

First Responder



October '10 Newsletter

IN THIS ISSUE:

- ★ High Concentration O2 post cardiac arrest - maybe not !!
- ★ Current quality of First Aid training a concern
- ★ Hands only CPR and pushy dispatchers are saving lives
- ★ Australian Resuscitation Council - does its CPR policy reflect current science
- ★ The Last Word
- ★ Sale specials @ FRA

DIPLOMA in PARAMEDICAL SCIENCE (Ambulance)

2011 enrolments open now
CALL (07) 4032-244 FOR AN
INFORMATION PACK

EMERGENCY MEDICAL TECHNICIAN PROGRAM CERTIFICATE LEVEL IV CAIRNS Dec 17 11 days full-time

PLEASE ENQUIRE ABOUT OUR
ON-SITE PROGRAMS

High concentration O2 post cardiac arrest - maybe not !

A recent review of the association between high concentration oxygen therapy following resuscitation from cardiac arrest has shown an increased risk of death.

This large, prospective observational study (*JAMA*. 2010;303:2165-2171) investigated the association between elevated arterial oxygen levels (hyperoxia) and increased hospital mortality post-resuscitation from cardiac arrest. The data was pulled from the Project IMPACT database, which encompasses 120 intensive care units (ICUs) across the U.S.

Hyperoxic patients were compared against those who were hypoxic and normoxic post-cardiac arrest. A total of 6,326 patients were eligible for review: 1,156 were hyperoxic, 3,999 were hypoxic and 1,171 patients were normoxic with mortality rates of 63%, 57% and 45%, respectively.

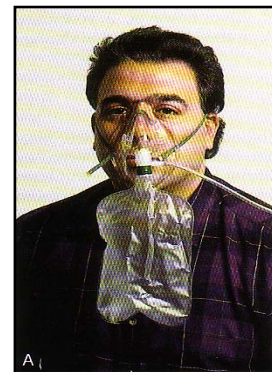
Unfortunately many cardiac arrest patients are still being ventilated at a rate well in excess of the recommended rate of 10 breaths per minute on 100% oxygen. Studies have reported rates in excess of 30 per minute. This results in a hyper-oxygenated patient and if ROSC (return of spontaneous circulation) is achieved many of these patients received continued ventilations at excessive rates or high concentration oxygen therapy which continues the insult to the patient.

Understanding of cardiac arrest physiology continues to significantly expand with research such as this. There's a growing body of science to indicate that oxygen is not a benign drug. This concept runs counter to our longstanding prolific use of oxygen in every level of first aid and pre-hospital care.

However, many countries have lagged behind the recommendations of such notable organizations as the British Thoracic Society who in 2008 released guidelines for oxygen administration that prescribed that there's no reason to exceed an oxygen saturation of greater than 96%. In the study, the data clearly showed a significant increase in mortality when the arterial oxygen content exceeded 300 mmHg and, in fact, was worse than that of patients who were hypoxic. Additionally, the neurologic status of survivors was worse if they experienced post-arrest hyperoxemia.

The theory is that during ischemia there are several protective mechanisms the body uses to inhibit cell death. These anti-inflammatory and antioxidant responses are inhibited by high concentrations of oxygen, particularly immediately after perfusion is restored. In this study, the first measurement of arterial oxygen content was made when the patient arrived in the ICU, which was more than likely an hour or more after return of spontaneous circulation (ROSC). This study no doubt will impact on emergency department care of the cardiac arrest patient. The fact that animal data indicates that oxygen causes cellular damage immediately following ROSC may force many EMS to consider titrating oxygen delivery in the field.

It will be interesting to see if the 2010 International Resuscitation Guidelines address this issue.



PHERT PRE-HOSPITAL CARE PROFESSIONAL DEVELOPMENT PROGRAM (EMT Refresher)

CAIRNS
November 3-5 2010
2.5 days full-time

CERTIFICATE III in Non Emergency Client Transport

CAIRNS
March. 26 - April 2
2011

Pre-requisites apply
Limited spaces-bookings essential

CERTIFICATE IV in Health Care (Ambulance)

CAIRNS

Stage 1 Mar. 26 - April 2
Stage 2 April 4-15
2011

Pre-requisites apply
Limited spaces-bookings essential

Current quality of First Aid training a concern

The Community Services and Health Industry Skills Council (CSHISC) has called for feedback regarding the Health Training Package HLT07. This allows stakeholders to express their opinions as to what changes may be required. The HLT07 Health Training Package includes the nationally accredited CPR and First Aid programs which have come under attack from Industry Groups as lacking in demonstrable skills. Essentially the only demonstrable skill in the First Aid competency is the skill of CPR. This has allowed many providers to conduct what some in the industry describe as “dodgy” courses, in some instances programs taking only as long and 3-4 hours to conduct with no pre-course reading or study.

