

## Review

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# Legal and Regulatory Framework for Provision of First Aid and Education in First Aid in Out-of-Hospital Cardiac Arrest

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**ABSTRACT** The likelihood of life recovery in out-of-hospital cardiac arrest (OHCA) critically depends on the speed of providing care. Basic bystander cardiopulmonary resuscitation in case of OHCA and automatic external defibrillation greatly increase the chances of survival. To ensure a high level of readiness of the population to provide first aid (FA), effective legal regulation is required. The article presents the results of a comprehensive analysis of the current regulatory legal acts of the Russian Federation governing the provision of FA in case of OHCA, as well as domestic and foreign scientific publications dedicated to legal support in the field of FA. In particular, the issues of protection of persons providing FA from legal liability in case of harm to the victim are discussed, the obligations established by the legislation to provide FA and train FA, suggestions are made to optimize the relevant legal framework in order to increase the efficiency of first aid for OHCA and reduce mortality from OHCA in Russia.

**Keywords:** cardiac arrest, first aid, cardiopulmonary resuscitation, training, legislation, law, liability, responsibilities, motivation

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AED, Automatic External Defibrillator

CPR, cardiopulmonary resuscitation

EEP, Essential Educational Program

ERC, European Resuscitation Council

FA, first aid

FSES, Federal State Educational Standard

MchS (Russian abbrev)/ EMERCOM (International abbrev)/Ministry of Emergency Situations, the Ministry of the Russian Federation for Civil Defense, Emergencies and Elimination of Consequences of Natural Disasters

OHCA, out-of-hospital cardiac arrest

RF, Russian Federation

## INTRODUCTION

The chances of saving life in cases of out-of-hospital cardiac arrest (OHCA) largely depend on the ability of eyewitnesses to provide first aid (FA) in a timely manner and correctly - to implement a complex of basic cardiopulmonary resuscitation (CPR) measures and, if possible, use an automatic external defibrillator (AED) until medical care team arrives [1].

Despite the indisputable importance of rendering FA by witnesses of OHCA, in many countries, including the Russian Federation (RF), eyewitnesses rarely undertake resuscitation attempts [2–5]. According to sociological studies, the common factors limiting the readiness of non-specialists to provide care for OHCA are the lack of relevant knowledge and skills, the fear of causing additional harm to the victim and fears about possible legal consequences [6–9].

Foreign experience indicates that the implementation of measures aimed at increasing the preparedness of the population to render FA can provide a significant increase in the rate of attempted resuscitation by the OHCA witnesses and a decrease in mortality [10, 11]. Optimization measures with a proven positive effect on survival in patients with OHCA include, in particular, educating the general population in the principles of basic and AED use [12], as well as providing public access to AEDs [13, 14], the implementing the practice of instructing the OHCA witnesses on FA by ambulance dispatchers via phone [1, 15]. Meanwhile, effective regulatory mechanisms are required both for the effective implementation of measures aimed at improving FA, and for the motivation of the general population to provide FA, [16].

In accordance with the RF Ministry of Health and Social Development Order No. 477n dated 04.05.2012, circulatory arrest is a condition in which FA, and the approved list of measures to provide FA includes all components of the currently used algorithm of basic CPR [17]. Consequently, the Russian legislation provisions regarding the FA provision apply, in particular, to the providing the basic CPR by OHCA.

Previous studies demonstrated the imperfections and the need to optimize the regulatory framework in the field of providing FA [18–20]. To determine the priority areas for improving the statutory regulation of rendering the FA in OHCA in Russia, it is necessary to study the peculiarities of the current organization of the relevant regulatory support in the RF and in other countries, which was the purpose of this review.

## **MATERIAL AND METHODS**

A comprehensive analysis of the regulatory legal acts governing the provision of FA and training in the FA provision in the RF, as well as an the analysis of Russian and foreign scientific publications covering the legal regulation of the FA provision in OHCA.

To search for the RF regulatory legal acts, the reference legal systems Garant and Consultant Plus were used. The search for scientific publications was carried out in the scientometric databases of the RSCI, Google Scholar, PubMed, Web of Science, and Scopus.

An additional information search on the topic of the review was carried out in open sources of information using the Google search engine.

## **RESULTS AND DISCUSSION**

### **PROTECTING FIRST AID GIVERS FROM LEGAL LIABILITY**

Fear of legal prosecution in connection with causing additional harm to the casualty or misconduct is a common barrier to rendering FA, including CPR, in many countries of the world, including the United States [6], countries of the European Union [21, 22], Asia [8, 23], and in Russia [9, 24].

In order to motivate people to provide assistance in urgent situations, the legislation of a number of countries uses the rule of law (legal concept), widely known as the Good Samaritan law, which protects a person who voluntarily and gratuitously attempted to provide FA, from liability in case of unintentional harm to the casualty [22, 25]. This legal norm does not apply to cases of harm caused by gross imprudence (negligence) or deliberate misconduct, as well as to cases of rendering assistance in the framework of professional duties [26].

Good Samaritan laws operate, in particular, in Australia [27], Canada [28], China [29], South Korea [30], throughout the United States [26]. However, in the United States, in some states, protection is provided only for people who have received special training: the laws of the states of California, Connecticut, Illinois, Indiana, Kansas, Louisiana, Missouri, and Oregon do not protect people who have no training at all [26].

The RF legislation in the field of criminal and administrative law provides for exemption from legal liability in the event of unintentional harm in the FA provision in accordance with the “extreme necessity” norm [31, 32] (Table 1). A similar legal norm is valid in many European countries, including Germany, Italy, Finland, France [25].

Table 1

**The norm of “extreme necessity” in the legislation of the Russian Federation**

Name of the normative legal act	Wording of the article
"The Criminal Code of the Russian Federation" dated 13.06.1996 No. 63-FZ [31]	Article 39. Extreme necessity. 1. It is not a crime to inflict harm on interests protected by criminal law in a state of extreme necessity, that is, to eliminate a danger that directly threatens the person and the rights of this person or other persons, the interests of society or the state protected by law, if this danger could not be eliminated by other means and at the same time, the limits of extreme necessity were not exceeded. 2. The exceeding of the limits of extreme necessity shall be deemed the infliction of harm that clearly does not correspond to the nature and degree of the threatened danger and the circumstances in which the danger was eliminated, when harm equal to or more significant than that prevented was caused to the specified interests. Such an excess entails criminal liability only in cases of intentional harm.
"Code of the Russian Federation on Administrative Offenses" dated 30.12.2001 No. 195-FZ [32]	Article 2.7. An urgent need. It is not an administrative offense for a person to inflict harm on legally protected interests in a state of extreme necessity, that is, to eliminate a danger that directly threatens the person and the rights of this person or other persons, as well as the interests of society or the state protected by law, if this danger could not be eliminated by other means and if the harm caused is less significant than the harm prevented.
"Civil Code of the Russian Federation (part two)" dated 26.01.1996 No. 14-FZ [33]	Article 1067. Causing harm in a state of extreme necessity. The harm caused in a state of extreme necessity, that is, to eliminate the danger threatening the harm-giver himself or other persons, if this danger under the given circumstances could not have been eliminated by other means, must be compensated by the person who caused the harm. Taking into account the circumstances in which such harm was caused, the court may impose the obligation to compensate it on a third person, in whose interests the person who caused the damage acted, or to release from compensation for damage in whole or in part both this third person and the person who caused the harm.

