

**National Disaster Medical System  
Disaster Medical Assistance Team**

# **Modular Training Program**

**Prepared by:**

**Toledo Area Center for Disaster Education & Research  
Toledo Area Disaster Medical Assistance Team**

Module I - Disasters and the DMAT

Module II - Deploying, Living and Working in the Field Setting

Module III - Disaster Medicine Concepts

Module IV - Disaster Drill

Module V - Advanced Disaster Medicine

Module VI - Personal and Family Preparedness

Module VII - Multidisciplinary Skill Cross - Training

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# Table of Contents

<b>TABLE OF CONTENTS .....</b>	<b>2</b>
<b>MODULE I -DISASTERS AND THE DMAT .....</b>	<b>5</b>
FIRST STEP.... DEFINE A DISASTER .....	6
INCIDENTS OF DISASTERS PER REGION AND INCIDENTS RELATED TO GEOGRAPHY .....	6
INCREASING INCIDENTS OF DISASTERS THROUGHOUT HISTORY .....	7
THE LIFE CYCLE OF THE COMMON DISASTER.....	8
THE FEDERAL RESPONSE PLAN AND EMERGENCY SUPPORT FUNCTIONS .....	9
THE NATIONAL DISASTER MEDICAL SYSTEM (NDMS) .....	10
STRUCTURE AND FUNCTION OF NDMS .....	11
THE MANAGEMENT SUPPORT TEAM.....	11
WHAT IS DONE AT THE FEDERAL LEVEL PRIOR TO DEPLOYMENT .....	11
PREPARING TO DEPLOY: WHAT IS DONE AT THE LOCAL LEVEL PRIOR TO DEPLOYMENT .....	11
DMAT ALERT LEVELS.....	12
HOW DMATs ARE CHOSEN FOR DEPLOYMENT BY NDMS .....	13
THE DISASTER MEDICAL ASSISTANCE TEAM .....	14
HISTORY OF DMAT DEPLOYMENTS / RESPONSES.....	15
APPLICATION PROCESS .....	15
DMAT MEMBERSHIP.....	16
TEAM DUES .....	16
TEAM POSITIONS AND ABBREVIATED JOB DESCRIPTIONS.....	16
FEDERAL EMPLOYMENT (LICENSURE, MALPRACTICE, DISABILITY) .....	18
PAYMENT, REIMBURSEMENT .....	18
INCIDENT COMMAND SYSTEM FOR DMATs (WHILE ON A DEPLOYMENT).....	19
NDMS / DMAT CODE OF CONDUCT (FROM NDMS OPERATIONS MANUAL).....	19
THE TADMAT COMMAND STAFF.....	21
MEETING SCHEDULE / TRAINING SCHEDULE / EXERCISE SCHEDULE .....	23
<b>POST TEST EVALUATION QUESTIONS.....</b>	<b>24</b>
<b>MODULE II -DEPLOYING, LIVING AND WORKING IN THE FIELD SETTING .....</b>	<b>28</b>
OUTSTANDING IN YOUR FIELD.....	29
PERSONAL GEAR .....	29
A BAG, IN A BAG, IN A BAG.....	30
DRESS FOR SUCCESS .....	30
COLD WEATHER DEPLOYMENTS .....	31
IN THE HEAT OF THE NIGHT... WARM WEATHER DEPLOYMENTS.....	31
GETTING OFF ON THE RIGHT FOOT.....	32
BUCKET LAUNDRY .....	32
PERSONAL HYGIENE .....	32
HUMAN WASTE .....	33
TEAM SAFETY DURING THE DEPLOYMENT .....	33
PERSONAL SAFETY .....	33
GP MEDIUM TENT (NOTHING SMELLS LIKE OLD CANVAS....)	33
COTS, LITTERS, LITTER STANDS (NOW I LAY ME DOWN TO SLEEP...)	35
PHYSICAL CAMP LAYOUT / SETTING UP THE FIELD HOSPITAL .....	36
<i>Specific camp setup issues based on disaster type (earthquake vs. flood, etc)</i> .....	36
<i>Setting up a disaster treatment site within a standing facility</i> .....	36
LITTER CARRYING, LIFTING SAFETY, GROUND TRANSPORT OF PATIENTS VIA VEHICLE .....	36

WATER, WATER EVERYWHERE.....	36
DRINKING WATER... SAFE OR NOT? .....	36
AN ARMY TRAVELS ON IT'S STOMACH.....	37
FLYING THE FRIENDLY SKIES - AIRCRAFT SAFETY: .....	38
USE OF ROTARY & FIXED WING VEHICLES FOR PATIENT TRANSPORT & PT. PREP FOR TRANSPORT .....	40
SIMPLISTIC BOXING & PAINLESS PALLETIZING: .....	40
ACTION PACKER LABELING .....	40
THE "463L" SYSTEM.....	41
LOAD-MASTER OR BAG BOY ?.....	41
"NOTHING BUT NET..." .....	41
DANGEROUS GOODS: SHIPPING HAZARDOUS MATERIAL.....	42
GENERATORS, LIGHTING AND ELECTRICAL SAFETY .....	43
COMMUNICATIONS / INFORMATION TECHNOLOGIES .....	43
<i>Overview of communications needs during a disaster.....</i>	<i>43</i>
<i>Redundant communication techniques .....</i>	<i>43</i>
<i>UHF / VHF portable radio use.....</i>	<i>43</i>
<i>HF radio.....</i>	<i>43</i>
<i>Information gathering and intelligence prior to, during and after a disaster .....</i>	<i>43</i>
<i>Internet, Email, Pagers, etc. ....</i>	<i>43</i>
<i>GIS / GPS .....</i>	<i>43</i>
MEDIA & PUBLIC RELATIONS .....	43
<i>The importance of the PIO .....</i>	<i>43</i>
<i>How to conduct yourself during an interview.....</i>	<i>45</i>
<b>MODULE III –DISASTER MEDICINE CONCEPTS.....</b>	<b>48</b>
TRIAGE .....	49
<i>Dynamics of disaster triage.....</i>	<i>49</i>
<i>Review of triage systems and each ones advantages / disadvantages .....</i>	<i>49</i>
<i>START (Simple Triage and Rapid Treatment).....</i>	<i>49</i>
<i>color coded triage tags and tagging systems.....</i>	<i>49</i>
<i>The morality / ethics / legality of triage.....</i>	<i>49</i>
<i>The sensitivity, specificity and effectiveness of triage.....</i>	<i>49</i>
<i>Triage scenarios .....</i>	<i>49</i>
CRITICAL INCIDENT STRESS MANAGEMENT .....	49
<i>Expected stress response of disaster victims.....</i>	<i>49</i>
<i>Expected stress response of disaster responders .....</i>	<i>49</i>
<i>Post traumatic stress disorder.....</i>	<i>49</i>
<i>Debriefing (introduction, fact, thought, reaction, symptoms, teaching).....</i>	<i>49</i>
<i>Stress reduction techniques for DMATs .....</i>	<i>49</i>
<i>How a typical DMAT CISM program works .....</i>	<i>49</i>
PROTECTING PATIENTS PRIVACY / CONFIDENTIALITY .....	49
ORIENTATION TO THE DISASTER MEDICAL RECORD .....	49
REVIEW OF THE DMAT HARD MEDICAL ASSETS (LAB EQUIPMENT, MONITOR, LP-10, GLUCOSCAN, ETC.)	49
<b>MODULE IV –DISASTER DRILL.....</b>	<b>50</b>
<b>MODULE V –ADVANCED DISASTER MEDICINE .....</b>	<b>51</b>
SPECIFIC INJURY TYPES / MANAGEMENT .....	52
<i>Crush injury.....</i>	<i>52</i>
<i>Mass gathering medicine .....</i>	<i>52</i>
<i>Blast injury .....</i>	<i>52</i>
<i>Exposure (Heat / Cold) &amp; principles of environmental medicine.....</i>	<i>52</i>
<i>Disaster airway management .....</i>	<i>52</i>
<i>Spinal immobilization during disasters .....</i>	<i>52</i>
<i>Thoracic trauma during disasters.....</i>	<i>52</i>

<i>Abdominal trauma during disasters</i> .....	52
<i>Extremity trauma and amputation / fasciotomy during disasters</i> .....	52
<i>Field surgical procedures</i> .....	52
<i>Wound care issues in the disaster setting</i> .....	52
<i>Fluid resuscitation during disasters (adults &amp; children)</i> .....	52
<i>The burned patient during disasters</i> .....	52
<i>Special considerations of the pediatric patient during disasters</i> .....	52
<i>Respiratory &amp; Cardiac arrest in the disaster setting</i> .....	52
<b>HAZMAT FOR DMATS</b> .....	52
<b>RADIATION EXPOSURE</b> .....	52
<b>CHEMICAL / BIOLOGICAL WEAPONS</b> .....	52
<i>Effects</i> .....	52
<i>Treatment</i> .....	52
<b>EMERGING INFECTIONS AND THEIR IMPLICATIONS FOR INTERNATIONAL DISASTER RESPONSE</b> .....	52
<b>RAPID DISASTER ASSESSMENT OF DISPLACED POPULATIONS (MEDICAL AND PUBLIC HEALTH NEEDS)</b> .....	53
<b>OUTREACH PURPOSE AND METHODS</b> .....	53
<b>PUBLIC HEALTH ISSUES FOR LARGE GROUPS</b> .....	53
<b>DISASTER MORTUARY ISSUES</b> .....	53
<b>DISASTER VETERINARY ISSUES</b> .....	53
<b>MODULE VI –PERSONAL &amp; FAMILY DISASTER PREPAREDNESS</b> .....	54
ANOTHER OUTLINE TO FOLLOW ~30 PAGES OF TEXT.....	55
<b>MODULE VII –MULTIDISCIPLINARY SKILL CROSS-TRAINING</b> .....	56
<b><i>GIVING MEDICATIONS (SQ, IM, ETC.)</i></b> .....	57
SUTURING AND WOUND CARE TECHNIQUES FOR NON-PHYSICIANS .....	57
VITAL SIGNS FOR NON-MEDICAL DMAT MEMBERS.....	57
<b>APPENDIX A: MENU AND ACCESSORY ITEMS FOR THE MEALS-READY-TO-EAT:</b> .....	58
<b>APPENDIX B: COLLECTION OF MRE RECIPES UTILIZING MRE CONTENTS:</b> .....	59
<b>GLOSSARY</b> .....	64
<b>BIBLIOGRAPHY</b> .....	66
<b>INDEX</b> .....	67