The Australian Emergency Care Providers group - the peak body for the first aid training industry has submitted to CSHISC its findings which identified a number of areas of concern after having canvassed its members

The concerns were:

- a. The proliferation of first aid courses which do not provide adequate hands-on training in practical skills.
- b. The tendency of the current package to rely on the Australian Resuscitation Council to provide adequate guidance without emphasising the relevance to current clinical practice of a wide range of research bodies, and
- c. The need of the HLT to reflect the scientific research in skills retention which shows severe degradation in a skill not utilised within six months of being taught.

The AECP recommendations to CSHISC were as follows:

1. Practical training.

It is current AECP policy that no member is to provide first aid training courses which do not contain adequate time for 'hands-on' training in:

- A. Cardiopulmonary Resuscitation,
- B. Airway management including posturing of patient onto side as a minimum,
- C. Control of external bleeding,
- D. Basic spinal immobilisation, and
- E. Treatment of soft tissue injury and fractures.

By 'hands-on' training, AECP has agreed that the skill must be physically demonstrated to the trainee and then practiced by the trainee before assessed. This requirement extends to any training where a device or clinical procedure is being taught.

3. Widening the scope of advice to be accessed in developing course content.

AECP recommends a broadening out of the existing clinical framework from which the principals and practice of first aid is derived. This framework must include but not be limited to the Australia Resuscitation Council (ARC). There are a number of specialist organisations who conduct original research and whose recommendations vary from those of the ARC.

Being aware of the limited resources available to the ARC and the views of our insurance advisors, AECP recommends to all of its members that they should draw upon the most scientifically valid treatment recommendations. In a number of cases these recommendations vary from those of the ARC.

3. Competency reassessment period.

AECP and its members recommend that competency in essential first aid skills be confirmed every twelve months and that the elements be adjusted to reflect this.

Continued next page

Continued from previous page

This is currently the case in a number of industries such as mining, utilities and defence. It should be the case across the board.

In relation to the wider community and business generally, it is practice within the first aid industry to recommend that first aid refresher training is undergone every twelve months. This advice is based upon the evidence of degradation of skills which are not used by the trainee over six months. Twelve months is accepted as being a reasonable timeframe, given the allocation of resources required by employers. The current concept of re-training every three years is not supported by AECF or its members as competency in life saving skills cannot be maintained over such a long period.

All of our members hope that the above recommendations are implemented into the new HLT Package. We believe this will assist in raising the level of rigour in first aid training in Australia. AECF and many of its member companies are concerned that standards have been slowly dropping. This is reflected in courses that allot only two hours practical skills, use pillows and balloons as replacements for resuscitation manikins and which attempt to transfer skill sets through audio visual and computer based packages.

Editor's Note: As a founding member First Response Australia supports AECF in its submission with the hope that the Industry Skills Council will make the important changes needed to improve the quality of First Aid training in Australia. From our point of view we especially agree with the urgent need for training providers to be able to draw upon the most scientifically valid treatment recommendations and not be forced to comply with only Australian Resuscitation Council (ARC) guidelines. Many of us feel that by having to comply only with ARC Guidelines we are in fact creating unnecessary liabilities by not utilising "scientific consensus". A case in point is that one training provider was challenged by its "accreditation board" because it suggested that "compression only CPR" is valid in certain situations, that "initiating CPR with 2 breaths" may be detrimental to patient outcome.

This provider may now be forced to deliver its training to what many of us feel is against the opinion of scientific evidence. For those training organisations who pride themselves on being up to date in the field of Emergency Care training with all the new evidence that abounds, it is a sad day when we are compelled to teach techniques that are in some cases over 5 years behind the times.

Hands only CPR and pushy dispatchers are saving lives !

A recent study in the USA found skipping mouth-to-mouth CPR and a motivational "Emergency Services call taker" can make a big difference in saving a life. The research found that more bystanders are willing to attempt CPR if an emergency dispatcher gives them firm direct instructions — especially if they can just press on the chest and skip the mouth-to-mouth.

The two new studies conclude that "hands-only" chest compression is enough to save a life. The studies are the largest and most rigorous yet to suggest that breathing into a victim's mouth isn't needed in most cases.

