

The Lomond Clinic Emergency Response Policy

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Reviewer Name: Anna Blackshaw

Emergency Response Policy

Equipment held at the practice -

First aid kit with a stethoscope, saline, a volumatic spacer, a blood pressure machine, valve mask, a pulse oximeter and access to an automated defibrillation device.

How to recognise cardiac arrest

- Start CPR in any unresponsive person with absent or abnormal breathing.
 Slow, laboured breathing (agonal breathing) should be considered a sign of cardiac arrest.
- A short period of seizure-like movements can occur at the start of cardiac arrest.
 Assess the person after the seizure has stopped: if unresponsive and with absent or abnormal breathing, start CPR.

How to alert the emergency services

Alert the emergency medical services (EMS) immediately by dialling 999 on your phone, if a person is unconscious with absent or abnormal breathing.

- A lone bystander with a mobile phone should dial 999, activate the speaker or another hands-free option on the mobile phone and immediately start CPR assisted by the dispatcher.
- If you are a lone rescuer and you have to leave a victim to ring the ambulance service, alert the ambulance service first and then start CPR.

High-quality chest compressions

- Start chest compressions as soon as possible.
- Deliver compressions on the lower half of the sternum ('in the centre of the chest').



- Compress to a depth of at least 5 cm but not more than 6 cm.
- Compress the chest at a rate of 100–120 min⁻¹ with as few interruptions as possible.
- Allow the chest to recoil completely after each compression; do not lean on the chest.
- Perform chest compressions on a firm surface whenever feasible.

Rescue breaths

- If you are trained to do so, after 30 compressions, provide 2 rescue breaths.
- Alternate between providing 30 compressions and 2 rescue breaths.
- If you are unable or unwilling to provide ventilations, give continuous chest compressions.

AED

How to find an AED

• The location of an AED should be indicated by <u>clear signage</u>, John St, Scout Hall.

When and how to use an AED

- As soon as the AED arrives, or if one is already available at the site of the cardiac arrest, switch it on.
- Attach the electrode pads to the person's (who has sustained cardiac arrest) bare chest according to the position shown on the AED or on the pads.
- If more than one rescuer is present, continue CPR whilst the pads are being attached.
- Follow the spoken (and/or visual) prompts from the AED.
- Ensure that nobody is touching the person whilst the AED is analysing the heart rhythm.
- If a shock is indicated, ensure that nobody is touching the person. Push the shock button as prompted. Immediately restart CPR with 30 compressions. If no shock is indicated, immediately restart CPR with 30 compressions.



 In either case, continue with CPR as prompted by the AED. There will be a period of CPR (commonly 2 minutes) before the AED prompts for a further pause in CPR for rhythm analysis.

Compressions before defibrillation

- Continue CPR until an AED (or other type of defibrillator) arrives on site and is switched on and attached to the person.
- Do not delay defibrillation to provide additional CPR once the defibrillator is ready.

Fully automatic AEDs

 If a shock is indicated, fully automatic AEDs are designed to deliver a shock without any further action by the rescuer. The safety of fully automatic AEDs has not been well studied.

Safety of AEDs

Many studies of public access defibrillation have shown that AEDs can be used safely
by bystanders and first responders. Although injury to the CPR provider from a shock
by a defibrillator is extremely rare, do not continue chest compression during shock
delivery.

Safety

- Make sure you, the person and any bystanders are safe.
- Members of the public should start CPR for presumed cardiac arrest without concerns of causing harm to those not in cardiac arrest.
- Members of the public may safely perform chest compressions and use an AED as the risk of infection during compressions and harm from accidental shock during AED use is very low.

Foreign body airway obstruction

- Suspect choking if someone is suddenly unable to speak or talk, particularly if eating.
- Encourage the person to cough.
- If the cough becomes ineffective, give up to 5 back blows:
 - Lean the person forward.



- Apply blows between the shoulder blades using the heel of one hand.
- If back blows are ineffective, give up to 5 abdominal thrusts:
 - Stand behind the person and put both your arms around the upper part of their abdomen.
 - Lean the person forwards.
 - o Clench your fist and place it between the umbilicus (navel) and the ribcage.
 - Grasp your fist with the other hand and pull sharply inwards and upwards.
- If choking has not been relieved after 5 abdominal thrusts, continue alternating 5 back blows with 5 abdominal thrusts until it is relieved, or the person becomes unresponsive.
- If the person becomes unresponsive, start CPR.

Recovery Position

- For adults and children with a decreased level of responsiveness due to medical illness or non-physical trauma, who do not meet the criteria for the initiation of rescue breathing or chest compressions (CPR), RCUK recommends they be placed into a lateral, side-lying recovery position. Overall, there is little evidence to suggest an optimal recovery position, but RCUK recommends the following sequence of actions:
 - Kneel beside the person and make sure that both legs are straight.
 - Place the arm nearest to you out at right angles to the body with the hand palm uppermost.
 - Bring the far arm across the chest, and hold the back of the hand against the person's cheek nearest to you.
 - With your other hand, grasp the far leg just above the knee and pull it up, keeping the foot on the ground.
 - Keeping the hand pressed against the cheek, pull on the far leg to roll the person towards you onto their side.
 - o Adjust the upper leg so that both the hip and knee are bent at right angles.
 - o Tilt the head back to make sure the airway remains open.