TADMAT Modular Training Program

# **Module I - Disasters and the DMAT**

## ***First step.... define a disaster***

Before one can even think of deploying with the Disaster Medical Assistance Team (DMAT), one needs to be aware of what constitutes a disaster and why the DMAT is needed in the first place. The actual definition of a disaster varies depending on who you talk to. Generally, DMATs will only be involved in large scale disasters in which there is a medical emergency of the proportions that exceed, disrupt or disable an areas normal Emergency Medical Services (EMS). Keep in mind that a **disaster** can roughly be defined as: "an event that causes serious disruption in the services that are essential for the normal operation of a society and frequently result in widespread human & environmental losses." (AEM,v.2, #12, Dec 95) However, one also could consider a disaster any situation where existing resources do not adequately meet the resource needs. Put very simply, disasters occur when hazards and vulnerability meet.

Disasters come in many forms. Types of disasters include natural disasters which comprise geological events such as an earthquake, landslide, or volcano, and weather related events such as tornadoes, hurricanes / tsunamis, floods, blizzards, heat waves, droughts, and fires. Disasters also include technological or man-made events such as nuclear or hazardous materials exposures, motor vehicular, railway and waterway accidents, explosions, industrial accidents, and intentional disasters such as the World Trade Center and Oklahoma City federal building bombing. Mass gatherings can introduce special problems and can constitute a disaster if planners have not pre-planned and mitigated for certain circumstances.

Some areas may be predisposed to disasters, especially environmentally related events. Coastal areas are prone to have hurricanes, the west coast shakes frequently with seismic activity, and tornado alley is plagued every year by a barrage of twisters. These areas are attractive for one reason or another and seem to be where a lot of people choose to live. When a disaster strikes an area of high population density, there is an increased chance of creating a situation where the number of injured exceeds the local resources and state or federal help must be called in. If an affected area had poor resources prior to the disaster, such as low economic stature, poor health care resources, or a distressed underlying hygienic / environmental health condition; a disaster can have a more pronounced effect and more quickly exceed the available assets.

Disasters are also classified as simple or complex. A **simple disaster** occurs with little or no community disruption. The infrastructure of the government and public services are left intact. Examples of this type of a disaster would include a multiple-vehicle crash. The number of victims may put a strain on the local EMS, but they are able to treat and transport the victims to a local hospital in a timely manner. An **extended disaster** is one in which the infrastructure is damaged to a varying extent. Essential services such as law enforcement, fire fighting, garbage removal, etc. are disrupted. The governmental infrastructure is still functional, although not at the same level as it was prior to the disaster. A **complex disaster** is one in which the governmental and public services infrastructure is completely damaged and becomes non-functional.

## ***Incidents of disasters per region and incidents related to geography***

There are certain disasters that can occur at any time, anywhere. Others are regional or localized in some predictable pattern. Fire is the biggest killer and cause of damage in the United States. The U.S. has the highest per capita death rate due to fire in the world. Six thousand people a year die from fire with over 100,000 people injured. For the individual or family, a fire is the most common type of disaster they will experience. Annually there are over 24 million fires with over \$11 billion in losses. In the United States, for the general population, the most common type of large-scale natural disaster is flooding. Flash flooding can occur with little to no warning and can reach full peak and water heights of 30 feet within minutes. Since the early 1900's, flooding has been attributed to over 10,000 deaths. Annually, there is over \$1 billion lost due to flood damage in the U.S.

Earthquakes pose a moderate to high risk for a population of 70 million people in 39 states. All people in all states are at a slight risk for earthquakes. As an example, Washington State has over 1000 earthquakes a year with the possibility of having a catastrophic earthquake at any time.

During the winter months, most northern states are at risk for winter storms and extreme cold. Winter storms can cripple southern states that are not usually prepared for winter weather. During winter storms, the major disruption occurs due to transportation difficulty and power outages. With the loss of power, safety becomes the major concern.

Almost all states are at risk for exposure to any of the 500,000 hazardous substances that travel on our roads and railways. Accidents involving toxic substances have occurred in almost every part of the country.

Internationally, many countries follow the same incidence of disaster, as does the United States. Others have unique situations that affect the impact and frequency of disasters and their effects. Africa's natural disaster hazards are mainly epidemics, endemic disease, drought, flood and bush fires. Some areas also are susceptible to earthquakes, cyclones and volcanic eruptions. Also occurring in Africa are armed conflicts and transportation related disasters. Africa's rapid population growth, forced population movement, environmental degradation, a precarious urbanization and fragile economy and political instability heighten the effect of a disaster. As in many countries, wars and armed conflict have destroyed or severely taxed the health network compounding the effect of a disaster in their region. (World Health Statistics Quarterly 49(3-4):179-84, 1996.

Conversely, Thailand has been a relatively disaster free country. Until recently they have suffered only minor losses from natural hazards throughout the years. In the very recent past, Thailand has experienced a rapid economic growth and industrialization and now faces an increased risk of consequence from manmade disasters. (Disasters 21(1):77-88, 1997 Mar.)

The effect of a disaster is not always evenly distributed based on the type of disaster. For example, Hurricane Andrews 140 mph winds resulted in 20 persons killed. A year earlier in Bangladesh a cyclone of similar size with the same wind speed resulted in the death of 138,000 people. Similarly, in 1906 Hong Kong lost 10,000 people living in boats in the harbor during a typhoon. The population has now grown but living standards are better and fewer people live in boats. Thus the risk of loss of life has been greatly reduced, but the risk of property damage has been greatly increased. The economic effect of a disaster can have a differential effect also. Hurricane Hugo's damage cost \$7.6 billion or (0.1% of the US Gross National Product). The effects of the El Nino on Bolivia, Peru and Ecuador in 1982-83 were 100 times as large and cost those countries almost 10% of their GNP (nearly half of their annual tax revenue for that year) (Climate Alert, 1993 Vol 6 no. 4 p. 1,4-7)

## ***Increasing incidents of disasters throughout history***

Many people have perceived an increase in the number of disasters throughout history. There is no hard scientific evidence that there have been more hurricanes or more earthquakes in recent history than in the past. When one considers that human populations are becoming more vulnerable to climactic extremes, it is easy to understand why this perception exists. From 1988 to present, the US has experienced \$93 billion in damage from disasters compared to \$5 billion from 1983-1987 (figures from the National Climatic Data Center, Asheville, N.C.).

Especially in developing countries people are being forced to live in more exposed areas and high risk zones. Some of these high-risk zones (i.e.: beaches and hillside areas are high-value properties. Hurricane Hugo which devastated the Caribbean and southern United States in 1989 and Andrew which damaged south Florida in 1992 both caused billions of dollars in damage. Many who experienced these disasters had the opportunity to do so because they were attracted to the coastline lifestyle and chose to live in this vulnerable area. Finally, our media coverage has improved drastically over time. Many government agencies rely on CNN to bring the first views of a disaster-ravaged area because the media can get on site faster than they can. This has made news and information more widely available than ever before, consequently, people are much more aware of the occurrence of extreme events and of their impact than we were in the past.

During the last 20 years there have been 18 disasters in which more than 10,000 people died and two super-disasters (1970 Bangladesh cyclone, 1976 Tangshan, China earthquake) that took more than a quarter

million lives (Environment Mar 1988 v.30 no.2 p. 25-29). Technological and man-made disasters are a growth industry. Industrial disasters, contamination of food, water and air are attached to almost every industrial activity. Recently, weapons of mass destruction and emerging diseases have become a threat, even as tools of terrorists. It is getting to be almost impossible to remove to risk of a technological disaster (Tropical Doctor. 21 Suppl 1:70-81, 1991).

## ***The Life Cycle of the common disaster***

In general terms, disasters seem to follow a pattern. The components of this pattern include: the **warning** or alert, the **impact**, an **acute phase** lasting 1-4 days, a **chronic-acute phase** of 4-7 days, a **post impact phase** of 7-30 days and a **recovery period** lasting one month to years. Not all disasters follow this pattern strictly, and some phases may not even exist (i.e. there may be no warning phase for an earthquake, it just happens). Smaller scale disasters may not take as long to recover from, and thus the number of days for each phase may be much less.

During the **warning** phase, people are given time to prepare for the oncoming disaster. A warning phase precedes disasters such as floods, hurricanes and to a lesser degree, tornadoes and volcanic eruptions. The more advanced warning provided the lesser the impact on the population. A warning phase gives the population time to prepare themselves or their dwellings for the disaster. If need be, it gives people time to evacuate the disaster area. During the warning phase, an evacuation of the population may occur in order to minimize loss of life when the disaster occurs. The evacuation time is dependent on the density of the population in that area and may exceed the time from warning to when the disaster strikes. For example; New Orleans, LA has a dense population. There are only a few major bridges and highways leading away from the city. As the city lies almost 8 feet below sea level, and protected by dikes, it would suffer great damage and a high potential for loss of life if struck by a strong hurricane. Although the National Hurricane Center is able to predict tropical weather with increasing accuracy, storms that form in the Gulf of Mexico give little warning, and intensify very rapidly. It is conceivable that a hurricane could develop and strengthen, and then strike the Louisiana coastline in less time than the estimated 72 hours needed to evacuate the city of New Orleans. DMATs and other federal assets may be put "On Alert" during this time in order to give the teams time to prepare their equipment and gather intelligence about the disaster and disaster area for potential deployment.

