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A.A. Aleksandrov<sup>1</sup>, A.G. Gumerov<sup>2</sup>, P.S. Khafizov<sup>3</sup>,  
G.A. Sharipov (Aubakirov)<sup>4</sup>, Waldemar Kozłowski<sup>5</sup>

<sup>1</sup>Bauman Moscow State Technical University, Moscow, Russian Federation;<sup>2</sup>Ufa State Oil University, Ufa, Russian Federation; <sup>3</sup>Ufa State Oil University, Ufa, Russian Federation;<sup>4</sup>Kokshetau Technical Institute of Emergency Committee of the Ministry of Internal Affairs  
of the Republic of Kazakhstan, Kokshetau, Kazakhstan;<sup>5</sup>University of Warmia and Mazury, Poland

2019emeraleksandrovA@mail.ru; 2019emergumerAs@mail.ru;

2019emerhafizovFa@mail.ru; [gabit\\_72@inbox.ru](mailto:gabit_72@inbox.ru)

## PUBLIC WARNING AS A BASIS FOR PROTECTION IN EMERGENCY SITUATIONS OF THE TECHNOGENOUS CHARACTER

**Abstract.** The given article deals with actual issues of the current state of public warning about the dangers arising due to natural and technogenic emergencies. There were defined problems of the existing state system of civil protection, public warning in emergency situations and recommendations to improve public awareness. There will be carried out a set of priority, rescue and emergency work done by civil protection authorities. As a result, there will be taken decisions on rescue and other urgent work, the correlation, depending on the prevailing situation in the course of liquidation must be taken into account. Timely public informing occurs from the moment a call comes in, assisting injured persons, and involving emergency services is one of the basic rules for reducing high mortality rates, injuries in emergencies. There were offered solutions to ensure the safety of the population and territories by upgrading the existing control systems of public warning. There are considered the ways of propaganda in the sphere of civil protection state system.

**Key words:** fire protection, fire protection technology, oil products, tank, combustible mixture, granular materials, heat flow, film thickness, foam destruction, highly inflammable liquid.

Measures aimed at the prevention of emergencies of various nature, accompanied by possible significant economic damage, the maximum reduction in the scale of losses in case of their occurrence have become a nationwide problem and an important task of central and local executive authorities [1].

One of the basic principles of civil protection is to minimize the threat and damage to citizens and society because of emergency situations [2].

The measures of civil protection and rapid response in emergency situations refer to the realization of interrelated actions of the State system governing bodies of civil protection to immediate receiving information about the place, time and nature of the emergency, timely warning of the population and interested organizations, as well as clarification and analysis of the situation decision making and emergency response organization by the appropriate forces [3].

The warning public system and the civil protection authorities are the main engineering and technical source of warning the population about emergencies, as well as bringing the authorities of the civil protection forces to various levels of readiness for emergency response. Accordingly, the degree of protection of the population depends on the ability of the system to effective performing of appropriate tasks. Therefore, the issues of warning and informing in the civil protection system, as well as improving the efficiency of the operation of warning systems, require close attention and seriously affect the general condition of the state security.

Informing the population of the Republic of Kazakhstan about the danger in emergency situations is one of the primary tasks of the state system of civil protection.

In accordance with the regulatory and legal acts of the Republic of Kazakhstan, the civil protection alert system is a set of software and hardware tools that inform the public and state bodies about the threat to human life and health, about the course of action in the current situation [4].

The main task of the warning system is timely, guaranteed and reliable delivery of signals to the governing bodies and information on actions in emergency situations of the population, as well as year-round functioning and constant readiness for using in all levels of the state civil defense system [5].

According to experts in the sphere of civil protection, measures to protect the population and territories of the Republic of Kazakhstan from natural and technogenic emergencies, rescue operations were carried out with greater efficiency, including, if some of the forces involved in rescue operations were deployed in advance near large population centers during the period of danger, thanks to timely and effective information.

In addition, it is advisable to have the basic elements of information and warning as the base for the reception of newly arrived forces and equipment during rescue and emergency operations. This action will enable to ensure the centralized distribution of the resource, reduce the possibility of unreasonable use of existing forces and means.

In this regard, the necessity to determine the places of advance forces and means deployment involved in emergency response in a given region is more than actual.

Timely public warning about the danger in an emergency situation will allow conducting a number of operational measures to protect the population from their negative consequences in the shortest possible time.

The relevance of this article lies in the fact that practical experience in dealing with emergencies in recent years indicates a positive growth trend in the number of injured persons. One of the reasons for the growth is the timeliness and degree of reliability of the authorities warning and population informing about the danger in emergency.

