

## What is Military Medicine?

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"Military Medicine" is an academic discipline supported by extensive literature and scholarly activities with broad applications across the spectrum of medical specialties. Armed forces physicians generally recognize that there is a body of knowledge peculiar to the medical problems and needs of military units and that this knowledge base is different from that required in ordinary medical practice. The practice of medicine by uniformed physicians in fixed military facilities does not differ greatly from the above mentioned "ordinary medical practice." However, Military Medicine involves risk ("threat") assessment, prevention, medical dispositions (evacuations), and the clinical management of diseases and injuries resulting from military occupational exposures.

This is not to suggest that the environmental hazards to which military members may be exposed are completely unfamiliar in civilian occupations; rather, it is the manner and degree of the military occupational exposures that are unique. Thus, while civilian workers certainly may be at risk of hearing loss from exposure to noise, few are at risk of exposure to the high blast over pressures generated by artillery pieces and other explosive weapons. Armored vehicle crewmen, operating in the confined, sometimes poorly-ventilated spaces of their vehicles, may receive short, intermittent, high-level exposures to a variety of toxic gases, such as carbon monoxide, ammonia, sulfur dioxide, and nitrogen oxides, from weapons firing and engine exhaust--conditions of exposure seldom duplicated in any civilian occupation. Forces deployed in tropical, Third World countries may be exposed in nature to a variety of infectious diseases capable of producing catastrophic morbidity such as malaria, hepatitis, and leptospirosis to mention a few--diseases that only rarely produce morbidity in civilian work forces on a scale comparable to that frequently seen in military operations. To these examples, one may add exposures to very high altitudes, either in aircraft or mountainous terrain, various undersea environments, and extreme conditions of cold and heat. Finally, the injuries inflicted by modern conventional weapons, not to mention those capable of being produced by chemical, biological, and nuclear weapons, represent the hazards usually associated with military service.

Besides having technical competence in general medicine, the Military Medicine specialist must have additional skills and knowledge in the specialty areas of preventive medicine, trauma management, behavioral sciences, environmental medicine, and tropical infectious diseases. Besides being able to move comfortably between fixed and field medical facilities and to provide quality medical care in both the military physician sometimes must serve as "Staff Surgeon," in field units. He must be cognizant of the significance of any particular medical problem to the unit, and must provide medical recommendations to the military unit commander on matters concerning the health of the command.

At least three other categories of basic knowledge under the rubric, "Military Leadership and Management," are essential to successful performance in this latter capacity; namely, knowledge of operational environments, military operations, and military organizational structure. A similar knowledge base is required in civilian occupational medicine practice, albeit one peculiar to the industry being served. On several counts, one might argue that Military Medicine is a unique brand of occupational medicine, one that deals with the prevention and treatment of diseases and injuries resulting from work in military occupations in military operational environment.