

# DIPLOMA IN THE MEDICAL CARE OF CATASTROPHES

## SYLLABUS

<b>Module 1: Epidemiology of Disasters and societies affected by Conflict</b> (defining the situation and gathering information)				
<b>No (a)</b>	<b>Topic (b)</b>	<b>Definition/Key message (c)</b>	<b>Main items (d)</b>	<b>Components (e)</b>
M1:1	Disasters	<i>Disaster - a disruption of normal life and activities that requires the affected community to make extraordinary efforts to cope with it and usually requires outside help</i>	1) Types of disaster Natural Man made Complex emergencies Societies affected by conflict  2) Phases  Social and Public health implications of disasters	Natural A) <i>Sudden or acute onset</i> Earthquakes, Flood, High wind, Landslide, Volcanic eruption, Epidemics  B) <i>Slow or chronic onset</i> Drought, Famine  Man-made <i>Industrial</i> Chemical, microbiological, radiological and nuclear accidents, fire, explosion, pollution, terrorism <i>Transport accidents</i> <i>Deforestation</i>  Emergency phase Post emergency phase Peaks of mortality  Complex humanitarian emergencies Wars, civil strife etc leading to Internally Displaced Persons and Refugees  Characteristics of Fragile and Failed states War and public health

				Features of post-conflict societies Stabilisation of post-conflict states Urbanisation and disasters
M1:2	Epidemiology in disasters	<i>The use of epidemiological methods to study and manage the public health aspects of disasters.</i>	Time, person & place Numbers and rates Key indicators  Data collection methods	Who, what, when, where, why. how  <ul style="list-style-type: none"> <li>• Mortality</li> <li>• CMR, CFR, Age specific, Maternal, U5MR</li> <li>• Morbidity <ul style="list-style-type: none"> <li>○ Incidence, Attack rate, Incidence rate</li> <li>○ Prevalence</li> </ul> </li> <li>• Nutritional</li> <li>• Health services</li> <li>• Vital needs</li> </ul> Surveillance systems, surveys, outbreak investigations
M1:3	Initial assessment (Needs assessment)	<i>Assessment provides an understanding of the disaster situation and a clear analysis of threats to life, dignity, health and livelihoods to determine, in consultation with the relevant authorities, whether an external response is required and, if so, the nature of the response”</i>	1) Methods  2) Content	Objectives, Preparation, Information sought, Obtaining information, Validity & bias, Personnel, Deployment, Reporting Key agencies requiring needs assessment information
M1:4	Health Intelligence acquisition	<i>Intelligence on medical, bio-scientific, epidemiological, environmental and other information related to human or animal health.</i>	Sources Information sought  Basic analytical techniques for use in predictive intelligence production.	Environmental factors Topography and Climate, Socio-economic Factors, Public Health Arrangements, Animal and Plant Hazards, Environmental and Industrial Hazards (EIH)  Epidemiology and morbidity factors Incidence & prevalence of endemic diseases,

			<p>On-site assessment of health service capabilities and wider public health arrangements during reconnaissance.</p> <p>Reporting systems to identify changes in health services and support infrastructure, and mortality/morbidity in affected population.</p>	<p>Distribution, Effects of population migration</p> <p>Control of Communicable disease</p> <p>Health services and support infrastructure Capabilities of hospitals and treatment facilities Availability of local care,</p> <p>MEDEVAC and emergency health service capabilities, Medical materiel, blood banking, clinical laboratory facilities, cold chain arrangements</p>
M1:5	Disease surveillance (see also Topic 4)	<i>The ongoing systematic collection, analysis and interpretation of data in order to plan, implement and evaluate public health interventions (WHO).</i>	<p>Surveillance systems</p> <p>Case definitions</p> <p>Sources of data</p> <p>Evaluation of surveillance systems</p>	<p>Comprehensive Sentinel</p> <p>WHO, CDC, local</p> <p>Health facilities, individuals, aid agencies</p>
<b>Module 2: Priorities for intervention in disasters</b>				
M2:1	Priorities for intervention	<i>What needs to be done immediately</i>	Top ten priorities	<ol style="list-style-type: none"> <li>1. Initial assessment (Topic 3)</li> <li>2. Measles immunisation (Topic 15)</li> <li>3. WASH (Topic 7)</li> <li>4. Food &amp; Nutrition (Topic 9)</li> <li>5. Shelter &amp; site planning (Topic 8)</li> <li>6. Health care in the emergency phase (Modules 3 &amp; 4)</li> <li>7. Control of communicable diseases &amp; epidemics (Modules 3 &amp; 4)</li> <li>8. Public Health Surveillance (Topic 5)</li> <li>9. Human resource training (Module 6)</li> <li>10. Co-ordination (Modules 5 &amp; 6)</li> </ol> <p>Provision of security (Module 6)</p>

M:2:2	WASH	<i>Water, sanitation &amp; hygiene requirements for those affected by disasters</i>	<p>Water</p> <p>WHO Drinking Water Guidelines Local Water Supply legislation Sphere Standards</p> <p>Sanitation Sphere Standards</p> <p>Hygiene Sphere Standards</p>	<p>Water requirements, Quantity (broken down by purpose of use) -Quality - Availability Extraction: Types of sources Purification: -Sedimentation - Disinfection</p> <p>Storage Distribution</p> <p>Latrine types (including cultural considerations) Numbers required Location and spacing of latrines Anal cleansing Waste disposal</p> <p>Hand-washing Bathing Laundry</p>
M2:3	Shelter and site planning	<i>Requirements for provision of shelter for those affected by disasters</i>	UN and WHO guidelines Sphere Standards	<p>Areas required per individual</p> <p>Basic construction specifications</p> <p>Layout of camps, including minimising of vulnerability of individuals/sections of populations.</p>
M2:4	Food and nutrition	<i>Requirements for provision of food for those affected by disasters, both normally nourished and malnourished</i>	<p>UN and WHO guidelines Sphere standards</p> <p>Management of malnutrition in populations</p>	<p>Daily calorific requirements</p> <p>Principles of nutrition surveillance of a population. Local custom Local availability</p> <p>Identification of vulnerable groups Malnutrition.-principles of treatment Food delivery – World Food Programme (WFP), agencies, logistic considerations</p>

