

## ON THE ISSUE OF SPECIAL EXERCISES IN THE COUNTERTERRORISM SYSTEM INVOLVING SPECIALISTS OF HEALTH CARE MANAGEMENT BODIES, MEDICAL FORMATIONS AND ORGANIZATIONS

I.G. Titov<sup>1</sup>

<sup>1</sup> State Research Center – Burnasyan Federal Medical Biophysical Center of Federal Medical Biological Agency, Moscow, Russian Federation

**Abstract.** *The objectives of the study* are to analyze the experience of exercises conducted in the counter-terrorism system by specialists of the regional Disaster Medicine Service, to identify key organizational issues of preparation and implementation of exercises; to develop proposals for their improvement in the subject of elimination of medical and sanitary consequences of terrorist acts committed with the use of conventional means of destruction.

*Materials and research methods.* Sources of information and materials studied: normative and methodological documents regulating the procedures of organizing and conducting military training in the field of healthcare; materials of trainings performed by specialists from regional EMC on the subject of organizing the liquidation of medical and sanitary consequences of terrorist acts; data from expert evaluation maps on the subject of the study; scientific papers and publications on technologies of training and exercises involving specialists from healthcare management bodies, medical units and organizations.

The following scientific methods were used in the research: content analysis method, expert assessment method, statistical method, logical and informational modeling, and analytical method.

*Results of research and their analysis.* The results of the study of basic organizational issues of preparing and conducting special exercises (command-staff exercise, staff training, tactical and special exercises) conducted in the regions with the participation of specialists of public health authorities, medical formations and organizations within the framework of counter-terrorism are presented. Sound proposals were made to improve the technology of preparing and conducting special exercises and communicating their results to medical specialists.

The results of the study showed that almost all the experts (98.0%) were in full agreement with the need, in order to maintain and increase the preparedness of health care authorities, medical organizations, including emergency medical care and the Disaster Medicine Service, to conduct regional trainings on the subject of medical support of the population during terrorist acts. And only 2.0% of the experts had difficulty in formulating a specific conclusion on this issue.

**Key words:** *command-staff exercises, conventional means of destruction, counterterrorism system, Disaster Medicine Service, emergencies, emergency medical care, medical formations, medical organizations, public health authorities, regional centers for emergency medical care and disaster medicine, special exercises, staff training, tactical-special exercises, territorial disaster medicine centers, terrorist acts*

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## К ВОПРОСУ О ПРОВЕДЕНИИ В СИСТЕМЕ ПРОТИВОДЕЙСТВИЯ ТЕРРОРИЗМУ СПЕЦИАЛЬНЫХ УЧЕНИЙ С УЧАСТИЕМ СПЕЦИАЛИСТОВ ОРГАНОВ УПРАВЛЕНИЯ ЗДРАВООХРАНЕНИЕМ, МЕДИЦИНСКИХ ФОРМИРОВАНИЙ И ОРГАНИЗАЦИЙ

И.Г. Титов<sup>1</sup>

<sup>1</sup> ФГБУ «ГНЦ-Федеральный медицинский биофизический центр им. А.И.Бурназяна» ФМБА России, Москва, Россия

**Резюме.** *Цели исследования* – изучить и проанализировать опыт специальных учений, проведенных в системе противодействия терроризму специалистами Службы медицины катастроф (СМК) регионов; определить ключевые организационные вопросы подготовки и проведения таких учений; разработать предложения по совершенствованию проведения специальных учений применительно к тематике ликвидации медико-санитарных последствий терактов, совершенных с использованием обычных средств поражения.

*Материалы и методы исследования.* Источники информации и материалы, подвергнутые изучению: нормативные и методические документы, регламентирующие порядок подготовки и проведения учений в сфере здравоохранения; материалы учений, проведенных специалистами СМК регионов по тематике ликвидации медико-санитарных последствий терактов; данные карт экспертной оценки по теме исследования; научные работы и публикации, посвященные технологиям подготовки и проведения специальных учений с участием специалистов органов управления здравоохранением, медицинских формирований и организаций.

При выполнении исследования применялись следующие научные методы: метод контент-анализа, метод экспертной оценки, статистический метод, логическое и информационное моделирование, аналитический метод.

Результаты исследования и их анализ. Представлены результаты исследования базовых организационных вопросов подготовки и проведения специальных учений (командно-штабное учение, штабная тренировка, тактико-специальное учение), проводимых в регионах с участием специалистов органов управления здравоохранением, медицинских формирований и организаций в рамках противодействия терроризму. Внесены обоснованные предложения по совершенствованию технологической подготовки и проведения специальных учений и доведения их результатов до медицинских специалистов.