The aim of this article is to identify the problems of the existing public alert system in an emergency situation and to develop recommendations for raising public awareness.

The existing warning system, initially designed to serve large cities, districts and industrial facilities in peacetime and wartime, and does not cover rural settlements [6].

This fact became possible due to the abolition of the state communication network with the transfer of communications enterprises to private ownership; the radio wire broadcasting was liquidated [7]. Then, as previously, the local executive bodies of the administrative-territorial units had their own radio broadcasting network and their own broadcasting studio, which enabled them to prompt informing of a large part of the population.

The existing warning system does not allow interception of regional television and radio broadcasts, due to their transition to the digital broadcasting standard.

When warning the public using cell phones, the text of the SMS message must meet several requirements. Firstly, there should be included the information of actions order in a particular emergency situation and consist of several sentences. Secondly, it should be informative, i.e. it must not contain just the amount of different information, but encourage the person who received the SMS message to act in accordance with the given instructions. Thirdly, the text of one message should be limited in scope, include no more than 70 characters of SMS text. The fact that complicates the solution of these problems is that there are a great number of emergencies types that, in turn, have their own "unique" development scenario, caused by various factors. Therefore, at present, the public warning using SMS-messages is due to a number of difficulties [8].

Elimination of the revealed contradictions in the warning system will enable to reliable informing the population about the time, place and nature of emergencies and their possible course of action.

Also it is important the degree of the population readiness itself and the state of its system of learning the rules of behavior when receiving warning signals. The checks show an extremely low level of readiness of the population for independent actions even when receiving warning signals and sufficiently detailed informational messages. As part of solving the identified problematic issues, in public warning it is offered to develop and introduce SMS messages bank for typical development of an emergency situation that meets current requirements using cell phones.

An alternative approach of solving the issue of the population agitation is the creation of more intense programs with the involvement of animation means and high-quality television films.

However, these events cannot replace the colorful editions of leaflets addressed to residents of this particular city or district, which are distributed free of charge by the cooperative of apartment owners [9].

The leaflets may carry the following information: signal information; telephone numbers of the city duty services, characteristics of types of potent toxic substances, methods of protection against them and methods of assisting with lesions; locations of potentially hazardous objects; the most expedient evacuation routes, locations of evacuation points; addresses of shelters; radio frequencies and television interception programs of all levels that are designed to be used in the interest of informing the public in case of an emergency.

Obtaining qualitative results will enable compliance with a number of organizational and regulatory requirements in the course of effective measures for the preparation and rapid response to emergency situations [10, P.265].

One solution to this task lies in the development and implementation of a fundamentally new methodology for training personnel of state and local government, including:

- high-quality registering of information transfer receiving;
- clear fixation of temporal indicators of information exchange and the giving information reports to the concerned governing bodies;
- when receiving tasks from a higher governing body, emergency response manager or fire extinguishing manager, it is necessary to clarify specific time indicators for doing this task.

In conclusion, it should be noted that the existing hazard warning systems require further improvement in view of the modernization of the structure of governing bodies and new standards for television and radio broadcasting.

**Александров А.А., Гумеров А.Г., Хафизов Ф.Ш., Шарипов (Аубакиров) Г.А., Козловски Вальдемар**

#### **ХАЛЫҚТЫ ҚОРҒАУ НЕГІЗІ РЕТІНДЕ ХАБАРДАР ЕТУ ТЕХНОГЕНДІК СИПАТТАҒЫ ТӨТЕНШЕ ЖАҒДАЙЛАРДА**

**Аннотация.** Бұл мақалада табиғи және техногендік сипаттағы төтенше жағдайлар салдарынан туын-дайтын қауіптер туралы халықты хабардар етудің қазіргі жай-күйінің өзекті проблемалық мәселелері қаралды. Азаматтық қорғаудың қазіргі мемлекеттік жүйесінің, төтенше жағдай кезінде халықты құлақтандырудың және халықты ақпараттандыру деңгейін арттыру бойынша ұсынымдар әзірлеудің проблемалары анықталды. Төтенше жағдайдың ауқымы, сипаты, туындау уақыты және оның одан әрі таралуы туралы шынайы мәліметтерді айқындау кезінде азаматтық қорғау органдары орындайтын бірінші кезектегі, құтқару және кезек күттірмейтін жұмыстар мен іс-шаралардың көлемі қалыптасатын болады. Жою барысында қалыптасқан жағдайға байланысты корреляцияны ескере отырып, құтқару және басқа да кезек күттірмейтін жұмыстарды жүргізу жөнінде шешімдер қабылданатын болады. Халықты төтенше жағдайдың туындау қаупі туралы уақтылы хабардар ету шақыру келіп түскен, зардап шеккендерге көмек көрсеткен, шұғыл жедел қызметтерді тартқан сәттен бастап жүзеге асырылады. Байланыс арналарының дамуын ескере отырып, қауіптілік туралы халықты құлақтандыруды басқарудың қолданыстағы жүйелерін жаңғырту арқылы халықты ақпараттандыру кезінде халық пен аумақтардың қауіпсіздігін қамтамасыз ету бойынша шешімдер ұсынылды. Азаматтық қорғаудың мемлекеттік жүйесі саласында насихат жүргізу тәсілдері қарастырылды.