In case of OHCA, the greatest danger for the victim is the rapidly progressive hypoxic damage to the brain and other vital organs caused by the blood circulation cessation, which, in the absence of timely assistance, leads to a rapid decrease in the chances of survival and to the development of biological death [34]. Prior to the arrival of the ambulance team, measures aimed at eliminating this danger are to conduct the basic CPR and use AED by eyewitnesses of OHCA [1]. It is impossible to eliminate this danger by other means until qualified assistance arrives.

At the same time, the harm that can be caused by the actions of persons providing FA in OHCA is undoubtedly less significant compared to the risk of irreversible death due to delayed care. Resuscitation can lead to damage to bone structures (fractures of the ribs, sternum), vessels, and solid organs [35]; however, serious, life-threatening complications of CPR are extremely rare. Even in cases where eyewitnesses mistakenly resuscitated victims without cardiac arrest, complications were limited to chest pain or discomfort (12%) and rare cases of rib or sternum fractures (2%) [36].

Accordingly, inadvertent harm caused by basic CPR by a witness of OHCA meets the statutory criteria for harm in a state of urgency and should not be considered as exceeding the limits of urgency, since the interventions to provide FA are consistent with the imminent danger and are aimed directly at preserving the victim's life. On the contrary, the greatest harm to the victim with OHCA comes from the refusal of eyewitnesses to render FA.

Whereas the Criminal Code of the Russian Federation [31] and the Code of the Russian Federation on Administrative Offenses [32] create conditions for the protection of persons providing FA from prosecution in case of unintentional harm to the victim; the Civil Code of the Russian Federation [33] provides compensation for harm caused in a state of extreme necessity by the person who caused the harm (see Table 1), which can reduce the motivation of the country's population to render FA [18].

#### FIRST-AID RESPONSIBILITIES

In some countries, the rule of law imposes on citizens the obligation to render FA. Thus, the Criminal Code of Belgium, Germany, Portugal, Finland, France, Switzerland obliges all citizens to render FA and establishes punishment for refusing to provide assistance to a person in danger [22, 25]. In the United States, laws impose an obligation on incident witnesses to provide FA in two states (Minnesota and Vermont) [26].

The Russian legislation provides for sanctions for non-providing FA by certain persons who are obliged to provide FA (Table 2), but they are not applied to an unlimited circle of witnesses to the incident. In accordance with Part 1 of Article 31 of the Federal Law No. 323-FZ of November 21, 2011 "On the

Fundamentals of Health Protection of Citizens in the Russian Federation" [37], FA should be provided by "the persons obliged to provide FA in accordance with federal law or with a special rule and having appropriate training".

In addition to those categories of organized subjects indicated in Table. 2 who are to provide FA, the responsibility to render FA is assigned to certain categories of citizens.

Table 2

**Persons obliged to provide first aid in accordance with the current legislation, and references to the relevant regulatory legal acts of the Russian Federation**

Persons obliged to provide first aid	Name of the normative legal act establishing the obligation
Servicemen of the RF Armed Forces	the RF President Decree dated November 10, 2007 No. 1495 "On approval of the general military regulations of the Armed Forces of the Russian Federation" [38]
Servicemen (employees) of the National Guard troops	Federal Law of 03.07.2016 No. 226-FZ "On the troops of the National Guard of the Russian Federation" [39]
Employees of Departmental Security	Federal Law of April 14, 1999, No. 77-FZ "On departmental security" [40]
Employees of the RF internal affairs	Federal Law of 07.02.2011 No. 3-FZ "On the Police" [41] The President of the Russian Federation Decree of 15.06.1998 No. 711 "On additional measures to ensure road safety" [42]
Customs officers	Federal Law of 03.08.2018 No. 289-FZ "On customs regulation in the Russian Federation and on amendments to certain legislative acts of the Russian Federation" [43]
Employees of the Federal Security Service	Federal Law of 03.04.1995 No. 40-FZ "On the Federal Security Service" [44]
Employees, military personnel and employees of the State Fire Service and other types of fire protection	Federal Law of December 21, 1994 No. 69-FZ "On Fire Safety" [45] Federal Law of 06.05.2011 No. 100-FZ "On voluntary fire protection" [46]
Rescuers of rescue services and rescue teams	Federal Law of 22.08.1995 No. 151-FZ "On rescue services and the status of rescuers" [47] The RF Ministry of Emergency Situations (MchS of the RF) Order dated December 23, 2005, No. 999 "On approval of the Procedure for the creation of non-standard emergency rescue teams" [48]
Bailiffs	Federal Law of 21.07.1997 No. 118-FZ "On the enforcement agencies of the Russian Federation" [49]

Notes: MchS, Ministry of the Russian Federation for Civil Defense, Emergencies and Elimination of Consequences of Natural Disasters; FA, first aid; RF, Russian Federation

1. Vehicle drivers: in accordance with clause 2.6 of the RF Traffic Regulations [50], the driver involved in the road accident is obliged to take measures to render FA to the injured.

2. Employees of enterprises: in accordance with Article 228 of the RF Labor Code [51], in the event of an accident, the employer is obliged to immediately arrange a FA to the casualties (which implies rendering FA by the workers). In addition, the obligation of various categories of workers to render FA is established by various regulations that set up standard instructions for workers, labor protection rules, and qualification characteristics of workers' positions [18].

3. People participating in the protection of law and order: the obligations for this category to provide FA are established at the level of the laws of the individual federal subjects of Russia [18].

4. Employees of private security companies: in accordance with the Law of the Russian Federation dated 11.03.1992 No. 2487-1 "On private detective and security activities in the Russian Federation" [52].

5. Citizens of the Russian Federation: in the event of the introduction of a high alert or emergency situation, upon detection of an injured citizen, citizens are obliged to "take measures to call authorized officials and, before their arrival, in the absence of a threat to life and health, render FA to the casualties" [53].

It should be especially noted that the RF legislation currently in force enshrine the obligation to provide FA for medical workers, including those with higher medical education [19, 20].

Along with the obligation to provide FA for the aforementioned persons, Article 31 of the Federal Law "On the Fundamentals of Health Protection of Citizens in the Russian Federation" [37] secures the right to provide FA for drivers of vehicles and other persons with appropriate training and (or) skills.

For cases where the failure to provide FA by persons obliged to provide it in accordance with the law or with a special rule, in the absence of good reason, resulted in negligence causing moderate or serious harm to the health of the victim or the death of the victim, punishment is provided in accordance with Article 124 of the Criminal Code of the Russian Federation "Failure to provide assistance to the patient" [31].

