

World First Aid Day – on Saturday 9 September 2023

First Aid in the Digital World

IFRC Global First Aid Reference Centre / WFAD Concept note / Paris - Geneva / April 2023

INTRODUCTION

Since its creation, the International Federation of Red Cross and Red Crescent societies (IFRC) is committed to saving lives and changing minds. With its 192-member National Societies, bringing together almost 15 million volunteers for the good of humanity, the IFRC is the world's largest humanitarian network. One of the links of its humanitarian chain is First Aid, with over **23 million people** trained all over the world.

First aid is a humanitarian act, vital to supporting healthy and resilient communities. It is a fundamental skill that can provide effective and rapid interventions to help reduce injury and suffering, and improve the chances of survival of someone in need. It should be accessible to everyone and everywhere without any discrimination. A simple principal guides this belief: "Everyone has the capacity to save lives". [The Global First Aid Reference Centre](#), centre of excellence of the IFRC, has been created to collaborate with the National Societies and make people and communities more resilient through first aid education and services.

To celebrate first aid, the second Saturday in September of each year is World First Aid Day (WFAD). WFAD is an annual opportunity for everybody to promote and gain knowledge in first aid. Every year, the Red Cross and Red Crescent National Societies all around the globe take this opportunity to engage with their communities through awareness activities promoting and celebrating the importance of first aid.



2023 WFAD THEME: **FIRST AID IN THE DIGITAL WORLD**

World First Aid Day 2023 will focus on the theme of **“First Aid in the Digital World”**.

The 2023 WFAD theme includes **all age groups**; children, adults and older adults:

Children: the use of digital tools for children’s education is essential now. Children are increasingly using digital devices and platforms in their every day to day activities. This is why it is important to adapt the digital tools in the field of first aid according to this age category. Digital tools can help children learn first aid skills in an interactive way through the variety of engaging resources such as videos, games and simulations. This can help children understand and remember important first aid concepts and revise it any time. Digital platforms can also be easily accessed by children, allowing them to learn at their own pace and in their own time. Additionally, the digital world can facilitate communication and collaboration between children and first aid trainers, providing opportunities for children to be included more comprehensively in first aid education.

Adults: the digital world can benefit adults in learning first aid skills by providing access to a many resources that can be adapted to their busy schedule such as online courses, instructional videos, and interactive simulations. Adults can learn first aid skills at their own convenience and pace, without necessarily the need for in-person training for the theoretical parts. Digital platforms can also connect adults with their National Societies, allowing them to ask questions, receive feedback, and exchange information. Additionally, digital tools can help adults refresh their skills and stay up to date with the latest developments and best practices in first aid, enhancing their knowledge and preparedness in emergency situations.

Older adults: it is important to keep in mind that older adults may have more difficulties using new technology but studies show also that their interest in engaging with digital tools is increasing due to their will to keep up with the world trends. In this way, digital first aid learning can benefit older adults by providing accessible and adaptable resources that can accommodate different learning styles and abilities. First aid digital tools are designed to be user-friendly and easy to navigate for older adults who may not be as comfortable with technology. Digital platforms can also provide opportunities for older adults to connect with other learners, creating a supportive and inclusive learning community.

KEY MESSAGES

Under the theme of **First Aid in the Digital World**, the Global First Aid Reference Centre aims at:

- **Advocating for first aid knowledge dissemination throughout an easier access to digital resources for everyone, everywhere**

Digitalization and other forms of technological advancement have the enormous potential to improve our lives to make them more prosperous and sustainable, changing the sceneries of the future of work. There is a great risk, however, that people in vulnerable conditions and low-skilled jobs might fail to capture the benefits and could be left behind.

By leveraging digital technologies, National Societies can expand access to first aid education and training, empowering individuals and communities to take action in emergency situations. Advocating for an **easier access to digital first aid resources** can help overcome barriers to traditional in-person training, such as time constraints, location, and mobility limitations. It is thus important to promote the use of **online courses, instructional videos, and interactive simulations** that are tailored to different learning styles and abilities, making it easier for individuals of all ages and backgrounds to acquire and retain first aid knowledge.