The American Heart Association (AHA) has been promoting hands-only CPR for two years. The new studies hopefully encourage dispatchers and bystanders to be more aggressive about using the simpler technique. Dr. Arthur Kellermann, a RAND Corporation expert on emergency medicine believes that it could translate into hundreds if not thousands of additional lives saved each year.

An estimated 310,000 Americans die each year of cardiac arrest outside hospitals or in emergency rooms. Only about 6 percent of those who have an out-of-hospital cardiac arrest survive.



The importance of forceful dispatchers: When someone collapses and stops breathing, many people panic and believe that phoning the Emergency Services number is the best they can do to help. The larger of the two new studies reported survival rates of about 12 percent when bystanders did dispatcher-directed CPR, confirming earlier research that on-scene CPR can dramatically increase a victim's odds of survival.

The studies also spotlighted the importance of having forceful dispatchers coaching bystanders. Previous research has suggested that adults who need CPR, get it only about one-quarter to one-third of the time when bystanders are around. One of the new studies found that when dispatchers told callers to start CPR, about 80 percent attempted it when given hands-only instructions, more than the 70 percent who tried the standard version.

Continued next page

Continued from previous page

'Emergency Services call taker can make a big difference' Dispatchers who immediately told callers what to do, instead of first asking them if they had CPR training or if they would be willing to try it until medical help arrives, are credited with the increase in survival rates. This study shows that with great training and motivation, the 911 call taker can make a big difference.

CPR, or cardiopulmonary resuscitation, is a technique that's been in use for about 50 years. The standard version now calls for alternating 30 hard pushes on a victim's chest with two quick breaths into their mouth. The aim of CPR is to do some of the mechanical work of the heart by forcing at least some blood and oxygen to the brain and other vital organs.

Experts have come to believe that pumping is what's most important in most adult cases, and advise doing chest pushes continually at a rate of 100 per minute and skipping the mouth-to-mouth. Cardiac patients do as well or better when they got hands-only CPR as compared to the traditional version, these and earlier studies have found.

One of the new studies, carried out in London and the Seattle area, involved more than 1,900 people who witnessed someone in cardiac arrest and called the Emergency Services or some other emergency number. Emergency dispatchers instructed callers to do either hands-only CPR or an older form of standard CPR. The second study was done in Sweden and included nearly 1,300 people.

In both studies, there was no significant difference in the survival rates of people who got conventional CPR and those who got the hands-only version. The studies are being published in July's New England Journal of Medicine.

Hands-only CPR 'catching on' While there is no good national data on how often hands-only CPR is used, Dr. Ben Bobrow, who directs the Arizona Department of Health Services' emergency medical system, believes it is catching on. "We've seen a huge trend in hands-only CPR in Arizona and I believe that trend is spreading across the country. I think these findings will further promote that," he said.

Many people think of traditional CPR as difficult, and to some extent it is. The victim's head has to be tilted back, the airway cleared, the nose pinched and the mouth completely covered by the rescuer's mouth. A lot of people have trouble with it, said Don Pederson, a dispatcher in Seattle's King County, who participated in the U.S. study. "A lot of the times they weren't getting air in there correctly," with air escaping out the sides of the mouth, Pederson said. Rea and his colleagues believe some bystanders perform mouth-to-mouth so poorly that the interruption reduces blood flow.

Worry about doing CPR correctly was the No. 2 reason many people don't attempt it, according to a Michigan study published in 2006. The No. 1 reason? People are too panicked. The "ick" factor of putting lips to a stranger's mouth — and picking up the stranger's germs — was cited by only a tiny fraction of people in the study. However, it may be a more significant issue than the study showed, at least in some communities, experts say.

Editor's Note: Traditional CPR is still the preferred form of resuscitation for children or adults who have stopped breathing because of choking, drowning or other respiratory problems.

It is becoming obvious that CPR training needs to be tailored according to the type of response capability available. e.g If you're the trained First Responder in a workplace and have ancillary resuscitation equipment and defibrillators available, the techniques for resuscitation would vary greatly from those even in the same workplace that only had basic CPR training. Do we actually believe that when a paramedic team initiates resuscitation that they start with 2 breaths and stop directly on 30 compressions for the next lot - I think not!

Australian Resuscitation Council - does its policy on CPR reflect current science?

The mounting evidence that "compression only CPR" should be taught to the lay public in Australia is compelling when the statistics coming from the USA are analysed.