In addition, Article 125 of the Criminal Code of the Russian Federation [31] "Leaving in danger" provides for punishment for "leaving without help a person who is in a state of danger to life or health and is deprived

of the opportunity to take measures for self-preservation due to childhood, old age, illness or due to his helplessness, in cases where the perpetrator had the opportunity to provide assistance to this person and was obliged to take care of him or he himself put him in a state of danger to life or health ”.

Therefore, for eyewitnesses of OHCA, who are not obliged to provide FA in accordance with the current legal regulations, they are not obliged to take care of the victim and did not put the victim's health at risk on their own, there is no legal liability for failure to provide FA in Russia.

#### OBLIGATORY FIRST AID TRAINING

International health organizations consider teaching the population the basics of FA, including basic CPR, as a relatively easy to implement, effective and low-cost way to limit preventable mortality and disability [16, 22].

Voluntary training FA cannot provide effective coverage of the population to form a sufficient contingent of people who are able to provide timely and correct assistance in a critical situation [54]. In countries with legally mandated compulsory education FA in schools, workplaces and / or driving courses, the proportion of people trained in assistance skills is significantly higher than in countries without appropriate regulations [22].

In Russia, compulsory training FA is provided for a wide range of people (Table 3). The wording of part 1 of Article 31 of the Federal Law No. 323-FZ "On the Fundamentals of Health Protection of Citizens in the Russian Federation" [37] suggests that appropriate training in FA should have persons who are obliged to provide FA in accordance with the Federal Law or with a special rule. At the same time, compulsory training FA is not mentioned in all regulations that establish the obligation to provide FA (see Tables 2, 3).

Table 3

#### Persons obliged to learn first aid in accordance with the current legislation, and references to the relevant regulatory legal acts of the Russian Federation

Persons required to undergo training in FA	Name of the normative legal act establishing the obligation
Servicemen of the Armed Forces of the Russian Federation	The RF President Decree dated November 10, 2007, No. 1495 "On approval of the general military regulations of the Armed Forces of the Russian Federation" [38]
Servicemen (employees) of the National Guard troops	Federal Law of 03.07.2016 No. 226-FZ "On the troops of the National Guard of the Russian Federation" [39]
Citizens of the Russian Federation	Federal Law of December 21, 1994, No. 68-FZ "On the protection of the population and territories from natural and man-made emergencies" [55] The RF Government Resolution of 04.09.2003 No. 547 "On training the population in the field of protection from emergencies of natural and man-made character" [56] The RF Government Resolution dated 02.11.2000 No. 841 "On approval of the Regulations on training the population in the field of civil defense" [57]
Citizens participating in the protection of law and order	Normative acts (laws) of the individual subjects of the Russian Federation [18]
Persons mastering educational programs of general education, secondary vocational education of any orientation, higher vocational education of any orientation [20]	Federal state educational standards
Persons mastering vocational training, retraining and advanced training programs for vehicle drivers	the RF Ministry of Education and Science Order dated December 26, 2013 No. 1408 "On Approval of Model Programs for Professional Training of Drivers of Vehicles of Corresponding Categories and Subcategories" [58] The RF Ministry of Education and Science Order of 12.05.2015 No. 486 "On Approval of Model Programs for Retraining Drivers of Vehicles of the Corresponding Categories and Subcategories" [59] The RF Ministry of Education and Science Order dated 01.03.2018 No. 161 "On Approval of Model Programs for Advanced Training of Drivers of Vehicles of the Corresponding Categories and Subcategories" [60]
Teaching employees	Federal Law of December 29, 2012 No. 273-FZ "On Education in the Russian Federation" [61]
Employees of enterprises	"Labor Code of the Russian Federation" dated 30.12.2001 No. 197-FZ [51] The RF Ministry of Labor and the RF Ministry of Education Resolution dated January 13, 2003 No. 1/29 "On Approval of the Procedure for Training in Labor Protection and Testing the Knowledge of Labor Protection Requirements for Employees of Organizations" [62]

Notes: FA, first aid; RF, Russian Federation

The circle of people obliged to be trained in FA is significantly expanded by the Federal Law "On the Protection of Population and Territories from Natural and Technogenic Emergencies" dated December 21, 1994, No. 68-FZ [55]. In accordance with Article 19 of this Law, the RF citizens of the are obliged to study "the methods of providing first aid to casualties, ... to constantly improve their knowledge and practical skills in

this area" [55]. However, the procedure for passing the FA training by RF, the frequency of such training and the criteria for the adequacy of such training have not been specified.

According to Part 4 of Article 31 of the Federal Law No. 323-FZ "On the Basics of Health Protection of Citizens in the Russian Federation" [37] "the availability of appropriate training and(or) skills" is a stipulation that determines the right of an unlimited number of people to provide FA, however, the concept of "appropriate training and(or) skills" has not been disclosed in any of the regulatory legal acts of the Russian Federation [19].

An earlier review of the FA training programs operating in the RF showed that most of them had been developed before the adoption of the Federal Law No. 323-FZ [37] and the RF Ministry of Health and Social Development Order No. 477n, approving the list of conditions in which FA shall be rendered, and a list of measures to provide FA [17], and, as a result, the programs often do not comply with the current legislation, contain outdated or incorrect methods of providing FA [20].

This was the reason for the development of the "Model curriculum for training the persons obliged and(or) entitled to provide first aid", "Model program of additional professional education - advanced training for the preparation of first aid teachers" and the corresponding educational and methodological complex for FA [63], which are recommended by the RF Healthcare Ministry for implementation in the educational process in order to systematize, unify, and improve the quality of teaching FA in Russia. The approximate training program in FA provides for training in the theoretical bases and skills of basic CPR (4 academic hours); and the description of the principles of providing FA in circulatory arrest in the educational and methodological complex is based on the up-to-date recommendations of the European Resuscitation Council (ERC) [1].

#### THE REGULARITY OF OBLIGATORY RETRAINING IN CARDIOPULMONARY RESUSCITATION

Given that basic CPR skills have a clear tendency to fade over time [64], the regular retraining is necessary to retain the readiness of the population to render FA in OHCA. According to ERC Guidelines, retraining in basic CPR should be provided at least each 12–24 months. [65].

There are no unified legislative requirements for the frequency of retraining of persons obliged to provide FA in Russia. The regulatory legal acts imputing the obligation of rendering FA (See Table 2) and of training in FA (see Table 3), do not impose requirements to regular periodic training in FA. According to the RF Ministry of Labor and RF Ministry of Education Resolution dated January 13, 2003 No. 1/29 "On Approval of the Procedure for Training in Labor Protection and Testing the Knowledge of Labor Protection Requirements for Employees of Organizations" [62], the employer is obliged to organize periodic, at least once a year, training of workers in blue-collar occupations to provide FA.

