

3rd SRFAC Townhall
(Virtual)
First Aid Guidelines 2021 Update

Presented by
Faraz Zarisfi



Objectives

- Brief introduction to First Aid
- In a local context
- In a historical context
- Latest Guidelines
- Brief highlights

What is First Aid

- The behaviour and initial care provided to help and support an acute illness or injury
- It can be initiated by anyone to preserve life, alleviate suffering, limit further injury and promote recovery in any situation.

Who provides it

- Trained first aid provider
- Multiple training organisations
- Local standards set by SRFAC
- International standards set by ILCOR
 - International Collaborative effort since 1990s
 - Resuscitation and First Aid
 - Consensus on Science and Treatment Recommendation (CoSTR)
 - Focused topic reviews every 5 years, latest 2020
 - Each regional body then provides updates to local practice guidelines



Who needs it

Acute Illness

- Cardiac Arrest
- Dyspnoea
- Chest pain, Palpitation
- Abdominal Pain
- Stokes, Seizures
- Unconsciousness

Acute Injury

- Road Traffic Collisions
- Industrial, Workplace
- Homeplace Accidents
- Interpersonal violence

Who needs it (Annual statistics from SCDF)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Medical	139861	132581	128581	123434	119967	117308	110692	106905	100542	89944	86322
Trauma RTA	7844	10401	10415	10270	10880	11307	10896	11022	12561	13319	12432
Trauma Other	28248	30860	30657	29859	28509	28424	26958	26399	24238	22703	21720



Who needs it

- 11 minutes response, 80% of the time
- 10 minutes is a long time during a medical emergency
- Time of event to time of call
 - Early recognition, assessment and prioritisation of the need for first aid
 - Provision of care with appropriate knowledge, skill and behaviour
 - Awareness of limitations and seeking additional help without delay.

Why update?

- Regular evaluation of outcomes
- Review of effectiveness of current treatments
- Emerging technologies and therapies
- Emerging scientific evidence
- Relevance to improved outcome
- International consensus, enacted at local level

Brief Overview of Topical Updates

Safety First

- Physical
 - Environment
 - Event
 - Violence
 - Infection
- Emotional



Breathing Difficulties

- First Aid Providers should be trained in the administration of Inhaled bronchodilators so they can assist when required
- Administration of oxygen is not considered a standard first aid skill

Anaphylaxis

- Recognise anaphylaxis and be familiar with the administration of adrenaline autoinjector which may be carried by persons at risk

Chest Pain

- Transfer by EMS
- Aspirin
 - If available
 - If no contraindications

Shock

- Supine position rather than the upright position
- Passive leg raise of the feet may briefly improve blood pressure.
- Head down positioning should not be attempted

Recovery Position for Unresponsive Victims

- If a casualty is unresponsive and not breathing normally, the provider should proceed according to the basic life support guidelines immediately

Recovery Position

- Post RoSC
- Keep supine and regularly monitor
- Recovery position may hinder the detection of subsequent loss of cardiac output.

Recovery Position

- i) Abduct the arm of the nearer shoulder to 90 degree with the elbow flexed at 90 degrees and the palm facing upwards (like taking an oath);
- ii) Place the farther hand across the body and place the back of the palm against the casualty's cheek nearer to the rescuer;
- iii) Flex the farther knee to 90 degrees;
- iv) While keeping the casualty's back of hand pressed against the casualty's cheek, pull the farther thigh and roll the casualty towards the rescuer and the casualty is lying on his/her side now;
- v) Adjust the lower limb on top so both the hip and knee are flexed at 90 degrees;
- vi) Tilt the head back to keep the airway open.

Seizures

- Usually self-limiting events for patients with epilepsy
- Patients with cardiac arrest may initially develop anoxic seizures.
- Some patients with epilepsy may also develop cardiac arrest during a seizure
- Check for normal breathing after seizures have stopped and start CPR and use an AED if breathing is not present.

Poisoning

- Limit further access to the ingested poison by the casualty
- Do not try to induce vomiting.
- Do not administer anything by mouth for any ingested poison
- There is also no role of dilution with water or activated charcoal as a First Aid measure

Heat Disorders

- Spectrum of illness associated with either physical activity or passive exposure in the presence of heat and humidity.
 - Heat Cramps
 - Heat Exhaustion
 - Heatstroke

Heat Disorders

- Heat cramps are involuntary muscle spasms after or during exercise.
- Casualties with heat exhaustion may present with nausea, dizziness, muscle cramps, headache, fatigue and heavy sweating.

Heatstroke

- A medical emergency
- Syncope, Confusion, Seizures
- $T > 40\text{ C}$
- No Sweating

Heatstroke

Exertional Heat Stroke :

Precipitated by vigorous exercise in a hot and humid environment

Classical Heat Stroke:

Passive heat exposure usually seen in elderly, children, and those with chronic illness during extreme heat events worldwide



Heatstroke

- The most important action for a victim of heat stroke is to begin immediate cooling and to activate EMS to take the casualty to the hospital for advanced care
- As casualties with heat stroke may not be able to swallow safely, one should not force them to drink.



Bleeding

- 1/3 of trauma mortality
- 33 to 56% during the prehospital period
- International data

Bleeding from Extremities

- First Aid Providers should use a tourniquet rather than direct manual pressure or dressing alone.
- SRFAC will continue to teach improvised tourniquets as a foundational skill
- We encourage professional first aid organisations and individual providers to use commercial tourniquets

Bleeding from Trunk and Head

- Direct pressure is a quick and effective method, easily performed by all First Aid Providers
- If it is not possible to provide continuous manual pressure, an elastic bandage wrapped over gauze should be applied with pressure
- Haemostatic dressings

Head Injury

- Recognise the mechanisms of injury leading to traumatic brain injury
- Recognise casualties with significant head injury
- Recognise risk of spinal injuries and protect
- Recognise risk of bleeding from scalp wounds

Spine

- Spinal injury after trauma should be suspected
- Mechanism, Symptoms
- Spinal immobilisation

Dental

- Immediate reimplantation of an avulsed tooth within an hour has the greatest chance of tooth survival
- In caring for the avulsed tooth, it should only be touched at the crown and not the root, and if contaminated, the avulsed tooth can be rinsed under tap water for a maximum of 10 seconds
- Transport the avulsed tooth by wrapping it in a cling film or storing it temporarily in a small container

Bites and Stings

- Animal and human bites should be irrigated with copious amount of running water with or without soap to reduce bacterial and viral contamination
- Snakebites should be immobilised
- There should be no attempt to cut the wound or suck the venom
- Application of tourniquet to snake bitten limbs is not advised

Bites and Stings

- Prevent further nematocyst discharge and provide pain relief to the casualty
- Care should be taken when removing tentacles, they should not be compressed or smeared
- Wash with vinegar (4%–6% acetic acid solution) for 30 seconds
- For pain relief, jellyfish and other marine stings should be treated with hot water immersion (maximum 45C) for 20-30 minutes

Education

- There is evidence of skills decay within 12 months after training
- Frequent training improves skills, responder confidence and willingness to perform first aid
- Online learning has provided an alternative to traditional classroom learning

In summary

- The aims of training and delivering first aid remain constant
- The scientific and clinical basis is evolving with new innovations and evidence
- There will be cycles of updated practice
- The community of First Aid Providers will continue to strive for improving outcomes



Thank You

