TITLE: Deployment Phase Medical Readiness Support

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Deployment Phase Medical Readiness Support

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SUMMARY:

This paper on “Deployment Phase Medical Readiness Support” will complete the information on medical readiness preparation requirements for the deployment of force to a NATO/Multinational Medical Mission.

DISCUSSION:

Deployment Phase Medical Readiness Support Functions

During the deployment phase of NATO or other multinational formation operations, several key monitoring and surveillance functions provide important measures of medical support readiness.

These measures are defined as follows:

- Assessment of the overall health readiness status of the troops through medical situation reports.
- Establishment of an epidemiological surveillance data-collection and reporting system.
- Verification of a system for the management of stress and prevention of Post Traumatic Stress Disorders (PTSD).
- Certification of the readiness and preparedness of non-NATO/multinational formation deployed medical capabilities.
- Assessment of the medical force protection function, which will provide commanders with an assessment of the readiness and adequacy of the medical support structure at all levels, identify positive lessons learned to assist and thereby promote exploiting operational success across the entire theatre of operation and advise commanders on medical support issues requiring national or collective action.
- Provision of selected force protection preventive medical initial and reinforcement training.

Medical Force Protection

Up to here the main monitoring and surveillance functions to measure medical support readiness for deployed forces have been mentioned.

In addition I would like to expand on this it a little bit covering the overall aspect of Medical Force Protection. Medical Force Protection measures mainly applies to protect a deployed force, no matter if these forces are national forces or part of a multinational formation. However, Medical Force Protection is not limited to the deployed force but includes several functions during the pre- and post-deployment phase.

The presentation on “Pre-Deployment Medical Readiness Preparation” already provided some information on

- Medical Force Protection Assessment,
- Life-cycle Medical Surveillance for Operational Deployment and
- Pre-Deployment Medical Readiness Preparation and Baseline Assessment.

Together with the
- Deployment Phase Medical Readiness Support Functions,
some more medical preparatory and protective measures have to be taken into account to complete the whole circle of Medical Force Protection before, during and after a deployment.
These measures are:

- Post-Deployment Phase Medical Status Monitoring Functions,
- Preventive Medicine, Preventive Medicine Requirements and Civil Labour,
- Morbidity Surveillance and Casualty Reporting and
- MASCAL and Incident Response Planning.

**Post-Deployment Phase Medical Status Monitoring Functions**

Post-Deployment Phase Medical Status Monitoring is another major phase of medical status monitoring, which applies to the post-deployment, or troop return phase of an operation.

It is an important primary function of national deployment responsibility, but also bears important implications for shaping follow-on phases of the same NATO or multinational formation operation, and for future operations.

Information pertaining to changes in the health readiness status of re-deploying forces is important in both the short and longer-terms at national and multinational levels of management.

In the short term for both participating nations and multinational formation commanders important insight may be gained on the adequacy of medical intelligence and health support services thereby providing input for changes in current or follow-on multinational operations.

At the national level critical fitness for duty determinations for returning troops is also gained.

Longer-term benefit may also be achieved for the continuation and enhancement of multinational formation operations where economy and efficiency will continue to be important principles governing the multinational medical support.

Longer-term national relevance regarding liability determination for follow-up medical support requirements may be ascertained.

**Preventive Medicine and Medical Force Protection**

Diseases and Non-Battle Injuries will be an ever present risk to personnel. Medical support plans must include provision for preventive medical measures and the means to implement them effectively. The execution of operational plans requires a close collaboration of preventive medicine and medical force protection programmes.

Preventive medicine measures must be capable of:

- Identifying the risks and threats to the health of all personnel deployed in a specific theatre of operations, from terrain, climate, endemic disease, special environmental and occupational hazards.
- Identifying necessary preventive and controlling measures and advising commanders on their implementation, to include the development of a theatre policy on immunisation and prophylactic measures and on the appropriate training of all personnel, especially on measures to prevent food/waterborne and arthropod-borne diseases.
- Advising on and auditing the quality of water and food.
- Auditing and supervising implemented measures.
- Gathering of epidemiological and other technical statistics and information.
- Advising commanders on the overall health risks and threats and the limitations they may place on the campaign.