By promoting digital first aid education and training, National Societies can help create a culture of preparedness, where individuals are empowered to respond effectively in emergency situations. This can lead to a safer and more resilient society, where everyone has the skills and knowledge to provide life-saving assistance when it is needed most.

- **Promoting the importance of maintaining and refreshing learners' knowledge by offering new ways of learning through digital innovation**

Digital innovation offers new opportunities to **engage learners, keep their knowledge up-to-date, and offer continuous learning opportunities**. Indeed, using methods such as **digital games** may regularly reinforce skills and psychological preparedness for unexpected emergencies¹. For example, **refresher courses, quizzes, and interactive simulations** can help learners maintain their knowledge and skills. In the same way, **blended learning, lifelong learning, learner-centred education and harmonisation** will enable every citizen to be effective at the right time and, above all, to feel capable of taking action and to have finally the confidence to act². Additionally, the use of digital technologies can be useful in order to deliver updates on the latest best practices and procedures in first aid, ensuring that learners are equipped with the most current information.

¹ International Federation of Red Cross and Red Crescent Societies (IFRC). *International First aid, Resuscitation and Education guidelines*, 2020

² International Federation of Red Cross and Red Crescent Societies (IFRC). *Global Survey on First Aid*, 2018

Promoting the importance of maintaining and refreshing learners' knowledge through digital innovation can also help National Societies track learner progress and identify areas where additional support may be needed. Digital platforms can provide analytics and data on learners' engagement and performance, allowing first aid trainers to tailor their offerings and improve the effectiveness of their training programs.

➤ **Supporting Inclusivity with a digital transformation of first aid training and awareness campaigns**

In line with the IFRC's plan for better digital transformation, the development of digital first aid training and awareness campaigns aligns with the Red Cross Movement's commitment to promoting health, safety, and well-being for all. A prioritization of innovation and use of digital technologies in **first aid education methodologies, teaching techniques and delivery of the knowledge** is started. Increasing the use of innovation and digital technology, both in methods and delivery, in our evidence-based first aid programme will increase **inclusivity**³.

OBJECTIVES

Through World First Aid Day 2023, the Global First Aid Reference Centre and the International Federation of Red Cross and Red Crescent Societies encourage National Societies to:

- Fit in the digital age by innovating and developing digital tools in first aid.
- Enhance digital skills and competences within their first aid team.
- Foster the development of a high-performing digital education ecosystem in first aid.
- Support the creation of a knowledge-sharing platform for first aid education in the digital age to improve the dissemination of success models.
- Adapt their first aid education system to their community, needs, target audiences, level of access to resources, etc.

N.B.: *digital technologies can be useful for learning and practicing first aid skills but it is important to recognize the value of face-to-face and practical training as well. First aid requires not only knowledge but also physical skills and the ability to apply them in real-world situations. Hands-on training with guidance and live feedback from an instructor is crucial for developing these skills and building confidence in their application. These approaches are complementary to one another. By combining them, individuals can develop a comprehensive set of skills that will enable them to provide effective first aid in emergency situations.*

³ International Federation of Red Cross and Red Crescent Societies (IFRC). *First Aid Vision 2030*, 2022

STUDIES AND KEY FIGURES RELATING TO WFAD 2023 THEME

1. Adapting first aid training to crisis, needs and publics

- **How to adapt first aid education to crisis:** In an article published in the *International Journal of First Aid Education* in 2020, it is shown how major crisis can accelerate digital innovation and first aid education methods. Through the example of COVID-19, various alternatives of first aid training and sources of practical action for just-in-time components were found, such as the Universal First Aid App used by hundreds of Red Cross and Red Crescent National Societies⁴.
- **Difficulties in asserting a certain type of effective education:** An academic article about revolution in first aid education highlights the lack of any consensus for measuring educational effectiveness in first aid, as well as the lack of metric with which to prove the value of first aid education. Indeed, it is essential to keep in mind that there are different communities facing different vulnerabilities, and different modalities which can enhance learning through targeted approaches according to personal preference, access to technology and time available⁵.

