



## Military approach to medical planning in humanitarian operations

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*ABC of conflict and disaster*

This is the fifth in a series of 12 articles

**Military approach to medical planning in humanitarian operations**

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Military medical forces may be the only medical services available in the immediate aftermath of conflict and are often required to coordinate the re-establishment of civilian services. UK military medical services have a long history of providing assistance in humanitarian emergencies.

Military medical planners apply a structured approach to determine the requirements for medical support to military operations. This "medical estimate" has two outputs. The first develops health promotion and preventive medicine advice and actions to help maintain the physical, psychological, and social health of the military force. The second output develops missions and tasks for the medical elements of the force.

**Estimate format**

In military medical planning, a planner is given a mission by headquarters. The planner is required to assess this mission to establish missions for his or her subordinates. If the mission is unclear the planner may seek further information from intelligence reports or reconnaissance. Thus, the critical task is interpretation of the mission in order to give subordinates instructions to fulfil the planner's interpretation of the problem.

*Background information*—At the start of an estimate it is important to assemble background information. This might include maps, situation reports for the local area, news reports, and information about prevalent diseases. Internet sites hosted by international aid organisations such as the United Nations, World Health Organization, US Centers for Disease Control, and the UK Health Protection Agency may contain useful information. Less formal sites such as ReliefWeb and Well Diggers Workstation contain much practical information.

**The steps in the estimate**

An estimate follows five steps: mission analysis, evaluation of factors, consideration of courses of action, commander's decision, and development of the plan.

**Step 1: Mission analysis**

An estimate starts with a mission analysis based on the mission statement provided by headquarters. Ideally, this mission statement should be a unifying task with a purpose similar to that of a vision statement in management. Mission analysis involves interpreting the mission to deduce the tasks specified in the mission and those that are implied.

**Step 2: Evaluation of factors**

This step is designed as a series of tools and checklists to enable the medical planner to determine "how to do it." Its structured format is designed to allow an estimate to be made by a single individual or by several planners working on separate aspects.

*Environment*—The geography of the area of operation is reviewed, and factors such as distance, environmental temperature, roads, airfields, and other geographical features are considered. The locations of indigenous medical facilities and structures such as water treatment facilities, power stations, food storage sites, etc, must be noted.



British Army ambulance in a refugee camp in Kosovo, 1999. Military medical forces may be the only medical services available in the immediate aftermath of conflict

**The five steps of the military medical estimate****Step 1—Mission analysis****Step 2—Evaluation of factors**

General factors—environment, friendly forces, hostile forces, surprise, security, time

Medical factors—casualty estimate; medical logistics; medical facilities and capabilities; medical force protection; nuclear, biological, and chemical defence; medical "C4" (command and control, communications and computers)

Humanitarian factors—the 10 priorities of Médecins Sans Frontières

**Step 3—Consideration of courses of action****Step 4—Commander's decision****Step 5—Implementing the plan****Examples of mission statements given to military medical forces in humanitarian operations****Kurdistan 1991**

To assist in the provision of security and humanitarian assistance in order to expedite the movement of Kurdish displaced persons from refugee camps directly to their homes

**Rwanda 1994**

To provide humanitarian assistance in the south west of Rwanda in order to encourage the refugee population to stay in that part of the country



Senior military medical planners and commanders discussing medical arrangements to support military exercise SAIF SERREA in Oman, 2001

## Clinical review

*Hostile forces*—Medical planners should review the weapons available to hostile forces (small arms, artillery or aircraft, mines, booby traps, etc) to generate a list of the types of injuries that might need treatment. The threat from release of chemicals (either deliberately or from collateral damage to industrial facilities) should be identified at this stage. Indigenous diseases are also considered as hostile forces.

*Friendly forces and the population at risk*—It is vital to know how many people are dependent on the health service plan—the population at risk. In humanitarian operations this often comprises two groups, providers and recipients of the humanitarian response.

*Casualty estimate*—This requires assessment of hostile forces and friendly forces to produce an estimate of the numbers and types of casualties that will require treatment and evacuation.

*Security*—Combatants in complex humanitarian emergencies increasingly regard the humanitarian community, including medical workers, as targets. It is vital that the security of the humanitarian community be given a high priority. This has to be balanced against the constraints it places on humanitarian workers' ability to meet the needs of the dependent population.

*Medical force protection*—This identifies the preventive medical actions that need to be taken to protect both the humanitarian community and the dependent community from threats identified from hostile forces. Examples might include pre-deployment immunisation, security of food and water sources to prevent gastrointestinal illness, measures to prevent insect bites and chemoprophylaxis against malaria, and use of body armour to protect against fragmentation weapons.