A recent survey of Crimean residents showed that of the people who have ever been trained in CPR (53% of the population of the peninsula are over 18 years old), almost half have been trained only once; and in most cases, the time elapsed since the previous training exceeded one year [9].

#### TRAINING IN CARDIOPULMONARY RESUSCITATION IN SECONDARY SCHOOLS

Schoolchildren constitute the optimal target audience for teaching the principles and methods of providing FA in OHCA. CPR teaching at school has a proven high efficiency, allows to reaching all strata of society in the future and to ensure a significant coverage of the population with the necessary knowledge and skills [54, 66].

Compulsory training in basic CPR in the framework of the school curriculum is considered by the world resuscitation community as one of the most important ways to increase the frequency of rendering care and reduce mortality in case of OHCA [54, 65].

In 2015, the World Health Organization endorsed a proposal put forward by ERC and the International Conciliation Committee on Resuscitation to recommend an annual two-hour training in basic CPR for children in all schools around the world starting from the age of 12 years or younger [54].

Compulsory education of all schoolchildren in basic CPR is enshrined at the legislative level in 27 of 50 US states [67], as well as in a number of European countries, including Belgium, Germany, Denmark, Italy, Norway, Portugal and France [22, 68–70]. In the regions where the practice of compulsory CPR teaching in schools was introduced, a higher frequency of resuscitation by witnesses of OHCA and a higher survival rate were noted [65, 69].

In the Russian Federation, teaching FA in schools is provided for by Federal State Educational Standards (FSES). FSES of basic general education (grades 5-9) [71] and secondary general education (grades 10-11) [72], which establish requirements for the structure, conditions of implementation, and results of mastering the corresponding essential educational programs (EEP), include a number of provisions indicating the need for mastering FA in the school curriculum (Table 4). However, a circulatory arrest as a condition in which FA is rendered, and CPR as an intervention to provide FA, are not mentioned in FSES. FSES of primary general education (grades 1-4) [73] does not contain requirements for teaching children in FA or CPR.

Table 4

**Statements of the Federal State Educational Standard of basic general and secondary general education, establishing the requirements for teaching first aid**

FSES level	Section	Quote
FSES of basic general education [71]	II. Requirements for the results of mastering EEP of basic general education	Subject results of studying the subject area "Natural science subjects" should reflect: [...] Biology: [...] mastering the methods of providing FA [...]
		Subject results of studying the subject area "Physical culture and the basics of life safety" should reflect: [...] Fundamentals of life safety: [...] the ability to provide FA to victims [...]
FSES of secondary general education [72]	II. Requirements for the results of the development of EEP	The personal results of the development of EEP should reflect: [...] the ability to provide FA [...]
		The study of the subjects "Physical Education", "Ecology" and "Fundamentals of Life Safety" should provide: [...] possession of [...] the skills of providing FA to victims [...] "Fundamentals of life safety" (basic level) - the requirements for the subject results of mastering the basic course of the fundamentals of life safety should reflect: [...] mastery of the basics of medical knowledge and the provision of FA to victims in emergency conditions (with injuries, poisoning and various types of injuries), including knowledge about major infectious diseases and their prevention

Notes: EEP, Essential Educational Program; FA, first aid; FSES, Federal State Educational Standard

Developed on the basis of FSES and approved by the federal educational and methodological association for general education, the suggested EEP of basic general education and secondary general education include the methods of providing FA as a results of studying the course of biology [74] and the basics of life safety [74, 75] ... However, the provision of FA in cardiac arrest is mentioned only in the EEP of basic general education in the group of results "The graduate will have the opportunity to learn" of the subject "Fundamentals of Life Safety", which involves the provision of these results by the teacher in relation to some of the most motivated and capable students, but not all students [74]. In EEP of secondary general education, among the compulsory results of studying the subject "Fundamentals of Life Safety" there is the ability to "provide first aid in case of emergency" without specifying conditions and measures for rendering FA [75].

#### REGULATORY STANDARDS OF THE AUTOMATIC EXTERNAL DEFIBRILLATOR USE

When defibrillation is performed within 3-5 minutes after cardiac arrest, the survival rate can reach 50-70%, while every minute of defibrillation delay, on the contrary, reduces the chances of a favorable outcome by 10%-12% [1]. Taking into account the proven high efficiency and safety of defibrillation performed by bystanders of OHCA using AED [13, 14], the introduction of public access programs to defibrillation is recommended to reduce mortality from OHCA [1]. Such programs involve the placement of AED in public places and the possibility of using the device in cases of OHCA by eyewitnesses of the incident, which requires an appropriate legal base.

Laws establishing norms for the AED use have been adopted throughout the United States [76], in a number of European countries [77], in Japan [78]. The American Heart Association recommends that regulations governing the AED use should cover the following key areas: 1) protecting caregivers from legal liability; 2) training the population in the skills of CPR and the AED use; 3) providing communication between the local public access program for defibrillation and the corresponding emergency medical service (registering AED and informing the service about the location of AED) [76].

The rights, obligations, and conditions of using AED as part of the FA provision in OHCA are not regulated by the legislation of the Russian Federation. Under consideration of the State Duma there is the Draft Law "On Amendments to Article 31 of the Federal Law "On the Fundamentals of Health Protection of Citizens in the Russian Federation", according to which" in the event of situations requiring the provision of FA using AED,

such assistance can be provided by an unlimited circle of persons" [79]. It is assumed that the introduction of appropriate amendments to Article 31 will require amendments to Order No. 477n "On the approval of the list of conditions in which first aid is provided and the list of first aid measures" [17], as well as the RF Government approval of the regulations for the provision of assistance using AED and their placement rules, information about the use, and requirements for AED accommodation facilities in RF [79].

## CONCLUSION

According to the International Committee of the Red Cross in the world, the legal regulation of the provision and training of first aid techniques is characterized by significant heterogeneity, in many countries there are serious gaps in this area [22]. In order to significantly increase the involvement of the population in the process of first aid, the International Committee of the Red Cross recommends that measures to optimize the regulatory framework be directed towards strengthening the protection of first aid providers from legal liability and popularizing relevant information, establishing compulsory training, and approving first aid training standards [22].

Russian legislation lays down the fundamental principles of legal regulation of first aid in life-threatening conditions, including cardiopulmonary resuscitation by witnesses of out-of-hospital cardiac arrest. However, the actual frequency of rendering first aid and the readiness of the Russian Federation residents to provide first aid remain low [9, 24, 80], which indicates the need to optimize the regulatory legal provision in the field of first aid. The results of the analysis allow us to determine the directions for improving the current regulatory framework of the Russian Federation in order to increase the first aid efficiency in out-of-hospital cardiac arrest:

- in order to increase the number of people who are able to attempt cardiopulmonary resuscitation in cases of out-of-hospital cardiac arrest, it is necessary to optimize the legal norms governing the first aid training, in terms of establishing the procedure for passing the first aid training and the rate of retraining, ensuring standardization, quality assurance and monitoring the first aid training;
- in accordance with the recommendations of international health authorities, compulsory training in cardiopulmonary resuscitation in Russian general education schools should be regulated. To do this, it is necessary to amend the sample basic educational programs of basic general education and secondary general education in order to include basic cardiopulmonary resuscitation in the list of mandatory results of mastering the basic educational program for all students and provide for an annual two-hour retraining in cardiopulmonary resuscitation;
- an open public discussion is required on the issues of excluding the obligation to compensate for damage by a person who caused harm in a state of extreme necessity; of establishing legal responsibility on an unlimited number of persons for non-rendering assistance establishing the obligation on healthcare providers to provide first aid;
- it seems important to establish the mechanisms in the current legislation for popularizing knowledge on the issues of legal regulation in the field of first aid among the population.

