International Scientific Journal "Internauka" https://doi.org/10.25313/2520-2057-2020-20

Педагогічні науки

UDC 355.232:614.8](73:477)

Pokaliuk Viktor

PhD in Technical Sciences, Docent, Head of the Chair of Fire Tactics and Emergency Rescue Cherkasy Institute of Fire Safety named after Chornobyl Heroes of National University of Civil Defence of Ukraine

Покалюк Віктор Миколайович

кандидат педагогічних наук, доцент, начальник кафедри пожежної тактики та аварійно-рятувальних робіт Черкаський інститут пожежної безпеки імені Героїв Чорнобиля Національного університету цивільного захисту України

FEATURES OF TRAINING AND PROFESSIONAL DEVELOPMENT OF CANADIAN RESCUERS ОСОБЛИВОСТІ ПІДГОТОВКИ І ПРОФЕСІЙНОГО РОЗВИТКУ РЯТУВАЛЬНИКІВ КАНАДИ

Summary. The article reveals the features of training and professional development of rescue services in Canada. It has been established that the training and professional development of Canadian rescuers is carried out in formal, non-formal and informal education. In formal education, training is carried out at the following levels: bachelor's, master's and educationalscientific. Non-formal education is represented by training courses, seminars and trainings. Informal educational opportunities include self-education, which can be provided online, participation in professional public organizations and associations.

Key words: training of emergency specialists, professional development, curricula, formal education, non-formal education, informal education.

Анотація. В статті розкрито особливості підготовки і професійного розвитку працівників оперативно-рятувальних служб Канади. Встановлено, що навчання і професійний розвиток рятувальників Канади здійснюються у формальній, неформальній та інформальній освіті. У формальній освіті підготовка здійснюється за рівнями: бакалаврським, магістерським та освітньо-науковим. Неформальна освіта представлена навчальними курсами, семінарами та тренінгами. Інформальні освітні можливості включають самоосвіту, що може здійснюватися онлайн, участь у професійних громадських організаціях та об'єднаннях.

Ключові слова: навчання спеціалістів з надзвичайних ситуацій, професійний розвиток, навчальні програми, формальна освіта, неформальна освіта, інформальна освіта.

The content of training programs for Canadian emergency specialists has changed in line with changing global conditions, changing national priorities and strategic directions for Canada's development. In other words, the training of such important professionals to ensure the civil protection of the population is mobile, adaptive and modern. This is evidenced by the fact that every 5 years in Canada there is a review of the structure of civil protection and emergency management services in the federal, provincial and territorial governments to ensure its relevance and compliance with new conditions [1, p. 5].

It should be noted that the consequences of most emergencies and natural disasters in Canada are addressed at the local or provincial / territorial levels and do not require the direct involvement of the federal government in the response phase. However, if an emergency threatens to destroy or damage the resources and infrastructure of any particular province / territory, the federal government may intervene at the specific request of the provincial / territorial government or

act simultaneously within its jurisdiction, such as aviation, nuclear safety or telecommunications [2].

In 2003, a separate department was established in the Federal Government of Canada (PS) to better address and coordinate civil safety and governance issues in the National Assembly - Public Safety Canada (PS). In addition to the department itself, 5 other agencies deal with civil protection issues: RCMP – Royal Canadian Mounted Police; CSIS – Canadian Security Intelligent Service; CSC – Correctional Service of Canada; NPB – National Parole Board and CBSA – Canada Border Service Agency. The structure also includes 3 independent supervisory bodies.

As in the United States, Canada adheres to the same principles of emergency prevention, protection, mitigation, and recovery. However, Canadians see management in emergencies as 4 components rather than 5, combining prevention and mitigation because they include structural mitigation measures (eg, construction of flood defenses), non-structural mitigation measures (eg, building codes), land use planning and insurance incentives). These components can be considered independently. Another difference is that in Canada, in contrast to the United States, instead of the principle of protection, the activities of rescue services are focused on "emergency preparedness". This means being prepared to respond to and manage the disaster through measures applied to the event, such as developing emergency plans, concluding mutual assistance agreements, conducting an inventory of resources and training, raising awareness, providing equipment and training programs [1, p. 8].

