

## HYGIENE AND EPIDEMIOLOGICAL CONTROL IN THE CZECH ARMY

Ivan POHL

Military Medical Service Command, Hradec Králové

### **Summary**

*The presentation describes the hygiene and epidemiological control in the Czech Army. This control is implemented by two organizational systems. The first of them is based on the garrison medical stations and the Central Military Medical Institute, which are the institutions built according to the military organizational tables. The second system consists of some military hygiene service officials (Chief Hygienists, Director of the CMMI, the heads of the CMMI branches), who execute their authorities derived from the Public Health Protection Act. Some details about hierarchy and main tasks of both systems are provided.*

KEY WORDS: Structure of military hygiene service; Organization; Communicable diseases control.

This presentation is aimed to describe the organizational structure of the Czech military hygiene service and its basic functional characteristics with special accent on the communicable diseases control.

It is needed to make some introductory remarks at first.

A communicable diseases control is not but one of many preventive controls exercised by the Medical Corps. It can be right understood in this context only, especially in connection with hygiene control. There are general practitioners at the garrison medical stations, who exercise those controls being the first executive elements of the whole control system. Moreover, they are usually the first physicians, who establish the diagnosis of infectious disease and take all needed measures, including a case report. They play an important role in vaccination campaigns as well.

That is why the garrison medical stations should be considered the elements of a communicable disease control in spite of the fact that they are not the parts of the military hygiene service.

With respect to what has been already said, a communicable diseases control in the Czech Army is implemented by garrison medical stations and the Central Military Medical Institute. Their structure and main tasks could be described as follows:

### Garrison medical stations

Overall, each of the Medical Corp members is obliged to perform the basic hygiene and epidemiological control. With respect to this fact the garrison medical stations represent the basic executive elements in the field of hygiene and epidemiology.

There are 62 garrison medical stations dispersely located over the whole state territory. The hygiene and epidemiological activities are imposed on their heads.

The required hygiene activities set by the General Surgeon's instruction include a general hygiene supervision on military training, soldier's accommodation, nutrition, drinking water, sewage and waste disposal and working conditions. The good implementation of this supervision contributes positively to the health living and working conditions reducing thus infectious and occupational disease hazards.

The required epidemiological activities set by military regulations or instructions include:

- the early diagnosis, isolation and treatment of all infectious diseases cases,
- the first necessary antiepidemic measures eliminating spread of the causative agent,
- vaccination campaigns,
- the obligatory written report on the cases of notifiable sporadic infectious diseases,
- the obligatory weekly telephonic report on the

- cases of acute respiratory infectious diseases, infectious anginas and acute diarrhoeal diseases,
- the immediate report on epidemic outbreaks or cases of highly infectious or „exotic“ diseases.

### The Central Military Medical Institute

Since the last reorganization of the Medical Corps in 1997 the CMMI represents the only military hygienic institution directly subordinated to the Troops Medical Corps Headquarter in Hradec Králové.

It consists of four organizational elements:

- a core part in Prague,
- three branches located in Plzeň, České Budějovice and Brno (Org. chart 1).

**The core CMMI part in Prague**, which directs its branches, is organized in the following manner (Org. chart 2):

- Directorate
- Department of Epidemiology (Epidemiol. Grp and Lab Grp)
- Department of Hygiene (Community Hyg. Grp, Lab Water Analysis, Food Hyg. Grp, Food Biochem. Microbiol. Grp.)
- Department of Occupational Hygiene (Occup. Hyg. Grp, Toxicol. Gas Chromatography Grp)
- Department of Radiation Protection (Non-Ionizing Radiat. Grp, Ionizing Rad. Grp)
- Group of Pharmacy
- Logistic

The CMMI branch located in České Budějovice is organized as follows (Org. chart 3):

- Head's bureau
- Department of Epidemiology and Microbiology (Epidemiol. Grp, Microbiol. Grp, Virol. Grp, Parazitoentomol. Grp, Growth Media Product. Grp and Vivarium)
- Department of Hygiene (Food Hyg. Grp, Occup. Hyg. Grp, Community Hyg. Grp)
- Logistics

Similar structure is in Plzeň (Org. chart 4).

The smallest of the CMMI branches, which is located in Brno, is organized as follows:

- Head's bureau
- Department of Epidemiology
- Department of Hygiene

The main task of the CMMI in the field of hygiene is to exercise the special hygiene supervision.

