# FM 100-14, RISK MANAGEMENT, 23 APRIL 1998

## Proponent

The proponent for this manual is Headquarters, U.S. Army Training and Doctrine Command.

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### **Definitions**

Assessment-an analytical process to determine an organization's current levels of proficiency on a specific objective (for example, a training objective or risk management implementation) (CJCSM 3500.03).

Controls - actions taken to eliminate hazards or reduce their risk.

Danger - exposure or vulnerability to harm or risk; the balance between the chance or probability of a hazardous incident and the result of the hazardous incident.

Exposure - the frequency and length of time personnel and equipment are subjected to a hazard.

Hazard - any actual or potential condition that can cause injury, illness, or death of personnel, damage to or loss of equipment, property or mission degradation (FM 101-5); a condition or activity with potential to cause damage, loss or mission degradation (Joint Pub 1-02).

Inherently dangerous - an activity or task containing a danger to life or limb that is a permanent and inseparable element of the activity.

Probability - the likelihood that a hazardous incident will occur.

Residual risk - the level of risk remaining after controls have been identified and selected for hazards that may result in loss of combat power.

Risk - chance of hazard or bad consequences; the probability of exposure to chance of injury or loss from a hazard; risk level is expressed in terms of hazard probability and severity (FM 101-5).

Risk assessment - identification and assessment of hazards (first two steps of risk management process); an identified hazard is assessed to determine the risk (both the probability of occurrence and resulting severity) of a hazardous incident due to the presence of the hazard.

Risk decision - the decision to accept or not accept the risks associated with an action; made by the commander, leader, or individual responsible for performing that action.



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Risk management - the process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk cost with mission benefits.

Risk management integration - the embedding of risk management principles and practices into Army operations, culture, organizations, systems, and individual behavior.

Severity - the expected consequence of an event (hazardous incident) in terms of degree of injury, property damage, or other mission-impairing factors (loss of combat power and so on) that could occur.

Situational awareness - ability to have accurate and real-time information on friendly, enemy, neutral, and noncombatant locations; a common, relevant picture of the battlefield scaled to specific level of interest and need.

### **Synopsis**

Army operations are demanding and complex. Many of these operations are inherently dangerous, including tough, realistic training. The risk management process allows commanders and individuals to make informed, conscious decisions to manage and accept risks.

The Army's fundamental purpose is to use resources to fight and win the nation's wars quickly, decisively, and with minimal losses. The Army's inherent responsibility to the nation is protect and preserve its resources. This responsibility resides at all levels of command, leadership, and management. Risk management is an effective process for preserving resources.

FM 100-14 describes the principles, procedures, and responsibilities to successfully apply the risk management process to conserve combat power and resources. The manual applies to both Army and civilian personnel during all Army Activities, including joint, multinational, and interagency environments.

The manual provides commanders, their staffs, leaders, and managers a risk management process framework. Additionally, it helps to make risk management a routine part of planning, preparing, and executing operational missions and everyday tasks. The framework developed allows soldiers to operate with maximum initiative, flexibility, and adaptability. While the manual's prime focus is the operational Army, the principles of risk management apply to all Army activities.

The manual discusses the risk management fundamentals including, the background, principles, applicability, and constraints. Historically, government and military leaders have wrestled with the effect of casualties on policy, strategy, and mission accomplishment. They both try to balance following with the value of national objectives:

- effects of casualties,
- impact on civilians,
- damage to the environment,
- loss of equipment, and
- level of public reaction.

Historically, the Army has had more accidental losses from non-battle causes, than losses from combat. A necessary trait for leaders is the ability to adapt and take risks. A risk management process provides a method to identify, assess, and manage operational risks.

The basic principles that provide a framework for implementing the risk management process

#### include:

- integrating risk management into mission planning, preparation, and execution,
  - ⇒ continuously identifying, assessing, and addressing hazards by leaders and staffs.
- making risk decisions at the appropriate level in the chain of command, and
- ⇒ Commanders provide risk guidance based on established Army policies and on higher commander's direction. This guidance establishes how much risk he is willing to accept and delegate.
- accepting no unnecessary risk.
- ⇒ Commanders accept risks only if benefits outweigh potential costs or losses. They alone decide whether to accept the level of residual risk to accomplish the mission.