				Food security and vulnerable elements Rationing Therapeutic and supplementary feeding Vitamin and micronutrient deficiencies
M2:5	Evaluation of interventions	<i>Evaluation of effectiveness of interventions with respect to donors, recipients and agencies</i>	Principles and methods of evaluation	Means of evaluating single projects and programmes  Reporting
<p><b>Module 3: Recognition and control of communicable diseases and epidemics</b>  (for treatment of infectious diseases see Clinical Knowledge section)  [Communicable diseases of importance in disasters and societies affected by conflict  Morbidity and mortality  Causes, measurement and reporting  Natural history of disasters and societies affected by conflict In terms of disease]</p>				
M3:1	Diseases of Poverty	<i>Diseases that are more prevalent among the poor than among wealthier people</i>	Diseases especially common in poverty stricken populations  Disease as a cause of poverty	Malaria, TB, HIV, Measles, pneumonia, and diarrhoeal diseases
M3:2	Important vector-borne diseases and zoonoses (See also Topic 76)	<i>The most important vector borne and zoonotic diseases likely to affect those involved in disasters</i>	Arthropod vectors  Rodent vectors  Important vector borne diseases  Viral haemorrhagic fevers  Vector control measures:  Feral animals and their potential	Mosquitoes, Sandflies, Ticks, Lice  Rats (brown, black, multimammate), mice, bats  Malaria, Yellow Fever, Dengue, Typhus (Tick and louse borne), Leishmaniasis, Plague  Ebola, Marburg, Lassa fever  Hygiene, site selection & management, sanitation, safe and effective use of Insecticides (larviciding, residual spraying, fogging, baiting, impregnation of bednets and possibly clothing), rodenticides and traps, waste disposal  Effective and humane control of feral animals

			role in the spread of rabies, and as a reservoir of zoonoses	
M3:3	Individual protection against insect vector- borne disease	<i>Measures to prevent or limit the incidence of insect vector borne disease</i>	Chemoprophylaxis  Vaccination Vector avoidance/Bite avoidance,	Antimalarials  Yellow fever Protective clothing, bednets (preferably impregnated with an appropriate insecticide), insect repellents
M3:4	Important oral route diseases	<i>Important diseases transmitted via the mouth</i>	Important infectious diseases  Toxins in food and water  Control	Cholera, Typhoid, Dysentery, Hepatitis A & E, food poisoning ( <i>Salmonella</i> , <i>Campylobacter</i> , <i>E.coli</i> , viral pathogens [norovirus, rotavirus etc]),  Botulism, <i>Staphylococcus aureus</i> , <i>Bacillus cereus</i> , scombrotoxins, ciguatera,  Water and food, fly control, waste control
M3:5	Important airborne diseases	<i>Important diseases acquired primarily by inhalation</i>	Important diseases  Control  Mechanisms of transmission	Measles, Meningitis, Influenza, Diphtheria, TB  Isolation, vaccination, screening  Aerosols, role of hands
M3:6	Important blood-borne diseases	<i>Important diseases transmitted in blood, blood products and body fluids</i>	Important diseases  Control	Hepatitis B, C, HIV  Vaccination (Hep B), PPE, PEP
M3:7	The place of vaccination and/or immunisation	<i>Use of a preparation of a weakened or killed pathogen or part of its structure to stimulate immunity against the</i>	What specific vaccines appropriate?  When and where?	Routine or as a response to an outbreak?

		<i>pathogen</i>		
<b>Module 4: <i>Clinical Knowledge</i></b>				
The specialised clinical knowledge which gives the aid worker the ability to deal with the health problems likely to be encountered in the disaster environment				
<b>(M4:a) Environmental injuries and medicine in remote environments</b>				
M4:a:1	Heat injury – recognition, treatment and prevention	<i>Injury caused by exposure to the sun or in hot conditions</i>	Types of Heat Illness/Injury;  Recognition of: Heat Stress Heat Stroke  Preventive Measures:  Predisposition to heat illness  Treatment principles	Sunburn Prickly Heat Heat Stress/exhaustion Heat Stroke  Core temperature  Acclimatisation Monitoring of water intake Appropriate clothing Salt intake
M4:a:2	Cold injury – recognition, treatment and prevention	<i>Injury caused by exposure to extremes of cold</i>	Types of cold injury  Recognition of Hypothermia Peripheral cold injury  Preventive measures:	Frost nip Frostbite Immersion Foot Hypothermia  Appropriate clothing

			<p>Predisposition to cold injury</p> <p>Treatment principles</p> <p>Altitude considerations, including altitude sickness</p>	<p>Diet</p> <p>Fluid intake</p> <p>Fitness</p>
M4:a:3	Injuries due to bites and toxins	<i>Injury cause by the bites of or contact with poisonous living organisms</i>	<p><u>Poisonous organisms:</u></p> <p>Snakes,</p> <p>Types of snake venom</p> <p>Signs &amp; symptoms</p> <p>Treatment</p> <p>Other poisonous organisms</p>	<p>Vipers, cobras</p> <p>Proteolytic, Hemotoxic, Neurotoxic, Cytotoxic</p> <p>Wash wound, immobilize, elevate, bandage, antivenins</p> <p>Arthropods (spiders, scorpions, centipedes), Aquatic animals (fish, jellyfish, octopi, algae), plants (nettles, poison ivy, algae, mushrooms)</p>
<b>(M4:b) Appreciation of the principles of Pre-hospital emergency medicine (PHEM), triage, trauma, surgery, resuscitation</b>				
M4:b:1	Evacuation of casualties by road/ship	<i>The medical requirements for and potential problems associated with the medical evacuation of casualties by land or sea</i>	<p>Medical problems of medevac by road</p> <p>Use of ships and trains for evacuation and as treatment centres</p>	
M4:b:2	Aeromedical evacuation (AE)	<i>The potential role for aeromedical evacuation</i>	<p>Role</p> <p>Limitations</p>	<p>Deliver teams and equipment, remove casualties, access specialist care, evacuate aid workers</p> <p>Cost, availability, time to organise, site access,</p>