This type of supervision is oriented on the same subjects as the general one. The difference between them consists in complexity of the problems should be solved during the special supervision, what usually requires special technologies and devices.

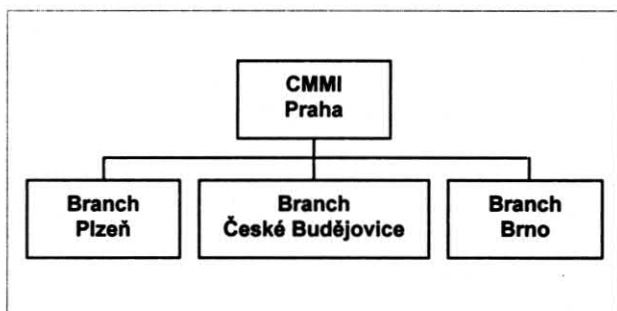


Chart 1 The Central Military Medical Institute (CMMI)

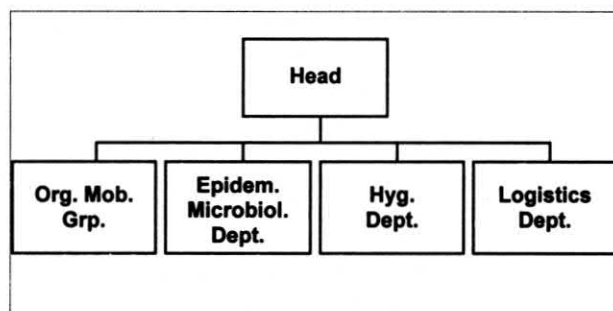


Chart 4 CMMI Branch in Plzeň

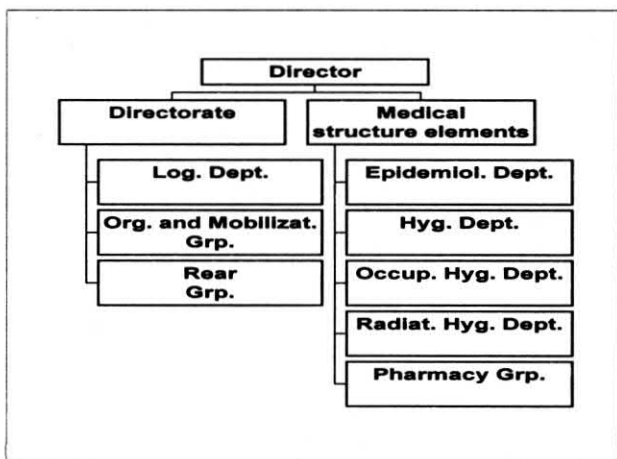


Chart 2 CMMI Praha

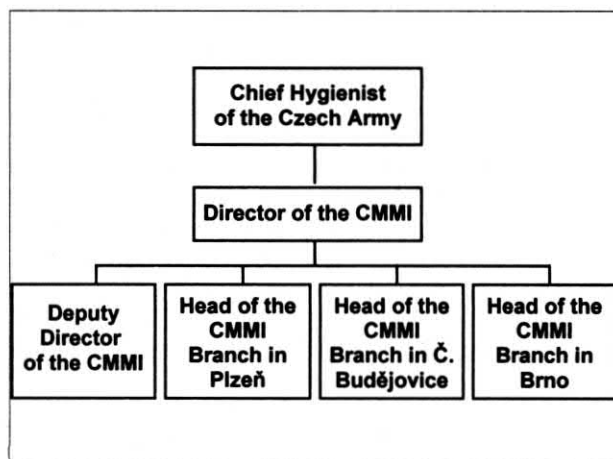


Chart 5 Officials authorized to execute the public health supervision

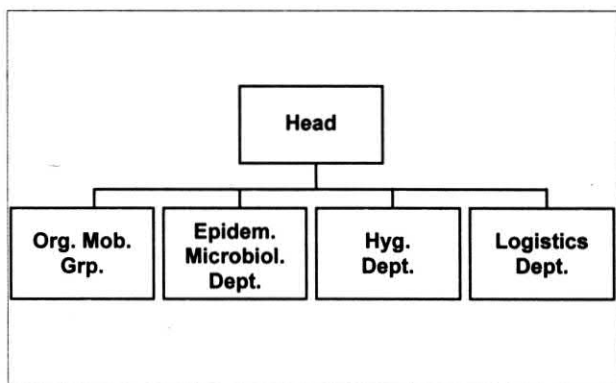
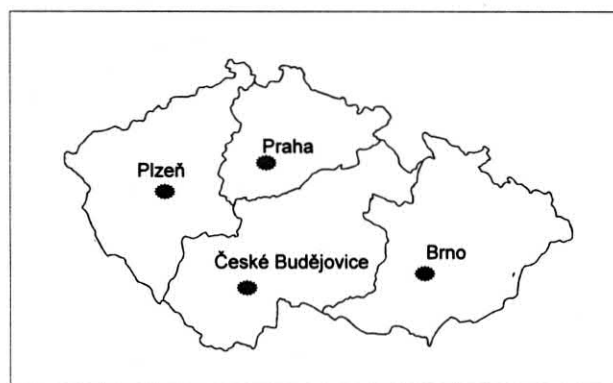


Chart 3 CMMI Branch in České Budějovice



Picture 1 The CMMI parts' territories

Concerning epidemiology all the CMMI structural elements play two basic roles:

They continually observe the epidemiological situation and actively influence it. As for the observation the CMMI uses the following information sources:

- reports about sporadic cases and weekly infectious morbidity records elaborated and transmitted by the garrison medical stations,
- reports about the epidemic outbreaks affecting military units, which are compiled by the military epidemiologists themselves,
- epidemiological records elaborated by the civilian hygiene service,
- documents elaborated by the WHO (e.g. Weekly Epidemiol. Records).

The CMMI epidemiologists are obligated to visit the epidemic foci and to organize all measures concerning their elimination.

The same activity should be developed when some sporadic cases of infectious diseases occur (e.g. viral hepatitis, tuberculosis, meningococcal meningitis etc.). In addition to this work the epidemiologists organize and supervise the vaccination campaigns, e.g. against meningococcal diseases and influenza. In sum, it represents a lot of work as follows from the fact that the CMMI dealt with 35 outbreaks and organized vaccination of about 40 000 soldiers in the year 1997.

Although each of the CMMI elements develops similar basic activity in the field of communicable diseases control, there are some differences between them following the differences in staff number, equipment and professional responsibility. The Department of Epidemiology of the core CMMI part in Prague is the only place, where the epidemiological data are centralized and processed