

**Military Contingency Medicine Course Guide**  
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Military Contingency Medicine (MCM) is the capstone course in the Uniformed Services University Military Unique Curriculum. This unique curriculum is specifically designed to prepare medical students to provide the highest quality health care for servicemen and women in austere environments. MCM augments the student's core clinical knowledge with unique medical training that enables them to excel as a General Medical Officer (GMO) in an operational setting. This training includes a three week didactic session (see table 1) that culminates with a four day field exercise "Operation BUSHMASTER". The course is based on the adult learner model, which reinforces didactic discussion with small group practical exercises and the culminating field exercise in order to enhance retention.

Operation BUSHMASTER is the School of Medicine Exercise that serves as the practical exam for MCM. Drawing from all available "Lessons Learned" from the current operational environments, it simulates a military Joint Task Force deployment during which the students must plan for and then provide all of the medical support for the mission. Students are evaluated on their ability to stabilize and treat combat casualties at the point of wounding and evacuate those casualties to higher levels of care with surgical support assets. They are also evaluated on their ability to provide routine care for non-battle related injuries and illnesses, to prevent illness through appropriate preventative medicine measures, and to provide screening and initial treatment for combat stress related problems. The exercise runs continuously for 3 days with each operational day broken down into four 4-hour cycles. Students are organized into three groups (platoons) and conduct the training simultaneously at four separate training sites (two Army Battalion Aid Stations, a Marine Battalion Aid Station and a 4 bed Air Force Expeditionary Medical Support). The student positions rotate every four hours and the student platoons rotate training sites every day. The medical students are evaluated on their medical knowledge as well as on their leadership abilities as they rotate through a position as a commander, executive officer, medical officer, or ambulance team leader, and through a combat stress center rotation. When they are not being evaluated they serve in various roles such as medic, security or radio telephone operator.

The exercise begins with the students being transported by CH-47 helicopters from the Pennsylvania National Guard from the softball field behind USU to Fort Indiantown Gap, PA. This flight emphasizes the difficulty of providing health care during flight operations as the students experience the difficulty of obtaining vital signs on each other. Once students arrive at the training site, they attend classes (see table 1) and prepare their bivouac area. The first day of the exercise is committed to hands on training with classes that familiarize the students with the equipment and procedures they will use over the following 3 days. These include a triage exercise, establishing the

treatment sites, vehicle familiarization and loading, radio procedures, land navigation and a Battle Update Brief.

**The “war” begins.** The students establish the various sites and begin to receive simulated casualties (first year students who have extensive moulaged injuries) – both routine illnesses and battle injuries, who arrive by various methods from walking in to being brought by ambulance. Students must decide how to make the best use of their available resources. They respond with their ambulances to the Ambulance Team Leader sites where trauma patients are treated using Tactical Combat Casualty Care guidelines. As casualties arrive back at the aid station, the students demonstrate their field medical skills. Casualties are rapidly triaged and immediate treatment begins as a faculty evaluator assesses the medical care and leadership of the students in charge. The students are also presented with unanticipated operational problems which may involve a Geneva Convention issue, an illegal order or even technical vs. tactical chain of command, and evaluated on their ability to rapidly adapt to the changing conditions. They prioritize the casualties for evacuation and call in a 9 line MEDEVAC to the EMEDS. At the EMEDS station, the students have been busy attending to their own sick-call patients and the other aid stations’ requests for evacuation. As they receive the radio MEDEVAC calls, they must decide how to utilize their own ambulance resources in order to retrieve the casualties. At the end of every 4-hour cycle, the students and evaluators have a 15 minute feedback session and change leadership positions. Each rotation provides students with additional “lessons learned” that refine their problem solving abilities, and their skills grow more effective with each passing cycle.

Near the end of the exercise, the students have become proficient in their field medical care. They have been tested by the various operational problems, been attacked by the OPFOR and moved their aid stations from site to site. As they receive a final warning order to be prepared to move, they are presented with yet another operational challenge. This time, they are required to respond to a mass-casualty exercise and provide medical care to an Infantry Platoon that has been hit by an Improvised Explosive Device (IED) – a potential scene taken straight from today’s headlines. They arrive at the scene under darkness to the sound of scattered voices calling for help in the surrounding woods. They implement all the skills they have learned over their 3 years at USU and impose order on the chaos. They locate and retrieve the casualties, treat them and arrange for evacuation. They all know this is the last chance to get it right before they practice these skills under fire.

**TABLE 1**  
**MILITARY CONTINGENCY MEDINCE CURRICULUM**

Note: This is only a list of topics and doesn’t represent time devoted to each topic

**Review of Health Services Support Systems**  
**Lessons from a Combat Deployment**  
**Anaphylaxis and Arthropod Envenomations**  
**Dealing with the Media**  
**Advanced Trauma Life Support**

**Leishmaniasis**  
**Malaria**  
**Sports Injuries from Command Perspective**  
**Cultural Awareness**  
**Approach to Undifferentiated Patients**  
**Military Support to Civil Authority**  
**Preventive Medicine**  
**Preventive Medicine ( Small Group Activity )**  
**Annex Q – Medical Planning**  
**Mass Casualty Planning**  
**Tactical Combat Casualty Care**  
**Triage and Tactical Casualty Evacuation**  
**Medical Command & Control C2i**  
**Medical Care of Refugee Populations**  
**Physiology of Fatigue**  
**Patient Care at Altitude**  
**Working With Non-Governmental Organizations**  
**Military Support to Civilian Authorities**  
**Military Medical Ethics**  
**Combat Burn Care**  
**Diving & Ascent Injuries/Near-Drowning**  
**Heat and Cold Injuries**  
**Medical Considerations Following Biological Attack**  
**Recognition and Treatment of Chemical Agent Casualties**  
**Medical Considerations Following Radiation Exposure**  
**Medical Aspects of Military Operations in Urban Terrain**  
**Military Dermatology**  
**Military Ophthalmology**  
**Medical Intelligence**  
**Support for Deployed Female Personnel**  
**Small Unit Leadership**  
**Lessons Learned Psych**  
**Combat Stress Control**  
**Mental Health Cases (small group activity)**  
**Hemostatic agents**  
**Snake Bite**  
**Dental Trauma**  
**Common Dental Complaints**  
**Basic Disaster Life Support (BDLS)**  
**Ballistic and Blast Injuries**

## **BUSHMASTER**

**Medical Threat Assessment Briefing by students**  
**Mass Casualty Response**  
**NBC Decontamination Lane**

**Combat Medic Skills Review**  
**Leadership Evaluation**  
**Surgeon Evaluation**  
**Ambulance Team Leader Evaluation**  
**Combat Stress Control Evaluation**  
**EMEDS Familiarization**  
**BAS/MBAS Familiarization**  
**Weapons Familiarization**  
**Land Navigation**  
**Mounted Land Navigation**  
**Triage Tent Exercise**  
**Vehicle Familiarization**  
**Radio Procedures**