			<p>Capabilities</p> <p>Clinical considerations</p> <p>Military role and capabilities</p> <p>Disadvantages</p>	<p>capacity, working environment, physiological challenges</p> <p>Helicopter: easy access but limited range and capacity, hostile working environment Fixed wing: need a landing strip and logistic support but increased capacity and range</p> <p>Basic physiology of hypoxia and pressure changes</p> <p>AE essential to military ops to reduce medical footprint, expected standards of care, ranges from basic resuscitation and evacuation to intensive care recovery to home nation</p> <p>Limited asset, expensive, who do you evacuate, may make triage more complex, may splinter families</p>
M4:b:3	The "<C>ABCDE" PHEM system	<i>The structured treatment of casualties</i>	Principles	<p>Primary survey and resuscitation</p> <p>Team based horizontal resuscitation</p> <p>Secondary survey- where carried out, often in medical facility some time later</p> <p>Triage before treatment in mass casualty situations</p>
M4:b:4	Triage	<i>The application of a system to prioritise the immediate treatment of casualties</i>	<p>Principles of Triage</p> <p>How triage is performed</p> <p>Triage is a dynamic process</p> <p>Triage sieve/sort</p>	<p>Why and when triage is performed</p> <p>Methods, limitations, who can perform triage, labelling and flow of information at an incident requiring triage</p> <p>Triage can be performed at various stages in a mass casualty situation</p> <p>Knowledge of each system and where each is performed</p>

			Types of triage	T system, physiological, anatomical and mixed Principles and ethics
			The expectant/T4 casualty	
M4:b:5	Resuscitation fluids in emergency trauma care	<i>Pre-Hospital fluid administration</i>	Advantages of giving fluids to casualties  Disadvantages of fluids  Administration of fluids  Types of fluids	Maintaining circulation and blood pressure, importance in head injuries and burns  Not a blood replacement, risk of clot disruption and worsening haemorrhage  Pre-hospital consensus view on fluid use and NICE pre-hospital fluid guidelines  Awareness of different fluid types
M4:b:6	Importance of Timings in PHEM	<i>Historical background and recognising modern practices</i>	Trimodal distribution of death  Golden hour, platinum ten minutes  Importance of time to definitive care Damage Control Resuscitation (DCR)  Damage Control Surgery	Description of the term, understanding the modern limitations  Description of the terms  Key variable is time from injury to advanced care  Military background-, incorporates advanced airway skills e.g. Rapid Sequence Intubation with an ability to give blood products  Recognition of importance
M4:b:7	Relevant Injury Patterns	<i>An awareness of the most likely casualty types</i>	Explosive injuries  Bullet wounds  Crush injuries	Importance of initial haemorrhage control, management of amputees, co-existing pelvic injuries in blast casualties  Appreciation of cavitation and different bullet types, value of body armour  Awareness of consensus statement on crush injury and crush syndrome, long term complications, management of prolonged trapped casualties

M4:b:8	Analgesia and trauma casualties	<i>Types of analgesia, administration and complications of use</i>	Analgesia types Administration Complications Applicability to disaster teams Prolonged entrapment	Simple vs therapeutic methods Available routes and indications for each Of commonly used agents Limitations in carrying equipment Difficulties managing analgesia requirements vs side effects in trapped casualties
<b>(M4:c) Primary care in disasters and conflict environments</b>				
M4:c:1	The management of primary care (see also Topics 11 - 17)	<i>Dealing with the increase primary care needs that can affect those caught up in disasters and conflict</i>	Most common health needs in each phase of a disaster Public health needs Specific problems Specific vulnerable groups Chronic infections Prevention Isolation Treatment Chronic diseases	Emergency, chronic emergency, transition, post conflict (see also Module 1)  Communicable diseases, malnutrition, Children and the elderly , women of reproductive age (see also Topics 32 – 24) TB, HIV/AIDS Immunisation, water and sanitation, camp planning and shelter, outreach and home visitors Antimicrobials, supportive treatment, national protocols, outreach / primary centres/ support to local systems, referrals Diabetes, renal failure, cancers, home-based care, referrals, local protocols
M4:c:2	Standards and challenges for primary care in disasters and	<i>The health services which play a central role in disaster response and involve the widest scope</i>	Sphere guidelines for health care, Principle of treatment of common diseases in large populations	WHO guidelines such as epidemic thresholds

	conflict environments	<i>of health care</i>	<p>Issues of resource limitations</p> <p>Field definitions of disease</p> <p>Medicines management in disasters</p> <p>Support to local systems / provision of health posts / centres / clinics</p>	<p>Forward planning, considerations of host population needs and available resources</p> <p>Ministry of Health definitions if available, WHO definitions, definitions adapted to specific circumstances and resource availability</p> <p>Cold chain, supply chain, storage, expiry dates, WHO guidelines on donation standards, security, documentation</p> <p>Pros and cons of support to local facilities where existing vs developing parallel structures Human resources and sustainability; local HR structures, salaries, needs</p>
M4:c:3	Prevention and treatment of communicable diseases (see also Module 3)	<i>Treatment of communicable diseases encountered in disasters and conflict environments</i>	<p>Diarrhoeal disease</p> <p>Respiratory tract infections</p> <p>STIs &amp; HIV/AIDS</p> <p>Wound and skin infections</p> <p>Fungal infections</p> <p>Protection of staff</p>	<p>Shigella, cholera, bacillary dysentery, travellers diarrhoea</p> <p>Often underestimated, implications for children, shelter and indoor smoke, health promotion via home visitors or similar</p> <p>Infection prevention; helping those living with HIV, issues of stigma, mainstreaming into other programmes</p> <p>Use of PPE Scabies in children – treatment and prevention through community programmes</p> <p>Identification through community outreach workers, preventive measures</p> <p>Universal precautions, protocols re needle stick injuries etc., what medicine are kept in 'first aid kit' expense and expiry dates</p>
M4:c:4	Maternal and Child	<i>The special health demands of this</i>	Reproductive health (see topic 32)	

