casualty Management	Intensive Care facilities Hospital vulnerability assessment and reduction
	Failure of Lifeline Systems	Any cause, by lack of critical support care Trauma by crowd panic	Prompt back-up Casualty Management	+++	Mass Casualty Management	Hospital vulnerability assessment and reduction Back-up systems
	Mass Food Poisoning by Human Causes	Agent - specific	Alert and Assessment Identification of Agent Case Management	+	Epidemiology Specific Medical/Nursing care Environmental health	Toxicology Special Decontamination facilities Access to special reference Centres
Complex Emergencies	Armed Conflict	Trauma, Malnutrition, ARI, Diarrhoea, Measles, Meningitis vector -born diseases	Need Assessment 7 Advocacy Disease control Nut. Surveillance & Select feeding Injury Management	+++	Epidemiology & Diseases Control Nutrition War surgery	Special Agreements & Procedures war surgery facilities/capacities safe Transfusion facilities Co-ordination of International Aid
	Mass Labour Unrest	Trauma, Any cause by lack of critical support care	Mass casualty Management	+	Mass Casualty Management	Special Agreements & procedures
	Terrorist Attack	Blast, Trauma , Fire, Suffocation, Acute Resp. Distress, Other specific (e.g. Toxic gas)	Mass Casualty Management	-	Mass Casualty Management	Intensive Care facilities
	Refugee/Displaced Influx	Diarrhoea, ARI, Malnutrition, Measles, Meningitis, Vector -born diseases	Diseases control Nut. Surveillance & Select feeding Assistance in camps/transit points	-	Epidemiology & Diseases Control nutrition Health Care in temporary shelters	Recruitment of volunteers Outreach and supervision Co-ordination of International Aid
Major Public Functions	State Visit	Any illness of state guests illness among spectators crowd incidents (stampede, etc.)	Back - up for possible special, high -profile medical emergency readiness for crowd incidents	-	Medical/Nursing Care	Intensive Care facilities
	Pilgrimage	Epidemic diseases illness among spectators Crowd incidents (stampede, etc)	Disease Control Readiness for crowd incidents back-up for increased demand	-	Epidemiology & Disease control, Environmental Health Mass casualty Management	Intensive Care facilities Temporary outreach facilities
	Mass Entertainment	Illness among spectators Crow incidents (stampede)	Back-up for increased demand readiness for crowd incidents	-	Mass Casualty Management	Intensive Care facilities

