

# INTERNATIONAL LIFE SAVING FEDERATION

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## **MEDICAL POSITION STATEMENT - MPS 25**

## SOLO RESCUER CPR

**NOTE**: Medical Position Statements are intended only for trained lifeguards/lifesavers with a duty to respond.

## **PLAIN LANGUAGE SUMMARY**

A solo rescuer should call for help using a mobile device or bystanders while commencing CPR. If no help is available, perform 2 minutes of CPR, place the victim in the recovery position and then seek help.

## Who does this statement apply to?

This statement applies to adult, child and infant victims that require cardiopulmonary resuscitation (CPR) when only one lifeguard is available. It assumes that the decision to initiate or continue CPR is medically, ethically and legally appropriate and that risks to the rescuer, patient and bystanders have been properly assessed and mitigated, including the risk of post-traumatic stress reactions.

## Who is the intended audience for this statement?

This statement is for use by lifeguards; lifeguard supervisors, managers and employers; medical directors; and individuals/organisations providing first aid and CPR education to lifeguards.

#### **BACKGROUND**

Some lifeguards responding to a cardiac arrest may be working alone when they initiate CPR. There is very little evidence to guide the response of a solo rescuer in these situations. There is also debate over whether solo rescuers should start resuscitation immediately or leave the victim to get help. Furthermore, it is not known how long CPR should be performed before a decision to leave the victim is made.

Solo-rescuer CPR is much more effective than no CPR at all, but significantly harder to perform than CPR with multiple-rescuers. Solo-rescuer CPR with early AED use should be encouraged in primary cardiac arrest. In drowning, respiratory, paediatric and other

secondary cardiac arrest, prompt ventilation is important, especially in the period between respiratory failure and cardiac arrest.<sup>4</sup>

Given the lack of immediate backup in solo rescuer settings, significant pre-planning by lifeguard agencies is required. Documented policies and staff training must be in place before operations commence to ensure the physical and emotional wellbeing of lifeguards; safety of the public/patrons during a resuscitation; appropriate aftercare of the victim; and integration with emergency services, healthcare facilities and the authorities.

In locations where no backup or emergency services exist, lifeguards require a clear policy that specifies under what circumstances CPR should be attempted and when it should be stopped. It should be understood that out-of-hospital cardiac arrest survival rates are low and that successful resuscitation from cardiac arrest due to drowning is exceedingly rare. Rescuer expectations should be kept realistic and debriefing or counselling services made available to all lifeguards involved in a resuscitation.

This statement seeks to provide an expert consensus recommendation on best practice for solo-rescuer lifeguards in cardiac arrest resuscitation.

#### **RECOMMENDATIONS**

Employers and volunteer-based organisations that operate solo-rescuer lifeguard services are responsible for ensuring staff are equipped with basic personal protective and resuscitation equipment eg. Gloves, face shield, and a mobile communications device (See: MPS 07 - Medical Priorities in Lifesaving). Initial and ongoing training in the use of this equipment must also be provided (See: MPS 11 - Critical CPR Skills for Lifeguards) and provision made for maintenance and future replacement of defective, single-use, or obsolete items.

- In locations where no cellular/radio network exists, local systems must be in place for activating emergency services. Policies must also be developed for how the safety of the public/other patrons will be maintained if the lone lifeguard is performing CPR, and therefore, unable to supervise the water. These systems must be tested, and scenarios trained for on a regular, scheduled basis.
- Whether the resuscitation is successful or not, a policy that describes how the victim or body is handled/transported from the scene to an appropriate receiving facility is required. The process for initiating debriefing or counselling services to the lifeguard(s) involved should also be in place before operations commence.
- Where no backup support or emergency services exist, a policy is required that specifies when CPR should be started, and under what circumstances it can be stopped.

When no form of additional help or mobile communications device is immediately available, solo rescuers should begin CPR on all unresponsive patients who are not breathing normally. After approximately **two minutes** of CPR, the lifeguard should place the victim in the recovery position and leave them to get help and an AED:

• If an AED is available, it should be attached immediately.<sup>5</sup> If trained or lay rescuers become available, they should be utilised because multiple-rescuer CPR allows for less hands-off time and more effective ventilations.

- If a mobile communications device is available, summon help while simultaneously assessing/treating the victim. A mobile phone in hands-free mode can facilitate this. If a bystander is available, ask them to call for help.
- Infants and children (if small enough), can be carried with the rescuer while they are getting help and an AED.
- If a pocket mask is available, an over-the-head technique can be used, whereby the solorescuer kneels at the patient's head, holds the mask with 2 hands, crouches down to deliver breaths, and then leans over the patient's sternum to deliver chest compressions.<sup>6</sup>

#### **STATEMENT**

A solo rescuer encountering a patient who is unresponsive and not breathing normally should start CPR immediately. While assessing and treating the victim, call for help using a mobile communications device. If an AED is available, attach it immediately. Utilise bystanders to assist to call for help, locate an AED, and perform CPR.

If no bystanders or mobile communications device is available, after two minutes of CPR place the victim in the recovery position and leave them to call for help/locate an AED before returning as soon as possible to continue with resuscitation.

## **LEVEL OF EVIDENCE**

This statement is based on expert opinion.

## POTENTIAL CONFLICT OF INTEREST STATEMENT

None of the participants in the consensus process leading to this position statement has a conflict of interest with the stakeholder industry, technology, persons or organisations that are identified and/or impacted by the position statement.

#### REFERENCES

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- **5.** Bækgaard JS. The Effects of Public Access Defibrillation on Survival After Out-of-Hospital Cardiac Arrest: A Systematic Review of Observational Studies. Circulation 2017. 136(10):954-965.
- **6.** Perkins G et al. A comparison between over-the-head and standard cardiopulmonary resuscitation. Resuscitation, 61(2)155 161

### **APPROVAL**

Medical Position Statement approved by the ILS Rescue Commission: 23/01/2020.