

# P r e f a c e

FM 3-4 is the US Army's primary doctrinal reference on nuclear, biological, and chemical (NBC) protection and individual, collective, and force protection against NBC hazards. Individual protection refers to specific actions taken by soldiers to protect themselves against NBC hazards. It includes protection provided to the individual in an NBC environment by protective clothing and/or personal equipment. Collective protection provides relief from individual protective clothing to a group of soldiers. Force protection includes actions taken by commands to reduce their force vulnerability to NBC hazards.

This manual is for use by personnel in SC 74A and MOS 54B, NBC defense officers and NCOs, and unit leaders down to squad level. SC 74A and MOS 54B personnel should read Chapters 2 through 5, using Chapters 1 and 6 primarily as a reference. NBC defense officers and NCOs should first read Chapters 5 and 6 to develop familiarity with NBC defense equipment before starting with Chapters 2 through 5. It is mission-essential for these personnel to be knowledgeable on all the items presented in Chapter 1. A secondary audience for this manual is unit leaders down to section level. These personnel should become familiar with the concepts in Chapters 1 and 2 and 4 through 6.

This manual is divided into six chapters:

Chapter 1, Individual Protective Equipment. This chapter addresses individual NBC protective equipment and equipment-specific doctrine.

Chapter 2, MOPP Analysis. At battalion level and below, commanders and staffs must still determine appropriate levels of force protection. At this level, however, a simplified procedure is required. We call this simplified procedure MOPP analysis. MOPP analysis is a process conducted by small unit leaders, battalion level and below, that determine the level of protection to be used by their soldiers. Other decisions regarding subjects such as alarm placement and automatic masking criteria will be required to conduct this analysis. At the small unit level, this MOPP analysis constitutes that unit's chemical vulnerability assessment.

Chapter 3, Chemical Vulnerability Assessment and Force Protection. Commands determine appropriate levels of force protection by integrating NBC considerations into their decision-making process. This

process begins with an estimate of the likely hazards to be faced by the force. This estimate is called vulnerability assessment.

Chapter 4, Nuclear Protection. This chapter addresses actions required to protect soldiers from the effects of nuclear weapons. It discusses actions to be taken before, during, and after the attack, as well as a discussion of nuclear effects in special environments.

Chapter 5, Biological Protection. This chapter addresses actions required to protect soldiers from the effects of biological weapons. It covers actions taken before and during a biological agent attack and covers biological weapons effects in special environments.

Chapter 6, Collective Protection. This chapter covers all equipment currently available for collective protection as well as potential field expedients. It provides doctrine for collective protection planning, operation of collective protection systems, and entry/exit procedures.

NBC contamination avoidance and decontamination doctrine are closely related to protection doctrine. Therefore, an understanding of FM 3-3 and FM 3-5 is required to understand this publication.

This publication implements the following international agreements: Chapter 2, STANAG 2047/QSTAG 183, Emergency Alarms of Hazard or Attack (NBC and Air Attack Only), Edition 6; Chapter 1 STANAG 2352, NBC Defense Equipment Operational Guidelines, Edition 3; and QSTAG 465, Guidelines for Commanders in Coping with Operational Problems Associated With Miosis.

This manual incorporates findings from the Combined Arms in a Nuclear/Chemical Environment (CANE) force development testing and experimentation series of evaluations. These findings depict the impact on combat forces of extended operations under NBC conditions.

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

The proponent for this publication is the US Army Chemical School. Send comments and recommendations on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to

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