The above modifications aimed at legal stimulation of the population to learn first aid techniques and rendering first aid, alongside with the adoption of legislative norms allowing and regulating the use of an automatic external defibrillator within the framework of in first aid, should contribute to increasing the number of providing resuscitation by witnesses of out-of-hospital cardiac arrest, increasing effectiveness of first aid in out-of-hospital cardiac arrest and a decreasing the mortality rate of the country's population.

For further planning, development and approval of specific rule-making proposals for improving the system of legal regulation in the field of first aid and training in first aid, a coordinated interaction of executive authorities and public organizations with the direct participation of people with special knowledge and professional skills in law-making is required. One of the steps in this direction was the implementation of the decision of the RF Healthcare Ministry Specialist Committee on "First Aid" to create Expert Councils for improving various areas of first aid with the inclusion of professional community representatives together with members of the Specialist Committee [81].



## REFERENCES

- Perkins GD, Handley AJ, Koster RW, Castrén M, Smyth MA, Olasveengen T, et al. European Resuscitation Council Guidelines for Resuscitation 2015: Section 2. Adult basic life support and automated external defibrillation. *Resuscitation*. 2015;95:81–99. <https://doi.org/10.1016/j.resuscitation.2015.07.015>
- Ge Y, Cai M, Sun K, Li X, Jiang L, Lu Y. The current status analysis of bystander-initiated cardiopulmonary resuscitation for out-of-hospital cardiac arrest. *Chinese Journal of Critical Care Medicine*. 2015;5:477–480.
- Ong ME, Shin SD, De Souza NN, Tanaka H, Nishiuchi T, Song KJ, et al. Outcomes for out-of-hospital cardiac arrests across 7 countries in Asia: The Pan Asian Resuscitation Outcomes Study (PAROS). *Resuscitation*. 2015;96:100–108. <https://doi.org/10.1016/j.resuscitation.2015.07.026>
- Krishna CK, Showkat HI, Taktani M, Khatri V. Out of hospital cardiac arrest resuscitation outcome in North India – CARO study. *World J Emerg Med*. 2017;8(3):200–205. <https://doi.org/10.5847/wjem.j.1920-8642.2017.03.007>
- Birkun A, Frolova L. Introducing the Crimean Out-of-Hospital Cardiac Arrest and Resuscitation Registry (COHCARR): rationale, design and 6-month baseline data. *Journal Resuscitatio Balcanica*. 2019;14:198–205. <https://doi.org/10.5937/JRB1914198B>
- Coons SJ, Guy MC. Performing bystander CPR for sudden cardiac arrest: behavioral intentions among the general adult population in Arizona. *Resuscitation*. 2009;80(3):334–340. <https://doi.org/10.1016/j.resuscitation.2008.11.024>
- Rajapakse R, Noc M, Kersnik J. Public knowledge of cardiopulmonary resuscitation in Republic of Slovenia. *Wiener Klinische Wochenschr*. 2010;122:667–672.
- Chen M, Wang Y, Li X, Hou L, Wang Y, Liu J, et al. Public Knowledge and Attitudes towards Bystander Cardiopulmonary Resuscitation in China. *Biomed Res Int*. 2017;2017:3250485. <https://doi.org/10.1155/2017/3250485>
- Birkun A, Kosova Y. Social attitude and willingness to attend cardiopulmonary resuscitation training and perform resuscitation in the Crimea. *World J Emerg Med*. 2018;9(4):237–248. <https://doi.org/10.5847/wjem.j.1920-8642.2018.04.001>
- Hasselqvist-Ax I, Riva G, Herlitz J, Rosenqvist M, Hollenberg J, Nordberg P, et al. Early cardiopulmonary resuscitation in out of hospital cardiac arrest. *N Engl J Med*. 2015;372:2307–2315. <https://doi.org/10.1056/NEJMoa1405796>
- Malta Hansen C, Kragholm K, Pearson DA, Tyson C, Monk L, Myers B, et al. Association of Bystander and First-Responder Intervention With Survival After Out-of-Hospital Cardiac Arrest in North Carolina, 2010–2013. *JAMA*. 2015;314(3): 255–264. <https://doi.org/10.1001/jama.2015.7938>
- Finn JC, Bhanji F, Lockey A, Monsieurs K, Frengley R, Iwami T, et al. Part 8: Education, implementation, and teams: 2015 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. *Resuscitation*. 2015;95:e203–224. <https://doi.org/10.1016/j.resuscitation.2015.07.046>
- Weisfeldt ML, Sitlani CM, Ornato JP, Rea T, Aufderheide TP, Davis D, et al. Survival after application of automatic external defibrillators before arrival of the emergency medical system: evaluation in the resuscitation outcomes consortium population of 21 million. *J Am Coll Cardiol*. 2010;55(16):1713–1720. <https://doi.org/10.1016/j.jacc.2009.11.077>
- Blom MT, Beesems SG, Homma PC, Zijlstra JA, Hulleman M, van Hoeijen DA, et al. Improved survival after out-of-hospital cardiac arrest and use of automated external defibrillators. *Circulation*. 2014;130(21):1868–1875. <https://doi.org/10.1161/CIRCULATIONAHA.114.010905>
- Song KJ, Shin SD, Park CB, Kim JY, Kim DK, Kim CH, et al. Dispatcher-assisted bystander cardiopulmonary resuscitation in a metropolitan city: A before-after population-based study. *Resuscitation*. 2014;85:34–41. <https://doi.org/10.1016/j.resuscitation.2013.06.004>
- Friesen J, Patterson D, Munjal K. Cardiopulmonary Resuscitation in Resource-limited Health Systems-Considerations for Training and Delivery. *Prehosp Disaster Med*. 2015;30(1):97–101. <https://doi.org/10.1017/S1049023X14001265>
- Prikaz Minzdravotsrazvitiya Rossii ot 04.05.2012 No 477n “Ob utverzhdenii perechnya sostoyaniy, pri kotorykh okazyvaetsya pervaya pomoshch’, i perechnya meropriyatiy po okazaniyu pervoy pomoshchi”. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_129862](http://www.consultant.ru/document/cons_doc_LAW_129862) [Accessed April 09, 2020] (In Russ.).
- Boyarintsev VV., Dezhurny LI, Zakurdaeva AYU, Levinson TV, Neudakhin GV, Pakhomov PV, et al. In: Dezhurny LI, Boyarintsev VV (eds.). *First aid: Bleedings*. Voronezh: Nauchnaya kniga Publ.; 2013. (In Russ.).
- Zakurdaeva AYU, Dezhurny LI. Legal aspects of first aid providing by medical workers. *Medical Law: Theory And Practice*. 2018;1(7):25–31. (In Russ.).
- Dezhurniy L., Kudrina V., Zakurdayeva A. Problems of the statutory regulation of first aid treatment in the Russian Federation. *MIA Medical Bulletin*. 2019;2(99):8–15. (In Russ.).
- Savastano S, Vanni V. Cardiopulmonary resuscitation in real life: the most frequent fears of lay rescuers. *Resuscitation*. 2011;82(5):568–571. <https://doi.org/10.1016/j.resuscitation.2010.12.010>
- International Federation of the Red Cross and Red Crescent Societies. *Law and first aid: Promoting and protecting life-saving action*. Geneva: IFRC. 2015. Available at: [https://www.ifrc.org/Global/Photos/Secretariat/201506/First%20Aid%20Law%20Advocacy%20Report%20\(final\).pdf](https://www.ifrc.org/Global/Photos/Secretariat/201506/First%20Aid%20Law%20Advocacy%20Report%20(final).pdf) [Accessed April 09, 2020].
- Sajithkumar P, Ratna P. Bystander CPR during out-of-hospital cardiac arrest among patients brought to emergency department. *IOSR Journal of Nursing and Health Science*. 2015;3(4):43–45.
- Dezhurny L, Lysenko K, Baturin D. The role of unprofessional emergency aid to a victim in avoiding untimely death in Russia. *Social Aspects of Population Health*. 2011;2(18):21. (In Russ.).
- The Dan Legal Network. *The Good Samaritan Law across Europe*. Available at: [https://www.daneurope.org/c/document\\_library/get\\_file?uuid=c09228f3-a745-480b-9549-d9fc8bbbd535&groupId=10103](https://www.daneurope.org/c/document_library/get_file?uuid=c09228f3-a745-480b-9549-d9fc8bbbd535&groupId=10103) [Accessed April 09, 2020].
- Matt SB. Good Samaritan laws: Will I be protected if I help? *Nurse Pract*. 2018;43(3):52–54. <https://doi.org/10.1097/01.NPR.0000530216.62772.19>
- Gulam H, Devereux J. A brief primer on Good Samaritan law for health care professionals. *Aust Health Rev*. 2007;31(3):478–482. <https://doi.org/10.1071/ah070478>