	Health	<i>vulnerable group</i>	<p>Immunisation</p> <p>MCH programmes (see primary care above)</p> <p>Mental health (See also Topics 35 - 42, 79 a-c)</p> <p>Gender-based violence (see reproductive health) (see also Topic 33)</p>	<p>Measles vaccination, Extended Programme Immunisation, cold chain, support to local structures</p> <p>Integration, support to local structures, links with nutrition, reproductive health, immunisation, psychosocial care</p> <p>Needs created by disaster and conflict environments, locally appropriate responses, referral services</p> <p>Potentially increased needs in disaster and conflict environments; prevention; treatment and follow up; local support programmes.</p>
M4:c:5	Reproductive health	Reproductive health is a state of complete physical, mental and social well-being, and not merely the absence of reproductive disease or infirmity. Reproductive health deals with the reproductive processes, functions and system at all stages of life.	<p><u>Minimum Initial Service Package (MISP)</u></p> <p><u>Safe Motherhood</u></p> <p><u>Sexual and Gender-based violence</u> (see also Topics 32,34)</p> <p><u>Sexually Transmitted Diseases, including HIV/AIDS</u> (see also Topics 16,29)</p> <p><u>Family Planning</u></p> <p><u>Young People</u></p>	<p>Immediately available resources provided on the basis of best practice without the need for a complex needs assessment</p> <p>To enable women to go safely through pregnancy and childbirth.</p> <p>To provide couples with the best chance of having a healthy infant; locally acceptable provision; religious considerations</p> <p>Special needs of adolescents</p>
M4:c:6	Health of children		<p>Vulnerable groups</p> <p>Nutrition (see also Topic 9)</p> <p>Susceptibility to infectious disease</p> <p>Chronic disease (see also Topic</p>	<p>Unaccompanied children, children in work, child soldiers</p> <p>See especially ARIs, measles</p>

			29) Exploitation Protection Schooling & play	Labour, sexual & gender based, child soldiers Reunification, local networks, Min of SW, special programmes Integration or special programmes, camp planning, designated resources, sport
<b>(M4:d) The psychosocial and mental health implications of disasters (See also Topics 79 a-c)</b>				
M4:d:1	Anticipated and pathological psychosocial reactions to severe stress	<i>Defining the range of people's reactions to stress in disasters</i>	The impacts of traumatic events (including displacement and asylum seeking) on families, children and older people and their common reactions to severe stress. This includes:  a. Normal and pathological reactions to trauma and disaster;  b. The common coping mechanisms that people of all ages use when faced with severe stress;  c. Outline understanding of the impact of traumatic events on people's future psychosocial development;  Cultural differences in coping.	The concept of primary and secondary stressors;
M4:d:2	Psychosocial resilience	<i>Defining the nature of psychosocial resilience and the factors that protect people from the psychosocial and mental health implications of</i>	The nature of distress and differentiating it from mental disorders in response to traumatic circumstances.  The definition of psychosocial resilience in the context of	

		<i>disasters</i>	traumatic events and its 'personal' and 'collective' dimensions.  A basic understanding of the concept of post-traumatic growth.	
M4:d:3	Awareness of people's longer-term and/or problematic psychosocial reactions to trauma and mental disorders after traumatic events	<i>Knowledge about the broad range of psychosocial problems and mental disorders that can affect people after disasters</i>	The core factors that increase the risks of people responding adversely, including developing mental disorders, after traumatic events in the short, medium and longer terms.  The circumstances and/or disorders that require intervention delivered by: a. every responder; and b. mental health specialists.  A simple summary of the epidemiology, impacts and prognosis of the most common psychosocial responses and mental disorders.  More information on only the mental disorders that are most frequent following traumatic events.	Critical awareness of the literature  This section must cover people of all ages
M4:d:4	Awareness of contemporary doctrine on planning and delivering ethical and effective psychosocial and mental health care after disasters	<i>Defining the steps in planning and delivering psychosocial and mental health care immediately after disasters and in the medium- and longer-terms</i>	Awareness of the NATO-TENTS principles for psychosocial and mental health care for people affected by disasters, war, terrorism, and displacement. This includes:  a. A broad outline of the NATO-TENTS principles for good practice in planning and delivering psychosocial and mental health care for people affected by disasters;  b. Awareness of NATO's strategic	TENTS is an EU-funded programme  Common cross-agency issues  Good multi-agency working practices  May include reference to the new Sphere Handbook on its publication (it is in revision presently) and to forthcoming WHO guidance

