

Law and first aid

Promoting and protecting life-saving action

About the International Federation of Red Cross and Red Crescent Societies

The International Federation of Red Cross and Red Crescent Societies (IFRC) is the world's largest volunteer-based humanitarian network. Together with our 189 member National Red Cross and Red Crescent Societies worldwide, we reach 97 million people annually through long-term services and development programmes as well as 85 million people through disaster response and early recovery programmes.

We act before, during and after disasters and health emergencies to meet the needs and improve the lives of vulnerable people. We do so with impartiality as to nationality, race, gender, religious beliefs, class and political opinions. Guided by Strategy 2020 – our collective plan of action to tackle the major humanitarian and development challenges of this decade – we are committed to 'saving lives and changing minds'.

Our strength lies in our volunteer network, our community-based expertise and our independence and neutrality. We work to improve humanitarian standards, as partners in development and in response to disasters. We persuade decision-makers to act at all times in the interests of vulnerable people. The result: we enable healthy and safe communities, reduce vulnerabilities, strengthen resilience and foster a culture of peace around the world.

© International Federation of Red Cross and Red Crescent Societies, Geneva, 2015

Copies of all or part of this study may be made for noncommercial use, providing the source is acknowledged. The International Federation would appreciate receiving details of its use. Requests for commercial reproduction should be directed to the International Federation at disaster.law@ifrc.org.

The opinions and recommendations expressed in this study do not necessarily represent the official policy of the International Federation of Red Cross and Red Crescent Societies or of individual National Red Cross or Red Crescent Societies. The designations used do not imply the expression of any opinion on the part of the International Federation or National Societies concerning the legal status of a territory or of its authorities.

Cover photo: CPR demonstration in Indonesia © IFRC/Vina Agustina

For more information, please contact:

International Federation of Red Cross and Red Crescent Societies

P.O. Box 372 CH-1211 Geneva 19 Switzerland Telephone: +41 22 730 42 56 Fax: +41 22 730 49 29 Email: disaster.law@ifrc.org Website: ww.ifrc.org

Executive summary

First aid is a proven, cost-effective measure to save lives. Widespread training and education in first aid can improve the chances that someone is close at hand who is able and willing to provide the necessary intervention in the first moments after an injury or other sudden health crisis, avoiding "death by delay" pending the arrival of more highly trained health professionals.

Nevertheless, lawmakers have traditionally paid relatively little attention to first aid provided by laypeople. From country to country, there is enormous variety as to whether and how first aid training and delivery is promoted and regulated by law, with important gaps in many countries.

This report highlights three areas in which stronger legislation related to first aid may contribute to saving more lives. It draws on an extensive review of current medical and grey literature, several surveys of first aid experts from National Red Cross and Red Crescent Societies around the world, and a study of the laws of 37 sample countries.

First, it is recommended that first aid training be made mandatory in certain circumstances. One of these is in schools. It goes without saying that parents everywhere expect schools to do their best to ensure the safety of their children. However, many countries do not require teachers or school personnel to have first aid training. Perhaps more important, studies have shown that children themselves, even at quite a young age, are capable of learning and applying aspects of first aid. Moreover, they are well placed to learn and to receive training and in particular refresher sessions to cement their knowledge. Yet, only a minority of the countries examined required first aid training for students.

Another opportunity relates to driver's license applicants. Countries that have instituted mandatory first aid training requirements for applicants have seen dramatically higher permeation of first aid knowledge in their populations compared to those that have not. Moreover, road traffic accidents make up the largest proportion of unintentional injury deaths in the world and other drivers are often those closest at hand when they occur. Countries in Europe have gone farthest in this respect, though even there about a fourth of countries have no mandatory requirements.

The most common type of first aid training requirement around the world is related to occupational safety and health rules. Evidence has shown that workplace first aid training not only saves lives in situations of crisis but also enhances participants' motivation to avoid occupational injuries and illnesses in the first place and improves their risk control behaviour. Even here, however, the picture is mixed. Some countries do not impose first aid training as part of their occupational and health approach, and some that do have such rules lack the institutional infrastructure for enforcement.

A second issue raised by this report goes to the quality of first aid education. As may be expected, studies confirm that correctly performed first aid is much more likely

to save lives than clumsier attempts. Yet, very few states examined for this report had any official guidelines or standards for the minimum quality of content of first aid courses.

Finally, the report points to the issue of liability of lay first aiders. Studies in the literature and the surveys of Red Cross and Red Crescent first aid experts have shown that bystanders are frequently very reluctant to provide assistance in situations of crisis, and one of the reasons is a fear of legal entanglement. In some countries, this fear is clearly justified in light of a substantial number of cases where victims or the state have brought action against persons who tried unsuccessfully to intervene.

While some countries provide explicit protections against liability for those who try to help in such situations, this is not the case everywhere else. Moreover, even in some countries where protections do exist, they are not well known (or believed) in the population. Of course, mistakes can and do happen, but society is much better served by encouraging people to help than increasing a personal sense of risk among those who might be in a position to save a life. Accordingly, the report recommends that states expressly provide for protection against liability for the good faith efforts of lay first aiders.

Promoting and protecting life-saving action

Table of contents

.....

Acknowledgments	4
Sources for this report	5
Introduction	6
I. Background	6
A. The case for first aid	6
B. What are the barriers to saving more lives through first aid?	7
II. Mandating first aid training in certain circumstances	8
A. First aid training in schools	9
B. First aid training of driver's licence applicants	12
C. Workplace first aid mandates	13
III. Standards for first aid training	16
IV. Protection from liability	19
Conclusion and recommendations	23
Endnotes	24

Acknowledgments

This report was commissioned by the International Federation of Red Cross and Red Crescent Societies' Disaster Law Programme and Global First Aid Reference Centre. Substantial drafting and research support were provided by Jeffrey Pellegrino, Paulo Cavaleri and David Fisher, with editorial oversight from Pascal Cassan and Diane Issard and additional research by Mireille Le Ngoc.

The international law firm of CMS Cameron McKenna organized a substantial survey of relevant laws in 37 countries on a pro bono basis as a contribution to the project. Funding for other aspects of the project was provided by the Government of Switzerland. The IFRC is very grateful for their support.

Sources for this report

This report compiles findings from an extensive desk review of the medical and grey literature on first aid education and policy, previous research undertaken by the IFRC, as well as several research initiatives undertaken especially for this report and interviews with Red Cross and Red Crescent first aid trainers.

The previous IFRC research includes a study on first aid practice in Europe published in 2009,¹ an extended version of that report with a more global scope published in 2010,² the results from a 2013 IFRC Global First Aid Reference Centre survey of first aid focal points from 77 National Red Cross and Red Crescent Societies as well as qualitative information gained from IFRC-hosted meetings of first aid education managers from around the Movement in 2014-15.

With regard to the new research, in 2014, the IFRC Disaster Law Programme commissioned the law firm of CMS Cameron McKenna to examine laws in 37 countries, distributed amongst global regions (Africa, Americas, Asia & Pacific, Europe, and the Middle East/ Northern Africa) to gather extensive information about problems deriving from legal gaps in first aid (hereinafter, "the CMS Cameron McKenna Study").3 Moreover, in 2015, the IFRC Global First Aid Reference Centre undertook a follow-up survey of National Society first aid focal points, receiving 93 responses as of the time this report was completed.

Figures 1 and 2 below describe the geographic coverage of the CMS Cameron McKenna Study and of the responses to the 2013 and 2015 Reference Centre surveys.