28. *Good Samaritan Act* [RSBC 1996]. Chapter 172. Victoria, British Columbia, Canada. Available at: [http://www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/00\\_96172\\_01](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_96172_01) [Accessed April 09, 2020].
29. Global Times. A new law in China protects people who help others from being civilly liable. 2017. Available at: <http://www.globaltimes.cn/content/1072095.shtml> [Accessed April 09, 2020].
30. Son JW, Ryoo HW, Moon S, Kim JY, Ahn JY, Park JB, et al. Association between public cardiopulmonary resuscitation education and the willingness to perform bystander cardiopulmonary resuscitation: a metropolitan citywide survey. *Clin Exp Emerg Med*. 2017;4(2):80–87. <https://doi.org/10.15441/ceem.16.160>
31. *Ugolovnyy kodeks Rossiyskoy Federatsii ot 13.06.1996 No 63-FZ*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_10699](http://www.consultant.ru/document/cons_doc_LAW_10699) [Accessed April 09, 2020]. (In Russ.).
32. *Kodeks Rossiyskoy Federatsii ob administrativnykh pravonarusheniyakh ot 30.12.2001 No 195-FZ*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_34661](http://www.consultant.ru/document/cons_doc_LAW_34661) [Accessed April 09, 2020]. (In Russ.).
33. *Grazhdanskiy kodeks Rossiyskoy Federatsii (chast' vtoraya) ot 26.01.1996 No 14-FZ*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_9027](http://www.consultant.ru/document/cons_doc_LAW_9027) [Accessed April 09, 2020]. (In Russ.).
34. Larsen MP, Eisenberg MS, Cummins RO, Hallstrom AP. Predicting survival from out-of-hospital cardiac arrest: a graphic model. *Annals of Emergency Medicine*. 1993;22(11):1652–1658. [https://doi.org/10.1016/s0196-0644\(05\)81302-2](https://doi.org/10.1016/s0196-0644(05)81302-2)
35. Krischer JP, Fine EG, Davis JH, Nagel EL. Complications of cardiac resuscitation. *Chest*. 1987;92(2): 287–291.
36. White L, Rogers J, Bloomingdale M, Fahrenbruch C, Culley L, Subido C, et al. Dispatcher-assisted cardiopulmonary resuscitation: risks for patients not in cardiac arrest. *Circulation*. 2010;121(1):91–97. <https://doi.org/10.1161/CIRCULATIONAHA.109.872366>
37. *Federal'nyy zakon "Ob osnovakh okhrany zdorov'ya grazhdan v Rossiyskoy Federatsii" ot 21.11.2011 No 323-FZ*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_121895](http://www.consultant.ru/document/cons_doc_LAW_121895) [Accessed April 09, 2020]. (In Russ.).
38. *Ukaz Prezidenta RF ot 10.11.2007 No 1495 "Ob utverzhdenii obshchevoinskikh ustavov Vooruzhennykh Sil Rossiyskoy Federatsii" (vmeste s "Ustavom vnutrenney sluzhby Vooruzhennykh Sil Rossiyskoy Federatsii", "Distiplinarnym ustavom Vooruzhennykh Sil Rossiyskoy Federatsii", "Ustavom garnizonnoy i karaul'noy sluzhby Vooruzhennykh Sil Rossiyskoy Federatsii")*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_72806](http://www.consultant.ru/document/cons_doc_LAW_72806) [Accessed April 09, 2020]. (In Russ.).
39. *Federal'nyy zakon ot 03.07.2016 No 226-FZ "O voyskakh natsional'noy gvardii Rossiyskoy Federatsii"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_200506](http://www.consultant.ru/document/cons_doc_LAW_200506) [Accessed April 09, 2020]. (In Russ.).
40. *Federal'nyy zakon ot 14.04.1999 No 77-FZ "O vedomstvennoy okhrane"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_22716](http://www.consultant.ru/document/cons_doc_LAW_22716) [Accessed April 09, 2020]. (In Russ.).
41. *Federal'nyy zakon ot 07.02.2011 No 3-FZ "O politzii"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_110165](http://www.consultant.ru/document/cons_doc_LAW_110165) [Accessed April 09, 2020]. (In Russ.).
42. *Ukaz Prezidenta RF ot 15.06.1998 No 711 "O dopolnitel'nykh merakh po obespecheniyu bezopasnosti dorozhnogo dvizheniya" (vmeste s "Polozheniem o Gosudarstvennoy inspeksii bezopasnosti dorozhnogo dvizheniya Ministerstva vnutrennikh del Rossiyskoy Federatsii")*. Available at: <http://pravo.gov.ru/proxy/ips/?docbody=&prevDoc=102056733&backlink=1&&nd=102053637> [Accessed April 09, 2020]. (In Russ.).
