

АКТУАЛЬНЫЕ ВОПРОСЫ ПОДГОТОВКИ МЕДИЦИНСКИХ СИЛ И СРЕДСТВ СЛУЖБЫ МЕДИЦИНЫ КАТАСТРОФ АЛТАЙСКОГО КРАЯ В РАМКАХ ПРОВЕДЕНИЯ КОМАНДНО-ШТАБНЫХ И ТАКТИКО-СПЕЦИАЛЬНЫХ УЧЕНИЙ

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Резюме. Цели исследования – обосновать применение табеля оснащения специализированных врачебно-сестринских бригад (ВСБ) Службы медицины катастроф (СМК) Алтайского края (Служба), предназначенных для ликвидации медико-санитарных последствий чрезвычайных ситуаций (ЧС), в том числе при проведении контртеррористических операций; в соответствии с разработанными ситуационными задачами обучить специалистов Службы навыкам проведения медицинской сортировки пострадавших и раненых с огнестрельными и осколочными ранениями в условиях полевого многопрофильного медицинского сортировочного пункта (ММСП).

Материалы и методы исследования. Материалы исследования – нормативные правовые акты в сфере организации и проведения контртеррористических учений с привлечением сил и средств СМК, в том числе материалы межведомственной рабочей группы, возглавлявшейся заместителем Губернатора Алтайского края. Проанализирована законодательная и нормативная правовая база. Изучен опыт проведения командно-штабного учения (КШУ) и ликвидации условных медико-санитарных потерь, в том числе при проведении контртеррористической операции, что позволило, в свою очередь, оценить систему оказания медицинской помощи и разработать комплекс мероприятий по совершенствованию Службы. При подведении итогов учения были проанализированы справки посреднического аппарата.

Результаты исследования и их анализ. В процессе учения в целях ликвидации медико-санитарных последствий ЧС была организована работа сил и средств Службы в догоспитальном и госпитальном периодах; развернут полевой ММСП; предусмотрено обеспечение силами СМК работы временных медицинских пунктов для оказания круглосуточной неотложной медицинской помощи в пунктах временного размещения (ПВР) населения; оказание психологической помощи обеспечивали специалисты Алтайской краевой клинической психиатрической больницы им. Ю.К.Эрдмана. Кроме того, в состоянии готовности находились сотрудники внештатного формирования Алтайского краевого бюро судебно-медицинской экспертизы. Таким образом, в соответствии с планом-заданием для муниципальных образований все силы и средства СМК были готовы к ликвидации медико-санитарных последствий ЧС.

Ключевые слова: Алтайский край, бригады скорой медицинской помощи, командно-штабное учение, контртеррористическая операция, лечебно-эвакуационное обеспечение, медицинская эвакуация, медицинская сортировка, медицинская помощь, первая помощь, пострадавшие, раненые, Служба медицины катастроф, тактико-специальное учение, территориальный центр медицины катастроф, чрезвычайная ситуация

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ACTUAL ISSUES OF PREPARATION OF MEDICAL FORCE AND MEANS OF SERVICE OF DISASTER MEDICINE OF ALTAY REGION WITHIN THE FRAMEWORK OF THE COMMAND-STAFF AND TACTICAL-SPECIAL EXERCISES

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Summary. Investigation purposes – to make reasonable a usage of equipment report card of specialized medical-nurses teams (MNT) of Service of disaster medicine (SDM) of Altay region (Service), made for elimination of medical-sanitary consequences of emergency situations (ES), including cases of conducting antiterrorists operations; to teach specialists, according to crated situation exercises, from Service a skills of medical sorting conduction of victims and injured with gunshot and shrapnel wounds in the conditions of field medical sorting point (FMSP).

Materials and methods of investigation. Investigation materials – normative legal acts in the spere of organization and conducting of antiterrorists exercises with attracting of forces and means of SDM, including material of inter-

department work group which leads by deputy Governor of Altay region. Legislative and regulatory framework were analyzed. Experience of conducting a command-staff exercises (CSE) and elimination of medical-sanitary losses, including losses in case of antiterrorists operations, was researched. It allowed to assess a system of medical treatment provision and to develop a complex of measures for Service improvement. During summarizing of exercises results of the intermediaries reference was analyzed.

Investigation results and their analysis. During the exercise to eliminate a medical-sanitary consequences of ES a work of Service forces and measures in pre-hospital periods was organized; FMSP was deployed; Ensuring of temporary medical points for providing round-the-clock urgent medical help in the points of temporary placement (PTP) of population by the forces of SDM was provided for; Provision of psychological help was ensured by specialists from Altay region clinical psychiatrist hospital named after Y.K. Ardman. In addition, members of unregular former of Altay region bureau of forensic medical examination were on alert. This way, all forces and measures of SDM were ready for the elimination of medical-sanitary consequences of ES according to the plan for municipal formers.