The next phase of a disaster is the **acute phase**. This includes the actual strike of the disaster. Most disasters come and go rapidly. Hurricane winds decrease significantly after the hurricane makes landfall, decreasing the threat and amount of damage as the storm moves inland. Earthquakes occur very rapidly and can be over in seconds. Floods, blizzards and volcanic eruptions are examples of disasters that have a longer acute phase. Radiation / hazardous materials incidents can also have a long acute phase depending on the material involved. The potential for loss of life or injury is decreased significantly for those who have evacuated or are in a safe shelter with a disaster kit or some preparatory supplies. The acute phase is where most of the acute and / or traumatic injuries occur. It is during this time that most of the dramatic rescue efforts take place. Bystanders accomplish most of these rescue efforts, as professional rescuers are so overwhelmed with the magnitude of the disaster. The sheer numbers of victims prevent them from achieving the majority of the rescues. In some instances, as during Hurricane Andrew, the risk to rescuers while the disaster is still continuing is so great that they are told not to respond to requests for help until after the threat has passed.

During the **chronic-acute phase** the threat of the disaster has just passed. The population is just beginning to see the results of the disaster and its effect on their community. It is during this time that state and federal agencies will begin their evaluation of the disaster area to assess the damage and plan the magnitude of response. Local rescuers and public service personnel, who have been functioning under high levels of stress for a number of days, begin to lose their "adrenaline rush" and lose momentum in their rescue efforts. Some of these rescuers may be victims themselves and may have been unable to check on their homes and families. This can increase their stress and decrease their productivity. Most of the acute and traumatic injuries that were a direct result of the disaster have received initial treatment. Those who have not been found by this time will have an exponentially increasing chance of succumbing to their

injuries as the days go by. Sub-acute injuries incurred during the disaster may begin to have complications. It is also at this time that people with chronic health problems begin to develop symptoms of those problems. The State disaster plan and the Federal Response Plan will have begun to swing into motion and resources and assistance is beginning to arrive at the disaster site. The groundwork for the phenomenon of convergence (explained in the next paragraph) begins during this phase. DMATs and other federal response teams are "Activated" and begin moving into the disaster area and commence the setup of medical care and disaster aid sites.

During the *post-impact phase* of the disaster, the phenomenon of "convergence" escalates. It is during this time that the response to the public officials requests during the acute phase for "send us everything you've got", gets answered. Personnel and goods begin arriving from neighboring cities and states. Resources may even arrive from other countries if the magnitude of the disaster warrants it. The amount of supplies, personnel and equipment may exceed what can be of use. Personnel may arrive in such number and arrive ill prepared so that they become a burden on the community and supplement the problem instead of solving it. Goods and medications will arrive in such a quantity that they can't be sorted and utilized in a timely fashion and thus may go to waste. It is important that the DMAT arrive well prepared and self sufficient so as to not complement the problem. DMATs and other federal resources have set up their Field Hospitals and may have already treated and evacuated most of the injuries that were the direct result of the disaster. It is during this time that the post disaster environment is exacerbating the chronic health problems. People have lost their medications and / or not received their dialysis, chemotherapy or other treatments. The health care infrastructure, such as doctors offices, home health agencies, pharmacies and possibly hospitals are non-functional and the population begins to seek out alternate sources of health care. It is during this period that the DMAT Field Hospital switches from functioning primarily as an Emergency Department, and takes on the role of the community health center, clinic and pharmacy. Public health problems start to become a threat. Food and water born illness may be observed as without refrigeration food has spoiled and people may be drinking contaminated water. It is also during this phase that the first DMATs that have been deployed to the disaster area are being stood-down and new teams enter to replace them and continue on. Outreach around a DMAT treatment area, or to an area that is somewhat isolated or may not have received much care is initiated. Outreach was first used by DMATs during Hurricane Andrew in 1992 and consists of going door-to-door to assess the well-being and health needs of the local community. Outreach methods will be described in detail in a later chapter.

The last phase of a disaster is the *recovery phase*. It is during this time that the population has begun to rebuild their homes, business and the infrastructure that existed prior to the disaster. Pharmacy's, health care clinics and hospitals are now back into operation. DMATs and other response teams are beginning to phase themselves out of the response efforts as Public Health Service and other federal agencies step in to assist in the long term recovery efforts. Although this is the last phase of this disaster, the recovery phase is also the beginning phase of the next disaster as it is during this time that the population is most receptive to educational efforts and the community can prepare themselves for the next disaster. This phase can be extended years after the disaster as **preparedness** and **mitigation** (activities to reduce or prevent the impact of a disaster or its consequences) and **recovery** takes place.

## ***The Federal Response Plan and Emergency Support Functions***

The federal government has developed a plan to respond to a disaster in the United States. This **Federal Response Plan (FRP)** consists of twelve **Emergency Support Functions**. The FRP is designed to delineate duties and responsibilities between federal, state and non-governmental agencies in relation to the disaster. It facilitates the delivery of all types of Federal response assistance to States to help them deal with the consequences of significant disasters. The overall operation of the Federal Response Plan is the responsibility of the **Federal Emergency Management Agency**. The FRP is fairly complex and the average DMAT member need not know how it operates in detail. However, a basic awareness is helpful for one to understand the organizational structure of the federal disaster response and assistance.

### **Emergency Support Functions:**

	<b>Title</b>	<b>Function</b>	<b>Lead Agency</b>
1	Transportation	Civilian and Military Transportation	DOT
2	Communications	Telecommunications Support	National Communications System
3	Public Works and Engineering	Restore Essential Services & Facilities	US Army Corp. of Engineers / DOD
4	Fire Fighting	Detect and Suppress Fires	US Forest Services / Dept. of Agriculture
5	Information & Planning	Collect and Disseminate Critical Information	Federal Emergency Management Agency
6	Mass Care	Food Shelter, First Aid, Relief Supplies, Family Notification	American Red Cross
7	Resource Support	Equipment, Materials, Supplies to agencies involved in the response	Govt. Services Agency
8	<b>Health &amp; Medical</b>	<b>Assist in Public Health and Medical Needs</b>	<b>US Public Health Services / Health and Human Services</b>
9	Urban Search and Rescue	Locate, Extricate and Provide Initial Medical Care to Victims Trapped in Collapsed Structures	Dept. of Defense
10	HAZMAT	Support Federal Response to Real or Potential releases of Oil or Hazardous Materials	Environmental Protection Agency
11	Food	Identify Food Needs and Food Disbursal	Dept. of Agriculture
12	Energy	Restore Power Systems and Fuel Supplies	Dept. of Energy

As you can see, ESF #8 is the Emergency Support Function for Health and Medical Services. The lead agency is the US Public Health Service. This agency is the one that oversees the DMATs through the PHS Office of Emergency Preparedness.

When the Federal Response Plan goes into operation, A **Regional Operations Center (ROC)** facility is established at the FEMA Regional Office (or a Federal Regional Center) in response to (or in anticipation of) an event that may require Federal assistance under the Plan. FEMA regional personnel and representatives from the ESF primary agencies as required staff the ROC. It serves as an initial point-of-contact in the region for the affected State(s), the national Emergency Support Team and Federal agencies. Also established is a Disaster Field Office. A **Disaster Field Office (DFO)** is the primary field location in each affected State for the coordination of response and recovery operations. It houses the Federal Coordinating Officer (FCO) and staff comprising the **Emergency Response Team (ERT)**. It will operate 24-hours a day, as needed, or with a schedule sufficient to sustain the Federal response operations. Except where facilities do not permit, the FCO will be co-located with the State Coordinating Officer (SCO) at the DFO.

## ***The National Disaster Medical System (NDMS)***



In 1983 the President of the United States declared, by executive order, the formation of the National Disaster Medical System (NDMS). NDMS was to have two functions:

1. create a system whereby civilian hospital beds could be used in the event of a disaster within the U.S.
2. create Disaster Medical Assistance Teams (DMATs) who could respond to those disasters.

The National Disaster Medical System (NDMS) is a Federally coordinated system that is a private / public partnership that augments the Nation's emergency medical response capability. The Federal Emergency Management Agency (FEMA), Veterans Administration (VA), Department of Defense (DOD) and the US Public Health Service (PHS) comprise the public side of the system. The private side is made up of more than 5000 members of Disaster Medical Assistance Teams and over 300 civilian hospitals. The NDMS has developed into a system whereby victims of a disaster can be managed utilizing the assets of the public / private partnership as necessary. Some of the principal services that the NDMS provides include field rescue and first aid, casualty clearing (triage and medical stabilization), emergent surgical stabilization, medical (or aeromedical) staging, transportation from the disaster area by military or civilian aeromedical transport and definitive medical care in a hospital facility that has dedicated beds for the NDMS when needed. The overall purpose of the NDMS is to establish a single integrated National medical response capability for assisting State and local authorities in dealing with the medical and health effects of major peacetime disasters and providing support to the military and Veterans Health Administration medical systems in caring for casualties evacuated back to the U.S. from overseas armed conflicts.