Результаты исследования показали, что практически все эксперты (98,0%) были полностью согласны с необходимостью – в целях поддержания и повышения готовности органов управления здравоохранением, лечебных и других медицинских организаций, в том числе учреждений и формирований скорой медицинской помощи и Службы медицины катастроф – проводить в регионах учения по тематике медицинского обеспечения населения при террористических актах с использованием обычных средств поражения. И только 2,0% экспертов испытывали затруднения при формулировании конкретного заключения по данному вопросу.

**Ключевые слова:** командно-штабные учения, медицинские организации, медицинские формирования, обычные средства поражения, органы управления здравоохранением, региональные центры скорой медицинской помощи и медицины катастроф, система противодействия терроризму, скорая медицинская помощь, Служба медицины катастроф, специальные учения, тактико-специальные учения, территориальные центры медицины катастроф, террористические акты, чрезвычайные ситуации, штабные тренировки

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**Contact information:**

**Igor G. Titov** – Deputy Head of VTsMK «Zashchita» of Burnasyan FMBC  
**Address:** 5, Shchukinskaya st., Moscow, 123182, Russia  
**Phone:** +7 (916) 808-49-34  
**E-mail:** orgplan@vcmk.ru

**Контактная информация:**

**Титов Игорь Георгиевич** – заместитель руководителя ВЦМК «Защита» ФГБУ ГНЦ ФМБЦ им. А.И.Бурназяна ФМБА России  
**Адрес:** Россия, 123182, Москва, ул. Щукинская, д. 5.  
**Тел.:** +7 (916) 808-49-34  
**E-mail:** orgplan@vcmk.ru

The highest form of preparation of health care for response to natural and man-made emergencies, accompanied by medical and sanitary consequences, are special exercises (command-staff exercises, staff training, tactical and special exercises). Such exercises are held with the participation of specialists of health care management bodies, medical formations and organizations of emergency medical care and Disaster Medicine Service, medical treatment organizations and other medical institutions [1-3].

At special exercises a set of management tasks and therapeutic and evacuation measures in application to a specific case are practiced. This contributes to maintaining and improving the readiness of medical organizations to work in an emergency situation [1, 4].

Hence there is the need to investigate the problems of preparing and conducting special exercises in the system of counter-terrorism using the method of retrospective analysis.

Such exercises are conducted in the regions, as a rule, comprehensively, often — under the direction of anti-terrorist commissions and their headquarters. Relevant medical specialists, public health forces and means are invited to participate in them. However, as experience shows, it is expedient to hold such exercises and trainings in the system of regional health-care separately — only on the problems of liquidation of medical and sanitary consequences of terrorist acts [5, 6].

**The purpose of the study** is to determine the key organizational technologies for the preparation of the exercises, to develop proposals for their improvement as applied to the problems of liquidation of medical

and sanitary consequences of terrorist acts committed with the use of conventional means of destruction\* on the basis of the experience of special exercises performed by specialists of the Disaster Medicine Service.

**Materials and methods of research.** Sources of information and materials on the subject of the research were: normative and methodological documents; materials of trainings conducted by specialists of the Regional Disaster Medicine Service; data of expert evaluation maps on the subject of the research; scientific works and publications on the technologies of preparing and conducting the trainings.

The following research methods were used: content analysis method, expert assessment method, statistical method, logical and information modeling, analytical method.

**Results of the study and their analysis.** The study showed that practically all the experts (98.0%) agree with the necessity of conducting medical trainings in the regions. Only 2.0% of the experts have difficulty in formulating their conclusions on this matter.

The results of the study highlighted the need to study organizational issues of preparing and conducting special exercises in the health care system of the subjects of the Russian Federation.

First, it was necessary to determine the optimal frequency of special exercises. It was found that such exercises should be conducted within a municipality

\* Conventional means of destruction are weapons that are based on the use of explosives and incendiary mixtures — artillery, missile and aviation ammunition, small arms, mines, incendiary ammunition and flammable mixtures, as well as bladed weapons and non-standard (improvised) explosive devices

once every six months — 68.3% of the experts. 29.8% of the experts were in favor of having exercises once a year, and 2.9% of them thought it was optimal to have such exercises once every 2 years.

With this in mind, we examined the frequency with which similar exercises were conducted between 1999 and 2005 by regions where terrorist attacks occurred during this period. Why does the study cover this period of time? In the years indicated, there was high terrorist activity on the territory of the Russian Federation associated with counterterrorist operations in the North Caucasus.

It turned out that the most infrequent exercises were conducted in 1999-2001. In the first 4 years (1999-2003) only 38.5% were conducted, and in the remaining 3 years (2003-2005) 61.5% of the exercises were conducted. At the same time, according to data from the territorial Disaster Medicine Centers, from 1999 to 2001 there were no exercises at all in the Republic of Ingushetia, the Kabardino-Balkarian Republic, or the Moscow Region. If we consider that during these 3 years 47.3% of terrorist acts were committed on the territory of Southern Federal District subjects, such situation cannot be considered satisfactory. All the more so because during these years the sociopolitical situation in this federal district was the most acute.