			<p>stepped model of care;</p> <p>Awareness of the importance of, and challenges for ethical practice of trauma-care;</p> <p>Awareness of the methodological and ethical challenges of research during disasters, war and all other traumatic events.</p>	
M4:d:5	Preventing psychosocial problems and mental disorders and early psychosocial interventions with communities and families	<i>Prevention and initial community- and family-orientated psychosocial responses by agencies including certain specific interventions with people who have psychosocial problems</i>	<p>The psychosocial importance of restoring communities and priorities for action.</p> <p>The concept of re-traumatisation and its relevance to psychosocial and mental health care.</p> <p>General approaches to planning and delivering effective psychosocial interventions for communities that have been affected by disasters and major incidents of all kinds.</p> <p>The roles of schools and work.</p> <p>Providing information following traumatic events.</p> <p>Psychological first aid and its components.</p> <p>An outline of the evidence for screening for, and preventing post-traumatic disorders.</p>	<p>The importance of good communication skills</p> <p>Doing no further harm</p> <p>Psychosocial care that all responders can and should deliver</p>
M4:d:6	Evidence-based interventions for common post-traumatic psychosocial	<i>An outline of good practice for non-mental health service staff including awareness of what does and does not work in assessing and treating people who</i>	<p>The principles of an evidence-based approach to preventing, recognising and treating post traumatic mental disorders</p> <p>Critical knowledge of, and basic skills in assessing and intervening</p>	<p>Critical awareness of key lessons from the evidence and from experience</p> <p>For trained non-mental health service practitioners</p>



	problems and mental disorders	<i>develop post-traumatic mental disorders</i>	<p>with people who are affected psychosocially or who develop mental disorders</p> <p>Recognition of common problems (includes rape/sexual abuse).</p> <p>Core principles of assessment including basic psychosocial and psychiatric assessment and triage</p> <p>A plain guide to what interventions work for whom and which do not.</p> <p>Critical decisions about intervening.</p>	To include when not to become engaged in delivering psychosocial and psychiatric interventions
M4:d :7	Caring for responders to disasters and major incidents		<p>Awareness of the psychosocial risks run by people who respond to disasters.</p> <p>The principles of supporting appropriately professional responders to disasters.</p> <p>Outline awareness of the current evidence for the effectiveness or otherwise of interventions to support professional responders after disasters.</p>	
M4:d:8	Anticipated and pathological psychosocial reactions to severe stress	<i>Defining the range of people's reactions to stress in disasters</i>	<p>The impacts of traumatic events (including displacement and asylum seeking) on families, children and older people and their common reactions to severe stress. This includes:</p> <ul style="list-style-type: none"> <li>d. Normal and pathological reactions to trauma and disaster;</li> <li>e. The common coping mechanisms that people of all ages use when faced with</li> </ul>	The concept of primary and secondary stressors;

			severe stress; f. Outline understanding of the impact of traumatic events on people's future psychosocial development; Cultural differences in coping.	
<b>Module 5: The Disaster and Conflict environment</b>				
Non-medical concepts and subjects important for the understanding and management of catastrophes				
<b>(M5:a) Coordination and control of humanitarian actors, codes of practice</b>				
M5:a:1	UN Cluster system, sectoral issues	<i>Groupings of UN agencies, non-governmental organizations (NGOs) and other international organizations around a sector or service provided during a humanitarian crisis</i>	Lead organization (agency) concept  UN Inter-Agency Standing Committee (IASC)  The eleven clusters (sectors)	Protection, Camp Coordination and Management, Water Sanitation and Hygiene, Health, Emergency Shelter, Nutrition, Emergency Telecommunications, Logistics, Early Recovery, Education and Agriculture,
M5:a:2	Codes of practice for humanitarian workers	<i>Codes and agencies providing guidance for and assessment of standards in humanitarian practice</i>	Three important codes   Evaluation of Humanitarian	Code of Conduct for the Red Cross/Red Crescent Movement & NGO's in Disaster Relief  <i>People In Aid</i> Code of Good Practice in the Management and Support of Aid Personnel  The SPHERE project (Humanitarian Charter & Minimum Standards in Disaster Response)  Humanitarian Accountability Partnership International

			actions	(HAP International)  ALNAP (Active Learning Network for Accountability and Performance in Humanitarian Action)
<b>(M5:b) Concepts, and humanitarian law, human rights, ethics</b>				
M5:b:1	Humanitarianism	<i>An ethic of kindness, benevolence and sympathy extended universally and impartially to all human beings.</i>	The four underlying concepts:  Humanitarian space  Abuse of humanitarianism	Humanity Independence Impartiality Neutrality
M5:b:2	The Geneva Conventions especially those applicable to the Sick and Wounded	<i>Four treaties and three additional protocols that set the standards in international law for humanitarian treatment of the victims of war.</i>	Protected personnel  The Geneva Emblem  Humanitarian Law	Geneva Protocols  Equality of medical effort based on clinical need rather than any other consideration
M5:b:3	Ethics of humanitarian action	<i>The ethical principles underlying humanitarian activities</i>	Ethics of civilian humanitarian action  Tensions in the humanitarian arena  Conflict affected societies and humanitarian action	Do no harm ethos

			Ethics of military humanitarian operations	
<b>(M5:c) Stakeholders: UN, NGOs, ICRC, host nation actors, donor nations, refugees/IDPS, military</b>				
M5:c:1	Refugees & Displaced Persons	<i>Individuals who have been forced to flee their homes and have either crossed an internationally recognised border (refugee) or are still within the borders of their home state (IDP)</i>	<p>Definitions of Refugee and IDP</p> <p>Non-refoulement</p> <p>Repatriation and re-settlement</p>	<p>Refugee – a person who “owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to or, owing to such fear, is unwilling to avail himself of the protection of that country”.<sup>1</sup></p> <p>IDP – persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized State border</p> <p>A principle in international law, which concerns the protection of refugees from being returned to places where their lives or freedoms could be threatened.</p>
M5:c:2	Conflict & the care of detainees and POWs	<p><i>The Conventions governing the treatment of detainees and POWs</i></p> <p>(See also Topic 46)</p>	<p>Geneva Conventions</p> <p>Health care of POWs and detainees</p>	<p>Relative to the Treatment of Prisoners of War</p> <p>Relative to the Protection of Civilian Persons in Time of War</p>