Figure 1

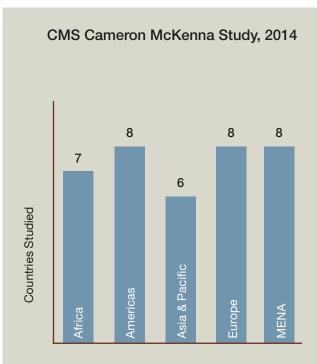
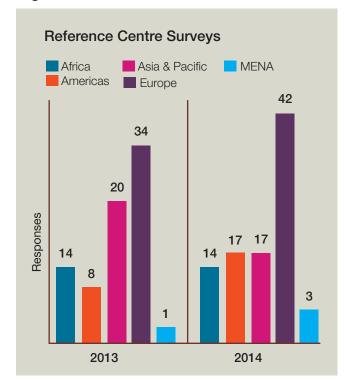


Figure 2



Introduction

There are many mysteries surrounding our health. Diseases for which we still have no cure, such as cancer, AIDS and diabetes, continue to plague millions of people around the world. Last year's unprecedented outbreak of Ebola in Western Africa caught the world by surprise, as did the sudden rise of severe acute respiratory syndrome (SARS) and avian influenza in 2003.

However, there are also aspects of public health that are no mystery at all. Among these are the benefits of first aid. Perhaps the humblest of health interventions, first aid is practiced at the individual level, often to save a single life or dress a single wound. However, whether offered within the home, among neighbours or in the workplace, the overall impact of first aid on the health and productiveness of a whole society can be impressive, and extremely cost-effective. For these reasons, National Red Cross and Red Crescent Societies have always had first aid in their organizational DNA and they have grown to become one of the largest providers of community-based first aid training.

Nevertheless, lawmakers have traditionally paid relatively little attention to first aid provided by laypeople. From country to country, there is enormous variety as to whether and how first aid training and delivery is promoted and regulated by law, with important gaps in many countries.

This report aims to illustrate three ways that, the evidence shows, lawmakers can greatly increase the chances that someone with the right skills is ready and able to apply them when and where an emergency arises. They are:

- Mandating first aid training in certain circumstances (in particular, schools, drivers' license applications and certain workplaces),
- · Adopting official guidelines or standards for the content of first aid training, and
- Extending and communicating liability protections for lay first-aiders acting in good faith.

These three recommendations have also been included in a resolution that has been proposed to the state parties to the Geneva Conventions and the components of the Red Cross and Red Crescent Movement for adoption at the 32nd International Conference of the Red Cross and Red Crescent in 2015.

I. Background

A. The case for first aid

Intentional (i.e., violent or self-inflicted) and unintentional (i.e., accidental) injuries claim more than 5.8 million lives or 10% of global fatalities annually, making them one of the leading causes of death and morbidity. As injuries disproportionally affect younger people, many millions of non-fatal events result in life-long disabilities, physically and psychologically, and increase years of life lost due to premature mortality (YLL), impacting not only those injured but also their families and economies

as a whole.⁵ Premature deaths also result from non-injuries, like sudden illness or exacerbation of chronic diseases during disasters. Communicable and non-communicable diseases impact individuals physically and psychologically, as well as communities socially and economically, leading to 40% of global YLL.

Timely first aid can greatly decrease these losses. It has been demonstrated, for example, that effective bystander cardiopulmonary resuscitation (CPR) provided immediately after cardiac arrest can double a person's chance of survival.⁶ Research on blunt trauma injuries,⁷ and injuries from traffic accidents,⁸ have also shown significant improvements in mortality rates when first aid was applied. One study of responses to an apparent case of arterial bleeding, found that first aid training dramatically improved the effectiveness of bystander intervention, yielding as many as 28 more saved lives out of 80 incidents examined.⁹

Widespread training and education in first aid can improve the chances that someone is close at hand who is able and willing to provide the necessary intervention in the first moments after an injury or other sudden health crisis, avoiding "death by delay" pending the arrival of more highly trained health professionals. In Europe, studies have shown that more than 50 per cent of all road accident fatalities occur within a few minutes of the crash, reducing the window of effectiveness for even the most rapid professional emergency services. 10 Research in Japan found that the survival rate for those who received first aid before professional help arrived stood at 14.2 percent, more than three times higher than the 4 percent for those who did not. 11

The Disease Control Priorities Project (a joint effort of the World Health Organization, the Fogarty International Center of the US National Institutes of Health and the World Bank) identified the training of lay first-responders and volunteer paramedics as one of the most neglected low-cost opportunities in low and middle income countries to reduce the burden of disease. It estimated a cost per death averted between US\$130 and US\$283 depending on the region. 12

Voluntary training efforts, such as those undertaken by National Red Cross and Red Crescent Societies, can go a long way to supplying this need. Indeed, a 2013 survey by the International Federation of Red Cross and Red Crescent Societies' (IFRC) Global First Aid Reference Centre (the "Reference Centre") (hosted by the French Red Cross) found that the participating 77 National Societies had collectively trained over 14 million volunteers the previous year.

As important as these voluntary efforts are, however, they will not meet the full life-saving potential of first aid without supportive legal frameworks, as discussed further below.

B. What are the barriers to saving more lives through first aid?

While many lives are already being saved through first aid, a great many other opportunities are lost. Bystanders to health crises or injuries often do not react at all or they react incorrectly.

The reasons for these gaps include lack of knowledge and skills, social norms and expectations, and environmental factors.¹³ Among the specific reasons cited in the research for the hesitation of bystanders to act are:¹⁴

- Simply not knowing how to help
- Fear of disease transfer or lack of protective barrier
- Shock or being upset (ex., by abnormal visuals (fractures), bad odours (burned flesh), or pain expressed by victims)
- Fear of doing more harm
- Fear of legal liability
- Negative attitudes towards strangers or particular groups
- Social norms that do not emphasize helping strangers or the opposite gender

Of particular concern is the so-called "bystander effect" – a finding that the presence of other bystanders tends to reduce the feeling of personal responsibility and willingness to intervene of each individual. 15

None of these problems is insurmountable. Relevant first aid education can address many of these concerns, increasing the willingness of bystanders to intervene and the chances that they will do so successfully. 16 However, to do so, it must be adequately available, of sufficient quality and periodically reinforced to avoid "skills fade" and a corresponding loss of confidence.

II. Mandating first aid training in certain circumstances

The most direct way that lawmakers can promote increased first aid education is by mandating training in certain circumstances. But why should they do so if many people are willing to sign up voluntarily?

Unfortunately, voluntary training, by itself, does not result in a sufficient permeation of the population with knowledgeable persons to ensure full protection. For example, the IFRC's 2009 review of first aid in Europe found a startling range in the proportions of various countries' populations with first aid training, ranging from 95% in Norway to less than 1% in Estonia. The study explained the difference by noting that "[m]ost countries at the top of the list have laws that make first aid training compulsory either at school, at the workplace or when applying for a driver's license."17

The majority of countries examined in the recent CMS Cameron McKenna Study have included some sort form of mandatory first aid training in their laws and regulations, in particular with regard to particular workplace settings. However, there was great variation in where and when first aid was mandated, as illustrated in Figure 3.

Figure 3



Source: CMS Cameron McKenna Study

Of course, mandatory training comes with some costs. However, research indicates a very positive cost-benefit ratio. 18 For example, in a Ugandan study, based on cost estimates from the World Health Organization, local injury data, and modelling from previous studies, the projected cost of scaling up a training for lay persons was found to amount to only (US) \$0.12 per capita or \$25-75 per life year saved. 19 Community-based first aid responder systems have been likewise found to demonstrate a cost-effective approach to building a larger emergency management system. 20

Cost-benefit analysis should also take account of the side benefits to first aid training. For example, teachers in classrooms are better able to identify risks to keep themselves and students healthy and attending school.²¹ Construction workers, as another example, tend to avoid risky behaviours for themselves and others and become empowered to assist co-workers needing help, after first aid training.²²

A. First aid training in schools

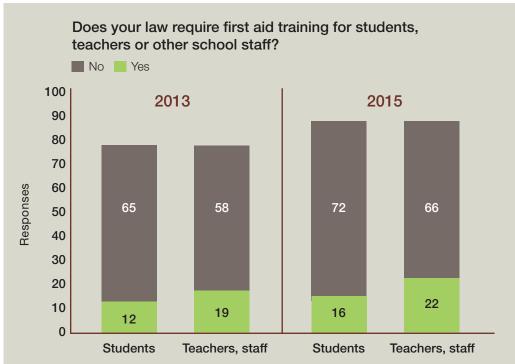
While there are a variety of circumstances in which laws have mandated training, this report recommends that a first place to look should be in schools. Children (age 0-14) make up about 25 percent of the world's population today, and represent up to 31 percent of low and middle-income country (LMIC) populations.²³ Injury is the leading cause of death in 1-14 year olds in a number of countries²⁴ and one in five injuries happen in school.²⁵ Children, therefore, are an important target population that may need first aid interventions.