to the form enabling the top level decisions. The Department of Epidemiology and Microbiology of the CMMI branch in České Budějovice serves as the Serum Bank of the Czech Army collecting and saving the serum samples taken from the soldiers before and after their deployment outside the state territory. Because of the short distance between České Budějovice and location of the deployable forces training base

in Český Krumlov it also organizes vaccination for the Czech Forces (e.g. SFOR) intended to be deployed abroad.

The CMMI structure, as it has been mentioned above, corresponds to the military tables of equipment. Besides that there is established another one, which is based on the professional as well as the legal responsibility of chosen officials of the military hygiene service. It resembles the structure of the civilian hygiene service. Each of those officials executes his authority, which is derived from the Public Health Protection Act. This Act enumerates the matters that are subjected to the authorized decision as well as the functionaries who are empowered to make it. Such decision has an obligatory character. Every institution or person, state or private, should follow it unless it appeals against.

The structure of the military hygiene service according to the Public Health Protection Act is built as follows (Org. chart 5):

The Chief Hygienist makes decision of the most importance, usually influencing the living and working conditions of the whole Czech Army. He executes his authority over all parts and members of the Czech Army. He plays the role of the supreme appellate authority in military hygiene service.

The director of the CMMI makes decision on the defined matters in the field of hygiene and epidemiology (e.g. an observance of hygiene norms as concerned all military medical institutions, tunnel shooting ranges, military institutions working with radiation sources etc.). In case of Chief Hygienist's absence he plays a role of the substituting authority.

The heads of the CMMI branches represent base of this system. They execute their authority over determined parts of the state territory (Picture 1). Being the basic executing elements of the system they influence its right function in many ways.

Correspondence: Plk. MUDr. Ivan Pohl, CSc.  
Velitelství vojskové zdravotnické služby  
Ak. Heyrovského  
500 01 Hradec Králové