43. *Federal'nyy zakon ot 03.08.2018 No 289-FZ "O tamozhennom regulirovaniy v Rossiyskoy Federatsii i o vnesenii izmeneniy v otdel'nye zakonodatel'nye akty Rossiyskoy Federatsii"*. Available at: <https://base.garant.ru/72005502> [Accessed April 09, 2020]. (In Russ.).
44. *Federal'nyy zakon ot 03.04.1995 No 40-FZ "O federal'noy sluzhbe bezopasnosti"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_6300](http://www.consultant.ru/document/cons_doc_LAW_6300) [Accessed April 09, 2020]. (In Russ.).
45. *Federal'nyy zakon ot 21.12.1994 No 69-FZ "O pozharnoy bezopasnosti"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_5438](http://www.consultant.ru/document/cons_doc_LAW_5438) [Accessed April 09, 2020]. (In Russ.).
46. *Federal'nyy zakon ot 06.05.2011 No 100-FZ "O dobrovol'noy pozharnoy okhrane"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_113763](http://www.consultant.ru/document/cons_doc_LAW_113763) [Accessed April 09, 2020]. (In Russ.).
47. *Federal'nyy zakon ot 22.08.1995 No 151-FZ "Ob aviarnykh spazatel'nykh sluzhbach i statuse spazateley"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_7746](http://www.consultant.ru/document/cons_doc_LAW_7746) [Accessed April 09, 2020]. (In Russ.).
48. *Prikaz MChS RF ot 23.12.2005 No 999 "Ob utverzhdenii Poryadka sozdaniya neshtatnykh aviarnykh spazatel'nykh formirovaniy"*. Available at: <http://base.garant.ru/189082> [Accessed April 09, 2020]. (In Russ.).
49. *Federal'nyy zakon ot 21.07.1997 No 118-FZ "Ob organakh prinuditel'nogo ispolneniya Rossiyskoy Federatsii"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_15281](http://www.consultant.ru/document/cons_doc_LAW_15281) [Accessed April 09, 2020]. (In Russ.).
50. *Postanovlenie Pravitel'stva RF ot 23.10.1993 No 1090 "O Pravilakh dorozhnogo dvizheniya" (vmeste s "Osnovnymi polozheniyami po dopusku transportnykh sredstv k ekspluatatsii i obyazannosti dolzhnostnykh lits po obespecheniyu bezopasnosti dorozhnogo dvizheniya")*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_2709](http://www.consultant.ru/document/cons_doc_LAW_2709) [Accessed April 09, 2020]. (In Russ.).
51. *"Trudovoy kodeks Rossiyskoy Federatsii" ot 30.12.2001 No 197-FZ*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_34683](http://www.consultant.ru/document/cons_doc_LAW_34683) [Accessed April 09, 2020]. (In Russ.).
52. *Zakon RF ot 11.03.1992 No 2487-1 "O chastnoy detektivnoy i okhrannoy deyatel'nosti v Rossiyskoy Federatsii"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_385](http://www.consultant.ru/document/cons_doc_LAW_385) [Accessed April 09, 2020]. (In Russ.).
53. *Postanovlenie Pravitel'stva RF ot 02.04.2020 No 417 "Ob utverzhdenii Pravil povedeniya, obyazatel'nykh dlya ispolneniya grazhdanami i organizatsiyami, pri vvedenii rezhima povyshennoy gotovnosti ili chrezvychaynoy situatsii"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_349314](http://www.consultant.ru/document/cons_doc_LAW_349314) [Accessed April 09, 2020]. (In Russ.).
54. Böttiger BW, Van Aken H. Kids save lives – Training school children in cardiopulmonary resuscitation worldwide is now endorsed by the World Health Organization (WHO). *Resuscitation*. 2015;94:A5–7. <https://doi.org/10.1016/j.resuscitation.2015.07.005>
55. *Federal'nyy zakon ot 21.12.1994 No 68-FZ "O zashchite naseleniya i territoriy ot chrezvychaynykh situatsiy prirodnogo i tekhnogennogo kharaktera"*. Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_5295](http://www.consultant.ru/document/cons_doc_LAW_5295) [Accessed April 09, 2020]. (In Russ.).
56. *Postanovlenie Pravitel'stva RF ot 04.09.2003 No 547 "O podgotovke naseleniya v oblasti zashchity ot chrezvychaynykh situatsiy prirodnogo i tekhnogennogo kharaktera"*. Available at: <http://base.garant.ru/12132351> [Accessed April 09, 2020]. (In Russ.).
57. *Postanovlenie Pravitel'stva RF ot 02.11.2000 No 841 "Ob utverzhdenii Polozheniya o podgotovke naseleniya v oblasti grazhdanskoy oborony"*. Available at: <http://base.garant.ru/182661> [Accessed April 09, 2020]. (In Russ.).