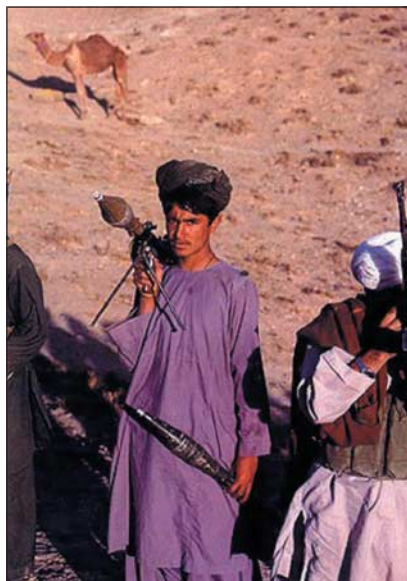
*Time*—Ideally, the organisation of ambulance services and the location of medical facilities should minimise delays in the provision of care. Such considerations must, however, be balanced against the resources available and the need to maintain the security of medical staff.

*Medical capabilities*—Review of the preceding factors will determine the capabilities and capacity of each medical facility required (surgical, paediatric, environmental health).

*Medical logistics*—Medical logistics merits a separate heading because of the technical complexity of the subject. Detailed planning for supply of individual items—such as oxygen, clinical waste disposal, and blood and blood products—needs to be considered in addition to planning for medical treatments. Special attention must be paid to the storage and distribution chain to ensure that medical material is kept within specified temperatures.

*Medical C4*—The medical system's efficiency depends on the effectiveness of the "C4" (command and control, communications and computers) of the various medical elements. The treatment and movement of a single casualty may require coordination of several medical facilities and organisations. It may be necessary to establish liaison officers, communication links, and other means of passing information efficiently between medical agencies involved in the humanitarian response.

*Humanitarian factors*—Médecins Sans Frontières recommend 10 priorities for intervention. The relative importance of these priorities will depend on the exact humanitarian emergency. The forced displacement in a Balkan winter of previously well fed and healthy civilians will create different challenges to those arising from severe flooding affecting a malnourished population with endemic malaria in Mozambique. The principal task is assessment. Various information gathering tools are available for humanitarian emergencies. Ideally, the humanitarian community should rapidly establish a common system for data collection so that all agencies can contribute to initial assessment and collation into a shared database.



A review of the weapons available to hostile forces will indicate the types of injury that might need treatment



A looted hospital ward in Iraq in 2003, showing the need for adequate protection of medical forces



Main medical warehouse in Basra, Iraq, after delivery of a major humanitarian aid shipment in 2003. The technical complexity of medical logistics means it requires careful and detailed consideration

#### Médecins Sans Frontières' 10 priorities for medical intervention in humanitarian emergencies

- |                             |   |
|-----------------------------|---|
| 1—Initial assessment        | 6—Health care in the emergency phase            |
| 2—Measles immunisation      | 7—Control of communicable disease and epidemics |
| 3—Water and sanitation      | 8—Public health surveillance                    |
| 4—Food and nutrition        | 9—Human resources and training                  |
| 5—Shelter and site planning | 10—Coordination                                 |

*Assessment of tasks*—The evaluation of factors will generate a list of tasks. These should be listed and matched to resources.

### Step 3: Consideration of courses of action

This is often the most difficult but most important step of the medical estimate. The tasks generated in step 2 must be converted into a series of mission statements or task lists for the medical elements of the military force. Ideally, the estimate process will lead to a list of key tasks, some of which may have various options.

### Step 4: Commander's decision

During military action, the commanding officer will have the final accountability for the medical plan. In a multiagency humanitarian response it will be necessary to spend much energy in generating consensus for any plan. Although military medical staff have well developed planning and decision making skills, it may be more appropriate for other agencies to take the lead in planning and coordinating the healthcare response.

### Step 5: Development of the plan

A plan has no value unless it can be communicated to and coordinated by all parties involved. This may require written instructions and verbal briefings. Each humanitarian agency may have its own similar procedures. As an estimate starts with mission analysis, the medical planner must carefully craft the "mission statements" for each of the component parts of the medical response so that the subordinate leaders understand how their missions contribute to the overall humanitarian response and are able to conduct their own medical estimates.

Graphical tools such as marked maps or project planning timetables may help to convey specific details. Planning conferences and workshops, such as tabletop exercises used in emergency planning, may also help mutual understanding between organisations.



Written instructions and verbal briefings may be needed as the medical planner assigns each of the component parts of the military medical response to subordinate leaders



The final military medical plan must be aligned to the overall humanitarian plan for the affected region

## Summary

The military medical estimate is a formal decision making tool. It provides a structure to allow analysis of the factors involved in complex humanitarian emergencies. The output of the estimate is a plan for the military medical response to a humanitarian crisis. The estimate may provide a suitable structure for use by other organisations working in similar environments.

The medical plan must be aligned to the overall humanitarian plan. This often considers wider humanitarian issues such as security; law and order; food, water, and fuel distribution; establishment of representative government; education; and other developmental issues.

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### Further reading

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- World Health Organization. *Rapid health assessment protocols for emergencies*. Geneva: WHO, 1999
- UN Office for the Coordination of Humanitarian Affairs Military and Civil Defence Unit. *Guidelines on the use of military and civil defence assets to support United Nations humanitarian activities in complex emergencies*. Geneva: MCDU, 2003. <http://ochaonline.un.org/DocView.asp?DocID=426>

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