Thus, the ultimate goal of Canada's emergency policy is to save lives, preserve the environment, and protect property and the economy. Moreover, the protection of life is of paramount importance. Broadly speaking, Canadians believe that emergency management raises awareness of risks and promotes a safer, more prosperous, and sustainable society in Canada.

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To achieve this goal, it is necessary to comprehensively and systematically train management specialists in emergencies, to take care of systematic and regular training. Teaching staff of the CEMC (Canadian Emergency Management College) in close cooperation with federal, provincial and territorial governments were engaged in research these issues, as well as the development of full educational and methodological support since inception of the College in 1950 and until its closure in 2012.

The Emergency Management Act of Canada came into force in 2007, which places full responsibility for emergency regulation, civil protection and security on the PS Department in the federal government, established in 2003 by the government's new education partner. Canadian School of Civil Service (CSPS) became a new educational partner of the Government of Canada for training emergency response specialists. Public Safety Canada is actively cooperating with the School of Civil Service in order to expand the opportunities for education and training of specialists in emergencies at the federal level.

Analyzing the programs and courses for Canadian civil servants presented on the School's website, we found several ones that are recommended for staff. for example, "Federal emergency services Basic Emergency Management". Federal staff and agencies must understand their role and responsibilities before, during, and after an emergency to save lives, preserve the environment, and protect Canada's property and economy. This course introduces the basic principles of emergency management common to all agencies: prevention / mitigation, preparedness, response and recovery. Participants will learn about successful and effective management practices in emergencies, provided they share responsibility for the activities carried out between all levels of government, the private sector and international organizations. The course is designed for 3 hours and it can be done online [3].

The course "Applying the Fundamentals of Physical Security" is based on the already tested course "Fundamentals of Physical Security" (S204). It reveals the principles of application of basic concepts of physical security, such as zoning, access control and concentric protection rings. By solving a series of cases, course participants acquire the basic skills needed for their own physical defense. The training is conducted in a classroom and is designed for 7.5 hours. [3].

As evidenced by our analysis of training programs and courses for rescue services offered by the School, they are developed in the context of 4 basic principles of emergency management. Thus, the Emergency and Disaster Preparedness course complies with the preparedness principle, and the Fire Safety and Prevention course corresponds to the prevention principles. The first was designed to provide instructions on how to respond to emergencies, ensure safety, reporting, organize the evacuation of people, equipment and other private and corporate property in the event of a natural disaster, fire, bomb or other emergency. The second - introduces participants to ways to prevent fires and recognize the signs of fire. Participants will also learn what to do in case of a fire, including the proper use of portable fire extinguishers. The content of this course has been developed in accordance with regulatory requirements and with the support of Pinchin Group of Companies, an environmental and safety consulting firm with offices throughout Canada [3].

According to Canadian scientists J. Bruce, K. Donovan, M. Hornof (2004, p. 111), in Canada there is a "critical shortage of qualified teachers" for management training in emergencies. No less critical is the situation with certified specialists (bachelors, masters and doctors of philosophy), who would be able to conduct practical research, use the data in the development of new disciplines for management in emergencies [4, p. 14].

If to analyze several curricula in formal education, ie those offered by Canadian universities and colleges. In general, training programs for a degree in management in emergencies can be divided into: Undergraduate Degree Programs; Graduate Degree Programs; educational and scientific programs (PhD Programs).

For example, Brandon University in Manitoba offers a bachelor's degree Applied Disaster and Emergency Studies curriculum [5].

A bachelor's degree in emergency management can also be obtained at Business Lakeland College, where Applied Emergency Services curriculum has been taught since 2004. Interestingly, among the list of training courses for 1-2 credits, such large courses as "Practicum 1" and "Practicum 2" (15 credits each) are required.