The number of exercises conducted in different regions on the topic of the elimination of the medical and sanitary consequences of terrorist acts varied greatly. For example, during the period under study, 87 exercises were conducted in Moscow, 39 in Stavropol Krai, and 22 in Astrakhan Oblast. At the same time, in the Kabardino-Balkarian Republic, the Moscow Region, and the Republic of North Ossetia-Alania, 2, 3, and 7 such exercises were conducted, respectively. One cannot agree that there was no need for more intensive training of health care authorities and medical organizations in these regions to deal with the consequences of terrorist attacks.

The study established that the foci of the medical and sanitary consequences of terrorist acts committed with the use of conventional weapons and explosive devices are, as a rule, local in nature. In view of this, it was necessary to specify the scale of the exercises and the number of medical forces and facilities involved in the exercises.

It was determined that these exercises should involve health care management bodies, medical organizations (medical treatment organizations, trauma centers, the regional center for emergency medical care and disaster medicine, the station, substation or department of emergency medical care, the territorial center for disaster medicine, etc.). This is especially true in cities where there are facilities with a high risk of terrorist attacks on them or where major events are held.

There are convincing arguments to support this conclusion. During the period under study, 93.8% of ter-

rorist attacks were committed in large cities in crowded places. The trend of committing terrorist attacks in cities is stable not only in Russia, but also in other countries [4, 7, 8].

The study of this issue using the method of expert assessment yielded the following results. 46.8% of experts believed that it is necessary to conduct exercises with the medical organization that is planned to be involved in the elimination of the medical and sanitary consequences of terrorist acts, as well as with the entire healthcare system of the municipality. 32.3% of the experts were in favor of conducting exercises with relevant organizations of a medical district (inter-municipal entity or major city). 20.9% of experts were in favor of conducting exercises on a regional healthcare scale.

The results of the study allow us to formulate the following recommendation. Initially, it is advisable to conduct exercises on the scale of medical organizations located on the territory of one municipality. Then the scale of the exercise can be enlarged: the number of victims, the number of medical institutions involved in the elimination of medical and sanitary consequences of the terrorist attack increased; the medical and tactical situation and conditions of management activities complicated, and the exercise should be then conducted within the medical district, within a major city or region. In doing so, the exercise scenario should be based on the need to perform a maximum amount of medical evacuation and management activities.

The recommendation concerning the scale of a special exercise is fully consistent with the results of our earlier study [7].

In performing the study, it was necessary to identify the main developer — the organization specialists who should prepare the necessary materials for conducting a special exercise and the official who will manage these exercises.

The analysis of experts' opinions on this issue showed that 57.1% of experts believe that the main developers of materials should be specialists of regional emergency and disaster medicine centers and territorial disaster medicine centers. 35.3% of experts believe that such materials should be developed by specialists of executive authorities in the sphere of public health protection. And 7.6% gave preference to specialists from other government agencies, including those in the regional anti-terrorist commission, territorial bodies of the Federal Security Service and the Russian Ministry of Emergency Situations.

The study of the experience of real exercises during the period under study showed that the main developers of such exercises in 60.4% of cases were specialists of territorial disaster medicine centers. In 3.3% of cases they were developed by specialists of regional healthcare authorities; in 8.6% — by specialists of municipal healthcare authorities. In 26.7%

of cases the developers were the heads of medical treatment organizations; in 0.5% of cases — the specialists of ambulance stations and in 0.5% of cases — other medical specialists. When preparing and conducting the exercises, the specialists of the territorial centers for disaster medicine provided methodological assistance to the heads and developers of the exercise materials.

As for the question of who should be the head of the exercises, the experts' opinions were distributed as follows. Most of all (41.8%) experts gave preference to the head of regional healthcare. 28.2% preferred the head of the regional center for emergency medical care and disaster medicine; 20.9% preferred the deputy head of regional health care. 9.1% of the experts indicated other medical specialists, including those from the regional anti-terrorist commission, the territorial bodies of the Federal Security Service and the Russian Ministry of Emergency Situations.

Other results were obtained when studying the experience of the conducted exercises. It turned out that the leaders of the exercises were: in 32.3% of the exercises — the directors of territorial centers for disaster medicine; in 17.7% — the heads of medical treatment organizations; in 16.7% — the heads of healthcare authorities of the subjects; in 15.6% — their deputies; in 15.1% — the heads of healthcare authorities of municipalities; and in 2.6% of the exercises, other officials.