			Role of ICRC Ethnicity and healthcare	
M5:c:3	Host nations	<i>Rights and duties of nations in which disasters are or have occurred and in which humanitarian aid agencies are operating</i>	Relief commissions Role of ministries Co-ordination of humanitarian activities by host nation	Links with UN, NGOs, military
M5:c:4	Agencies involved in relief work	<i>All those operational organisations whose work is based on the principle of humanity: to prevent and alleviate human suffering wherever it may be found ... to protect life and health and to ensure respect for the human being</i>  (See also Topic 43)	International Supranational Governmental Intergovernmental NGOs  Importance of co-operation  Avoidance of duplication of effort  Interoperability difficulties  Co-ordination of humanitarian activities	
M5:c:5	Role of the military	<i>The role that military forces can and should play in relief operations in natural disasters and complex emergencies</i>  (See also Topic 47)	Complex humanitarian emergencies and the actors involved  Military as aid workers  Key documents  Erosion of separation between military and humanitarians  OCHA Continuum of Engagement	Military Relief Operations, CIMIC, Hearts and Minds  "Sharing the Space" Oslo protocol MDCA protocol

			<p>What humanitarians need from military forces</p> <p>Information sharing</p> <p>Bilateral military assistance</p> <p>UN peacekeeping operations</p> <p>Role of NATO</p>	<p>Secure environment, safe travel, removal of mines &amp; UXO, safe water, logistic support, medical support</p> <p>Links between UN forces and UN humanitarian agencies</p>
M5:c:6	Donors	<p><i>Sources of funding for humanitarian and development aid programmes</i></p> <p>(See also Topic 51)</p>	<p>Governmental</p> <p>Multinational</p> <p>Private</p> <p>Bilateral donations</p> <p>Criteria &amp; Governance by donors</p> <p>Evaluation of programmes</p> <p>Funding and applications</p>	<p>(e.g. DfiD, USAID, JICA, AusAid etc.).</p> <p>(e.g. ECHO)</p> <p>Log frames</p>
M5:c:7	Gender issues	<p><i>Identification and analysis of relationships between men and women, their roles, privileges, statuses and positions</i></p> <p>(See also Topics 32 – 34)</p>	<p>Roles of men and women in the societies affected</p> <p>Vulnerable groups</p> <p>Gender based violence</p>	<p>Impact on relief programmes (e.g. suitability and use of staff of different sexes)</p>
<b>(M5:d) Media</b>				
M5:d:1	The roles and impacts of the media		<p>Media agendas</p> <p>Managing the media</p>	

			Interviews and techniques National and international media Policy for dealing with the media Media training	
<b>(M5:e) CBRNE</b>				
M5:e:1	Chemical warfare agents	<i>Toxic chemicals used as warfare agents or instruments of terrorism</i>	Classification and effects of chemical agents Physical properties (persistency) Potential delivery methods and application to terrorism Types of detection and identification	The connection between these and response management requirements.
M5:e:2	Potential Biological Agents	<i>Microbiological organisms or products used as warfare agents or instruments of terrorism</i>	Bacteria, Viruses, Toxins, other  Biological factors  Strategic use  Potential delivery methods	Biological agents of note: <ul style="list-style-type: none"> <li>• <i>Bacillus anthracis</i></li> <li>• <i>Yersinia pestis</i></li> <li>• Smallpox</li> <li>• Botulinum toxin</li>   <li>• Lethal or incapacitating</li> <li>• Infecting dose, incubation period, pathogenicity</li> <li>• Transmissibility</li>   <li>• Large scale</li>   <li>• Asymmetric warfare</li> <li>• Bioterrorism</li> </ul>

M5:e:3	Radiation and Nuclear Hazards	<i>Dangers resulting from the use of nuclear weapons, "dirty bombs" or other deliberate or accidental releases of radioactive materials</i>	Types of radiation and their characteristics  Medical effects of radiation  Potential delivery methods and application to terrorism  Types of detection and identification  Principles of radiation health protection	Types of radiation: Alpha, Beta, Gamma, X-ray, Neutrons  Types of medical effects Deterministic Acute radiation syndrome Local radiation injury Stochastic (cancers)  Describe the difference between irradiation and contamination  Time / Distance / Shielding
M5:e:4	Effects of environmental and toxic industrial hazards (and trauma)	<i>Dangers resulting from large scale accidental releases of toxic industrial hazards (TIH) or from long term pollution of the environment, water supplies etc.</i>	Environmental pollution  CBRN / EIH spectrum and the concept of CBRNE3 (Explosives, Environmental and Endemic)	Type: Water, air, land and food chain  Overlap between EIH and CBRN  Signs of a deliberate release (CBRN) compared to natural or accidental  Management of concurrent trauma
M5:e:5	CBRN Incident Management	<i>Methods for removing biological agents, chemicals or radiation from individuals or the environment</i>	Safety  Cordons  Assessment  Triage  Casualty Hazard Management	Personal protective equipment  Hot / warm and cold zones  Scene assessment (detect) Casualty assessment (diagnose)  CBRN triage methods  Contain



				Decontamination Isolation Quarantine
M5:e:6	<b>Treatment of Chemical Casualties</b>	<i>Treating those affected by chemical warfare agents and by industrial chemicals (intoxicated)</i>	Decontamination  Casualty assessment  Supportive management  Definitive management (antidotes)	Specific methods for chemical contamination  'Toxidromes' and pattern recognition Clinical investigations  Application of CABCDE to the chemical casualty  Specific antidote treatment
M5:e:7	<b>Treatment of Biological Casualties</b>	<i>Treating those affected by biological agents or biological toxins (infected / sepsis)</i>	Decontamination & isolation  Casualty assessment  Supportive and definitive management  Public health management	Difference between contaminated, infected and infective (contagious)  Syndromic approach to biological agents <ul style="list-style-type: none"> <li>• Flu-like, respiratory, cutaneous, GI, haemorrhagic, neurological (peripheral / central)</li> </ul> Application of CABCDE to the biological casualty Application of 'surviving sepsis' guidelines Use of antimicrobials, antitoxins, vaccines post-exposure  Infection control, quarantine, Restriction of Movement
M5:e:8	<b>Treatment of Radiation Casualties</b>	<i>Treating those affected by radiation (irradiated)</i>	Decontamination & decorporation  Casualty assessment  Supportive management	Use of decorporating agents for internal decontamination  Radiological assessment of casualties including triage of nuclear casualties  Application of CABCDE to the radiological casualty