Risk management assists the commander or leader

- conserve lives and resources and avoid unnecessary risk,
- make an informed decision to implement a course of action,
- identify feasible and effective control measures where specific measures do not exist, and
- provide reasonable alternatives for mission accomplishment

Using the risk management process does not give commanders and leaders the authority to violate local, state, national, or host nation laws; however, restrictions that may adversely affect mission accomplishment are negotiable using the risk management process to determine satisfactory courses of action.

The risk management process consists of five steps:

- 1. identify hazards,
- 2. assess hazards to determine risks,
- 3. develop controls and make risk decisions,
- 4. implement controls, and
- 5. supervise and evaluate.

This manual describes the risk management steps in detail and provides application examples. The table correlates the risk management steps with military decision-making tasks.

Table 1. Risk Management Steps Correlated with Military Decision-Making Tasks

| Military Decision<br>Making Process   | Risk Management Steps |                   |  |                       |                              |  |
|---------------------------------------|-----------------------|-------------------|--|-----------------------|------------------------------|--|
|                                       | Step 1                | Step 2            | Step 3   | Step 4                | Step 5                       |  |
|                                       | Identify<br>Hazards   | Assess<br>Hazards | Develop<br>Controls and<br>Make Risk<br>Decision | Implement<br>Controls | Supervise<br>and<br>Evaluate |  |
| Mission Receipt                       | X                     |                   |  |                       |                              |  |
| Mission Analysis                      | X                     | X                 |  |                       |                              |  |
| COA Development                       | X                     | X                 | X  |                       |                              |  |
| COA Analysis                          | X                     | X                 | X  |                       |                              |  |
| COA Comparison                        |                       |                   | X  |                       |                              |  |
| COA Approval                          |                       |                   | X  |                       |                              |  |
| Orders Production                     |                       |                   |  | X                     |                              |  |
| Rehearsal <sup>1</sup>                | X                     | X                 | X  | X                     | X                            |  |
| Execution and Assessment <sup>1</sup> | X                     | X                 | X  | X                     | X                            |  |

From FM 100-14

COA = Course of Action

The manual also discusses the moral and ethical implications of risk management. It outlines essential responsibilities and considerations necessary to effectively integrate and assess risk management within the Army. Leaders should develop specific how-to procedures based on the their circumstances, resources, and mission. Leaders and soldiers at all levels are responsible and accountable for managing risks by:

- identifying hazards and associated risks during planning, preparation, and execution of operations, and
- controlling hazards and associated risks during preparation and execution of operations.

## What Does This Mean for Military Public Health?

• historically disease and non-battle injury (DNBI) rendered more soldiers non-effective

<sup>&</sup>lt;sup>1</sup> All boxes marked to emphasize the continued use of the risk management process throughout the mission.

than battle injury received as a direct result of conflict. Preventive medicine actions and interventions could have reduced DNBI and been a force multiplier. The Army's Line Commanders have either known, or frequently had to learn from experience, that attention to basic field hygiene and sanitation is essential to maintain and protect the health of soldiers in the field;

- the Army currently assesses materiel health hazards using a risk assessment code (RAC) matrix. The matrix is defined in Army Regulation 40-10, Health Hazard Assessment Program in Support of the Army Materiel Acquisition Decision Process, 1 October 1991. This matrix is similar to the ones described in
  - ⇒ Army Regulation 385-16, System Safety Engineering and Management,
  - ⇒ Field Manual 101-5, Staff Organization and Operations, and
  - ⇒ Department of Defense Instruction 6055.1, "DoD Occupational Safety and Health Program."
- ♦ DoD has been using this risk-based method to prioritize installation safety and health hazards for abatement since the early 1980s;
- preventive medicine professionals have been working with risk estimates, assessments, and risk management principles for many years and understand the risk management process better than most other Army disciplines;
- the use of the risk management process is a natural extension of the existing Preventive Medicine threat assessment process. It provides the means to effectively convey risk and outcomes for various risk levels to commanders that is consistent with the way they receive other important information. Integration of the risk management process into the current threat assessment methods will improve the use and credibility of the threat estimates. Preventive Medicine will be talking the "language of the line" rather than talking in terms of standards exceeded or incidence rates;
- preventive medicine personnel can state the health risk and its impact on the activity at hand. Prioritizing the health threats minimizes resource shortfalls and time constraints. This allows commanders and their staffs to concentrate on the significant health risks;
- the tempo and complexity of military operations have continued to increase since the end of the Cold War. Emerging operational requirements establish the need for preventive medicine services that optimize human health, fitness and performance.

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