Key words: *Altay region, ambulance crew, antiterrorist operation, command-staff exercise, emergency situation, first aid, injured, medical evacuation, medical sorting, medical treatment, medical-evacuation ensuring, Service of disaster medicine, tactical-special exercise, territorial center of disaster medicine, victims*

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To ensure the fulfillment of the main tasks of the All-Russian Disaster Medicine Service, first of all — to eliminate medical and sanitary consequences of emergency situations (ES), the territorial centers of disaster medicine (TCDM) carry out various activities, one of which is the organization of exercises and competitions on disaster medicine, emergency and emergency medical assistance, as well as first aid in ES¹⁻⁴ [1].

At the present time exercises held with the participation of medical forces and means of the Disaster Medicine Service (DMS) of the Russian Ministry of Health have characteristic features and serve as one of the forms of research and testing of methods of solving tasks as well as actions to prevent and liquidate medical and sanitary consequences of emergencies. Exercises and drills are a form of training of the medical personnel of the respective facility and a method of testing their readiness to solve assigned tasks and duties in an environment as close to real conditions as possible [2, 3].

Command-staff exercise (CSE) is one of the forms of joint training of the managerial staff of management bodies, formations and DMS institutions of all levels [4].

Questioning or interviewing the personnel both before and after the Tactical and Specialized Exercises (TSE) or CSE allows identifying gaps in the knowledge of the respondents and the persistence of their knowledge after receiving practical skills.

On August 3, 2022, in Nalobikha, Kosikhinsky District of Altai Territory, a Shield-2022 exercise with elements of TSE was conducted, which involved the forces and means of Altai Territory DMS (hereinafter — DMS, Service).

In the course of the exercise the issues of organization and conduct in the field of medical triage of the injured⁵ (Fig. 1, 2) were practiced. Within the framework of the exercise a study was conducted.

Objectives of the study — to substantiate the application of the equipment table of specialized medical and nursing teams (MNTs) of the Altai Krai Disaster Medicine Service intended for liquidation of medical and sanitary consequences of emergency situations, including during counter-terrorist operations; in accordance with the developed situational tasks to train medical specialists of the Service in skills of medical triage of victims with fire and shrapnel wounds.

Materials and research methods. The study materials are normative legal acts in the sphere of organization and carrying out of counter-terrorist exercises with the involvement of DMS forces and means, including the materials of the interdepartmental working group headed by the Deputy Governor of Altai Krai. The legislative and regulatory framework has been analyzed. The experience of the emergency response and elimination of conditional medical and sanitary losses was studied, which allowed to evaluate the system of medical assistance and to develop a set of measures to improve the Service. In summarizing the results of the exercise, mediator's certificates were analyzed.

¹ On protection of population and territories from emergency situations of natural and man-made character: the Law of the Russian Federation of 11.11.1994, № 68. El. resource: http://www.consultant.ru/document/cons_doc_LAW_5295/ (with amendments and additions as of 11.06.2021).

² On the unified state system of prevention and liquidation of emergency situations: Law of the Russian Federation of 30.12.2003 No. 794. El. resource: http://www.consultant.ru/document/cons_doc_LAW_45914/ (as amended and supplemented as of 16.06.2022).

³ On approval of the nomenclature of medical organizations: the order of the Ministry of Health of Russia from 06.08.2013 №529n. http://www.consultant.ru/document/cons_doc_LAW_151979/ (as amended and supplemented as of 19.02.2020)

⁴ On approval of the Order of organization and provision by the All-Russian Disaster Medicine Service of medical assistance in emergency situations, including medical evacuation: order of the Ministry of Health of Russia from 06.11.2020 №1202n. Electronic resource: http://www.consultant.ru/document/cons_doc_LAW_117601/ (as amended and supplemented as of 06.08.2021).

⁵ On Approval of the Regulation on the All-Russian Disaster Medicine Service: Law of the Russian Federation of 26.08.2013 No. 734. El. resource: http://www.consultant.ru/document/cons_doc_LAW_117601/ (as amended and supplemented as of 12.10.2020)



Рис. 1. Работа медицинских специалистов
Fig. 1. Working of medical specialists

Results of the study and their analysis. In the course of the exercises medical forces and means of the Service were organized to eliminate medical and sanitary consequences of emergency in pre-hospital and hospital periods; a field multidisciplinary medical triage point was deployed; provision of temporary medical points to provide 24-hour emergency medical aid in temporary accommodation centers (TAC) by DMS forces; psychological aid was provided by specialists of Altai Krai Clinical Psychiatric Hospital named after Y.K. Erdman. Besides, employees of Altai Krai Forensic Medical Bureau were put in readiness. Thus, all forces and means were prepared in accordance with the assignment plan for the medical forces and means of the municipal entities included in the DMS⁶.

At all stages the interaction algorithm was carried out in accordance with the regulatory legal acts on providing measures related to suppression of a terrorist act or actions posing an immediate threat of its commission.