58. Prikaz Minobrnauki Rossii ot 26.12.2013 No 1408 "Ob utverzhdenii primernykh programm professional'nogo obucheniya voditeley transportnykh sredstv sootvetstvuyushchikh kategoriy i podkategoriy". Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_165639](http://www.consultant.ru/document/cons_doc_LAW_165639) [Accessed April 09, 2020]. (In Russ.).
59. Prikaz Ministerstva obrazovaniya i nauki RF ot 12.05.2015 No 486 "Ob utverzhdenii primernykh programm perepodgotovki voditeley transportnykh sredstv sootvetstvuyushchikh kategoriy i podkategoriy". Available at: <http://base.garant.ru/71174220> [Accessed April 09, 2020]. (In Russ.).
60. Prikaz Ministerstva obrazovaniya i nauki RF ot 01.03.2018 No 161 "Ob utverzhdenii primernykh programm povysheniya kvalifikatsii voditeley transportnykh sredstv sootvetstvuyushchikh kategoriy i podkategoriy". Available at: <http://base.garant.ru/71942062> [Accessed April 09, 2020]. (In Russ.).
61. Federal'nyy zakon ot 29.12.2012 No 273-FZ "Ob obrazovanii v Rossiyskoy Federatsii". Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_140174](http://www.consultant.ru/document/cons_doc_LAW_140174) [Accessed April 09, 2020]. (In Russ.).
62. Postanovlenie Mintruda Rossii, Minobrazovaniya Rossii ot 13.01.2003 No 1/29 "Ob utverzhdenii Poryadka obucheniya po okhrane truda i proverki znaniy trebovaniy okhrany truda rabotnikov organizatsiy". Available at: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_40987](http://www.consultant.ru/document/cons_doc_LAW_40987) [Accessed April 09, 2020]. (In Russ.).
63. Uchebno-metodicheskiy kompleks po pervoy pomoshchi. Available at: <https://mednet.ru/umk> [Accessed April 09, 2020]. (In Russ.).
64. Woollard M, Whitfield R, Newcombe RG, Colquhoun M, Vetter N, Chamberlain D. Optimal refresher training intervals for AED and CPR skills: a randomised controlled trial. *Resuscitation*. 2006;71(2):237–47. <https://doi.org/10.1016/j.resuscitation.2006.04.005>
65. Greif R, Lockey AS, Conaghan P, Lippert A, De Vries W, Monsieurs KG, et al. European Resuscitation Council Guidelines for Resuscitation 2015: Section 10. Education and implementation of resuscitation. *Resuscitation*. 2015;95:288–301. <https://doi.org/10.1016/j.resuscitation.2015.07.032>
66. Cave DM, Aufderheide TP, Beeson J, Ellison A, Gregory A, Hazinski MF, et al. Importance and Implementation of Training in Cardiopulmonary Resuscitation and Automated External Defibrillation in Schools: A Science Advisory From the American Heart Association. *Circulation*. 2011;123(6):691–706. <https://doi.org/10.1161/cir.0b013e31820b5328>
67. Berger S. How to develop and execute a public health agenda: From grass roots to legislation. *Cardiol Young*. 2017;27(S1):S101–S103. <https://doi.org/10.1017/S1047951116002316>
68. Kanstad BK, Nilsen SA, Fredriksen K. CPR knowledge and attitude to performing bystander CPR among secondary school students in Norway. *Resuscitation*. 2011;82(2):1053–1059. <https://doi.org/10.1016/j.resuscitation.2011.03.033>
69. Wissenberg M, Lippert FK, Folke F, Weeke P, Hansen CM, Christensen EF, et al. Association of national initiatives to improve cardiac arrest management with rates of bystander intervention and patient survival after out-of-hospital cardiac arrest. *JAMA*. 2013;310(13):1377–1384. <https://doi.org/10.1001/jama.2013.278483>
70. Semeraro F, Wingen S, Schroeder DC, Ecker H, Scapigliati A, Ristagno G, et al. KIDS SAVE LIVES-Three years of implementation in Europe. *Resuscitation*. 2018;131:e9–e11. <https://doi.org/10.1016/j.resuscitation.2018.08.008>
71. Prikaz Ministerstva obrazovaniya i nauki Rossiyskoy Federatsii ot 17 dekabrya 2010 g. No 1897 "Ob utverzhdenii federal'nogo gosudarstvennogo obrazovatel'nogo standarta osnovnogo obshchego obrazovaniya". Available at: [https://fgos.ru/LMS/wm/wm\\_fgos.php?id=osnov](https://fgos.ru/LMS/wm/wm_fgos.php?id=osnov) [Accessed April 09, 2020]. (In Russ.).
72. Prikaz Ministerstva obrazovaniya i nauki Rossiyskoy Federatsii ot 6 oktyabrya 2009 g. No 413 "Ob utverzhdenii i vvedenii v deystvie federal'nogo gosudarstvennogo obrazovatel'nogo standarta srednego obshchego obrazovaniya". Available at: [https://fgos.ru/LMS/wm/wm\\_fgos.php?id=sred](https://fgos.ru/LMS/wm/wm_fgos.php?id=sred) [Accessed April 09, 2020]. (In Russ.).
73. Prikaz Ministerstva obrazovaniya i nauki Rossiyskoy Federatsii ot 6 oktyabrya 2009 g. No 373 "Ob utverzhdenii i vvedenii v deystvie federal'nogo gosudarstvennogo obrazovatel'nogo standarta nachal'nogo obshchego obrazovaniya". Available at: [https://fgos.ru/LMS/wm/wm\\_fgos.php?id=nach](https://fgos.ru/LMS/wm/wm_fgos.php?id=nach) [Accessed April 09, 2020]. (In Russ.).
74. Primernaya osnovnaya obrazovatel'naya programma osnovnogo obshchego obrazovaniya. Available at: [https://fgosreestr.ru/registry/%d0%bf%d0%be%d0%be%d0%bf\\_%d0%be%d0%be%d0%be\\_06-02-2020](https://fgosreestr.ru/registry/%d0%bf%d0%be%d0%be%d0%bf_%d0%be%d0%be%d0%be_06-02-2020) [Accessed April 09, 2020]. (In Russ.).
75. Primernaya osnovnaya obrazovatel'naya programma srednego obshchego obrazovaniya. Available at: <https://fgosreestr.ru/registry/primernaya-osnovnaya-obrazovatel'naya-programma-srednego-obshhego-obrazovaniya> [Accessed April 09, 2020]. (In Russ.).
76. Aufderheide T, Hazinski MF, Nichol G, Steffens SS, Buroker A, McCune R, et al. Community lay rescuer automated external defibrillation programs: key state legislative components and implementation strategies: a summary of a decade of experience for healthcare providers, policymakers, legislators, employers, and community leaders from the American Heart Association Emergency Cardiovascular Care Committee, Council on Clinical Cardiology, and Office of State Advocacy. *Circulation*. 2006;113(9):1260–1270. <https://doi.org/10.1161/CIRCULATIONAHA.106.172289>
77. Bahr J, Bossaert L, Handley A, Koster R, Vissers B, Monsieurs K. AED in Europe. Report on a survey. *Resuscitation*. 2010;81(2):168–174. <https://doi.org/10.1016/j.resuscitation.2009.10.017>
78. Mitamura H. Public access defibrillation: advances from Japan. *Nat Clin Pract Cardiovasc Med*. 2008;5(11):690–692. <https://doi.org/10.1038/ncpcardio1330>
79. Zakonoproekt No 466977-7 O vnesenii izmeneniya v stat'yu 31 Federal'nogo zakona "Ob osnovakh okhrany zdorov'ya grazhdan v Rossiyskoy Federatsii" (v chasti okazaniya pervoy pomoshchi s ispol'zovaniem avtomaticheskikh naruzhnykh defibrilyatorov). Available at: [https://sozd.duma.gov.ru/bill/466977-7#bh\\_histras](https://sozd.duma.gov.ru/bill/466977-7#bh_histras) [Accessed April 09, 2020]. (In Russ.).
80. Kucherenko V, Garkavi A, Kavalersky M. First aid readiness in the population at a road traffic accident. *Vrach*. 2009;12:82. (In Russ.).
81. Protokol provedeniya zasedaniya profil'noj komissii Ministerstva zdravoohraneniya Rossijskoj Federatsii po napravleniju "Pervaya pomoshh'" ot 17–22.07.2020. Available at: [http://allfirstaid.ru/system/files/protokol\\_22.07.2020.pdf](http://allfirstaid.ru/system/files/protokol_22.07.2020.pdf) [Accessed October 21, 2020].

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