2. Positive effects of online and blended learning

- **The historical emergence of digital first aid learning:** In 1998, the use of CD-ROMs was piloted for teaching, producing a unique first aid course that combines CD technology with a practical component. In the internet era now, the experience of such pilot programmes could be transferred and accessed on a large scale⁶.
- **Online learning has been shown to increase knowledge.**
 - A study conducted by Burgess et al. (2015) evaluates *Cool Runnings*, an app designed to increase parents' knowledge of burn risks to children (specifically burns caused by hot drinks) and the correct first aid treatment. Through a single-blind randomised control trial, 121 participants used the app and demonstrated a statistically significant increase in burn knowledge compared to the control group⁷.

⁴ Pellegrino, J. (2020). COVID-19 first aid adaptations. *International Journal of First Aid Education*, 3(1), 1–5

⁵ Pellegrino, J. L., Oliver, E., Orkin, A., Marentette, D., & Snobelen, P. J. (2017). A call for revolution in first aid education. *International Journal of First Aid Education*, 1(1).

⁶ Reichle, C., & Cearns, M. (n.d.). Using distance training to deliver first aid training. *Journal of Telemedicine and Telecare*, 6, 63–64.

⁷ Burgess, J., Watt, K., Kimble, R.M., & Cameron, C. M. (2018). Combining technology and research to prevent scale injuries (the Cool Runnings intervention): Randomised controlled trial. *Journal of Medical Internet Research*, 10(20), e10361.

- Another study by Luckie et al. (2018) assesses the impact of a 60-minute online asthma management program. The study suggests that online sessions increased knowledge but did not translate into application in a scenario setting⁸. This is also why it is important to keep face to face trainings and practical practice in parallel to technology inclusion in your first aid education plan.
- **Blended learning can be used to develop knowledge, facilitate first aid skills and build confidence within learners.**
 - A study about blended learning focused on trauma suggests that a webinar combined with virtual in-person training is effective for teaching tourniquet and direct-pressure application skills, as well as life-threatening bleeding knowledge. Virtual in-person education may be useful for creating resuscitative medicine instructors from distributed locations, and to reach learners who cannot attend classroom-based instruction⁹.
 - Brannon et al. (2009) conducted a study assessing the impact of watching a video before attending a face-to-face session. Parents of premature babies watched a video on baby CPR before attending a session with a facilitator. In conclusion, the results from the standardised skills test suggest that watching a video before attending a face-to-face session is linked to improved skill performance¹⁰.
 - Another study compares the difference in knowledge, confidence and willingness to act between learners who completed a facilitated session versus a blended one using the British Red Cross *Everyday learning approach* (e-learning followed by a face-to-face segment). The authors found comparable results between the facilitator-only and blended learning groups with regards to improved first aid knowledge. However, statistical analysis shows that blended learning was superior to improve learners' willingness and confidence¹¹.

3. First aid education through gamification and immersive technologies

- **Positive effects of learning first aid with digital games for primary school students:** A study conducted in 2023 aims to examine the effects of digital health games developed on primary school students' first aid awareness. It concludes that

⁸ Luckie, K., Bandana, S., Galstaun, V., Kritikos, V., Collins, J. C., & Moles, J. R. (2018). The effectiveness of an online training programme to prepare teachers to provide first aid. *Journal of Paediatrics and Child Health*, 54(12), 1348–1352.

⁹ Goolsby, C. A., Schuler, K., Rodzik, R., Charlton, N., Lala, V., Anderson, K., Pellegrino, J. L., (2021). The FAST VIP (First Aid for Severe Trauma "Virtual" in-Person) Educational Study. *Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health*, 22(4), 951–957.

¹⁰ Brannon, T. S., White, L. A., Kilcrease, J. N., Richard, L. D., Spillers, J. G., & Phelps, C. L. (2009). Use of instructional video to prepare parents for learning infant cardiopulmonary resuscitation. *Baylor University Medical Center Proceedings*, 22(2), 133–137.

¹¹ Oliver, E., Forsyth, M., Colebourn, D., Gordon, E., Taylor, H., & Mulligan, J. (2020). A randomized trial of blended first aid education for the public. *International Journal of First Aid Education*, 3(1) 38–48.

the knowledge of the students about the definition of first aid and possible application situations, first aid kit and emergency ambulance number has increased after the implementation. As a result of the study, digital health games improves the first aid awareness of elementary school students¹².