Moreover, the opportunity represented by schools, as major social and educational institutions, is unique, in terms of societies' expectations, the fact that students are already a "captive audience" primed to learn, and the possibility to easily programme regular "refreshers" to lessen the loss of skills.

i. Teachers and staff

It goes without saying that parents everywhere expect schools to do their best to ensure the safety of their children. In some countries, teachers and other school personnel are required to obtain certification in first aid. However, the Reference Centre's surveys indicate that this is a minority, as illustrated in Figure 4.

Figure 4



Source: Reference Centre Surveys

Trained school personnel and teachers play an important role not only as providers of first aid to children at school but also as mentors encouraging pupils to acquire their own first aid competencies. In spite of the challenges arising from lack of resources, a number of the countries of the Middle East and North Africa identify first aid as a means to empower local communities, through required training in their schools. 26 Yet, many other countries lack legal provisions to oblige schools to have or offer first aid training. Argentina is one country that has recently moved to address this gap, as described below.

Country case study: Shaping first aid in Argentine schools

The Argentine Ministry of Health has published first aid guidelines in 2011 for teachers that include general information, practical cases and exercises to enhance their preparedness taking into account the most frequent situations and risks in different regions of the country. In 2012, Argentina's national legislature mandated first aid training (focusing on CPR) for high school teachers and students, through the Ministry of Education. It was expected that this legislation would have a major impact in building the country's community resilience through first aid. However, it wasn't until 2014 that the government adopted implementing regulations for the law.

ii. Youth

While it may seem counter-intuitive, recent research indicates that even very young children can be effective first aiders. For example, a 2011 study conducted by the Norwegian Red Cross evaluated the effects of a first aid course for 4-5 year-old kindergarten children. The findings suggest that children of this age are able to learn and apply basic first aid. Retention of knowledge and skills has also been demonstrated at the first grade level, where children performed first aid measures after an intervention and six months later. Teaching first aid also led to more active helping behaviour and increased empathy in the children.²⁹

Similarly promising findings came out of a study of first aid training for 6-7 year olds in Austria in 2003, who were found to be capable to learning and applying first aid techniques, including defibrillation. In its analysis of the literature, that study noted that "both the American Academy of Pediatrics and the European Resuscitation Council stated that schools should include basic life-support in their curricula. In fact, most schools have failed to respond to those suggestions. Research shows that only 6.6% of the pupils in the UK had been trained at school." The study concluded that "[t]he optimal way to reach and teach a large proportion of the population is to teach resuscitation and first aid skills in primary schools. Training school children will take some years to achieve the full effect, but will render numerous benefits to the community. Moreover, the young tend to pass on information to others about first aid situations and treatment."

Integrating first aid education as part of the basic curriculum popularizes and extends access to life-saving competencies to those who could not afford private training. A developmental approach allows for current curriculum to be integrated from several disciplines, creating context and instilling social responsibility. Moreover, as the organizers of the campaign called "Kids Save Lives – Training School Children in Cardiopulmonary Resuscitation Worldwide" have underlined, students and teachers are important "multipliers," inspiring others to receive training. In support of taking this step, in a 2015 meta-analysis, colleagues at the Belgian Red Cross Society developed an evidence-based educational pathway to enable the integration of first aid into the school curriculum by defining the goals to be achieved for knowledge, skills and attitudes, for different age groups. 32

Country case studies: National first aid success in schools

Brazil's Programme on Health at School (*Decreto n° 6282/2007 Programa Saúde na Escola*), established by decree in 2007, works to bridge the gap between school and the national health system by educating students in first aid and prevention as well as creating awareness about health issues. The program now reaches the entire Brazilian school population and it is hoped that, in a few years, all pupils would know the basic principles of first aid.³³

Similarly, in 2014, Spain passed a decree making first aid education mandatory for primary schools (*Real Decreto de Educación Primaria 28-II-2014*). The intervention seeks to sensitize children on the identification of emergency situations and basic first aid skills (including CPR). The Royal Decree on Elementary Education established first aid's introduction in three different subjects: Science of Nature, Social and Civic Values, and Physical Education. This first step towards a life-long first aid education begins with government officials trusting that even if a child is unable to provide CPR he or she will be able to tell bystanders how to do it. 34

Since 2005, France has taken a developmental approach to mandatory first aid training, starting in primary schools for children (known as *Apprendre à porter secours*), followed by a refresher at the secondary school level (known as *Prévention et secours civique de niveau 1*). Unfortunately, however, it seems that the implementation of the law falls short of expectations. According to local specialists, only 20% of secondary pupils actually get this second first aid training.³⁵

For its part, Italy belongs to a group of European countries – including Germany, France, Denmark and Norway – that have mandated training for secondary school students.³⁶

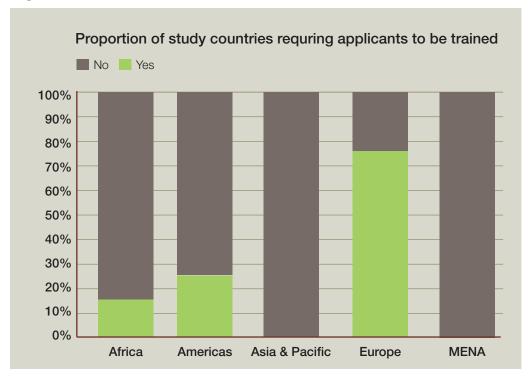
B. First aid training of driver's licence applicants

Another group of persons particularly vulnerable to injuries are those involved in traffic—whether as a drivers, passengers, or pedestrians. The acute and significant trauma of road traffic injuries (RTI) internationally, makes them a prime matter to be addressed by the lay public trained in first aid. Toverall, RTIs make up the largest proportion of unintentional injury deaths in the world (33%). When standardized per 100,000 people, the death rate in low and middle-income countries (LMIC) is nearly double that of high-income countries (65 vs. 35 per 100,000), and the rate of disability-adjusted life-years is more than triple in LMIC (2,398 vs. 774 per 100,000). Meanwhile, a 2013 survey of drivers conducted in Europe revealed a high number with no knowledge of first aid, in particular in countries with no mandatory first aid training requirements for driving licences.

First aid education of drivers would greatly improve the chances of having trained persons near traffic accidents. As one illustration, the majority (67%) of Dominican Republic motorcycle taxi drivers surveyed by one study had witnessed an accident, but only 15% percent had received first aid training. 40 Yet requiring first aid training

for drivers is far from a universal practice across the globe, as illustrated by the proportions of the sample studies in the Cameron McKenna CMS Study, as shown in Figure 5. Even in Europe, the region that has gone farthest in this area, no generalized policy exists on this issue and about a fourth of countries in the region have no mandatory requirements on first aid training for driver's licenses.