			Definitive management of acute radiation syndrome	Replacement therapy Immunotherapy Stem cell and bone marrow transplant
<b>(M:5:f) Management of specific types of or aspects of disasters</b>				
M5:f:1	Mass casualty events	<i>Events, often with a wide range of factors, resulting in large numbers of casualties</i>	Land transport accidents  Air accidents  Major events	Road, rail, sea  Air crashes  Football matches, other sporting gatherings, demonstrations, religious events
M5:f:2	Dealing with the dead	<i>The health and other implications of dealing with the dead</i>	Health aspects  Disposal of the dead    Other key items	Role of deceased in transmission of disease  Religious factors Different disposal methods Handling of cadavers Preparation of cadavers  Legal Psychosocial Cultural
<b>Module 6: Management and protection of teams and team members</b> The core knowledge and understanding required to ensure the safe, efficient and effective operation of individuals and groups attending a disaster or supporting a society affected by conflict.				
<b>(M6:a) Team formation and leadership</b>				
M6:a:1	The principles of strategic leadership and management	<i>Taking overall responsibility for the strategic direction coordination and control of teams through planning</i>	Strategic leadership and management in disaster scenarios  Recognition and understanding of major relief agencies (Govt, IO,	Basis and boundaries of strategic authority to prioritise and act, longer term planning  Operating with own and host government, understanding culture and mission of agencies and

		<p><i>and responding to the disaster or supporting a society affected by conflict.</i></p>	<p>NGO) and their mandates.</p> <p>Mobilisation and utilisation of local community resources</p> <p>The importance of strategic leadership</p> <p>The role of strategic management - including ability to negotiate and co-ordinate within wider response</p> <p>Needs-led resource allocation and management in disaster scenarios (especially as regards healthcare)</p> <p>Equity</p> <p>Coping with incomplete/limited resources and services</p> <p>Setting priorities</p> <p>Essential supplies/equipment/drugs</p> <p>Proper reporting and documentation</p>	<p>importance of preservation of 'humanitarian space'.</p> <p>Assessing potential of local resources including logistics</p> <p>Seven Core Strategic Leadership Competencies</p> <ol style="list-style-type: none"> <li>1. Direction, vision, mission, strategies and values</li> <li>2. Alignment</li> <li>3. Example and role model issues</li> <li>4. Developing people at all levels</li> <li>5. Effective communication</li> <li>6. As change agents</li> <li>7. Action in crisis and ambiguity.</li> </ol> <p>The 4 'Cs' - Command, Control, Coordination, and Computers (and up to date intelligence/information) Awareness of the strategic environment</p> <p>Needs assessment process, prioritization, allocation and logistics mechanisms/systems including stock security, storage requirements e.g. cold chain, inventory control and resupply.</p> <p>Concept of equity, ethics (utilitarianism/deontology) Local community engagement and security issues</p> <p>Managing scarcity and expectations of population, innovation, maximising safety/morale of team</p> <p>Dynamic process to take account of changing situation in short, intermediate, and long term</p> <p>Rapid and ongoing assessment process, action plan; Public Relations to avoid unsuitable/inappropriate donations of supplies etc.</p> <p>Reporting/documentation system with clear policies and administrative support</p>
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M6:a:2	Leadership components	<i>The skills of and requirements for the leadership role</i>	<p>Tactical/Team Leadership Role Leader Identification/Selection</p> <p>Qualifications</p> <p>Recognition of early symptoms of psychological stress within the individuals/the team and its management</p> <p>Relationships with head office, other agencies, governments, military etc.</p> <p>Hiring and firing</p>	<p>Achieving the Task, Building and Maintaining the Team, Developing the Individual</p> <p>Leadership competencies (including communication skills, situational awareness/sensitivity awareness of group dynamics, conflict resolution, synergy and maintenance of good morale</p> <p>Stress – understanding occupational stress and specific stresses of the humanitarian work/environment Recognising signs of excessive stress, mental ill-health – anxiety, depression, PTSD; drugs/alcohol abuse, sexual relations (see Sers 77 a,b,c)</p>
M6:a:3	Human resources and Training	<i>Who to select, how to select them and what training may be needed</i>	Importance of human resources (HR) in dealing with disasters and societies affected by conflict	<p>Determining HR requirements – team/local recruitment Matching numbers with needs of programme and qualifications required</p> <p>HR Plan – organisation chart</p> <p>Job profiles e.g. home visitors in a refugee programme</p> <p>Staff policies - terms and conditions</p> <p>Selection procedures</p> <p>Training – assessment of training needs &amp; delivery</p> <p>Induction, supervision, co-ordination</p>

				Evaluation/appraisal  Specific issues – Refugee workers, health workers, expatriate staff e.g. in refugee programmes
<b>(M6:b) Security</b>				
M6:b:1	Personal & Group security	<i>Keeping the individual and the team safe from harm</i>	Types of hazard  Awareness of hazards  Briefings Booking in and out “Bounds and boundaries” Communications systems  Risk avoidance    Hostage taking –	Road Traffic Accidents Mines, boobytraps and UXO (Unexploded ordnance) Firearms and cutting/stabbing weapons  Radio procedures  Defensive driving, Vehicle maintenance, Driver training and selection Vehicle equipment Environmental considerations (terrain, ice, road surfaces, volume of traffic etc)  a) conduct on capture b) procedures on kidnap of group personnel  Policy on medical treatment of hostages
<b>(M6:c) Administration, reporting, tasking, HQ –field liaison, military concepts of command chain</b>				
M6:c:1	Planning and resource allocation (see also Topics 66 - 68)		Extent of problem Nature of problem Local abilities	Role of health intelligence and on-site assessment

