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Surf Life Saving Australia - Circular

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Change-Management for Changes to Resuscitation

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Department Lifesaving	

Summary
This Circular provides information on change management strategies relating to changes to resuscitation for the 2006/07 season

From

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Resuscitation Changes
The National Board of Lifesaving has recently adopted the new Australian Resuscitation Council (ARC) guidelines for resuscitation. The SLSA Medical Advisor, Dr Natalie Hood has been part of the ARC team working to produce the guidelines. These most recent guidelines have been formulated through research adopted by The International Liaison Committee on Resuscitation (ILCOR). Adopting the new guidelines will see the largest change in resuscitation in the last two decades and will require major change within the organisation. This Circular will provide all levels of the organisation with information relating to the change and will assist with change-management issues.

The resuscitation chapters of the 32nd Edition of the SLS Training Manual have been rewritten to incorporate the new guidelines. Version 2 of the manual will be available by August 2006. A Q&A fact sheet is at the end of this circular to assist clubs understand the new changes. A number of tools such as posters will be sent to clubs prior to August 2006.

The main changes include:
- 30:2 rates for one and two person operations in all patients
- Two initial breaths instead of five
- The two initial breaths and the two breaths in the 30:2 cycle will be known as “rescue breathing”
- Removal of pulse checks and removal of EAR (1 breath every 4 seconds) from the resuscitation algorithm
- Changing compression operators every 2 minutes

The change in resuscitation will take effect within SLSA from 1 August 2006. After this date all assessment must be conducted under the new resuscitation standards. Teaching of resuscitation under the new guidelines may be conducted prior to this date.

When can I start teaching the new resuscitation procedures?
You can start teaching under the new procedures today. However, the National Board of Lifesaving (NBOLS) has recommended that as of 1 August 2006 all assessment will be conducted using the new guidelines.

This will allow suitable time for the reprint of the SLS Training Manual over winter and education programs and resources for training officers and assessors to be developed and rolled out. The decision by states and clubs on when to move to the new procedures will need to be based on the availability of updated training officers and assessors. It will however be compulsory that all assessment after 1 August 2006 be conducted using the new procedures. SLSA will be aiming to have the necessary systems in place well before this date. This includes a PDF version of the updated manual chapter on the SLSA website by June 2006.

How will the changes affect proficiency tests?
In-service courses will need to be conducted as part of the 2006/07 proficiency test and all members gaining their proficiency test prior to 31 December 2006 will need to understand the new rates and procedures.

What planning should I be doing in preparation for the implementation?
States and Branches should conduct information courses prior to the 1 August 2006 (Ideally in July but maybe in August/September depending on your local season start date) for their Assessors and Chief Training Officers. It would be anticipated that the largest hurdle in this change management exercise will not be learning the new resuscitation procedure but in creating an understanding of the science behind the change.

Where can I find out more about the background to the changes?
If you would like to read the full scientific paper (300 pages) on the ILCOR research you can find the PDF document on the SLSA website. Go to the “Lifesaving” page in the “Members” section of the website to download the PDF.

The Australian Resuscitation Council also has a number of Q&A sheets on their website along with information on the changes www.resus.org.au

Roles in the Change-Management Process
From today all levels of the organisation should form part of the planning process to implement the change-management process. While the actual workshopping of the new guidelines may not be able to be conducted prior to the release of the updated Unit 6 of the SLS Training Manual, administrators and officers should now start setting in-service dates and informing the organisation’s members of the impending changes.

The guidelines below are some suggested change management strategies that will assist in implementing the new standards.

Surf Life Saving Australia

- Will continue to assist in the development of Australian Resuscitation Guidelines while keeping in touch with world developments in the area of resuscitation
- Will ensure up-to-date manuals and resources are available to implement change
- Will have agreement of States regarding change-management implementation

- Will provide tools to assist in implementing the change
- Will update multiple choice assessment papers, CD Rom and Workbooks
- Will update State Managers and Directors on the changes

States (Branches in NSW/QLD)

- Hold in-service courses for their Assessors and Chief Training Officers prior to 1 August 2006
- Ensure that all assessment after 1 August 2006 is conducted under the new guidelines
- Promote and distribute information at meetings, conferences and gatherings of Assessors and Chief Training Officers.

Clubs

- Attend any Branch/State workshops to update key club personnel
- Hold in-service courses for Club Training Officers
- Promote changes to proficiency testing in club newsletters etc
- Set time for in-service of members at club proficiency testing
- Display new resuscitation information posters
- Have copies of Q&A papers or provided reference to the SLSA website
- Print off the updated Unit 6 of the SLS Training manual when available on the SLSA website for use by key training officers

Specific resources available to assist implement change:

- Powerpoint presentation on changes to resuscitation (Available April)
- Posters with new algorithm and major changes (Available May)
- Updated Unit 6 and 7 of SLS Training Manual in PDF printable format on SLSA website by the June 2006.
- Q&A sheets with explanations of changes. (listed below and updated on SLSA website)
- Useful links information page

All of these resources will be available on or before 1 June 2006. A club pack with hard copies will be sent with attention to Chief Training Officers around this date.

For further information see the SLSA website (www.slsa.com.au) or contact your State Lifesaving Manager/Director.

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Question and Answer Sheet
Resuscitation Changes

Why the rate change?
The balance of international evidence is that the best outcomes are obtained with a faster compressions rate of 100 per minute and with fewer interruptions. There is evidence that with the old ratios, patients receive too much ventilation compared to chest compression and that this is both unnecessary and potentially detrimental if the air pressure in the chest is too high.