Five years of Arizona data published in the month's issue of the Journal of the American Medical Association (JAMA) says "chest-compression-only" CPR is more effective than mouth-to-mouth when it comes to patients who suffer sudden cardiac arrest outside a hospital.

The national USA survival rate for such patients is grim -- fewer than 10 percent. But the Arizona data provides hope that chest compression CPR (also known as hands-only) could improve those rates if more people learned the method, said Dr. Gordon A. Ewy, senior author of the study and director of the University of Arizona's Sarver Heart Center. Ewy helped develop chest compression CPR at the Sarver Heart Center.

His study says the overall survival of patients who suffered out-of-hospital cardiac arrest was 5.2 percent without any bystander giving CPR, 7.8 percent when bystanders did conventional mouth-to-mouth CPR, and 13.3 percent for those receiving chest-compression-only CPR.

Continued next page

Continued from previous page

The study followed 5,272 Arizona patients at least 18 years old with out-of-hospital cardiac arrest between Jan. 1, 2005 and Dec. 31, 2009. "This is the first report of results from an intentional effort to encourage and endorse chest-compression-only CPR to the public," said Dr. Bentley Bobrow, lead author and medical director of emergency medical services at the Arizona Department of Health Services and a member of the UA Sarver Heart Center Resuscitation Research Group.

The study identified three major findings:

1. The rate of bystanders becoming involved with CPR for patients with out-of-hospital cardiac arrest increased significantly from 28 percent in 2005, when the statewide study began to 40 percent by the end of 2009.
2. The rate of chest-compression-only CPR rose from 20 percent in 2005 to 76 percent in 2009.
3. A significantly greater percentage of cardiac arrest victims survived in the chest-compression-only CPR group compared to the conventional CPR group.

In 2004, fire departments, EMS ambulance companies and hospitals across Arizona all agreed that the current dismal survival rates from cardiac arrest in their state was unacceptable and brought into motion an enormous collective effort to teach

chest-compression-only CPR to their communities for free. "This has resulted in hundreds of lives saved in Arizona," Bobrow said in a prepared statement.

The next step, Ewy said, is for national and international guidelines to adopt chest-compression-only CPR as a worldwide standard.

In early 2008 the American Heart Association (AHA) endorsed the teaching of "hands only CPR". It did however qualify it by stating that this was for the lay person who was unwilling or untrained to do "mouth to mouth". It still recommended that for arrest victims such as infant, children and adults from drownings, standard CPR be administered but "hands only CPR" was better than nothing. It seems that the mounting evidence is now supporting that momentous change back in 2008.

Unfortunately the European Resuscitation Council (ERC) did not follow the lead of the AHA. At that time the main reasons stated by the ERC for not changing were:

1. The hypothesis that the currently recommended combination of chest compressions combined with mouth-to-mouth ventilations is superior to chest compression-only CPR.
2. A new consensus on science will be published in 2010 and it is appropriate to await the outcome of this process before new changes in the guidelines are recommended.
3. Following Guidelines 2005, the compression:ventilation ratio has increased from 15:2 to 30:2, already emphasizing the importance of minimally interrupted high-quality chest compressions. Furthermore, unlike the AHA guidelines, the ERC guidelines indicate that 30 compressions are given before attempting ventilation.
4. In Europe, the proportion of resuscitation attempts in which trained lay rescuers perform CPR is already considerable. The percentage is cited between 27% and 67%, considerably higher than generally observed in the USA. Therefore, the need to simplify guidelines, potentially at the expense of quality, to encourage lay rescuers to perform CPR is less compelling as in the USA.
5. It is unlikely that lay rescuers will be able to identify with confidence these circumstances and, if taught to give only chest compressions, may provide CPR of insufficient quality to many victims.

The Australian Resuscitation Council (ERC) took the same stance as the ERC.

The Last Word

This month should see the release of the 2010 AHA's new "International Guidelines" based on a consensus of science which has been derived from data spanning over the last five years. This does not mean that the ARC will necessarily follow all changes or recommendations. A point in case was the ARC not supporting the AHA's promotion of "compression only CPR"

Never was it the intent of the AHA that "compression only CPR" replace standard CPR but actually complement it by having more of the public initiate this lifesaving strategy.