It should be noted that despite the fact that colleges offer curricula in one area, but each has its own specifics. For example, La Cite Collégiale in Ontario offers a two-year Security Management program. Sir Sanford Fleming College offers Applied Technology, Environmental Assessment and Management program. If studying in the first program, students learn to create programs of awareness and prevention of catastrophes, terrorist threats, to analyze risks and dangers, to plan and implement necessary measures for emergency management, then the second college teaches students to manage environmental risks, quantify them and determine the most appropriate methods for their elimination and manage crisis situations (Programs & Courses Fleming College, 2020).

Cape Breton University College of Atlantic Canadian University offers public health training programs, including in the National Assembly, at the bachelor's and postgraduate levels, for those emergency management professionals who already have diploma of higher education. This ensures the continuity of professional education in the field of public safety from various disasters and cataclysms. The specified program is available only in distant format. However, taking into account its demand, the possibility of in-service training is provided, with a break from professional activity (Program Snapshot, 2020). It is noteworthy that for applicants with a diploma, the duration of training is 2 times less, and is 2 years. Another option for the postgraduate level - training within the framework of professional development, is offered only to the military who aspire to obtain a diploma. Upon completion of the program, the Canadian Institute of Public Health Inspectors certifies military personnel.

In British Columbia, the School of Community and Regional Planning (SCARP) at British Columbia University offers a program in disaster management / planning for undergraduates and graduate students. In addition, the University of British Columbia offers a Master of Arts and Doctor of Science in Social Sciences with a focus on management in emergencies [9].

Graduates of the University of Waterloo in Ontario can take special courses, where, at their request, the content and objectives of the course will focus on management in emergencies and related topics. This approach is quite appropriate and beneficial for participants and for the university, because only a small number of students need such a narrow specialization.

The University of Manitoba has a PhD program in Risk and Hazard Management. However, it is not a separate stand-alone program due to its narrow specialization. Therefore, applicants who wish to obtain the degree of Doctor of Philosophy in Management in emergencies, can obtain it within other existing curricula for which they study [10].

Having mastered the training programs in emergency management, graduates will be able to work in the following positions: security specialist; hurricane response manager; head of emergency services; head of the working group on emergency issues; environmental and safety manager; specialist in programming and emergency exit planning; administrator of emergency care etc.

Regarding the opportunities offered by non-formal education for operational and rescue specialists, it is necessary to emphasize their rather wide choice. The range of training programs and courses on civil defense and management in emergencies is impressive. Their distinctive feature is that it is the institutions of formal education that develop their content, structure, recommend teaching and assessment methods.

In addition, formal education institutions also offer their own training courses for non-formal education. Many Canadian universities conduct training courses and special seminars that introduce students to general management issues in emergencies and accidents. However, upon completion of these training courses, participants do not receive a bachelor's degree in emergency management. They may not receive any diplomas or certificates at all, as this is considered practical training rather than the education of emergency specialists. Their practical orientation is evidenced by the titles of the training courses: "Occupational Health and Safety", "Security Management", "Fire Safety", "Business Recovery", "Media Management".

It is worth noting that the training and education of rescue services in Canada is practice-oriented and is seen primarily as a relationship between the two streams - "practical management activities in the emergency and the application of theory in practice" [11, p. 10].

Moreover, the most effective and recommended format for training and education of emergency specialists is to obtain theoretical knowledge in an educational institution, and practical skills directly in the workplace - in emergency services. The study of management mechanisms in emergencies requires a specialist to be prepared not only for such a mixed learning of applied theory and practice, but also for lifelong learning. Jacksonville State University professor of emergency management Brenda Phillips even believes that emergency management is a more applied field than medicine, law or social sciences [12, p. 21].