Preventive medicine measures are an essential element of the planning process. Their implementation begins during the pre-deployment stage and continues throughout the deployment, irrespective of overall changes in the conduct of the operation and must extend well into the post-deployment period. They involve every individual in the operational theatre, who must be aware of necessary personal protective measures and be trained accordingly. The organisation to undertake preventive medicine measures must therefore be in place from the outset and must extend from theatre headquarters down to units and below. Its shape and size will be mission-dependant but will include, at least, individual preventive medicine advice at every level of operational command. Depending on the circumstances, this advice may come from a single staff officer with multiple medical responsibilities or from a full preventive medicine staff.
Preventive Medicine Requirements

The following mentioned requirements apply in the field of Preventive Medicine:

- **Medical Intelligence / Information**
  The single most essential requirement of preventive medicine is a source of prompt, usable medical information and/or intelligence, available at the planning stage before the outset of an operation. This information must be accurate and its source sufficiently dynamic to inform the user quickly of threat changes.

- **Immunisations, Education & Training Materials**
  Other preventive medical resources will include provision for immunisations against specified diseases and chemoprophylaxis, advice on training and information for the prevention of Diseases and Non-Battle Injuries, prophylactic medical materiel and a spectrum of mission dependent field support measures.

- **Laboratory Capabilities**
  Surveillance and assessment of environmental health risks require laboratory capabilities. Field laboratory capabilities are part of the environmental health team support functions focused on identification, surveillance and monitoring of health risks in field operating environments. These capabilities should include technology for sampling and analysis for NBC contaminants in air, soil, water, and food supplies. Appropriate equipment and transport capabilities are needed both in the form of a field mobile laboratory to support immediate sampling and initial screening of hazards; and a fixed laboratory capability to support both confirmatory evaluations and more extensive assessment of collected field samples pertaining to naturally occurring and manmade health risks.

**Morbidity Surveillance and Casualty Reporting**

Both morbidity surveillance and casualty reporting systems are important functions performed by medical staff elements to support the multinational formation commander in the ongoing objectives of protecting the force and conserving the fighting strength and manpower of the force. The disease surveillance function serves as a key indication of troop health status, and as a key warning system or sentinel to trigger further investigation, preventive countermeasures, or other command action to reduce the adverse impacts of health threats. It also provides an estimate of the impact (manpower and working day losses) of disease occurrence. An appropriate morbidity surveillance system should involve the monitoring, collection, and evaluation of illness and injury data on all deployed personnel who report for medical treatment support, both on an outpatient and inpatient basis. It is also set to run in conjunction with other national reporting systems. Epidemiological data on all treatment visits, including both first and subsequent attendance in the theatre of operation, are collated and analysed at theatre level. For NATO such a morbidity surveillance system called EPI-NATO is available. Through the quantitative identification of causes of morbidity and qualitative measuring of their effect, an evaluation occurs as well as consequences is the prime objective of this survey. Findings may then support appropriate response actions, both in the short and long term.

**Civil Labour**

During operations civil labour is often utilised in large numbers and this can pose a number of health hazards: They may be reservoirs of infectious disease. When they are billeted in large encampments, the encampments can become unhygienic and pose an increasing risk of infectious disease. Infection of own troops from infected food handlers, from contamination of water sources and from sexually transmitted diseases are historical problems associated with civil labour. The host nation should be responsible for the health of civil labour and any camps they occupy. However, where the host nation’s medical infrastructure is inadequate, the contributing nations employing civil labour need to make sufficient arrangements in order to protect the health of their own troops. At a minimum these arrangements must include a strategy to eradicate infectious diseases which are a threat to one’s own forces, and a first aid service during work. Depending on the supporting civilian infrastructure, consideration will also have to be given to providing a primary health care service, if only to ensure the continued provision of the required labour.

**MASCAL and Incident Response Planning**

A mass casualty (MASCAL) situation is one in which an excessive disparity exists between the casualty load and the medical capabilities locally available for its conventional management. In crisis response operations a MASCAL situation will most likely be the result of accidents (road accident, plane crash, bomb, fire, etc.), hostile actions (guerrilla warfare,
terrorist attack) or natural phenomena (flood, earthquake, etc.). Incidents will most likely be smaller in scale compared to a shooting war situation. A series of suitable plans must be developed for different scenarios at tactical level and integrated into a theatre-wide MASCAL Plan. Force protection measures require a rapid and efficient response to MASCAL situations and incidents. Their effective management shows the theatre ability to respond as a whole to a medical crisis by cross-borders mobilisation of resources and minimisation of obstacles to interoperability.

MASCAL exercises at theatre and local level will help in developing and testing the overall MASCAL Plan. Training objectives may include amongst others:

- Evaluate the ability to conduct theatre level medical regulating and aero-medical evacuation.
- Identify interoperability issues affecting multinational support.
- Practice cross levelling of medical supply and blood products.
- Determine the adequacy of emergency care resources.
- Test communications connectivity.