Continued next page

Continued from previous page

In Australia, only a few progressive training organisations employ CPR teaching strategies such as:

1. After having assessed any person in Cardiac Arrest, start compressions immediately whilst someone calls for help and returns to assist in standard CPR. This is possible in most workplace situations.
2. If on your own and it is unsafe to do “mouth to mouth/nose” make sure compressions are done at least.
3. In the majority of workplaces, barrier devices such as pocket masks are available, so starting compressions without delay whilst someone retrieves the mask makes a lot of sense.
4. In all cases of child and infant attempt to do standard CPR.
5. If an arrest is witnessed and an AED is immediately available, give priority to delivering a shock first, then worry about CPR.

So, what's so hard about this!- does it really detract from the quality of CPR training? We believe it actually enhances the quality of the training! But as you can see from a previous article in this issue, many training organisations feel hamstrung because of the inflexible belief in this country that the Australian Resuscitation Council (ARC) guidelines represent a “best practice” model. and in

In relation to Australian Quality Training Framework (AQTF) legislation, Registered Training Organisations are compelled to teach exactly to ARC guidelines as the National Training packages for first aid, only recognise the ARC guidelines and no others from elsewhere in the world.

Being aware of the limited resources available to the ARC, and the views of our insurance advisors, the Australia Emergency Care Providers (peak body for the first aid industry) recommends to all of its members that they should draw upon the most scientifically valid treatment recommendations. In a number of cases these recommendations vary from those of the ARC.

What must be remembered is that in Australia, almost no research in this field takes place, sometimes simply because our population doesn't allow for significant data to be collected from studies and the “silver bullet” is continually being looked for. There is no “silver bullet” in improving cardiac arrest outcomes. As proven in some EMS systems in the USA a systems approach is what works.

Time for a change!

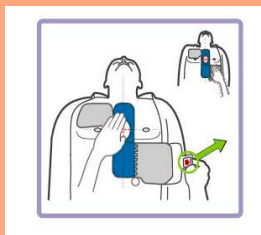
*Charles Makray
Managing Director*

Sales @ FRA

**ALL SPECIALS VALID UNTIL
November 30, 2010 or until stocks last**



ZOLL AED Plus
Now standard with a pocket resuscitation mask and the revolutionary ResQPOD



\$2999.00

Price GST Free
(Normally \$2990.00)



FAST 1 Intraosseous System

Fastest route to the heart

- *Precise placement, every time*
- *Excellent concurrent treatment coordination*
- *Sterile, one-time use*
- *Automatic depth control*
- *Low-profile, secure tubing*

\$ 249.00 (PLUS GST)
(NORMALLY \$295.00)

**BUY 2 OR MORE AND PAY
ONLY \$235.00 EA.**

When Every Second Counts

In medical emergencies rapid, reliable vascular access is vital for the administration of life saving drugs and fluids. Over a million attempts to place IV lines fail each year. Even successful IV placement can take up to 10 minutes.

With **FAST1™ Intraosseous Infusion System**, drugs reach the patient's heart in seconds. In critical care situations – on the street, in the hospital and in the workplace

RESPONDER PRO

Oxy Resus Trauma Kit
with
Diagnostics, Pulseoximetry
& I-gel airways



(cylinder not included)

\$ 1,880.00

(GST Free)

PACK INCLUDES:

- DHS 101 Oxy Resus Pack
- All brass multi flow regulator
- ResQPOD
- i-gel airway kit (2 sizes)
- Bag Valve Mask Device - Adult disposable including mask, tubing and reservoir
- Therapy masks (adult)
- Oropharyngeal Airways (4)
- V-Vac Suction Kit
- Glucometer (Proforma)
- Fingertip Pulseoximeter
- Sphygmomanometer (palm style)
- Stethoscope (Sprague)
- Penlight torch
- Paramedic shears
- Sharps container
- X-Collar Cervical Splint
- Instructions for Use



i-gel

ADVANCED AIRWAY KIT

Includes:

- ★ NEW I-GEL Airways - Size 3,4 with gel
- ★ ResQPOD
- ★ Bag Valve Mask -Adult & Child
- ★ Gloves
- ★ Carry Case

\$ 399.00

(GST Free)



**i-gel
CPR / AIRWAY
KIT**

PRODUCES NORMAL
BLOOD PRESSURES &
NORMAL BLOOD FLOW

DURING CPR

Includes:

- ★ NEW CardioPump
- ★ ResQPOD
- ★ I-GEL Airways
 - Size 4, & 5 with gel
- ★ Bag Valve Mask - Adult
- ★ Gloves
- ★ Carry Case

\$ 639.00

(GST Free)

NORMALLY \$ 699.00

OXY / AED Oxygen Resuscitation / Trauma Pack



PACK INCLUDES:

(cylinder not included)

- * DHS 130 Custom Oxy Resus Pack
- * ZOLL AED Plus with two piece pads (2 sets)
- * ResQPOD
- * CardioPump with Metronome
- * All brass multiflow regulator
- * I-gel Airways (2 sizes)
- * Bag Valve Mask Device - Adult disposable including mask, tubing and reservoir
- * Therapy Masks (adult / child)
- * Set of 3 Oropharyngeal Airways
- * V-Vac Suction Kit with spare cartridge
- * Fingertip Pulsoximeter
- * X-Collar Cervical Spine Splint

\$4999.00 !!!!!!!