Figure 5



Source: Cameron McKenna CMS Study

The WHO recommends, to governments and others, the implementation of "specific actions to prevent road traffic crashes, minimize injuries and their consequences, and evaluate the impact of these actions." Specifically, "strengthening all links in the chain of help for road crash victims, from the crash scene to the health facility (for example, specific groups, such as commercial vehicle drivers, most likely to be first on the scene of crashes, might be provided with basic training in first aid, and health professionals might be provided with specialized training in trauma care)." To accomplish this recommendation, legislation/regulation of first aid education and its content will likely be required.

C. Workplace first aid mandates

The most common legal mandates for first aid training relate to workplaces. This has even risen to the level of international obligations, in the form of several International Labour Organization (ILO) conventions, as described below. However, the nature and application of workplace first aid requirements varies widely.

Workplace first aid and international law

Two ILO Conventions of general application – the Occupational Safety and Health Convention of 1981 (C155) and the Occupational Health Services Convention of 1985 (C161) – include provisions relevant to first aid training in the workplace.

C155 requires member states to formulate, implement and periodically review "national policies on occupational safety and health" (art 4.1). Among the required provisions of these policies is "training, including necessary further training, qualifications and motivations of persons involved, in one capacity or another, in the achievement of adequate levels of safety and health" (art. 5(c)). Moreover, the convention provides that "employers shall be required to provide, where necessary, for measures to deal with emergencies and accidents, including adequate first-aid arrangements" (art. 18). In 2005, a protocol to C155 was agreed that will compel governments and employers to gather and share data on occupational safety and health epidemiology.

For its part, C161 requires that companies' occupational health services shall have the function of "organising of first aid and emergency treatment" (art 5(j)).

These two conventions have had moderate success in terms of global ratification, with 64 parties to C155 (and 10 parties to its protocol) and 32 parties to C161. Among the countries covered by the CMS Cameron McKenna study, there did appear to be a positive correlation between ratification of one of these instruments and the imposition of mandated first aid training requirements, though there were also exceptions, as illustrated in Figure 6.

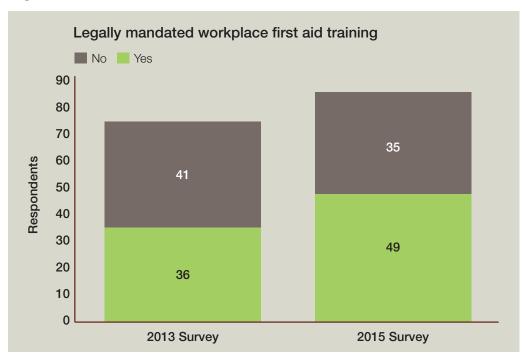
A number of additional ILO conventions also make reference to first aid training and other arrangements with respect to very specific workplaces, including the Convention on Occupational Safety and Health (Dock Work) Convention of 1979 (C152), the ILO Convention concerning Health Protection and Medical Care for Seafarers of 1987 (C164) and the Maritime Labour Convention of 2006.



In 2008-9, the WHO undertook a baseline survey of national policies and practices related to occupational health.⁴² The survey found that, although most countries surveyed had some strategies, standards, and targets for coverage of occupational health services, only one third of these countries covered more than 30% of their workers with such services. Moreover, most countries' ministries of health lacked capacity to promote their occupational health policies; and in one third of the countries they had no staff devoted to this issue. On the other hand 63% of countries had national injury prevention campaigns including an occupational component. The WHO has also separately reported that, "[i]n many countries more than half of workers are employed in the informal sector with no social protection for seeking health care and lack of regulatory enforcement of occupational health and safety standards."43

The Reference Centre's surveys show a similarly mixed picture with regard to the more specific question of whether first aid is legally mandated in the workplace, as illustrated in Figure 7.

Figure 7



Source: Reference Centre Surveys

In some countries, occupational health legislation requires the collection of data on injuries and illness incidents, which also offers an important opportunity for the development of more targeted first aid education programmes. Alternative sources for information may come from labour organizations, non-governmental organizations, health centres, or insurance companies.

Country case studies: Legislating first aid in the workplace

In Russia, the concern for adequate first aid training in the workplace is reflected in a national first aid policy targeting industrial workers aged between 40 and 60 who are at risk with respiratory disease and asthma.

In Fiji, occupational health regulations place legal responsibility on employers for first aid facilities, resources, and following first aid training standards. They systematically also require employers to create records of injuries or illnesses treated in by first aiders, to provide evidence of current work and to anticipate needs.

The United Kingdom also has national regulations on this point, which were recently reviewed and updated. Some recommendations stemming from the review of the British experience include that although first aid awareness and penetration in workplaces was good, compliance was found to be more "in spirit" rather than the letter of the regulations and this exposed some important deficiencies in the format and content of guidance and in the proportionality of the current regulatory requirements for lower risk employees. 44

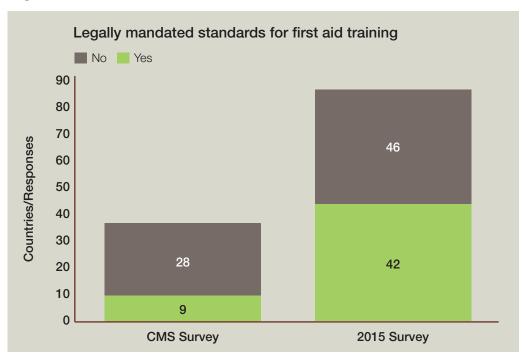
By way of contrast, when a baseline survey was carried out in Gambia in 2004, it did not have legislation about first aid training, and it was found that 94% of workplaces lacked persons capable in first aid.⁴⁵

In addition to its benefits in terms of stemming crises, evidence has shown that workplace first aid training enhances participants' motivation to avoid occupational injuries and illnesses in the first place and improves their risk control behaviour. The implication of this is that first aid training can have a positive preventive effect, complementing existing occupational health and safety training programs. As such, there may be benefit in providing first aid training to all employees rather than limiting this training to a small number of designated "first aiders". 46

III. Standards for first aid training

Whether mandated or voluntary, first aid training can only be effective if it is of sufficient quality and based on sound medical science. In many countries, however, there is surprisingly little official guidance as to the content of first aid training. As illustrated in Figure 9, less than a quarter of the countries examined in the CMS Cameron McKenna Study, and less than half of the countries of the respondents to the 2015 Reference Centre survey reportedly had legally mandated standards.

Figure 8



While there are many circumstances in which even inexpert intervention is far better than doing nothing, there is a difference between competent and incompetent first aid. For example, a 1995 study on cardiac arrests in New York City found that, in 64% of the situations in which a bystander attempted CPR, it was provided incorrectly and the survival rate of the victim was nearly three times lower than situations in which CPR had been provided correctly.⁴⁷ Likewise, there is a difference between effective and ineffective training. Particularly when training is mandated and imposes a cost, there may be a temptation to accept (cheaper) poor quality instruction.⁴⁸ Moreover, it is important for educational materials to be regularly updated to reflect current science. For example, a 2013 study examining 31 of the most commonly used first aid reference books in Nepal with regard to their provisions on the treatment of snake bites found that none fully reflected current international guidance and many included advice that was considered harmful or ineffective.⁴⁹

For countries that have not yet developed their own standards, one useful resource may be the IFRC's International First Aid and Resuscitation Guidelines ("the IFRC Guidelines").50 Based on an exhaustive review of the most recent science, the IFRC Guidelines set out clear indicators for first aid approaches to common injuries/emergency health crises as well as guidance in the design of first aid education programmes, with references to the current medical literature. The Guidelines were first published in 2011 and a revised version is scheduled for publication in 2016.

In drawing inspiration from international references such as the IFRC Guidelines or from standards used in other countries, however, it is important to adapt the advice to the local context. As noted in a study published in 2011 by the Belgian Red Cross

– Flanders, "first aid training in sub-Saharan Africa is often based on handbooks prepared outside of the continent that are not adapted to the African context. Although well-intentioned, such resources sometimes lead to misdirected, inadequate, or even harmful training instructions." 51

Country case studies: Localizing first aid standards

By culture ...