## ***Structure and Function of NDMS***

The overall responsibility for management of the National Disaster Medical System is that of the Department of Health and Human Services (DHHS), Office of Emergency Preparedness (OEP). Under the director of the OEP are branches for Administration and Support, Program Development, and Emergency Operations and Readiness. The Emergency Operations group is the part of NDMS that oversees the DMATs and handles the logistics for their response effort. The Administration and Support branch process applications and maintains personnel records for DMAT members at the national level. The Program Development folks plan and execute drills and training programs. Each of the DMATs in the country has their own leadership staff. Usually, the teams have a Commander and Deputy Commander. The Deputy Commander is also sometimes called the Vice-Commander or the Executive Officer.

## ***The Management Support Team***

NDMS establishes in direct support of the DMATs a **Management Support Team (MST)**. The MST provides field command and control, operations and logistical support for the DMATs. Following the Incident Command System, the Operations staff of the USPHS Office of Emergency Preparedness coordinates the MST. DMATs themselves could serve as part of an MST. Specific DMAT members with desirable skills or talents may serve as members of the MST, even if their team was not called into service on the specific disaster. The MST is part of the **Push Package** by OEP, which consists of an MST and three DMATs. It may be deployed prior to the disaster, during the warning phase, and placed strategically close enough to the impact zone so as to remain safe, but so as to allow for expedient movement into the disaster area after the disaster has struck. The MST is responsible for locating the sites each DMAT will deploy to within the disaster area. Members of the MST coordinate with local representatives of the Medical community and Emergency Medical Services in order to get an idea of the needs of the medical infrastructure during the post-disaster period. They will choose the DMAT treatment sites and arrange for logistical support in moving the team and their equipment to those sites. The MST arranges for security at the DMAT site to protect the equipment and personnel. They will also be responsible for re-supplying the DMAT after the 72 hour period and addressing any unanticipated equipment or personnel deficits.

## ***What is done at the federal level prior to deployment***

When a major disaster occurs and the Federal Emergency Management Agency is put into service, the ERT that responded to the disaster evaluates if there is a mass medical need. If there is a mass casualty incident that exceeds or is expected to exceed the local medical infrastructure, ESF #8 may be activated. This puts into motion the National Disaster Medical System. At NDMS Headquarters, officials have teams designated to deploy to assist the victims in the disaster area. NDMS will often immediately mobilize a preliminary assessment team to go rapidly to the disaster scene, assess the capability of the local government and medical infrastructure and make recommendations as to the level of response needed by NDMS. In some cases, a response will consist of just technical support personnel who will assist local officials in accessing parts of the NDMS as needed. In other cases, as in large-scale disasters such as Hurricane Andrew, a full response of DMATs may be utilized.

## ***Preparing to deploy: What is done at the local level prior to deployment***

When a major disaster occurs, the local team leadership is usually aware of it via the local news media. The team leadership often is in contact with each other during these times assessing the potential that the team may be requested to deploy by NDMS. If an individual team is the one on call for deployment that month the team usually puts itself on a higher state of alert. The team may institute a "Pre-Alert" phase in which they notify their team members of the potential disaster deployment. During this pre-alert phase, the teams

logistical personnel will be getting equipment ready and get batteries on the hard medical equipment charged, etc. Items that need to be palletized will be organized and arranged. Items that need special packing or processing for flight / travel will be prepared. The teams Administrative Officer will be preparing deployment / activation forms and cumulating a list of personnel who have been cleared through the NDMS personnel application process. The Communications Officer will be checking on the local communications infrastructure, what frequencies the local amateur radio operators and EMS use and prepare the teams communications equipment for deployment. The teams Commander will contact NDMS and notify them of the teams availability and readiness. Other assets that may be brought into play include contacting local experts such as the Geographical Information Systems experts to develop maps and census info on the affected area.

When activated by NDMS the team's leadership will initiate a team notification. This is done in a number of ways including a call-up, voicemail/answering machine message, or via pagers. Upon activation, the team usually needs to be at the airhead and ready to deploy within an 8-24 hour period. Transportation for the team is being arranged by NDMS or by the team itself. Usually the team will have an airport they plan on departing from. Team medical, support and personal equipment assets will need to be palletized and placed on the transporting aircraft. This usually involves support from a military installation and military airlift specialists. When the deployment is expected to be less than 500 miles or when deploying as part of a push package prior to an expected disaster, the transportation method more than likely will be by bus and truck. This decreases the logistical effort but the travel may increase the fatigue factor for the team. Upon arrival of the team at the disaster site, the teams Commander or designate will report to the NDMS MSU personnel for instructions regarding their specific deployment mission.

## ***DMAT Alert Levels***

NDMS has developed classifications that address an emergent situation and deployment status: They are Advisory, Alert and Activation Deployment and Post Deployment. The Pre-Alert phase listed above is an internal team classification level.

During an *Advisory* the team has received word from NDMS that a disaster has occurred or is immanent. A response is not indicated at this time. Usually the team leadership is invited to a conference call with NDMS and other teams placed on advisory. Team members should continue to monitor the disaster situation via the local / national news and by calling the voicemail (419) 383-5163 for updates. The team leadership may also initiate a Call-Up of all team members to notify them of the developing situation. Team members should take no action in switching work schedules or leaving work unless directed to by team leadership.

During the *Alert*, the team Commander has received official word from NDMS of a possible need for the DMAT to activate to a specific disaster. At this time, the team will initiate a Call-Up and notify all team members of the *Alert*. Team members should begin to evaluate their work situation and begin to discuss the possibility of leaving their jobs for 10-14 days to deploy. If trading of work schedules is going to take place, it should be made known that the *Alert* may never develop into Activation. Contingencies to return to the members normal work schedule at a moment's notice should be addressed. Team members should more frequently check into the voicemail during the *Alert* phase. If you are available to deploy, you should assess the readiness of your personal gear for the specific disaster area climate and make necessary changes. You should insert last minute items into your deployment pack. You should acquire any prescription medication (two week supply), withdraw enough money, some in cash and some available with a credit/debit card etc. for your deployment (you will not receive pay until you return home).

If the team is placed on *Activation* status by NDMS the unit commander will again notify the team via a Call-Up. *Activation* means that some or all of the team is necessary for deployment. Team members will receive instructions via the Call-Up or via the voicemail as to where to meet and departure time and any needs for personnel for pre-deployment assistance, packing and logistics. Team members who are able to deploy must make themselves known to the DMAT command staff. NDMS may provide departure logistics (i.e. plane, bus, or truck) on fairly short notice. Team members should report for travel when and where directed and keep all receipts. They should come in uniform and fully prepared to deploy with their "Deployment Pack"

A *Deployment* means that the team is actually leaving for the disaster site. Upon arrival at the disaster area, the Team Commander will immediately report to the Management Support Team Commander (if a member is travelling on his or her own, you should report directly to the MST Commander). Team members should perform their assigned duties as a team player. They should comply with the chain of command and policies adopted for the "disaster specific" operation. Team members are responsible for your own well being and if possible, keep in touch with your family. Team members must comply with the NDMS Code of Conduct. Team members should attend briefings as directed and should remember team operational activities and procedures.

The last status, *Post Activation*: includes returning home. Team members may be asked to assist in unpacking and unloading. Team members should: attend any debriefings facilitated by the team leadership. Team members are responsible for submitting the required post deployment paperwork for reimbursement and payment. The personnel officer will assist team members with this process.

### ***How DMATs are chosen for deployment by NDMS***

Presently, NDMS has designated on a rotational basis, certain teams per month to be on-call for the West Coast and for the East Coast. Each month, teams change on a rotational basis. Teams are chosen based on geographic region, disaster risk assessment for the team's home location, and the availability of the team (i.e. not having other commitments, availability of personnel and equipment). In the past, DMATs have been polled as to their availability by NDMS at the onset of a threat of a disaster occurring. This sets the DMAT into the process of self-preparation. In other cases, disasters are unannounced and with little warning. At these times, there is the potential that any team may be pressed into service and even partial teams may be combined to form a full team to deploy. Some of the issues that have affected a team deploying in the past include a local weather condition that precludes them from flying out of the airport or commitments for air-shows or other local events that absorb too much of the teams resources to make them a deployable asset. In these cases, the redundancy of having 21 Level-1 teams and numerous Level-2 and Level-3 teams allows the NDMS to still have deployable assets.

## The Disaster Medical Assistance Team

Disaster Medical Assistance Teams (DMAT) are categorized according to their response capability. A Level -1 DMAT is one that can deploy to point of departure within an 8 hour period, remain self sufficient (food, water, shelter, logistical & support supplies) and have the medical equipment and staff to treat about 250 patients / 24 hour period. A Level-II team may lack some of the above characteristics, i.e. does not have the capability to respond within 8 hours, or doesn't have enough food / water / shelter to remain self-sufficient for 72. Level-III teams may not have any of their own equipment and may only consist of personnel. Level-IV teams are special teams with special functions, such as a Veterinary Medicine (VMAT), Disaster Mortuary (DMORT) or Mental Health (MHDMAT) Specialty team. Presently, there are 26 Level-I teams spread throughout the country. The chart above shows the locations of most of the 26 Level-1 DMATs.



### Some of the Roles of the DMAT might include:

→ **Field treatment and stabilization**

The DMAT can provide more sophisticated pre-hospital care due to the MD's, and RN's on the team, essentially bringing the hospital to the victims.

→ **Casualty Clearing Point**

Either at the disaster site for evacuation by air to a remote location or at the remote location receiving victims into that medical system from the disaster site

→ **Outreach and community assistance**

During post disaster and the recovery phase, the DMAT could provide medical needs assessment to those unable to access the health care system.

→ **Many DMATs have developed a rapid deployment team**

Designed to deploy within hours of a disaster to provide sophisticated medical care at the disaster site. An RDT may consist of a team of MD's and RN's with previous pre-hospital experience. They carry their own supplies to initiate Advanced Life Support measures in the field which in some situations victims would otherwise not get until reaching the hospital.