Why 2 breaths vs 5 breaths?
Evidence shows that 5 breaths leads to better oxygen levels in the blood but that 5 breaths leads to increased air in the stomach. SLSA has chosen 2 initial rescue breaths in line with the ARC guidelines and other resuscitation councils around the world.

Why do we roll the patient over in the assessment stage and some other teaching organisation do not?
It is recognized that in the drowned patient there is potentially water in the airway and that rolling the drowned patient onto the side to check and clear the airway could drain some of this water.

Why don't we feel a pulse?
There is good evidence that checking for signs of life is as good as pulse checks and that medical personnel, first responders and lay first aiders cannot reliably detect the presence or absence of a pulse in an unconscious person.

Will it cause damage to the heart if we press on it while it is still beating?
There have been case reports of broken ribs and small bruises to the heart caused by CPR but these risks are considered acceptable compared to the risk of incorrectly calling "pulse present" and withholding CPR.

Will the new resus procedures be easier to teach?
Yes. With the new 30:2 ratio of compressions to breaths for all age groups for both one person and two person CPR and the omission of EAR alone, there is a lot less to practise and remember.

With the removal of pulse checks – when do we stop CPR? CPR is continued until return of other signs of life, until trained ambulance personnel arrive or it is physically impossible to continue. CPR may be stopped temporarily for placement of defibrillation pads and continued as per the machine's voice prompts.

Do I really need to change to a new operator after 2 minutes even if I do not feel tired?
Yes. There is good evidence that the technique of the chest compression operator deteriorates after one minute even if the operator does not feel fatigued.

Do we have to do a count to 1 to 30 consecutively?
At a rate of 100 compressions/minute it is easy to lose count and difficult to count aloud at such a fast rate. Operators will need to practice different counting techniques and feed information back to the organisation before a "best practice" recommendation can be made.

If my resting heart rate is 60 bpm why do I need to compress at 100 compression per minute?
At a rate of 100 compressions per minute, operators will need to break compressions to effectively give the two rescue breaths. Therefore the patient will receive less than 100 compressions each minute. Secondly, CPR compressions are not as good as normal heart beats, (possibly only 20% as effective) therefore an increased rate will help maintain a best possible blood flow and blood pressure.

Can I just guess where the centre of the chest is for my chest compression or do I need to use the rib walk?
Evidence shows the resuscitators instructed to "compress the centre of the chest" will usually interpret this as a point on the lower half of the sternum ie the correct location. Techniques such as the "rib walk-index finger" are alternate location methods but potentially waste time and cause delays to start of CPR. Both examples will be mentioned in Version 2 of the 32nd Edition of the Surf Life Saving Training Manual

Why is it harmful to have interrupted CPR?
CPR provides the patient with a blood pressure to maintain blood flow to vital organs. Every time CPR is stopped, that blood pressure falls and requires a repeat initial period of CPR to rise again.

How does the defibrillator now fit into the resuscitation?
Defibrillation is considered part of basic life support that is taught even in lay community first aid courses. First responders such as surf lifesavers are expected to be competent in the use of a defibrillator, should one be available. A defibrillator should be obtained as soon as possible, placed on the patient and the machine voice prompts followed.

Is resuscitation in an aquatic environment different to cardiac arrest?
From a training point of view-no-although a witnessed collapse on the beach may give the rescuer time to call for help or run for the defibrillator. A drowned patient will most likely have been without oxygen to the brain a lot longer and in need of immediate rescue breathing.

Are the ILCOR guidelines more focussed on cardiac arrest research than aquatic drowning research?
The ILCOR guidelines focus on general Basic Life Support and Advanced Life Support without focussing on any particular cause. Within the document there are specific sections on drowning and experts on drowning formed part of the working parties making the final treatment recommendations.

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Resuscitation Update 06/07 – Change Table

Current Method/Practice	New Method/Practice	Why the Change?
Checking for Danger and response	No Change	
Clearing the airway	No change to clearing the airway for aquatic drowning For non aquatic locations clearing the airway may not be necessary and the assessment of the patient may be conducted on the back without rolling the patient on the side	Patients collapsed on the beach unlikely to have water in mouth and upper airway (but may still vomit)
5 Full Breaths	2 Rescue Breaths	The added oxygen benefit with 5 breaths has been balanced against the risk of stomach distension - the added breaths also delay CPR
Feel the Pulse	Check for “signs of life”	According to the most recent research, pulse checks in patients without a heartbeat are unreliable when performed by those not dealing with cardiac arrest victims on a regular basis.
EAR if pulse is present	No EAR but continue with CPR if no “signs of life”	Pulse checks are no longer taught. Performing full CPR eliminates the risk of incorrectly withholding chest compressions on patients whose pulse was in fact absent, too slow or too weak to be effective.
CPR at a rate of 60 to 100 compressions per minute	CPR at a rate of 100 compressions per minute	Research has shown that an increased rate will help maintain a best possible blood flow and blood pressure.

Current Method/Practice	New Method/Practice	Why the Change?
CPR at a rate of 15:2 and 1:5	CPR at 30:2 for one and two person operation	The faster rate, with less breaks for rescue breaths will allow for an increase in blood pressure. Evidence suggests the patient still receives enough oxygen for the amount of artificial CPR circulation.
Continue as the chest compression operator until feeling tired	Change as the chest compression operator every two minutes if available personnel	There is good evidence that the technique of the chest compression operator deteriorates after one minute even if the operator does not feel fatigued.
Pulse checks after first minute and then every two minutes	No pulse nor recovery checks. Continue CPR until return of signs of life, ambulance arrives or exhaustion.	Recovery checks are associated with a worse outcome for the patient due to the interruptions to CPR.