The World Bank identified first aid training as a cost-effective way to save lives in Sub-Saharan Africa. The Belgian Red Cross-Flanders collaborated with others to identify relevant evidence on the effectiveness, safety, and feasibility of various first aid procedures to be compiled in an African First Aid Materials (AFAM), in context with African cultural remedies and preferences. Together, a multidisciplinary panel of eleven African experts discussed each recommendation until they reached agreement on draft guidelines.

To implement the guidelines a flexible didactic materials kit and an implementation guide were co-developed before piloting the training materials and implementation guide in Uganda and Swaziland, in 2010. The pilots included focus group discussions on whether it was tested if:

- 1. the instructions and illustrations were clear and if more complex instructions were performable
- 2. the AFAM didactical materials kit was sufficiently flexible to allow adaptation to the local context, customs, and local didactic needs

The experiences and lessons learned were integrated in the guidelines and in the implementation guide. Eight African Red Cross National Societies (Cameroun, Uganda, Kenya, Burundi, Malawi, Swaziland, South Africa and Namibia) implemented AFAM during 2010-2013.52

By the numbers ...

In Latin America, Mexico has tried since 2010 to promote essential guidelines on first aid both from a medical and legal point of view. Very recently the Mexican Red Cross has been conducting together with the Government (Secretariat of Health) a study to determine the most frequent accidents in the country as a first step to develop national standards for a certified first aid training course.⁵³ In 2015, based on the evidence collected, a first responder curriculum was created to support initial care. ⁵⁴

By the learners ...

The German Red Cross has changed its delivery model so the learner follows 9 instead of 16 learning units of 45 minutes each. The amount of medical information given to the learner has been reduced following a review of content regarding priority and value. A series of role-plays and learning stations have been developed to help participants learn effectively to use their knowledge in coping

with emergencies and accidents. Instructors act more as facilitators rather than experts or teachers before. New short video clips on accident-risks at home, in the workplace and in leisure time stimulate cooperative problem solutions in small groups, where learners practice teamwork. New modern graphic learning cards assist non-German speaking participants to overcome language barriers.

In addition, official standards or guidelines should address the question of training frequency. As much as initial training in first aid is imperative, first aid competencies degrade over time in terms of knowledge, skill, and willingness to help. 55 For example, in Austria where drivers receive 6 hours of initial first aid training, only 59% / 79% of people were found ready to provide first aid, according to two different studies. These surveys demonstrated that an individual's readiness to help was directly related to the time elapsed since they were last trained in first aid. In Austria where just 63% of those surveyed were ready to provide CPR but immediately after first aid training the rate rises to 96%. Thus, a victim's odds of receiving lifesaving first aid can double or triple if bystanders present have recently attended a first aid training course. 56

As noted above, the IFRC recommends consistent repetition of education in life-saving measures, starting through mandated training in the developmental years (i.e., school years) in order to build a foundation of life-long learning and use of first aid. Regulated refresher education for drivers and labourers can also reinforce current practical skills and knowledge. Time limits must be set for first aid certificates, at least every five years, as it is the increment of time when changes in science and culture are examined to update evidence based guidelines. These activities should be accompanied by increased public information on the need of regular refresher experiences in first aid for bystanders and obligatory first aid training for target groups like policemen and teachers. 57

IV. Protection from liability

Even with training, lay first aiders can and do make mistakes in situations of crisis, even when acting in good faith. Should they then be held liable if someone dies? From a public policy point of view, the answer is clearly no, due to the overwhelming social interest in encouraging people to do their best to help each other in cases of emergency.

In many situations (such as during cardiac arrest or arterial bleeding), even inexpertly executed first aid is better than doing nothing and well trained first aiders can certainly make a substantial difference. Yet, bystanders – even when previously trained – are often extremely reluctant to get involved. For this reason, first aid promoters are at great pains to encourage a reluctant public to help.⁵⁸

As noted in Section I above, a number of reasons have been cited for this reluctance. Some of them, such as a lack of knowledge and confidence, shock or fear of disease transmission, can be addressed through the content and approach of first

aid education programmes. Lawmakers can promote this through requiring training in certain circumstances and ensuring minimum quality of training. However, the other common factor – the fear of liability or other official entanglement – is one that they are in a unique position to address even more directly.

A fear of legal exposure for hurting someone or simply "not doing the right thing" has been reported as an important factor in the failure to act in a variety of countries around the world, including in Singapore, 59 France, 60 South Korea, 61 China, 62 India, 63 the United Kingdom, 64 Australia 65 and the United States, 66 among others. In response to a 2013 survey carried out by the SaveLIFE Foundation in cities across India, 74% of respondents reported that they would be unlikely to seek to help in the case of a traffic accident and 88% of them cited "legal hassles" as the primary reason for this hesitation. 67

Likewise 65% of the Red Cross and Red Crescent first aid experts responding to the 2015 Reference Centre Survey indicated their belief that legal problems are a significant factor in whether people attempt to provide first aid. As illustrated in Figure 9, this included respondents from all regions.

Do you think that fear of legal problems is a significant factor in whether people attempt first aid? No Yes 40 35 30 15 25 20 15 22 10 4 11 10 5 7 5 0 Asia & Pacific **MENA** Africa Americas Europe

Figure 9

Source: 2015 Reference Centre Study

While there do not appear to be widespread prosecutions or lawsuits against first aiders in most countries, there have been some high profile exceptions, with a strong impact on public perceptions, as illustrated in the case studies below.

Country case studies: No good deeds unpunished?

In 2007, a Nanjing student allegedly sought to help an elderly woman after she fell while disembarking from a bus, even going so far to help the woman to the hospital and offer her some money to support her with hospital fees. However, the victim then sued the student accusing him of causing her fall. The judge sided with the plaintiff, finding that no one without a guilty conscience would have provided such assistance and ordered the defendant to pay more than 45,000 yuan (approximately US \$ 6,000). The case was widely reported in Chinese media, which, in turn, led to further claims against first aiders and fuelled the reluctance of bystanders to be involved. 68 A further example was reported in 2013, when two teenage boys who allegedly tried to rescue two girls from drowning were pressured to pay 50,000 yuan each to the girls' families for failing to save them. 69 In 2013, the City of Shanzen adopted China's first Good Samaritan law in response to this issue.

In 2007, the California Supreme Court upheld the claim of a woman who had been rendered paralysed after her friend inexpertly removed her from a vehicle after a car accident out of fear of an explosion. 70 While the State of California had a Good Samaritan law, the court held to it applied only to "medical emergencies" and this rescue was not covered. The state's Good Samaritan Act has subsequently been amended to address this type of situation. However, there remains great variety as to the coverage of Good Samaritan laws among states in the United States. 71

In some countries (particularly those in the civil law tradition), attempting to provide first aid is, in fact, legally required and such attempts will not expose the helper to liability. For example, under the German and Swiss penal codes about the non-provision of aid in emergencies (*Unterlassene Hilfeleistung*), a citizen is obliged to provide first aid when necessary and is immune from prosecution if assistance given in good faith turns out to be harmful. However, legislation is not uniformly clear about this in all countries with such requirements. Moreover, many countries that do not legally require a layperson to act in a case of emergency (particularly in the common law tradition), have also enacted "Good Samaritan laws" to provide them with varying degrees of protection from liability in case they do try. As illustrated in Figure 10 below, the coverage of these various types of legal protections is far from complete.

Does the law expressly provide for liability protection for lay first aiders? No Yes 90 80 70 Countries/Respondents 60 51 50 40 60 30

Figure 10

20

10

0

Sources: CMS Cameron McKennna Study and Reference Centre Surveys

33

CMS Study

Equally striking, however, is that even in countries where Good Samaritan laws do exist, laypeople sometimes do not seem to realize (or trust) that they will be protected. For example, a recent survey by a newspaper in Australia indicated that 32% of respondents would hesitate to provide CPR due to fear of lawsuits, despite the existence of Good Samaritan laws at the state and territory levels. This shows that is not enough to provide the legal protections, they must also be properly communicated to the public to have the desired effect.