→ **Supplementing local EMS teams**

→ **Management-Support-Unit (MSU) for incoming DMAT's**

Crucial liaison between NDMS and local authorities. Have appropriate and unique understanding of workings of both entities and of local assets needed by incoming DMATs.

→ **CISD**

Defusing during crisis & Debriefings after crisis

→ **Communications**

Runners (element of redundancy). Ham Operators with specific knowledge & disaster experience.

→ **Disaster needs assessment and consultation team. Comprises 1 of each: MD, RN, EMT-P, Maintenance/Supply.**

The other teams are very important for backfill of the Level-1's. Level-II and Level-III DMATs provide personnel who can step into the site of the Level-I after the 7-14 day deployment period for that team and continue on with the treatment of victims and the outreach programs of the previous team. Level-IV teams are also important to the overall mission of NDMS and the DMATs. They provide specialized services that may be beyond the capability of the regular DMAT. They can supplement a DMAT by providing mental health, mortuary services or other specialized care at the same site. For this reason, it is important that each facet of the NDMS teams be familiar with each other, train together, and work together as allied teams.

The average DMAT consists of thirty-five members, plus or minus 5. This 35 member team includes 4-5 Physicians, 10-15 Nurses, 8-10 EMT's, and 8-10 logistical and support staff which include communications specialists, maintenance and equipment operators, stretcher bearers, clerical and administrative assistants, radiology, respiratory, and pharmacy technicians. DMATs deploy for a 7-14 day deployment.

Those that are deployed early in the response may have greater demands, both physical and mental and may not be able to function longer than seven days. Those that deploy later in the response may be providing

medical care that is fundamentally similar to the care in a health clinic or hospital ER. These teams may be able to deploy for longer periods of 10-14 days. While on a deployment, the team members are paid a federal wage (based on their job description). They are also covered under **the Federal Claims Tort Act** and for Workers Compensation. As they are employees of the federal government. They can deploy anywhere in the federal domain without worrying about licensure or reciprocity. Within the NDMS, over 5000 people are enrolled on a DMAT.

There is a considerable amount of variation in the structure and composition of DMATs throughout the country. It is desirable to retain some personal team characteristics, but in order to allow for better inter-team operations and to minimize the requirements of logistical support, there is an effort to standardize the DMAT personnel and equipment, policies and procedures.

As you probably already aware, the DMAT is a valuable asset to the local community and the state in which the DMAT resides. DMAT's function first for the local level, next for the state and lastly at the national level for the federal government.

## ***History of DMAT deployments / responses***

1989	Hurricane Hugo, Loma Prieta Earthquake
1992	Hurricane Andrew, Typhoon Omar, Hurricane Iniki
1993	Midwest Floods
1994	Nothridge Earthquake, Southwest Georgia Floods, Houston Floods
1995	Oklahoma City Bombing, Hurricane Marilyn, Hurricane Opal
1996	Centennial Olympics Games, Hurricane Fran, Republican Convention, Democratic Convention, Quincy, IL Air crash, Oregon Floods, Hurricane Bertha, Hurricane Edward, Hurricane Hortense
1997	Presidential Inaugural, California Floods, Monroe, MI Air crash, North Dakota Floods, Minnesota Floods, Hurricane Fern, Indiana Storms, Ohio Floods, Nevada Floods, Hawaii Floods, Summit of the Eight (SOTE), Guam Air crash, Idaho Floods, Kentucky Floods
1998	New York Ice Storms, State of the Union, California Floods, Florida Fire Storm, Ohio Floods, Texas Floods, Hurricane Bonnie, Hurricane Georges
1999	NATO 50 <sup>th</sup> Summit, Kosovo Refugee Crisis, Hurricane Dennis, Hurricane Floyd, Egyptair Flight 990 Crash

## ***Application process***

Team members should know how the application process works should they be asked by persons interested in joining the team. Team members should also be able to supply interested persons with applications or at least be able to direct them to individuals with applications. Applications should always be available from the Administrative Officer and at team meetings.

Because some people join DMAT without fully understanding what they are getting into, there are certain steps that each applicant must go through before becoming a 'carded' member of the NDMS. The steps are as follows:

- ◆ Step One - Complete the team application and return it to the Administrative Officer with \$10 (checks payable to MCO Foundation).
- ◆ Step Two (Education & Training)- Complete self-study Training Module One. Training modules are designed to give the applicant a basic working knowledge of disasters and the Federal Response Plan. Additionally the applicant will learn about the form and function of DMAT and what to expect during a deployment. The applicant must also attend two monthly meetings and attend one mandatory training exercise (held 2 to 3 times per year).
- ◆ Step Three (Federal Application)- Upon completion of the above requirements the individual may submit an application for Federal employment to the team Administrative Officer.

Application fee is \$40 and includes application processing, two uniform T-shirts, two sets of uniform patches and two sets of name strips for BDU uniforms.

Once the application has been processed at the Federal level, the team Administrative Officer will receive an ID card for the individual. The person will be sworn into service at a team meeting and issued the ID card.

## **DMAT membership**

A DMAT is composed of many job categories. Each has specific requirements but most require one year of experience performing the duties of the position. Members are encouraged to upgrade to higher level positions as they gain this needed experience. Below is a listing of many job categories within the service of NDMS along with a brief description of the job requirements. Complete job descriptions are available from the team leaders upon request. The GS scale indicates the pay scale at which the job is rated. These scales change annually. Current salary for each GS can be found at <http://www.opm.gov/oqa/payrates/ndex.htm>

Identification cards issued by NDMS are without expiration. Should an individual decide to leave the service of NDMS, the ID card must either be destroyed or returned to the team Administrative Officer. *Members who move can be given a listing of other DMATs in the country and are free to transfer membership.* A transfer form (available from the team Administrative Officer) must be completed and submitted to NDMS to complete the transfer.

## **Team dues**

Dues are \$10.00 and are assessed annually in January. If dues are not paid by the end of January the fee increases to \$20 in February and \$30 in March. If dues are not paid by the end of March, the member is removed from the local roll as being inactive. To be reinstated, the member must contact the Administrative Officer and dues plus reinstatement fee is \$35. If the member is not heard from in the following 12 months, they will be dropped from the NDMS database. Reinstatement after that time may require completing the application and training process.

## **Team positions and abbreviated job descriptions**

Any membership problems should be dealt with within the OH-1 DMAT. *Members should never call NDMS directly.*

### COMMAND and SUPPORT PERSONNEL

TITLE	GS Scale	REQUIREMENTS
Administrative assistant	341-07	One year specialized experience directly related to the DMAT position OR one full year of graduate level education or law school
Administrative Officer	341-12	Four years specialized experience directly related to the DMAT position OR one year specialized experience and PhD OR two years experience and graduate degree.
Assistant Cook/Helper	7404-05	Experience and skill in the setup and operation of large scale food service operations.
Chief Cook	7404-08	Experience and skill in food preparation and distribution for large groups, including ordering, substituting, storing and special diet preparation.
Communications Officer	391-12	Practical knowledge of telecommunications theory, working knowledge of the parameters of DMAT communication equipment (field programming, troubleshooting, telephone wiring, cellular phone programming), ability to program communications equipment, experience in disaster and/or mass casualty care operations
Dietitian/Nutritionist	630-09	Bachelor's degree or higher in dietetics, food nutrition, food service management, institution management or related field. Two years professional experience.
Deputy Unit Commander	301-14	One year of operational experience in emergency incident management equivalent to GS-13; comprehensive knowledge of Incident Command System, DMAT functions; formal NFA or EMA training in large scale disaster management; Practical knowledge of terminology and capabilities of the major items in equipment cache;

		capable of effectively coordinating and directing multiple functions of the DMAT during mission assignment.
Maintenance Worker	4749-06	Experience and skill in maintenance and minor repair of a variety of unrelated equipment (generators, medical equipment, electrical devices, etc.)
Medical Supply Specialist	2001-09	Two years specialized experience directly related to position OR Master's degree OR one year of specialized experience and completion of one full academic year of graduate education.
Medical Supply Technician	622-05	One year specialized within the occupation or directly related experience to the DMAT position.
Supervisory Medical Officer	602-15	MD or DO with 3 years of post graduate training at an approved program AND 1 year specialized experience AND supervisory experience.
Supervisory Nurse Specialist	610-13	Graduate of a professional school of nursing AND 3-4 years nursing experience AND experience in supervising nursing staff.
Supply Management Officer	2003-11	Three years specialized experience directly related to position OR PhD OR two years experience and one year graduate school
Unit Commander	301-15	One year of operational experience in emergency incident management equivalent to GS-14; comprehensive knowledge of Incident Command System, DMAT functions; formal NFA or EMA training in large scale disaster management; Practical knowledge of terminology and capabilities of the major items in equipment cache; capable of effectively coordinating and directing multiple functions of the DMAT during mission assignment.

