LESSON ASSIGNMENT

LESSON 2	The Medical Threat to Field Forces
LESSON ASSIGNMENT	Paragraphs 2-1 through 2-3.
LESSON OBJECTIVES	After completing this lesson, you should be able to:

2-1. Identify medical threat to field forces.

2-2. Identify circumstances under which a soldier, in a field setting, would not practice proper personal hygiene.

2-3. Identify the three principles of preventive medicine measures.

LESSON 2

THE MEDICAL THREAT TO FIELD FORCES

2-1. INTRODUCTION TO THE MEDICAL THREAT

Although the medical threats have been classified as major and minor, that all threats should be treated as potentially lethal.

a. The medical threat to field forces: History has revealed that casualties caused by disease and non-battle injury (DNBI) have a serious impact on military operations. There are four major and three minor threats to field forces that have contributed to the number of DNBI in military operations. We will look at each of them individually along with an example or two from history. By studying the impact of the medical threat from a historical perspective, you can become more effective members of the field sanitation team. It is your duty as part of this team to see to it that the soldiers in your unit do not repeat history.

b. **The four major medical threats.** Major medical threats are those that occur most often in the field. These medical threats exist in peacetime as well as wartime operations, and you should be conscious of their impact in both situations.

(1) HEAT is the most lethal of all the factors working against field forces.

(a) Heat is a tactical weapon as was proven in the 1967 Egyptian-Israeli conflict. The Egyptians suffered 20,000 deaths due to heat when the Israelis severed the Egyptians' water supply lines.

(b) In the 1982 U.S. Sinai Peacekeeping action, 35 soldiers from an airborne company were so badly dehydrated they required intravenous fluids to recover.

(2) COLD is also incapacitating on the battlefield.

(a) Over 90,000 U.S. soldiers were admitted to hospitals with cold injuries during WW II.

(b) While in combat for 24 days on the Falkland Islands, cold injury accounted for 14% of the British casualties. How? The British, concerned about the possible number of cold weather casualties, conducted their main assault before they were fully prepared. By rushing their assault and going in unprepared, they actually increased the number of combat injuries they sustained.

(3) ARTHROPOD-BORNE ILLNESS can adversely affect military operations.

(a) Only 100,000 of Napoleon's 600,000-man army returned to France from Russia in 1812. They were destroyed by guerrillas, disease, and cold injury, which forced retreat. There were 70,000 combat losses, but 430,000 DNBI losses. It's estimated that over 100,000 soldiers of Le Grand Armee were lost due to louse-borne typhus.

(b) During the campaign for the Solomon Islands, malaria infection resulted in eight times more casualties than were caused by the Japanese.

(4) DIARRHEAL DISEASE is contracted from contaminated water and food, and it has a catastrophic impact on the fighting force.

(a) Not one of Rommel’s highly successful generals was available to help him when he needed them most for his desert campaign in North Africa at El Alamein. They had all been medically evacuated due to illness. Rommel himself was not even available because he was in Germany recovering from hepatitis. His Chief of Staff, Intelligence Officer, and Operations Officer were all evacuated prior to or during the battle with amoebic dysentery.

(b) The U.S. commander of the 1980 exercise Operation Bright Star, rewarded his troops for a job well done with a night in town prior to re-deployment. Thirty percent (30%) of his troops awoke the next day infected with shigellosis. All were vomiting and had severe diarrhea on the flight back to the states.

c. **The three minor Medical Threats.** These threats are considered minor ONLY because they do not occur as often as the major medical threats. They should, however, still be treated seriously.

(1) Toxic industrial materials, or TIMS, exist throughout modern society. They may be beneficial to us in small quantities, but when they are spilled in large quantities or are misused, they can become harmful, or even deadly, to humans.

(a) These chemicals consist of Non-NBC hazards such as solvents, fuels, and cleaning chemicals.

(b) If not properly used, stored, or disposed of these chemicals can become extremely dangerous.

(2) Noise is also a constant threat in military operations. The army is filled with heavy equipment, weapon-systems and generators that can have immediate, as well as gradual, detrimental effects on our hearing.

(a) Exposure to very loud concussion noises may cause an acute, or short-term, hearing loss.

(b) Prolonged exposure to vehicle and generator noises can cause a chronic or long-term, damage to your hearing.

(3) Pests other than arthropods, like mice and rats, are attracted to human dwellings for the shelter and food. Aside from the diseases these pests can transmit, the parasites they carry can also make us sick.

(a) Other pests include wild animals like snakes, bats, coyotes, as well as stray dogs and cats.

(b) These creatures can hurt you with poisonous bites and the possible spread of disease.

(c) Did you know that you don't need to be bitten to contract rabies? Even a cute, cuddly puppy can transmit rabies through its saliva.

2-2. CIRCUMSTANCES CONTRIBUTING TO POOR PERSONAL HYGIENE

a. Ordinarily, the U.S. soldier maintains a high standard when it comes to personal hygiene. However, when out of their familiar environments, soldiers may be compelled to abandon their normal routines.

b. The human body has an enormous capacity to protect itself against disease and climatic injury. But the efficiency with which it does this depends upon the overall well being of the individual.

c. Soldiers have the potential to encounter a wide range of climates, from mosquito-infested jungles and sand fly-infested villages to hot, dusty deserts and cold, windy plains. Even once modern cities can become harsh environments when natural disasters or wars destroy their power, water and/or sewer capabilities.

d. Deploying soldiers halfway around the world can disrupt their circadian rhythm, or their body's natural cycle. Adding heat or cold, feeding meals at irregular

hours, and depriving soldiers of sleep, can soon result in individuals who are more susceptible to illness and combat stress.

e. The problems you face in the prevention or reduction of DNBI pertain not only to the existing natural elements, but also to the soldiers' reactions to them.

2-3. THE THREE PRINCIPLES OF PMM

These principles must be applied to ensure the success of the unit's mission.

a. First, the individual soldier is responsible for putting individual PMM into practice.

b. Second, the commander is responsible for implementing and enforcing PMM.

c. Finally, the FST is responsible for advising the commander and training the unit's soldiers.