26

2013 Survey

17

2015 Survey

Conclusion and recommendations

The capacity, preparedness and willingness of ordinary people to provide first aid in situations of emergency are a critical link in the "chain of survival". While certainly not replacing the need for professional emergency responders and well-functioning hospitals, they have an indispensable role to play in the first moments of a crisis, when many deaths or long-term injury might otherwise occur. There are already many first aiders heroically meeting these needs today, but there are also a number of lingering barriers to a wider application of first aid that lawmakers can help to address

Voluntary first aid education remains extremely important, but governments should consider extending mandatory training requirements, particularly in schools and for driver's license applicants as well as in appropriate workplaces, with an eye to a developmental approach to instilling skills and confidence regularly supplemented throughout the life-cycle. The quality of first aid education should be supported with official guidelines and standards to ensure its scientific validity and effectiveness. And lay first aiders acting in good faith should be provided (and clearly informed about) protection from legal liability, in order to reduce the sometimes overwhelming hesitations that prevent people from saving lives.

In taking these steps, lawmakers should keep in mind their specific epidemiological profile, pre-hospital care system and existing legislation. The common health concerns and injuries identified by specific communities or targets groups must be addressed, with special attention paid to their cultural and religious beliefs as well as the available resources.

The IFRC previously made similar recommendations and while there has been some progress since its 2009 and 2010 reports, there is still much to be done. The 32nd International Conference of the Red Cross and Red Crescent will represent one of the few opportunities where a direct light will be shed on these issues in a prominent international forum. We hope that it will spark renewed energy to making these key investments in community-based health.

The IFRC and its member National Red Cross and Red Crescent Societies, with their long experience in providing first aid education to millions of ordinary people around the world, stand ready to support lawmakers to place the power to save lives in the hands of their citizens.

Endnotes

Introduction

- 1 IFRC, First aid for a safer future: Focus on Europe (2009), available at http://www.ifrc.org/PageFiles/53459/First%20aid%20 for%20a%20safer%20future%20Focus%20on%20Europe%20%20Advocacy%20report%202009.pdf?epslanguage=en.
- 2 IFRC, First aid for a safer future: Updated global edition (2010) (hereinafter 2010 IFRC Report), available at http://www.ifrc.org/PageFiles/53459/First%20aid%20for%20a%20safer%20future%20Updated%20global%20edition%20%20Advocacy%20report%202010%20%282%29.pdf?epslanguage=en.
- 3 Those countries were Algeria, Austria, Brazil, Bulgaria, Canada, Chile, China, Dominican Republic, Egypt, El Salvador, Ethiopia, France, Germany, Ghana, Guyana, Indonesia, Iraq, Jamaica, Japan, Jordan, Kuwait, Lebanon, Libya, Mexico, Poland, Qatar, Russia, Rwanda, Senegal, Serbia, South Africa, South Sudan, Sri Lanka, Thailand, Tunisia, Turkey and Vietnam.
- 4 World Health Organization, Injuries and violence: The facts (2010), available at http://apps.who.int/iris/bitstre am/10665/44288/1/9789241599375_eng.pdf
- Mathers C., et al., "The burden of disease and mortality by condition: Data, methods, and results for 2001," in Lopez A, et al., eds., Global burden of disease and risk factors (World Bank, 2006), Chap. 3, available at http://www.ncbi.nlm.nih.gov/books/NBK11808/.
- 6 See 2010 IFRC Report, supra note 2, at 7.
- 7 Tannvik, T., et al, A systematic literature review on first aid provided by laypeople to trauma victims, *Acta Anaesthesiol Scand.*, Vol. 56, No. 10 (2012), 1222–1227, available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3495299/.
- 8 Arbon, P. et al, First aid and Harm Minimisation for Victims of Road Trauma: A Population Study Final Report (June 2007), at 5, available at http://clicktosave.com.au/wp-content/uploads/2013/06/Australian_Population_Study_on_victims_of_Road_Trauma1.pdf.
- 9 Shotland, R, and Heinold W., Bystander Response to Arterial Bleeding: Helping Skills, Decision-Making Process and Differentiating the Helping Response, *J. of Pers. and Social Psychology*, Vol. 49, No. 2 (1985), 347-56.
- 10 See 2010 IFRC Report, supra, note 2, at 5.
- 11 Osaki T., Tokyo considers rewards for administering first aid, *The Japan Times* (April 3, 2015), available at http://www.japantimes.co.jp/news/2015/04/03/national/science-health/tokyo-considers-rewards-for-administering-first-aid/.
- 12 Laxminarayan R. et al. Advancement of global health: key messages from the disease control priorities project, The *Lancet*, Vol. 367 (2006), 193-208.

I. Background

- 13 Darley J & Latane B., Bystander intervention in emergencies: Diffusion of responsibility, J Pers Soc Psychol. Vol. 8, No. 4 (1968), 377-383, available at http://psych.princeton.edu/psychology/research/darley/pdfs/Bystander.pdf; Cho G, et al., The effect of basic life support education on laypersons' willingness in performing bystander hands only cardiopulmonary resuscitation, Resuscitation, Vol. 81, No. 6 (2010), 691-694, available at http://dx.doi.org/10.1016/j.resuscitation.2010.02.021; Shotland & Heinold, supra note 9.
- Whittaker J, et al., A review of informal volunteerism in emergencies and disasters: Definition, opportunities and challenges, Int'l J of Disaster Risk Reduction (publication pending), available at http://www.sciencedirect.com/science/article/pii/S2212420915300388; Ong, M. et al., National population based survey on the prevalence of first aid, cardiopulmonary resuscitation and automated external defibrillator skills in Singapore, Resuscitation, Vol. 84, No. 11 (2013), 1633-1636, available at http://dx.doi.org/10.1016/j.resuscitation.2013.05.008; Rowe B, et al., Preparation, attitudes and behaviour in nonhospital cardiac emergencies: Evaluating a community's r eadiness to act, Can J Cardiol. Vol. 14, No. 3 (1998), 371-377; Moreno-Walton L., et al., A survey investigation of knowledge and confidence in the performance of pediatric cardiopulmonary resuscitation among parents of patients in a middle eastern hospital, Acad Emerg Med. Vol 20, No. 5 (2013), S247; Sasson C, et al., Barriers and facilitators to learning and performing cardiopulmonary resuscitation in neighborhoods with low bystander cardiopulmonary resuscitation prevalence and high rates of cardiac arrest in Columbus, OH, Circ Cardiovasc Qual Outcomes. Vol. 6, No. 5 (2013), 550-558; Jayaraman S, et al., Current patterns of prehospital trauma care in Kampala, Uganda and the feasibility of a lay-first responder training program, World J Surg., Vol. 33, No. 12 (2009), 2512-2521; Dwyer T., Psychological factors inhibit family members' confidence to initiate CPR, Prehosp Emerg Care, Vol. 12, No. 2 (2008), 157-161; Platz E, et al., Attitudes towards CPR training and performance in family members of patients with heart disease, Resuscitation, Vol. 47, No. 3 (2000), 273-280.
- 15 Darley J. & Latane B., Bystander intervention in emergencies: Diffusion of responsibility, J Pers Soc Psychol, Vol. 8, No. 4 (1968), 377-383, available at http://psych.princeton.edu/psychology/research/darley/pdfs/Bystander.pdf.