#### TEAM MEMBER POSITIONS

POSITION TITLE	GS Scale	REQUIREMENTS
Administrative Clerk/Aid	303-03	Six months experience in clerical, office, or other equivalent position.
Chaplain	060-12	Graduate of a seminary. Four years experience.
Dental Officer	680-13	DDS or DMD. Three years experience or training beyond undergraduate dental school level.
Health Technician EMT-B	640-05	EMT-B license AND one year experience
Health Technician EMT-I	640-06	EMT-I license AND one year experience
Health Technician EMT-P	640-07	EMT-P license AND two years experience
Health Technician Leader	640-09	Three years specialized experience OR one year experience plus master's degree
LPN/Vocational nurse	620-05	Graduate of an approved school of nursing, valid license, 1 ½ years work experience.
Logistics Coordinator (Security/Comm)	303-07	Two years of general office work experience and one year of specialized experience directly related to DMAT position.
Medical Records Technician	675-05	One year experience within the occupation or directly related field.
Medical Supply Technician	622-05	One year experience within the occupation or directly related field.
Medical Technician (Laboratory)	645-05	One year experience within the occupation. Certification or valid license.
Mental Health Specialist	101-11	PhD OR three full years of graduate education in an appropriate social science field OR master's degree and one year of experience.
Nursing Assistant	621-4	At least 3 months experience in a related field.
Nursing Assistant Surg Tech	621-3	At least 6 months experience in a related field.
Nursing Asst Stretcher bearer	621-2	At least 3 months experience in a related field.
Nurse Practitioner	610-11	Graduate of a professional school of nursing AND valid license AND at least 2 years experience practice AND certification as nurse practitioner.
Pharmacist	660-11	Completion of 4 year course of study, bachelor's degree or higher AND one year internship AND one year of professional pharmacy experience.
Pharmacy Technician	661-05	One to two years experience as a pharmacy technician or assistant.
Physician Assistant	603-11	Two years experience as a physician assistant AND broad background and knowledge of medical environment and practices OR 3 years experience and completion of a formal course of study.
Respiratory Therapist	651-07	One year specialized experience in the occupation of respiratory therapist AND bachelor's degree.
Security Specialist		
Senior Medical Officer	602-14	MD or DO with valid license. One year experience at GS-13 level. Prefer skills in emergency medicine or surgery or general medicine, ATLS
Staff Medical Officer	602-13	MD or DO with valid license. Three years experience post graduate (includes residency training). Prefer skills in emergency medicine or surgery or general medicine, ATLS
Staff Nurse	610-05, 07, 09	Graduate of professional school of nursing, valid license, one to 3 years experience. Prefer certifications.
Supervisory Clinical Nurse	610-11	Graduate of professional school of nursing, valid license, 3-4 years experience, experience in supervising a nursing staff.

## ***Federal employment (licensure, malpractice, disability)***

During a deployment, team members are Federalized thus are paid employees of the U.S. Public Health Service. This employment status provides the member with certain benefits.

*Licensure* – Those members who are practicing under a license (MD, RN, LPN, EMT, etc.) will have automatic reciprocity wherever they are deployed. NDMS must have up to date information on licenses such as number and expiration date so it is important to keep this information updated with the team Administrative Officer. You will usually be asked by the Administrative Officer to show your license on an annual basis. *Failure to have up to date license information will likely prevent an individual's deployment with the team.*

*Liability* – As an employee of the Federal government you are covered under the Federal tort claims act. This means that you cannot be personally sued for any unintentional act of omission or commission.

*Worker Compensation* – Should you be injured or become ill on a deployment, medical expenses will be covered by the Federal government. Should the injury prevent you from working, you will receive worker's compensation. There is, of course, paperwork that must be filed in order to receive these benefits. Any injuries while on a deployment should be reported to the Incident Commander and the team physician. The necessary forms are available from the Incident Commander and/or the Administrative Officer.

As Federal employees, team members also have certain responsibilities. When on a deployment, team members are representatives of the city of Toledo, the state of Ohio and the Federal government. Rude or derogatory remarks, foul language or uncivilized behavior in public is not tolerated. When on a military base our conduct and dress are especially scrutinized. Further, the NDMS has published a Code of Conduct. Please read this section thoroughly. Please refer to this manual's appendix on military conduct. When deployed, team members are considered to be ready for duty 24 hours a day. Because of this, NDMS as well as OH-1 DMAT have zero tolerance for the consumption of alcohol or the use of recreational drugs. Violation of this policy will result in immediate removal from duty while on deployment and eventual dismissal from Federal service. The OH-1 DMAT policy on this subject appears elsewhere in this manual.

## ***Payment, reimbursement***

*Wages* - During a deployment, team members are paid from the time of activation until return to home. The standard daily pay is eight hours of regular time plus four hours of overtime pay. Time sheets are maintained by the Administrative Officer/Team Leader and are submitted to NDMS at the end of the deployment. Your pay is deposit to your account several weeks later. If you have not submitted a Direct Deposit form or if your account information is inaccurate your pay will be delayed. Current salary for each GS level can be found at <http://www.opm.gov/oca/payrates/index.htm>

*Expense Reimbursement* - In addition to your hourly pay rate, NDMS provides a daily meal stipend. The stipend rate varies depending on the area of the country that you are deployed to. Upon return from your travel destination you will receive an Expense and Reimbursement form from the Administrative Officer. You should incur no other expenses during a deployment. If you do, however, attach original receipts to the form. (This does not include the purchase of personal items.) Optionally, you may also opt to seek reimbursement for each meal however, this will result in the loss of your entire stipend for the entire deployment and you are reimbursed only for actual meal expenses. If you are deployed for greater than three days you are allowed \$3.00 per day for telephone calls. The ideal method for obtaining reimbursement for this is to purchase a phone card and attach the receipt to the form.

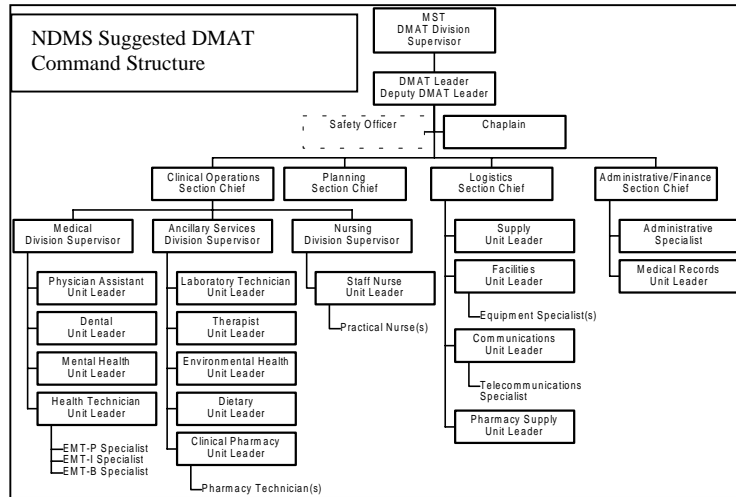
When you receive the Expense and Reimbursement form following your deployment, immediately complete the form, attach all receipts and return it to the Administrative Officer. Any delay in returning the form will result in a delay of your payment. The team's forms will be forwarded to NDMS. You will then receive a Travel Expense Voucher from NDMS. Sign the voucher and return it to the sender. Two to four weeks later you should receive your travel expense reimbursement.

Any issues concerning your pay (amount, pay scale, failure to be paid) should be directed to the team Administrative Officer. DO NOT call NDMS.

## ***Incident Command System for DMATs (while on a deployment)***

### **Incident Command System**

When OH-1 receives notice of activation for a deployment the OH-1 DMAT leadership system reverts to the Incident Command System. Under this system, the administrative officers of the team determine who the incident commander(s) will be for the deployment. These individuals will have final responsibility for all decisions made during the deployment. Other officers will be appointed by the Incident Commander(s) to fill all of the logistic posts. On a larger scale, a DMAT on deployment fits into an overall Incident Command structure and as such must fulfill its responsibilities in order to make the overall system work.



OH-1 has in the past used a system in which the team is sectioned into several 5-7 person sections. A leader will be appointed for each section. This may be done to facilitate a mission assignment or simply to streamline the lines of communication and accountability. Team commander(s) will attend MST (Management Support Team) briefings and this information will then be disseminated to the team during a briefing. Team briefings may be conducted with the entire team in attendance or the section leaders will be briefed and will then disseminate information to their section members.

Team members who wish to have an issue addressed should first take the issue to their section leader who will then take it to the appropriate command officer. For example, the Security Officer would best address a security issue. Issues brought to command officers can be dealt with at their discretion but will be reported to the Incident Commander. Section leaders will also identify and record behavioral, emotional or other problems with their personnel and will report these to the Incident Commander. Team members should NEVER address an issue directly with NDMS or its' liaison officers. It is the responsibility of the team Commander to decide what issues need to be addressed on the NDMS level.

The Incident Commander will investigate major personnel issues and a report will become a part of the individual's record. As well, reports of outstanding conduct or extraordinary effort on the part of team members will be noted and filed in their record.

During a deployment, every effort will be made on the part of the command structure to accommodate the needs of all team members. Circumstances, however, may not always be under the team Commander's control nor may situations always be favorable to the team thus team members must remain flexible and remember that the team itself is a part of a larger incident command structure.

### ***NDMS / DMAT Code of Conduct (From NDMS Operations Manual)***

When activated into Federal service you are a Federal employee representing the United States Government. Your conduct while on active duty should always be professional and with the best interest of the United States in mind. As an HHS employee, you must be familiar with and adhere to the HHS Standards of Conduct outlined in the Code of Federal Regulations, 45 CFR Part 73. Below are suggested guidelines for the conduct of a Federalized disaster Team Member.

Violation of the Code of Conduct may result in removal from the disaster site and temporary or permanent suspension from the team. Each case of misconduct will be handled by the Team Leader, or forwarded to the NDMS Headquarters for appropriate action.