An interesting experience of non-formal education for rescue workers is the activities of the company "Rocky Mountain Adventure Medicine" (RMAM -Rocky Mountain Adventure Medicine), which was founded in 2000 by entrepreneurs Dave and Brenda Watt. Today the company is a recognized leader in the practice of first aid, remote medicine, rescue and safety in the open air. The company not only provides a full range of training programs for urban and remote rescue environments in emergency situations, but its employees themselves provide medical care in extreme conditions. In other words, they are real practitioners with considerable experience in managing and creating an emergency plan or any incidents. Therefore, the courses offered by the company are aimed at creating a positive educational environment in which theory and practice are successfully combined. Note that the courses are designed in accordance with current standards of OH&S / NFPA rescue services.

To maintain the appropriate skills and abilities of its employees, Canadian rescue services make extensive use of the educational potential of on-the-job training. Indicative in this regard is the experience of Canadian Avalanche Association, which systematically trains its employees. One of the typical, effective forms is a two-day on-the-job training on avalanche preparedness in the mountains of Canada. Workers get acquainted with the basics of avalanche formation, learn to recognize the signs of avalanches, develop skills of planning and performing the necessary rescue measures, learn to use different scales for assessing the terrain. And most important thing - employees learn to understand that the proposed training does not exhaust all the possibilities of their training, which is a good incentive for self-education and further professional development. To this end, the organization fully provides employees with the necessary training resources: literature, posters, a number of different real and educational cases, a list of training programs and courses outside the organization. To get a recommendation on which course to choose for your professional development, you need to contact the coordinator.

In Canada, training, education and professional development for rescue workers are provided in formal, non-formal and informal education. In formal education, training is carried out at the following levels: bachelor's, master's and educational-scientific. The country has a number of different training programs focused on management in all types of emergencies. Non-formal education is represented by training courses, seminars and on-demand trainings. Informal educational opportunities include self-education, which can be provided online, participation in professional public organizations and associations.

References

- An Emergency Management Framework for Canada (2017) // Emergency Management Policy and Outreach Directorate. 3-rd edition. Ottawa, Canada. URL: https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2017mrgnc-mngmnt-frmwrk/2017-mrgnc-mngmnt-frmwrk-en.pdf
- Structure of Canada's Emergency Management System. (2020) // Public Safety Canada. URL: https://eird.org/rp17/emergency-management-incanada.html
- 3. Courses (2020) // Canada School of Public Service. URL: https://www.csps-efpc.gc.ca/Catalogue/index-eng.aspx#datasetfilter_wrapper
- 4. Bruce J. A., Donovan K.F., Hornof M. J. (2004). Emergency Management Education in Canada // Ottawa, Ontario: Science Applications International Corporation. URL: https://bcaem.ca/wpcontent/uploads/2019/05/PS4152005E.pdf
- ADES Applied Disaster and Emergency Studies (2020) // Brandon University. URL: https://www.brandonu.ca/ades/
- 6. Bachelor of Applied Business in emergency Services (2020) // Fire & Emergency Services. Lakeland College. URL: https://www.lakelandcollege.ca/academics/fire-emergencyservices/programs/bachelor-applied-business-emergency-services/courses/
- Programs & Courses (2020) // Fleming College. URL: https://flemingcollege.ca/programs/

- Program Snapshot (2020) // Cape Breton University College. URL: https://www.cbu.ca/academics/programs/bachelor-of-health-sciencespublic-health/
- SCARP School of Community and Regional Planning. (2020) // University of British Columbia. URL: https://scarp.ubc.ca/
- 10.Management (2020) // Faculty of Graduate Studies. University of Manitoba.

 URL:

https://umanitoba.ca/faculties/graduate_studies/management.html

- 11.Hite M. C. (2003). The emergency manager of the future: Summary of a workshop // International Journal of Mass Emergencies and Disasters. November 2003. Vol. 18. No. 3. PP. 417-437. Washington: National Research Council of the National Academies.
- 12.Phillips B. (2003). Disasters by discipline: Necessary dialogue for emergency management education // Workshop "Creating Educational Opportunities for the Hazards Manager of the 21st Century". Denver, Colorado, October 22, 2003.