In order to practise medical and tactical measures to eliminate medical and sanitary consequences of emergencies situational tasks were developed and used in the training of DMS forces to conduct medical triage and provide medical assistance to victims of gunshot and shrapnel wounds in the deployed MTP. Thirty situational tasks were prepared to monitor their execution.

In the course of the exercise, the Service forces solved the tasks assigned to them in full and made tactically correct decisions, which allowed the medical personnel of the MTP to practice the skills of medical triage and medical care in "special conditions".

Example of a situational task (task No. 30).

Soldier G., 20 years old, received a gunshot wound to the left lower leg about 15 minutes ago in the course of combat. There is an oval-shaped 0.5×0.7 cm wound with minor bleeding on the anterior-external surface of the middle third of the left tibia; on the posterior surface there is a slightly larger wound with uneven edges. The wounded person moves independently, with additional support on a stick. The skin was of a normal color. Pulse — 88 beats/min; blood pressure (BP) — 120/70 mm Hg.

Tasks:

- make a diagnosis;
- list the necessary measures of primary pre-hospital/physician medical care;
- decide on the inclusion of the casualty in one of the medical triage groups and his medical evacuation.

⁶ About the task-plans of Altai Krai DMS: Order of Altai Krai Ministry of Health of 16.08.2021 №446



Рис. 2. Проведение медицинской сортировки пострадавших в полевых условиях
Fig. 2. Conducting of medical sorting of injured in field conditions

After the exercise, a knowledge survival test questionnaire was developed to assess the quality of health care workers' skills in systematically conducting TSE.

Conclusion

1. Conducting the CPE allowed to practice not only interdepartmental interaction, but also to work with the Service personnel.

2. Participation in the CPE of the Medical Forces of the LRC increases the visibility of training and practicing special skills in providing medical care in "special conditions".

3. Work in conditions of CPE of medical forces of the Service and application of means on purpose (layouts for work of brigades and provision of specialized medical aid) promotes formation of strategy of behavior in emergency and increases stress-resistance of medical personnel.

4. The developed situational tasks on rendering medical aid to the victims of gunshot and shrapnel wounds in the MTP allow the medical specialists of the Service to

Анкета-опросник

«Получение навыков при проведении ТСУ»

1. Какую должность Вы занимаете?	<ul style="list-style-type: none"> • Главный врач • Врач • Медсестра (брат) • Фельдшер
2. Периодичность проведения ТСУ. Дата проведения последних учений	<ul style="list-style-type: none"> • Раз в квартал • Раз в полгода • Раз в год • Не проводятся <hr/> Дата _____
3. Проходили ли у Вас ТСУ с участием ТЦМК?	<ul style="list-style-type: none"> • Да • Скорее да • Скорее нет • Нет
4. Как Вы считаете, необходим ли расчет сил и средств для ликвидации медико-санитарных последствий ЧС?	<ul style="list-style-type: none"> • Да • Скорее да • Скорее нет • Нет
5. Разрабатывается ли у Вас план МСО* / план действий в ЧС?	<ul style="list-style-type: none"> • Да • Скорее да • Скорее нет • Нет
6. Ведете ли Вы учет состояния оборудования (медицинского, технического), используемого при ликвидации медико-санитарных последствий ЧС?	<ul style="list-style-type: none"> • Да • Скорее да • Скорее нет • Нет

* МСО – медико-санитарное обеспечение

practice correctly the skills on making a diagnosis, a plan of therapeutic and evacuation measures, stages of medical aid, including performance of cardiopulmonary resuscitation, immobilization, methods and techniques of transportation, etc.

5. In order to plan the further conduct of the CPE and TSE by questionnaire, the survivability of knowledge and skills of the exercise participants was established, as well as, taking into account the responses received, the problematic issues were identified.

Prospects for the development and further improvement of the Service's forces:

1. Involvement of medical specialists of different levels of medical care in CPE and TSE.

2. Development of situational tasks not only for pre-hospital, but also, taking into account the nature of wounds and injuries, for the hospital period, taking into account the multilevel system of health care and possible routing of medical evacuation of victims.

3. In order to train future young specialists to provide participation of students of Altai State Medical University of the Ministry of Health of Russia (ASMU) as volunteer statisticians (conditional victims), which will increase the visibility of their training in studying the discipline "Disaster Medicine".

4. In order to plan and to improve the quality of activities on providing elimination of medical and sanitary consequences of emergencies, plan to develop a test-questionnaire in two versions — for its use both at the beginning of the command-staff exercise and at the end of it.

All of the above will contribute to the development of the medical forces of the Service, in particular, to the training of medical specialists in organizing and conducting medical triage and in providing medical care in "special conditions", the training of specialists with different levels of skills (medical staff, students), taking into account the basic knowledge and using the skills of tactical medicine.

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