The heads of regional health authorities need to lead medical counterterrorism exercises more frequently. It is possible that the lack of participation in the exercises by heads of health care authorities had a negative impact on the quality of the exercises and reduced the degree of their effectiveness.

The results of the study speak for themselves. The leader of special exercises held on a municipal scale can be the head of a regional center for emergency medical care and disaster medicine or a territorial center for disaster medicine, or the deputy head of regional health care. The head of the exercises held on the scale of a medical district, a large city or a region is the head of regional health care, and the head of the headquarters of the exercises is the head of the regional center for emergency medical care and disaster medicine or the territorial center for disaster medicine.

An important aspect of the preparation and conduct of exercises is the ability of regional medical authorities and heads of medical institutions to organize and to conduct such exercises.

Experts' opinions on this issue were distributed as follows. 49.5% of experts believe that health authorities are fully prepared to perform the above task. 30.1% expressed the opinion that health authorities are partially ready, while 20.4% of experts found it difficult to assess their readiness.

The presented results of the study can contribute to the development of measures for the organization of

targeted professional training of relevant medical specialists. This will help to improve the quality of the exercises and achieve better preparedness of regional level health care to deal with the medical and sanitary consequences of terrorist attacks.

The results of the study also point to the need for more active, systematic and specific work on the training of specialists of health care management bodies and managerial staff.

According to experts, the main reasons for the failure of special exercises are: low level of professional training (34,5%); imperfect training programs (31,2%); insufficient methodological support (14,8%); lack of a standard list of training scenarios (17,2%); lack of participation of managerial specialists, shortage of trained medical specialists, turnover of medical staff (2,3%).

The study of exercise scenarios showed that the topics of the exercises were, as a rule, the same — in 80.2% of cases the topics of the exercises and the issues to be solved were the same. Often it was not possible to create a complex multivariant medical-tactical situation.

Specialists from the territorial organizations of the Ministry of Emergency Situations, the Federal Security Service, the Ministry of Internal Affairs of Russia, and other organizations and services, with which to interact during terrorist attacks, should be invited to the special exercise [8-10]. The main purpose of their participation is to understand the tasks that they will have to solve in the interests of organizing medical assistance and medical evacuation of the victims.

The study examined the extent to which these specialists participate in special exercises. It was found that such specialists are invited as participants in regional exercises in 91.8% of cases.

However, the share of specialists from different departments turned out to be different. Most often specialists from the territorial organizations of the Russian Ministry for Emergency Situations (37.4%), the Russian Ministry of the Interior (25.2%), the Russian Federal Security Service (23.1%) participate in the exercises. Much less often are specialists of the Federal Guard Service (4.9%), Rospotrebnadzor (2.5%), and other organizations and services (6.9%).

An important measure in the implementation of the results of the exercises is the order and completeness of their communication to the participants of the exercises and the relevant medical specialists. Emphasis should be placed on those results, which would help to improve the preparedness of the health care system to respond to terrorist attacks.

It turned out that in the regions different methods are used for this purpose. This occurs during working meetings devoted to parsing and summarizing the results of the exercises (61.0%), is reflected in the materials of exercise reports (21.9%), and in the content of normative and methodological documents being developed (17.1%).



The majority (62.4%) of experts pointed to the need to develop an improved method of communicating the results of the exercises to medical specialists. It would be advisable to use analytical letters and briefs more often. Such documents would present data in comparison with the results of other similar exercises, as well as include methodological recommendations.

### Conclusion

At the present time, when terrorist activity in our country and in some states bordering Russia remains high, it is necessary to pay more attention to health-care preparedness to respond to emergency situations caused by terrorist acts and to eliminate their medico-sanitary consequences.

Long-term experience of work on life saving and health preservation of victims in extreme situations and the results of this research show that the main and the most effective form of maintaining and increasing the level of preparedness are special exercises. At such exercises, on the one hand, the level of knowledge, practical skills and competencies are tested, and on the other hand, the training of medical specialists is carried out.

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The research results show that when preparing and conducting such exercises in the regions an important role belongs to heads and relevant specialists of health care management bodies, regional centers of emergency medical care and disaster medicine and territorial centers of disaster medicine and medical treatment organizations. Their professional training in this direction largely determines the quality and effectiveness of special exercises held. The study has shown that the level of training of the mentioned medical specialists needs further improvement.

Therefore, the forms and methods of their training require a thorough revision.

It is advisable to correct both the Unified postgraduate programs of doctors' training in the medicine of catastrophes (organization of medical aid to the population in emergency situations), and the specific curricula of the cycles of thematic improvement.

Since the elimination of the consequences of terrorist acts is carried out with the involvement of forces and means under the jurisdiction of various federal and regional bodies of executive power, in order to improve the operational interaction it is necessary to practice the invitation of specialists of these structures for their adequate participation in special exercises.

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