1. Insubordination will not be tolerated.
2. The chain of command will be adhered to. Criticisms, complaints, concerns, and grievances shall be channeled up the chain of command.
3. Command staff communication with NDMS should be limited to problems/issues that cannot be resolved by the team. Team Member communication with NDMS is discouraged except when requested by NDMS. Team Members should contact the Administrative Officer or the Team Leader with questions and/or concerns.
4. Any article written by a Team Leader or Team Member for publication, or any personal news release regarding an official deployment or the activities of a Team must be approved by NDMS.
5. Discussion with any media source during activation is prohibited unless authorized by the MST Leader.
6. Any Team Leader or Team Member who willfully takes **unauthorized** photographs, audio, or videotapes at a disaster site will be removed from the disaster site and his or her actions will be considered grounds for permanent removal from the team.
7. Failure to report for duty when and where you agreed without legitimate excuse is considered misconduct.
8. Entering into unauthorized contracts for goods or services in the name of the Team, NDMS, or U.S. Government is strictly prohibited.
9. Unprofessional conduct such as disrespect regarding the injured, dead, their personal effects, or families will not be tolerated and shall be considered gross misconduct.
10. Acceptance of any bribe of money, goods, or services in exchange for information is prohibited.
11. Gambling or any gaming for money between Team Leaders or Team Members is not allowed during disaster activation.
12. Team uniforms **shall not** be worn into bars, taverns or other establishments in which a bad reflection would be made on the Team or NDMS.
13. The use of any illegal drug or abuse of any prescription medication at any time while on activation is strictly prohibited. Violation of this is considered gross misconduct and grounds for permanent removal from the team.
14. Consumption of alcoholic beverages while on duty is prohibited. Driving or operation of government equipment or equipment issued to the government while under the influence of alcohol is prohibited and shall be regulated by local laws.
15. Local government laws and ordinances will be respected. Being Federalized does not allow Team personnel to ignore local laws. In the event a Team Member is incarcerated, he or she shall be on his or her own and shall face prosecution according to local laws.
16. Inappropriate, foul, or profane language is not allowed.
17. Sexual harassment will not be tolerated.
18. The use of personal AM/FM radios, CD, or cassette players in a “**controlled area**” is not allowed unless approved by the Team Leader.
19. Hazing, pinning, initiation, public or private intimidation or humiliation, ceremonies or ritual events directed against any Team Member is strictly prohibited.
20. Team Leaders and Team Members are responsible for their actions and activities during off-hours and are responsible for reporting to their disaster work assignment at the time and place scheduled. Tardiness due to social activities will be considered misconduct.
21. During activation periods, Team Leaders and Team Members shall utilize the “Buddy System” and shall not leave the area unless accompanied by another Team Member and/or they shall inform their supervisor of their destination and approximate time of return.

**NOTE:** NDMS will pursue ALL legal avenues available and will take appropriate disciplinary action concerning violation of the HHS Standards of Conduct or the NDMS Disaster Team Code of Conduct. Compliance with the code is expected by all Members.

## **The TADMAT Command Staff**

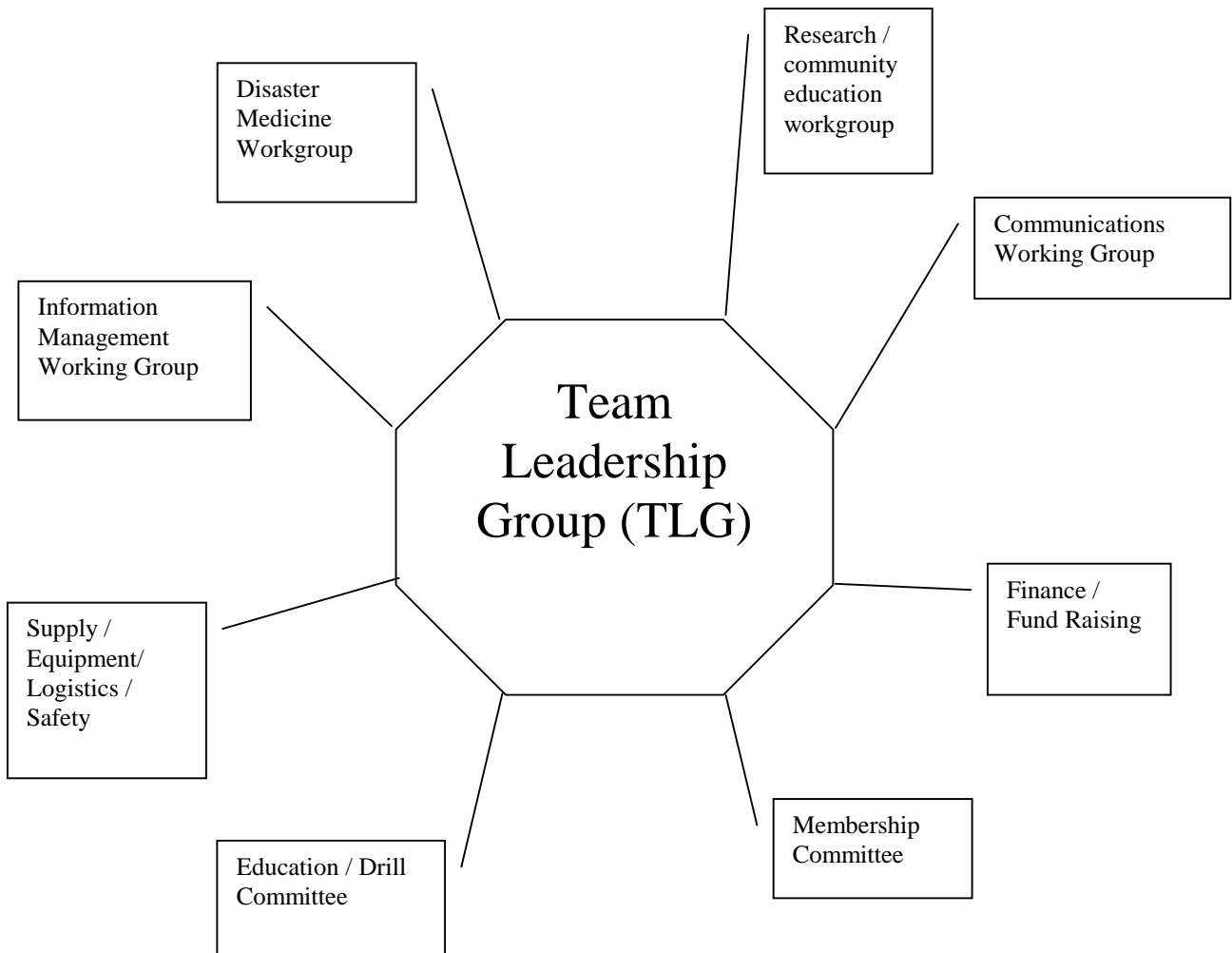
The TADMAT command staff is composed of a Unit Commander and four Deputy Commanders known as the **TEAM LEADERSHIP GROUP** or TLG. Members of the TLG include, Churton Budd, Unit Commander; Kelly Burkholder-Allen, Deputy Commander; Paula Edwards, Deputy Commander, James Fenn, Deputy Commander; and Mary Vance, Deputy Commander. This command body is the driving force for team leadership activities and will be the core of the leadership structure. Under this non-disaster organizational structure, **SUPPORT UNITS** will be formed. A support unit is formed to focus on a job role within the DMAT structure.

1. Additionally, Ad Hoc support units are formed to focus on specific problems or tasks. These have all the same requirements and methodology of the basic support units, but have a time limit on their existence based on the task that they were formed by. This limit will not exceed 6 months. After 6 months, if the TLG decides that this Ad hoc support unit has not been functional and moving forward in its task and has reasonable ability to meet its goals, the support unit will be dissolved.
2. Members of the TLG do not serve as a chairperson of a permanent support unit. This is intended so that they do not carry the burden of the support unit if team members don't take the initiative in the group. It would be unreasonable to assume that members of the TLG can function appropriately in their position if they are burdened with the responsibility of chairing a support unit also. Members of the TLG can server as chairpersons of an Ad Hoc support unit as these units are in existence for a defined role, for a short duration.
3. The support units, regardless of being an ad hoc or permanent support unit, submit a statement of goals and objectives on formation and annually thereafter at the January meeting of the TLG. These goals and objectives help define the role of the support unit. Each support unit appoints a chairperson and an alternate chairperson (or co-chairs). The support unit submits in writing a paragraph statement to the TLG due the second Friday of each month that lists the status report from the support unit in regards to goals and accomplishments. At each team meeting on the third Wednesday or Thursday of the month, these statements are delivered by the support unit or read at the monthly team meeting to the membership.

### **SUPPORT UNITS:**

- ❑ Communications – Maintains communications equipment, develops communications policies, trains team members on communications issues, maintains familiarity with communications equipment by holding exercises and frequency setting up and utilizing the TADMAT communications assets
- ❑ Finance / Fund Raising – Maintains the TADMAT bank account and finances. Explores and coordinates methods of fundraising and donations for the team
- ❑ Membership – recruits new team members and seeks out opportunities to attract new team members such as EMS and medical conferences, Emergency Planning events, etc. Acts in a mentoring role for new team members and assists in orienting new team members to the team.
- ❑ Education / Drill – Plans and develops drills and training events for the team. Maintains drills and training equipment cache along with support from the Supply/Logs/Equipment committee. Maintains records along with the personnel officer of team members level of training and completion of the TADMAT Modular Training Program.
- ❑ Supply / Logistics / Equipment / Safety – Maintains equipment and supplies readiness. Plans and performs equipment movement and logistics prior to and after a deployment
- ❑ Information Management – oversees informational gathering efforts regarding current or developing disasters and prepares information prior to a team deployment

- ❑ Disaster Medicine and Research / Community Education support units – Develops and performs disaster medicine research during DMAT deployments. Seeks grant funds for performing research. Reports results of research in current periodicals. Develops community education materials in relation to educating the community about the TADMAT, Disaster Medicine, Disaster Response, Personal, Family and Community preparedness and community disaster mitigation strategies. Represents the TADMAT on committees and with other agencies in the local and national domain. Assists in the development and delivery of community education programs.