GST Free

NORMALLY \$ 749.00

Oxy Tube Resuscitator

Compact and light, providing instant response, takes only seconds to make operational
(cylinder not included)

Includes: Multiflow Regulator, ResQPOD Disposable Bag Valve Mask Device w/- Reservoir & Mask Airways (4), Therapy Masks, Gloves, CPR Card, Carry Bag

\$ 699.00 (GST FREE)



(cylinder not included)

“The ResQPOD® is the only impedance threshold device on the market.”

ResQPOD®

Perfusion on Demand



New and Revolutionary Aid to CPR

ResQPOD® Impedance Threshold Device

The ResQPOD is an impedance threshold device (ITD) that provides Perfusion on Demand (POD) by regulating pressures in the thorax during states of hypotension.

Animal and clinical studies* have shown that during CPR, the ResQPOD:

- Doubles blood flow to the heart
- Increases blood flow to the brain by 50%
- Doubles systolic blood pressure
- Increases survival rates
- Increases the likelihood of successful defibrillation
- Provides benefit in all arrest rhythms
- Circulates drugs more effectively

The American Heart Association (AHA), in their 2005 guidelines, designated the impedance threshold device (e.g., ResQPOD) a Class IIa recommendation for increasing blood flow and immediate survival rates in patients in cardiac arrest. It is the most highly recommended CPR adjunct in the new guidelines and carries a higher recommendation than any medication used to increase circulation in adults in cardiac arrest. The ResQPOD is the only impedance threshold device on the market.

The ResQPOD is easy to use. It provides a unique way to increase circulation during CPR by refilling the heart after each chest compression. In addition, timing assist lights on the ResQPOD provide guidance on the proper compression and ventilation rates.

How It Works

The ResQPOD prevents unnecessary air from entering the chest during CPR. As the chest wall recoils, the vacuum (negative pressure) in the thorax is greater. This enhanced vacuum pulls more blood back to the heart, doubling blood flow during CPR. Studies have shown that this mechanism increases cardiac output, blood pressure and survival rates. Patient ventilation and exhalation are not restricted in any way.



ADVANCED COLLAPSE SYSTEMS, INC. ResQPOD®

"in partnership saving lives"



SPECIALISTS IN EMERGENCY CARE TRAINING AND EQUIPMENT

PO Box 81N, North Cairns, QLD 4870, Australia

Phone: (07) 4032 2444 Fax: (07) 4032 4722

Email: admin@FirstResponseAustralia.com.au

Website: www.FirstResponseAustralia.com.au



Prehospital Emergency Resuscitation & Trauma Program



Enhance & Update Your Skills

Who should attend ?

This unique 2^{1/2} - 3 day multi-disciplinary program is designed to further develop and enhance knowledge and skills of health care professionals.

Suitable to refresh qualifications and gain currency in skills for pre hospital care providers and provide valuable professional development to any allied health care worker.

This program is accredited by the Australian College of Rural and Remote Medicine (ACRRM) and recognised by the Australasian Registry of Emergency Medical Technicians (AREMT).



Quality Prehospital Care Providers

This program delivers the latest advances (innovations) in medical & trauma emergencies management including:

Advanced Airway Management

Impedance Threshold Device Technology

Haemorrhage Control

Intravenous Therapy

Intraosseous Vascular Access

Spinal Immobilisation

Musculoskeletal Immobilisation

Chemical Splashes & Burns Management

Wound Care & Closure

Multi Casualty Incidents

The program is practical based and includes case studies, skill stations and scenarios.



**SPECIALISTS IN EMERGENCY
CARE TRAINING
AND
EQUIPMENT**

PO Box 81N, North Cairns, QLD 4870, Australia

Phone: (07) 4032 2444 Fax: (07) 4032 4722

Email: admin@FirstResponseAustralia.com.au

Website: www.FirstResponseAustralia.com.au