**Түйін сөздер:** ақпараттандыру, халықты ақпараттандыру, құлақтандыру, құлақтандыру жүйесі, азаматтық қорғау, азаматтық қорғаныс, төтенше жағдайлар, қауіп туралы құлақтандыру, халықты қорғау, төтенше жағдайлар, қауіптілік.

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**А.А. Александров<sup>1</sup>, А.Г. Гумеров<sup>2</sup>, Ф.Ш. Хафизов<sup>3</sup>, Г.А. Шарипов (Аубакиров)<sup>4</sup> Вальдемар Козловски<sup>5</sup>**

<sup>1</sup> Московский государственный технический университет им.Н.Э. Баумана, г. Москва, Российская Федерация;

<sup>2</sup> Уфимский государственный нефтяной технический университет, кафедра

«Пожарная и промышленная безопасность», г. Уфа, Российская Федерация;

<sup>3</sup> Уфимский государственный нефтяной технический университет, кафедра «Пожарная и промышленная безопасность», г. Уфа, Российская Федерация

<sup>4</sup> Кокшетауский технический институт Комитета по чрезвычайным ситуациям МВД Республики Казахстан, г. Кокшетау, Республика Казахстан, <sup>5</sup> Университет Вармья и Мазура, Польша

#### **ОПОВЕЩЕНИЕ НАСЕЛЕНИЯ КАК ОСНОВА ЗАЩИТЫ В ЧРЕЗВЫЧАЙНЫХ СИТУАЦИЯХ ТЕХНОГЕННОГО ХАРАКТЕРА**

**Аннотация.** В данной статье рассмотрены актуальные проблемные вопросы современного состояния оповещения населения об опасностях, возникающих вследствие чрезвычайных ситуаций природного и техногенного характера. Определены проблемы существующей государственной системы гражданской защиты, оповещения населения в условиях чрезвычайной ситуации и выработке рекомендации по повышению уровня информирования населения. При определении достоверных сведений о масштабе, характере, времени возникновения и дальнейшего его распространения

чрезвычайной ситуации, будет складываться объем первоочередных, спасательных и неотложных работ и мероприятия выполняемых органами гражданской защиты. Вследствие, которых будут приняты решения по проведению спасательных и других неотложных работ, с учетом корреляции, в зависимости от складывающейся обстановки в ходе ликвидации. Своевременное информирование населения об угрозе возникновения чрезвычайной ситуации осуществляется с момента поступления вызова, оказания помощи пострадавшим, привлечении экстренных оперативных служб является одним из основных правил снижения высокой смертности, получения травм и увечий, в условиях чрезвычайных ситуаций. Предложены решения по обеспечению безопасности населения и территорий при информировании населения, путем модернизации существующих систем управления оповещения населения об опасности с учетом развития каналов связи. Рассмотрены способы ведения пропаганды в области государственной системы гражданской защиты.

**Ключевые слова:** информирование, информирование населения, оповещение, система оповещения, гражданская защита, гражданская оборона, чрезвычайные ситуации, оповещение об опасности, защита населения, опасность.

**Information about authors:**

Aleksandrov A.A. - doctor of technical sciences, professor, rector, Bauman Moscow State Technical University, Russian Federation, Moscow;

Gumerov A.G. - doctor of technical sciences, professor, chair of fire and industrial safety, Ufa State Oil Technical University, Russian Federation, Ufa;

Khafizov P.S. - doctor of technical sciences, professor, head of the chair of fire and industrial safety, Ufa State Oil Technical University, Russian Federation, Ufa;

Sharipov (Aubakirov) G.A. - candidate of technical sciences, associate professor, chair of civil defense and military training, Kokshetau Technical Institute of Emergency Committee of the Ministry of Internal Affairs of the Republic of Kazakhstan, Republic of Kazakhstan, Kokshetau;

Waldemar Kozlowski - assistant professor of economy, University of Warmia and Mazury, Poland, Department of Business Economics

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