16 Oliver, E., et al., Can first aid training encourage individuals' propensity to act in an emergency situation? A pilot study, *Emerg Med J.* Vol. 31, No. 6 (2014), 518-20; Arbon, *supra* note 9, at 8; Beaman A, et al., Increasing helping rates through information dissemination: Teaching pays, *Personality & Social Psychology Bulletin*, Vol. 4, No. 3 (1978), 406.

II. Mandating first aid training in certain circumstances

- 17 See Mathers, supra note 5, at 3-4.
- 18 Polinder S., et al., Assessing the burden of injury in six European countries, *Bull World Health Organ.*, Vol. 85, No. 1 (2007), 27-34; Wong P., et al., Elderly burn prevention: A novel epidemiological approach, Burns Vol 33, No. 8 (2007), 995-1000, available at http://www.burnsjournal.com/article/S0305-4179(07)00086-1/abstract; Bureau of Labor Statistics, US Department of Labor, ed., Nonfatal Occupational Injuries and Illnesses Requiring Days Away from Work (2009); Al-Naami M., et al., Trauma care systems in Saudi Arabia: An agenda for action, *Ann Saudi Med*, Vol. 30, No. 1 (2010), 50-58, available at http://www.bls.gov/news.release/archives/osh2_11092010.pdf.
- 19 Jayaraman S, et al., First things first: Effectiveness and scalability of a basic prehospital trauma care program for lay first-responders in Kampala, Uganda, *PLoS One*, Vol. 4 No. 9 (2009), e6955-e6955.
- 20 Sun J & Wallis L., The emergency first aid responder system model: Using community members to assist lifethreatening emergencies in violent, developing areas of need, *Emerg Med J.*, Vol. 29, No. 8 (2012), 673-678.
- 21 Obeng C., Injuries in preschool classrooms, Health Educ., Vol. 109, No. 5 (2009), 414-423, available at http://dx.doi.org/10.1108/09654280910984825; Newman L., & Crawford P., Dental injuries: "First aid" knowledge of Southampton teachers of physical education, Endod Dent Traumatol., Vol. 7, No. (1991), 255-258; Collard D., et al., Economic burden of physical activity-related injuries in Dutch children aged 10-12, Br J Sports Med., Vol. 45 No. 13 (2011), 1058-1063.
- 22 Zanner R., et al., Evaluation of M-AID, a first aid application for mobile phones, Resuscitation, Vol. 74, No. 3 (2007), 487-494, available at http://dx.doi.org/10.1016/j.resuscitation.2007.02.004.
- 23 World Bank, Population ages 0-14 (% of total), available at http://data.worldbank.org/indicator/SP.POP.0014.TO.ZS/countries/1W-XN-XD?display=graph (accessed 27 August, 2015).
- 4 Huang L, et al., The knowledge and self-efficacy of first aid on unintentional injury in parents with young children in Taiwan, Pediatr Crit Care Med., Vol. 15, No. 4 (2014), 177.
- **25** Khan U. et el., School-based injury outcomes in children from a low-income setting: Results from the pilot injury surveillance in Rawalpindi City, Pakistan, *BMC Res Notes*, Vol. 6 (2013), 86-86.
- 26 2010 IFRC Report, supra note 2.
- 27 Dirección Nacional de Capital Humano y Salud Ocupacional, Módulo VI: Primeros auxilios y medidas de protección personal para agentes comunitarios en ambiente y salud (2011), available at http://www.msal.gob.ar/observatorio/images/stories/documentos_institucional/materiales-didacticos/2-3-3-J-moduloprimaux.pdf.
- 28 Argentina, Ley 26.835 sobre promoción y capacitación en las técnicas de reanimación cardio-pulmonar (RCP) para estudiantes de nivel medio y superior [trans: Law 26835 on promotion and training techniques of cardio- pulmonary resuscitation (CPR) for students at the middle and upper level s] (2012), available at http://www.bnm.me.gov.ar/giga1/normas/15739.pdf.
- 29 Bollig G., at al., Effects of first aid training in the kindergarten a pilot study, Scand J Trauma Resusc Emerg Med., Vol. 19 (2011), 13. Bollig G, et al., Primary school children are able to perform basic life-saving first aid measures, Resuscitation, Vol. 80, No. 6 (2009), 689-692 available at http://dx.doi.org/10.1016/j.resuscitation.2009.03.012.
- **30** Uray, T. el al, Feasibility of life-supporting first aid (LFSA) training as a mandatory subject in primary schools, *Resuscitation*, Vol. 59, No. 2 (2003), 211-20.
- 31 "Kids Save Lives Training School Children in Cardiopulmonary Resuscitation Worldwide", joint Statement from the European Patient Safety Foundation (EuPSF), the European Resuscitation Council (ERC), the International Liaison Committee on Resuscitation(ILCOR) and the World Federation of Societies of Anaesthesiologists (WFSA) (2014), available at http://bit.lv/1kkW.//8
- 32 De Buck E., et al., Evidence-based educational pathway for the integration of first aid training in school curricula, *Resuscitation*, Vol. 94 (2015),8-22, available at http://www.ncbi.nlm.nih.gov/pubmed/26093230.
- **33** Coelho J., Ensino de primeiros socorros nas escolas e sua eficacia, *Revista Científica do ITPAC*, (Jan. 2015) available at http://www.itpac.br/arquivos/coppex/revista%20volume%208/artigo7.pdf.

- 34 El Consejo General de Enfermería (CGE), Los niños aprenderán primeros auxilios desde primaria, available at http://www.consejogeneralenfermeria.org/index.php/sala-de-prensa/noticias/item/3068-los-ni%C3%B1os-aprender%C3%A1n-primeros-auxilios-desde-primaria#.vdOJJ1NVikp (accessed August 18, 2015).
- 35 Permis: Quelle formation aux premiers secours, Génération En Action (accessed April 9, 2015), available at http://www.generation-en-action.com.
- 36 Ruggiero Corcella, Gli studenti impareranno in classe Esplora il significato del termine: Le manovre salva-vita, Corriere Della Serra (July 7, 2015), (accessed August 18, 2015), available at http://www.corriere.it/salute/15_luglio_03/scuola-studenti-rian-imazione-cardiopolmonare-primo-soccorso-58f0bf6e-218a-11e5-be97-5cd583b309bb.shtml?refresh_ce-cp.
- 37 European Transport Safety Council, Reducing the severity of road injuries through post impact care (1999), available at http://clicktosave.com.au/wp-content/uploads/2013/06/European_Transport_Safety_Council1.pdf; Seidenberg P., et al., Epidemiology of injuries, outcomes, and hospital resource utilization at a tertiary teaching hospital in Lusaka, Zambia. Acad Emerg Med. Vol. No. 5 (2013), S325, available at http://www.sciencedirect.com/science/article/pii/S2211419X14000329; Al-Shaqsi S., et al., Emergency medical services versus private transport of trauma patients in the Sultanate of Oman: A retrospective audit at the Sultan Qaboos University Hospital, Emerg Med J. (2013), available at http://www.ncbi.nlm.nih.gov/pubmed/23825061; Ngo A, et al., Road traffic related mortality in Vietnam: Evidence for policy from a national sample mortality surveillance system, BMC Public Health, Vol. 12 (2012), 561, available at http://www.biomedcentral.com/1471-2458/12/561; Kavita R., et al., Burden, characteristics, and outcome of injury among females: Observations from Bengaluru, India, https://www.ncbi.nlm.nih.gov/pubmed/21570866; Aygencel G., et al., Review of traffic accident cases presenting to an adult emergency service in Turkey, https://www.researchgate.net/publication/5751636.
- 38 Chandran A., et al., The global burden of unintentional injuries and an agenda for progress. *Epidemiol Rev. Vol. 32*, No. 1 (2010), 110-120, available at http://epirev.oxfordjournals.org/content/32/1/110.full.
- **39** Eurotest, Study on First Aid in Europe (2013), available at http://www.eurotestmobility.eu/wp-content/uploads/2013/11/Study-on-First-Aid_3018.pdf.
- 40 Arellano N., et al., The role of motorcycle taxi drivers in the pre-hospital care of road traffic injury victims in rural Dominican Republic, *Inj Prev.*, Vol. 16 No. 4 (2010), 272-274.
- 41 Lindqvist K. Lindholm L., A cost-benefit analysis of the community-based injury prevention programme in Motala, Sweden—a WHO safe community, *Public Health*, Vol. 115, No. 5 (2001), 317-322, available at http://dx.doi.org/10.1038/si.ph.1900793.
- 42 WHO, Global Plan of Action on Workers' Health (2008-2017): Baseline for Implementation (2013).
- 43 WHO, Protecting Workers' Heath, Fact sheet N°389, April 2014.
- 44 Winton, C., Evaluation of the Health and Safety (First-Aid) Regulations 1981 and the approved code of practice and guidance (2003), at viii.
- 45 Demba, E., et al, Prevention of work-related accidents, including high-risk sectors such as agriculture, construction and mining The Gambia country report, International Social Security Association, Technical Seminar on "Work Accidents and Occupational Diseases in Africa" Banjul, Gambia, 25-26 April 2013, at 4.