- **Better learning of first aid with the use of a mobile multimedia device:** A case—control study analyses if expert knowledge presenting step-by-step to untrained helpers using a personal digital assistant (PDA) would improve the quality of bystanders' basic life support. It concludes that PDA based expert system increases the performance of untrained helpers supplying emergency care significantly. Since Internet compatible mobile devices have become widely available, a significant quality improvement in bystander first-aid seems possible¹³.
- **Positive effects of Virtual Reality on first aid education:** An experimental evaluation shows that Virtual Reality methodology for CPR training benefits procedural knowledge and manual skills, even when a physical mannequin is not used. Additionally, the experimental evaluation suggests that the introduction of Virtual Reality is promising to broaden CPR training at affordable costs¹⁴.

N.B.: While digital technology has many benefits, it also has risks that must be considered, particularly in terms of the development of the brains of children, their learning of fundamental skills, and their attention span. It is important to **promote responsible screen use** and to recognize the potential negative consequences of excessive use. However, it is also important to note that first aid training and practice can promote learning and rely on attention spans, showing that **digital technology is not inherently bad, but rather it is the way in which it is used that can have negative effects.**

¹² Efe, H., & Topsakal, Ü. U. (2023, 8 February). LEARNING FIRST AID WITH DIGITAL GAMES FOR PRIMARY SCHOOL STUDENTS. *European Journal of Education Studies*, 10(2).

¹³ Ertl, L., & Christ, F. (2007). Significant improvement of the quality of bystander first aid using an expert system with a mobile multimedia device. *Resuscitation*, 74(2), 286–295.

¹⁴ Buttussi, F., Chittaro, L., & Valent, F. (2020). A virtual reality methodology for cardiopulmonary resuscitation training with and without a physical mannequin. *Journal of Biomedical Informatics*, 111.

COMMUNICATION PACKAGE

The Communications department of the International Federation of Red Cross and Red Crescent Societies with the Global First Aid Reference Centre will provide National Societies with a number of communication tools. These tools are free and easy to use. These materials and tools are optimized to raise awareness on first aid in a digital and innovative way:

- ✓ *The new IFRC Universal First Aid App*
 - *Communication Package*
- ✓ *Snapchat CPR Augmented Reality Tool*
- ✓ *Online Games*
 - *First Aid for Teenagers! (by the French Red Cross)*
 - *SAFE STEPS for Children (in partnership with Prudence Foundation)*
 - *Emojis and First Aid Game*
- ✓ *IFRC online courses*
 - *First Aid for Babies and Children*
 - *First Aid for Adults*
 - *First Aid for Older Adults*
- ✓ *Social Media assets*
- ✓ *Poster "First aid in the digital world"*

All the WFAD 2023 communication tools proposed to National Societies will be available online in a dedicated section of the Global First Aid Reference Centre platform.

Depending on the Covid-19 situation in your country, you can also use our [First Aid and Covid-19 pack](#). The pack also offers fun activities for children to learn first aid in the context of the global pandemic.



CALENDAR

Pre-launch:

- Tools availability: June 2023

Launch:

- World First Aid Day (WFAD): Saturday 9th September 2023

Report:

- Report template to be sent to National Societies: November 2023
- Final report published by the GFARC: December 2023

ABOUT THE GLOBAL FIRST AID REFERENCE CENTRE (GFARC)

The [Global First Aid Reference Centre \(GFARC\)](#) is one of the centres of excellence of the [International Federation of Red Cross and Red Crescent Societies \(IFRC\)](#). Hosted by the French Red Cross, the Centre aims to harmonize first aid practices worldwide through the development of first aid tools, the dissemination of evidence-based guidelines and the provision of training of trainers worldwide. In addition, the GFARC advises and supports the National Societies of the Movement to develop or adapt their training offer to local needs. Based on the premise that every citizen can save lives, the Centre also advocates for the dissemination of a first aid culture throughout the world.

If you have any questions or comments please do not hesitate to contact us on:

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