

FM 4-02.7 (FM 8-10-7)

**HEALTH SERVICE
SUPPORT IN A NUCLEAR,
BIOLOGICAL, AND
CHEMICAL
ENVIRONMENT**

TACTICS, TECHNIQUES, AND PROCEDURES

OCTOBER 2002

HEADQUARTERS, DEPARTMENT OF THE ARMY

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**FIELD MANUAL
NO. 4-02.7 (8-10-7)**

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DEPARTMENT OF THE ARMY
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PREFACE

The purpose of this field manual (FM) is to provide doctrine and tactics, techniques, and procedures for health service support (HSS) units and personnel operating in a nuclear, biological, and chemical (NBC), radiological dispersal device (RDD), and toxic industrial material (TIM) environment. The manual provides information for use by commanders, planners, leaders, and individuals in providing HSS under these adverse conditions.

The use of trade or brand names in this publication is for illustrative purposes only. Their use does not constitute endorsement by the Department of Defense (DOD).

The proponent of this publication is the United States (US) Army Medical Department Center and School (AMEDDC&S). Send comments and recommendations directly to Commander, US Army Medical Department Center and School, ATTN: MCCS-FCD, 1400 East Grayson Street, Fort Sam Houston, Texas 78234-5052.

The use of the term “level of care” in this publication is synonymous with “echelon of care” and “role of care.” The term “echelon of care” is the old North Atlantic Treaty Organization (NATO) term. The term “role of care” is the new NATO and American, British, Canadian, and Australian (ABCA) term.

The use of the term TIM in this publication is inclusive of RDD.

The use of the term “Health Service Support” in this publication is synonymous with Combat Health Support as used in other publications. Health Service Support is the term used in Joint Publications to describe medical support to Joint Forces.

Radiological and chemical detection devices discussed in this publication are currently being replaced through modernization or new device developments. The users should adapt the application of doctrine as described to fit the new devices when issued/authorized.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

This publication implements NATO Standardization Agreements (STANAGs) 2475, Medical Planning Guide for the Estimation of NBC Battle Casualties (Nuclear)—Allied Medical Publication (AMedP) 8(A), Volume I; 2476, Medical Planning Guide of NBC Battle Casualties (Biological)—AMedP-8(A), Volume II; 2477, Planning Guide for the Estimation of NBC Battle Casualties (Chemical)—AMedP-8 (A), Volume III. It is also in consonance with the following NATO STANAGs and ABCA Quadripartite Standardization Agreements (QSTAGs):

TITLE	STANAG	QSTAG
Warning Signs for the Marking of Contaminated or Dangerous Land Areas, Complete Equipments, Supplies and Stores	2002	501
Emergency Alarms of Hazard or Attack (NBC and Air Attack Only)	2047	183

TITLE	STANAG	QSTAG
Interoperable Chemical Agent Detector Kits		608
Emergency War Surgery	2068	
Commander's Guide on Nuclear Radiation Exposure of Groups	2083	898
Reporting Nuclear Detonations, Biological and Chemical Attacks, and Predicting and Warning of Associated Hazards and Hazard Areas—ATP-45(B)	2103	187
Friendly Nuclear Strike Warning	2104	189
Nuclear, Biological and Chemical Reconnaissance	2112	
NATO Handbook on the Medical Aspects of NBC Defensive Operations—AMedP-6(B)	2500	
Concept of Operations of Medical Support in Nuclear, Biological, and Chemical Environments—AMedP-7(A)	2873	
Medical Aspects of NBC Defensive Operations		1330
Principles of Medical Policy in the Management of a Mass Casualty Situation	2879	
Medical Aspects of Mass Casualty Situations		816
Guidelines for Air and Ground Personnel Using Fixed and Transportable Collective Protection Facilities on Land	2941	2000
Training of Medical Personnel for NBC Operations	2954	

CHAPTER 1

NUCLEAR, BIOLOGICAL, AND CHEMICAL
WARFARE ASPECT OF THE MEDICAL THREAT**1-1. General**

a. After World War II, the Soviet Union represented the principal threat to the national security interests of the US. During this period, the military capability of the Soviet Armed Forces grew enormously. Starting in the later years of the 1980s, the international security environment has undergone rapid, fundamental, and revolutionary changes. With the collapse of Soviet communism, the Soviet Union disintegrated as a viable economic and political system. The Warsaw Pact dissolved as a political and military entity. The central Soviet government was replaced by the Commonwealth of Independent States (CIS), dominated by the Russian Republic. The cohesion of Soviet strategic military capability has been fractured by—

- The dissolution of central Soviet control.
- The formation of the CIS.
- The unpredictability associated with uncertain loyalties and low morale.

The ultimate outcome of these events in terms of US national security interests is unclear. The military capabilities of CIS like Russia, Ukraine, Kazakhstan, and Belarus remain formidable. The capabilities include strategic nuclear and impressive conventional, biological, and chemical warfighting capabilities.

b. From a global perspective, the economic power and influence of developing and newly industrialized nations continue to grow. Centers of power (global or regional) cannot be measured solely in military terms. Nation states pursuing their own political, ideological, and economic interests may become engaged in direct or indirect competition and conflict with the US. More nations have acquired significant numbers of modern, lethal, combat weapon systems; developed very capable armed forces; and become more assertive in international affairs. In the absence of a single, credible, coercive threat, old rivalries and long repressed territorial ambitions will resurface, causing increased tensions in many regions. Political, economic, and social instability and religious, cultural, and economic competition will continue to erode the influence of the US over the rest of the world. This erosion will also reduce the US influence of traditional regional powers over their neighbors. This environment will encourage the continued development, or acquisition, of modern armed forces and equipment by less influential nations; thus raising the potential for the use of NBC/RDD weapons during internal conflict and armed confrontations in developing regions of the world.

c. A third dimension to the threat is terrorist, rogue groups, and belligerents employing a number of chemical and biological agents and the possible use of TIM to injure or kill US personnel. The actions may be isolated or may be imposed by groups of individuals. Most will have the financial backing of nations, large organizations, or groups that have the desire to cause harm and create public distrust in our government.

1-2. Medical Threat

Medical threat is the composite of all ongoing or potential enemy actions and environmental conditions that will reduce combat effectiveness through wounding, injuring, causing disease, and/or degrading