III. Standards for first aid training

- 46 Lingard H., The effect of first aid training on Australian construction workers' occupational health and safety motivation and risk control behaviour, *J Safety Res.* Vol. 33, No. 2 (2002), 209-230, available at http://www.researchgate.net/publication/11173671.
- 47 Gallagher, E. et al., Effectiveness of Bystander Cardiopulmonary Resuscitation and Survival Following Out-of-Hospital Cardiac Arrest, *JAMA* Vol 274 No. 24 (1995),1922-25.
- 48 Parnell M. & Larsen P., Poor Quality teaching in lay person CPR courses, *Resuscitation*, Vol 32, No. 2 (2007), 271-8; Shenefelt, R., Unmasking the Certification Mill Problem, Occupational Health and Safety Online (Apr 1, 2013), available at https://ohsonline.com/Articles/2013/04/01/Unmasking-the-Certification-Mill-Problem.aspx.
- 49 Pandey, D. and Khanai, B., Inclusion of incorrect information on snakebite first aid in school and university teaching materials in Nepal, *J of Toxic and Environtl Health Sciences*, Vol 5, No.3 (2013), 43-51.
- 50 The Guidelines are available online at http://bit.ly/1KN8IFB.
- 51 Van de Velde S. et al., Evidence-based African first aid guidelines and training materials, *PLoS Med.*, Vol. 8 No.7 (2011), e1001059-e100105, available at http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001059.

- **52** *Ibid.*
- 53 Aguilar L., Personal interview (2015); Mexican Ministry of Health, Manual for training in first aid first responders, National Center for Injury Prevention (2010).
- 54 Cruz Roja Mexicana, Curso primer respondiente (2015).
- McKenna S & Glendon A, Occupational first aid training: Decay in cardiopulmonary resuscitation (CPR) skills, J of Occupational Psychology, Vol. 58, No. 2 (1985), 109-117, available at http://psychsource.bps.org.uk/details/journal/ssue/3643761/Volume-58-Issue-2-June-1985.html; Li F. et al., Effects of pediatric first aid training on preschool teachers: A longitudinal cohort study in China. BMC Pediatr., Vol. 14, No. 1 (2014), 209-209, available at http://www.biomedcentral.com/1471-2431/14/209.
- 56 Starmayr B. Bereitschaft der Oesterreicher zur Erste-hilfe-leistung [trans: Readiness of Austrians to perform first aid] (2010), available at https://www.roteskreuz.at/fileadmin/user_upload/PDF/Gesellschaftspolitik/PB_EH.pdf.
- 57 Li F., et al, supra note 55.

IV. Protection from liability

- 58 Galloway, G., Even untrained bystanders should perform CPR in cardiac arrest cases, doctors say, *Globe and Mail*, Oct. 13, 2011.
- 59 Ong, M. et al, National population based survey on the prevalence of first aid, cardiopulmonary resuscitation and automated external defibrillator skills in Singapore, *Resuscitation* Vol. 84 (2013), 1633–36.
- 60 Larcan A. & Julien H., [First-aid in France. current situation and future perspectives], Bull Acad Natl Med. Vol 194, No. 6 (2010), 1071-1093.
- 61 Cho G, et al., The effect of basic life support education on laypersons' willingness in performing bystander hands only cardio-pulmonary resuscitation, *Resuscitation* Vol. 81 (2010), 691-4.
- 62 Young, M., The Aftermath of Peng Yu: Restoring Helping Behavior in China, *Pacific Rim Law and Policy J*, Vol. 22, No. 3, 691-711 (2013).
- 63 Jain A. et al., Two wheeler accidents on Indian roads a study from Mangalore, India. *J Forensic Leg Med.*, Vol. 16, No. 3 (2009), 130-133.
- 64 Hope, C., One in three passers-by will not administer first aid because they fear being sued, *The Telegraph*, Sept. 14, 2014, available at http://www.telegraph.co.uk/news/politics/11075274/One-in-three-passers-by-will-not-administer-first-aid-because-they-fear-being-sued.html.
- 65 Jones G. & Carson V., Fear factor hinders people learning and using CPR to save Australians' lives. *Daily Telegraph*, January 13, 2012, available at https://www.dailytelegraph.com.au/news/nsw/fear-factor-hinders-people-learning-and-using-cpr-to-save-australians-lives/story-e6freuzi-1226243035979.
- 66 Sasson H., et al., Barriers and facilitators to learning and performing cardiopulmonary resuscitation in neighborhoods with low bystander cardiopulmonary resuscitation prevalence and high rates of cardiac arrest in Columbus, OH, Circ Cardiovasc Qual Outcomes, Vol. 6, No. 5, (2013), 550-58.
- 67 SaveLIFE Foundation, Study on Impediments to Bystander Care in India (2013), available at http://www.grsproadsafety.org/sites/grsp.drupalgardens.com/files/2013.
- 68 See, e.g., Young, M., supra note 62.
- 69 The unkindness of strangers: A soul-searching debate rages about apathy towards those in need. *The Economist*, July 17, 2013, available at http://www.economist.com/news/china/21582295-soul-searching-debate-rages-about-apathy-towards-those-need-unkindness-strangers.
- 70 Van Horn v. Watson, 45 Cal. 4th 322, 197 P.3d 164 (2007).
- 71 Sutton, V., Is There a Doctor (and a Lawyer) in the House? Why our Good Samaritans Laws Are Doing More Harm than Good for a National Public Health Security Strategy: A Fifty-State Survey, J of Health and Biomedic al Law, Vol. 6, No. 2 (2010), 261-300.
- 72 Fear factor hinders people learning and using CPR to save Australians' lives. *Daily Telegraph*, January 13, 2012, available at http://www.dailytelegraph.com.au/news/nsw/fear-factor-hinders-people-learning-and-using-cpr-to-save-australians-lives/story-e6freuzi-1226243035979.

International Federation of Red Cross and Red Crescent Societies **Law and first aid**

Promoting and protecting life-saving action

The Fundamental Principles of the International Red Cross and Red Crescent Movement

Humanity The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavours, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation and lasting peace amongst all peoples.

Impartiality It makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavours to relieve the suffering of individuals, being guided solely by their needs, and to give priority to the most urgent cases of distress.

Neutrality In order to enjoy the confidence of all, the Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious or ideological nature.

Independence The Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so that they may be able at all times to act in accordance with the principles of the Movement.

Voluntary service It is a voluntary relief movement not prompted in any manner by desire for gain.

Unity There can be only one Red Cross or Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

Universality The International Red Cross and Red Crescent Movement, in which all societies have equal status and share equal responsibilities and duties in helping each other, is worldwide.