			Other Agencies Priorities  Interface and co-ordination with Governmental bodies locally  Interface with other NGOs	
M6:c:2	Co-ordination	(See also topics 43, 51 & 52)	Co-ordination of teams Co-ordination with other agencies	
M6:c:3	Logistics	<i>Procurement, transport, storage, distribution, finances, accommodation</i>  (See also Topics 4, 30)	Cold chain management  Protection of medical supplies Offices & Accommodation  Setting up transportation systems  Warehousing  Problem interfaces:    Dependence upon others for supplies – coordination essential	Guidance from WHO/PAHO Supply Management System (SUMA)     Customs Bureaucracy Corrupt officials Value of supplies
M6:c:4	Reporting		Preparation and writing of reports  Timings	Essential content  Weekly, annual, final
M6:c:5	Military organisation	<i>Understanding the principles and organization of military forces and multinational military contingents in humanitarian operations</i>	Chain of command Military organisation Military doctrine Civil Military Cooperation (CIMIC) NATO	How military forces operate  Military links with UN organisations  Humanitarian and disaster relief operations

		<i>and peace support operations</i>		Peace support operations Post conflict stabilisation operations NGO-military relations and training How military forces can support NGO and UN activity Military medical capability
<b>(M6:d) Maintenance of the health of persons and teams including emergency care of team members (local &amp; expatriate) and their medical evacuation</b>				
M6:d:1	Maintenance of the health of staff groups	<i>Ensuring the physical and mental health of teams</i>	Awareness of specific hazards and briefings Selection of personnel  Monitoring individual persons Who looks after the leader? Primary and secondary care of team members including procedures for their evacuation home.	Diet, water intake, rest and sleep, alcohol, drugs, sexual health  Identifying people who are sufficiently at risk psychosocially for their involvement in certain missions and events to be inappropriate  Nominated individual responsible for compliance, 'buddy' system
M6:d:2	Personal protection against disease: general activities (see also Topics 7, 13 -17)	<i>Measures to protect team members and the team as a whole against disease</i>	Prevalent/endemic diseases Pre-existing diseases Additional susceptibilities Education on avoidance Exclusion of persons who are at greater risk Current medications	

			<p>Vaccination</p> <p>Personal protection of water sources</p> <p>Domestic environmental health considerations</p> <p>The concept of primary, secondary and tertiary protection</p>	
M6:d:3	<p>Protection against vector borne diseases (see also Topics 12, 13))</p>	<p><i>Measures to protect the individual team members and the team as a whole against vector borne disease</i></p>	<p>Vectors</p> <p>Personal protection.</p> <p>Group protection.</p>	<p>Arthropods (insects, ticks, mites), rodents</p> <p>Bite avoidance, Nets and sprays,</p> <p>Chemoprophylaxis (Antimalarial and other prophylaxis, caveats and alternatives, Side effects of prophylactic agents)</p> <p>Clearance of static water, residual spraying, disposal of waste</p>
M6:d:4	<p>Water requirements per person per day (see also Topic 7)</p>	<p><i>Minimum volumes of water required to maintain health, ensure hygiene and for food preparation</i></p>	<p>Quantity and quality</p> <ul style="list-style-type: none"> <li>• Survival</li> <li>• Basic needs</li> </ul> <p>Longer term needs</p> <p>Monitoring of intake</p> <p>Incremental requirements with climatic and work rate differences</p>	<p>Sphere minima</p>
M6:d:5a	<p>Psychosocial care for responders to disasters and major incidents: a). general principles</p>	<p><i>Principles that impact on the requirements for providing psychosocial care for responders to humanitarian disasters and best practice in providing that care</i></p> <p>(See also Topics 35 – 42)</p>	<p>Awareness of the psychosocial risks run by people who respond to disasters.</p> <p>The nature of psychosocial resilience</p> <p>The principles of supporting appropriately professional responders to disasters.</p> <p>Outline awareness of the current</p>	<p>Examples include the NATO six level strategic stepped approach to psychosocial care for responders and the principles promoted by the Antares Foundation</p>



			evidence for the effectiveness or otherwise of interventions to support professional responders after disasters.	Importance of social support but avoidance of single session psychological debriefing (Cochrane review)
M6:d:5b	Psychosocial care for responders to disasters and major incidents: b). caring for oneself	<i>Activities to help team members to deal with the tensions inherent in, and common emergent stressors that arise when delivering humanitarian work in disasters</i>  (See also Topics 35 – 42)	The nature of psychosocial resilience: developing and sustaining one's own psychosocial resilience  Personal psychosocial coping methods and preventative measures  Awareness of the psychosocial risks for responders  Self-awareness skills	Cross-refer to the section on 'The psychosocial and mental health implications of disasters' which is applicable to staff who respond to disasters and major incidents  Coping with one's own distress without becoming immobilised  Early recognition of risk to self
M6:d:5c	Psychosocial care for responders: c). caring for groups of people	<i>Activities to help team leaders and teams to deal with and reduce the impact of primary and secondary stressors on the emotional wellbeing, psychosocial needs and mental health of responders</i>  (See also Topics 35 – 42)	The nature of psychosocial resilience: developing and sustaining teams' collective psychosocial resilience  Leadership and observation of teams  Daily briefings/debriefings  Imposition and maintenance of routines including those for: <ul style="list-style-type: none"> <li>• Sleep and rest periods</li> <li>• Alcohol/drug misuse avoidance</li> <li>• Recreation</li> <li>• Links with home for all team members</li> </ul>	Cross-refer to the section on 'The psychosocial and mental health implications of disasters' which is applicable to staff who respond to disasters and major incidents  Importance and role of leadership but also the skills of being led