## ***Meeting schedule / Training schedule / Exercise schedule***

Team meetings are held monthly except for the month of December. The meetings are at 7PM each night and last from between 1-3 hours depending on the agenda. Most of the time the team meetings are 1-2 hours in duration. Many team meetings also contain an educational offering. This is presented either by a team member or an outside authority. Meetings are held at the Medical College of Ohio campus in the Health Education Bldg. The meetings alternate between Wednesday and Thursday and are always the third Wednesday or Thursday of the month. The following is the schedule for the year 2000.

### **2000 Meeting Dates:**

January 20<sup>th</sup>, February 16<sup>th</sup>, March 23<sup>rd</sup>, April 19<sup>th</sup>, May 18<sup>th</sup>, June 21<sup>st</sup>, July 20<sup>th</sup>, August 16<sup>th</sup>, September 21<sup>st</sup>, October 18<sup>th</sup>, November 16<sup>th</sup>

The team participates in community disaster exercises and hospital disaster exercises. The team does have full-scale disaster "Field Exercises" which include the setup of a DMAT field hospital, practice with the equipment and performance of a full-scale disaster drill. This full-scale exercise is not done every year.

The team's major educational effort consists of the ***TADMAT Modular Training Program***, which is presented on a number of different days throughout the Calendar year. These are announced at team meetings. Module 1 is what you are taking now. The following modules will be delivered in the field, in classroom settings or in a multi-media or self-paced production i.e. CD-ROM or Video format.

### **TADMAT Modular Training Program:**

- Module 1*** - Disasters and the DMAT
- Module 2*** - Deploying, Living and Working in the Field Setting
- Module 3*** - Disaster Medicine Concepts
- Module 4*** - Disaster Drill
- Module 5*** - Advanced Disaster Medicine
- Module 6*** - Personal and Family Disaster Preparedness
- Module 7*** - Multidisciplinary Skill Cross-Training

Module 1 and 2 must be completed/attended in order to be deployable as a DMAT member. These module contain information that is important for you in order to assure your own safety, the safety of other team members and the successful completion of a field mission by the TADMAT.

# MODULE I

## POST TEST EVALUATION

- 1) True / False: One considers a disaster a situation in which the existing resources adequately meet the resource needs.
- 2) True / False: If an area affected by a disaster had poor resources prior to the disaster, a disaster can have a more pronounced effect and more quickly exceed the available response assets.
- 3) Chose one: An extended disaster: A) is one in which the governmental and public services infrastructure is completely damaged and becomes non-functional, B) occurs with little or no community disruption, C) is one in which the infrastructure is still function, although not at the same level as it was prior to the event.
- 4) Chose one: A) Hurricanes, B) Fires, C) Floods, D) Earthquakes, E) Tornadoes, F) Mass Gatherings, G) Tsunamis Are the biggest killer and cause of damage in the United States.
- 5) Chose one: A) Hurricanes, B) Fires, C) Floods, D) Earthquakes, E) Tornadoes, F) Mass Gatherings, G) Tsunamis are the most common type of large-scale natural disaster in the United States.
- 6) True / False: In the United States, all states and all people are at a slight risk of earthquakes
- 7) True / False: The damage and destruction caused by disasters has been well studied and based on this research it is known that the effect of a disaster is always evenly distributed and the effect of a Category III Hurricane making landfall will always cause between \$3-5Million in damage and will result in 10-25 deaths and 300-500 injuries.
- 8) True / False: There is hard scientific evidence indicating that there has been an increase in the incidents of natural disasters throughout history.
- 9) Place the following phases of a disasters in order from beginning to end: A) Post impact phase, B) Impact, C) Warning, D) Recovery period, E) Chronic-Acute Phase.
- 10) True / False: The acute phase of the disaster is the time that most of the rescue efforts are made by bystanders rather than professional rescuers and organizations.
- 11) Which of the following disasters is least likely to have a warning phase: A) Hurricane, B) Floods, C) Earthquake
- 12) Which phase of a disaster can last years: A) Warning, B) Post impact, C) Acute, D) Recovery, E) Chronic-Acute
- 13) The proposal the federal government has designed to respond to major disasters and includes the Emergency Support Functions is called the: \_\_\_\_\_.
- 14) Which Emergency Support Function is the one that deals with Health and Medical Issues and which NDMS and the DMATs fall under: A) ESF 1, B) ESF 8, C) ESF 10, D) ESF 12
- 15) The year the President of the USA declared the formation of the National Disaster Medical System was A) 1993, B) 1962, C) 1983, D) 1971, E) 1981
- 16) Which of the following agencies are not member agencies in the management of NDMS: A) Veterans Administration (VA), B) Department of Energy (DOE), C) Department of Defense (DOD), D) Public Health Service (PHS), E) Federal Emergency Management Agency (FEMA).

- 17) The agency which is the lead agency for the NDMS and oversees day to day operations of the system is the: A) Public Health Service (PHS), B) Federal Emergency Management Agency (FEMA), C) Department of Transportation (DOT), D) National Health Administration (NHA).
- 18) MST stands for: A) Medical Support Team, B) Management Support Team, C) Management Strike Team, D) Metropolitan Safety Technician
- 19) True / False: The MST takes over command of the DMAT when the team arrives on site. All members of the team will then report directly to the MST liaison.
- 20) What is the alert phase that the TADMAT places itself on when there is knowledge of a developing disaster situation: A) Preliminary Notification, B) Pre- Deployment, C) Alert, D) Pre-Alert
- 21) The alert phase that indicates that NDMS has requested the team respond and team members should prepare to meet at a staging point for departure is called: A) Advisory, B) Alert, C) Activation, D) Deployment, E) On Site
- 22) True / False: NDMS places the teams on a yearly rotation schedule where three teams are on-call for the year for the east coast, three for the Midwest and three for the west coast. In the event of a disaster in that area, those teams would deploy first.
- 23) True / False: The DMATs are divided into levels based on their ability to respond. These levels are listed as Level – I, Level – II, Level –III and Level – IV (Specialty) teams.
- 24) The average DMAT on a deployment consists of a complement of personnel roughly numbering A) 15 members, B) 20 members, C) 35 members, D) 55 members.
- 25) True / False: The DMAT is considered a valuable asset to first the local community, next the state and lastly to the federal government.
- 26) The understood time-frame for a DMAT deployment is A) 5-7 days, B) 10-14 Days, C) 25-30 Days
- 27) The yearly dues for DMAT members is A) \$10, B) \$25, C) \$5, D) there are no dues.
- 28) True / False: When you become a DMAT member you must fill out a State of Ohio Emergency Management Agency job Application form. This insures that you are covered for liability and licensure.
- 29) The Federal Claims Tort Act protects DMAT members while on a deployment in regards to: A) Professional Licensure, B) Liability, C) Workers Compensation, D) Payment and Reimbursement
- 30) After a deployment, it is the responsibility of whom to fill out the reimbursement forms for each team member: A) each team member, B) the personnel officer, C) the incident commander, D) the team payroll officer
- 31) The Incident Command System (ICS) is a structure that resembles A) Web, B) Circle, C) Triangle, D) Tree
- 32) True / False: If there is an issue, team members need to talk directly with personnel from the NDMS main office as they are the ones that make the decisions.
- 33) True / False: Violation of the NDMS Code of conduct may result in removal from the disaster site, and temporary or permanent suspension from the team.
- 34) The TADMAT leadership staff is called the: A) Team Leadership Group, B) Executive Committee, C) Inner Circle, D) High Command, E) Action Committee
- 35) The committees that function in special roles and to focus on a job role or special task on the team are called A) Action Committees, B) Support Units, C) Special Committees, D) Strike Teams
- 36) The TADMAT meets A) Weekly, B) Bi-monthly, C) Monthly, D) Quarterly

- 37) The TADMAT's major educational effort and the program you are working on right now is termed:  
The \_\_\_\_\_ Program
- 38) True / False: Team members are responsible for making sure that their personal information remains up to date in the team data files
- 39) True / False: If a team member moves out of the region they may join another DMAT by completing a transfer form
- 40) True / False: Team members should not call NDMS offices directly
- 41) During a deployment, DMAT members are forbidden to use the following: A) Alcohol, B) Recreational Drugs, C) Prescription medications, D) Personal snack items, E) Both A and B
- 42) The procedure for receiving Per Diem reimbursement includes A) Save all appropriate receipts, B) Complete and return the Expense and Reimbursement form supplied by the team, C) Sign and return the Travel Expense Voucher received from NDMS, D) All of the above

# MODULE I : POST TEST EVALUATION ANSWER SHEET

LAST NAME: \_\_\_\_\_ (print)

FIRST NAME: \_\_\_\_\_ (print)

Social Security Number \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Date completed: \_\_\_\_\_

(answer the following by placing a ✓ next to the best answer of the question or filling in the line with the correct response):

- |  |  |
|--|--|
| 1) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE  | 22) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE   |
| 2) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE  | 23) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE   |
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| <input type="checkbox"/> F <input type="checkbox"/> G  | 26) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C   |
| 5) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E  | 27) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D                            |
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| 6) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE  | 29) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D                            |
| 7) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE  | 30) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D                            |
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| 10) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE   | 33) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE   |
| 11) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C   | 34) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E |
| 12) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E | 35) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D                            |
| 13) _____  | 36) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D                            |
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| 15) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E | 38) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE   |
| 16) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E | 39) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE   |
| 17) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D                            | 40) <input type="checkbox"/> TRUE <input type="checkbox"/> FALSE   |
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| 21) <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E |  |

SCORED BY: \_\_\_\_\_

(34 CORRECT RESPONSES NEEDED TO PASS - No more than 8 wrong answers)

\_\_\_\_\_ PASS \_\_\_\_\_ FAIL