- Adjust the hand under the cheek if necessary, to keep the head tilted and facing downwards to allow liquid material to drain from the mouth.
- o Check regularly for normal breathing.
- Only leave the person unattended if absolutely necessary, for example to attend to other people.
- It is important to stress the importance of maintaining a close check on all unresponsive individuals until the EMS arrives to ensure that their breathing remains normal. In certain situations, such as resuscitation-related agonal respirations or trauma, it may not be appropriate to move the individual into a recovery position.

CHILDREN

CPR on children

Rescue breaths should be carried out with CPR on a child. It's more likely children will have a problem with their airways and breathing than a problem with their heart.

Children over 1 year

- Open the child's airway by placing 1 hand on their forehead and gently tilting their head back and lifting the chin. Remove any visible obstructions from their mouth and nose
- Pinch the child's nose. Seal your mouth over their mouth, and blow steadily and firmly into their mouth, checking that their chest rises. Give 5 initial rescue breaths.
- Place the heel of 1 hand on the centre of the child's chest and push down by 5cm (about 2 inches), which is approximately one-third of the chest diameter. The quality (depth) of chest compressions is very important. Use 2 hands if you can't achieve a depth of 5cm using 1 hand.
- After every 30 chest compressions at a rate of 100 to 120 a minute, give 2 breaths.
- Continue with cycles of 30 chest compressions and 2 rescue breaths until the child begins to recover or emergency help arrives.

Infants under 1 year

- Open the infant's airway by placing 1 hand on their forehead and gently tilting the
 head back and lifting their chin. Remove any visible obstructions from their mouth
 and nose.
- Place your mouth over the infant's mouth and nose and blow steadily and firmly into their mouth, checking that their chest rises. Give 5 initial rescue breaths.
- Place 2 fingers in the middle of the infant's chest and push down by 4cm (about 1.5 inches), which is approximately one-third of the chest diameter. The quality (depth)



of chest compressions is very important. Use the heel of 1 hand if you can't achieve a depth of 4cm using the tips of 2 fingers.

- After 30 chest compressions at a rate of 100 to 120 a minute, give 2 rescue breaths.
- Continue with cycles of 30 chest compressions and 2 rescue breaths until the infant begins to recover or emergency help arrives.

Choking

- If you can see the object, try to remove it.
- Encourage coughing.
- If coughing isn't effective (it's silent or they can't breathe in properly), shout for help immediately and decide whether they're still conscious.
- If still conscious, but they're either not coughing or their coughing isn't effective, use back blows.

Back blows for babies under 1 year

- Sit down and lay the baby face down along your thigh or forearm, supporting their back and head with your hand.
- Give up to 5 sharp back blows with the heel of 1 hand in the middle of the back between the shoulder blades.

Back blows for children over 1 year

- Lay a small child face down on your lap as you would a baby.
- If this isn't possible, support your child in a forward-leaning position and give 5 back blows from behind.
- If back blows don't relieve the choking and the baby or child is still conscious, give chest thrusts to infants under 1 year or abdominal thrusts to children over 1 year. This will create an artificial cough, increasing pressure in the chest and helping to dislodge the object.

Chest thrusts for children under 1 year

- Lay your baby face up along the length of your thighs.
- Find the breastbone and place 2 fingers in the middle.
- Give 5 sharp chest thrusts (pushes), compressing the chest by about a third.

Abdominal thrusts for children over 1 year

- Stand or kneel behind your child. Place your arms under the child's arms and around their upper abdomen.
- Clench your fist and place it between the navel and ribs.
- Grasp this hand with your other hand and pull sharply inwards and upwards.
- Repeat up to 5 times.
- Make sure you don't apply pressure to the lower ribcage, as this may cause damage.

Following chest or abdominal thrusts, reassess your child as follows



- If the object still isn't dislodged and the child's still conscious, continue the sequence of back blows and either chest or abdominal thrusts.
- Call out or send for help, if you're still on your own.
- Don't leave the child.
- Call 999 if the blockage doesn't come out after trying back blows and either chest or abdominal thrusts. Keep trying this cycle until help arrives.
- Even if the object has come out, get medical help. Part of the object might have been left behind, or the child might have been hurt by the procedure.

Unconscious child with choking

- If a choking child is, or becomes, unconscious, put them on a firm, flat surface and shout for help.
- Call 999, putting the phone on speakerphone so your hands are free.
- Don't leave the child at any stage.
- Open the child's mouth. If the object's clearly visible and you can grasp it easily, remove it.
- Start CPR

Anaphylaxis Guidelines

- Anaphylaxis is likely if a patient who is exposed to a trigger (allergen) develops a sudden illness (usually within minutes of exposure) with rapidly progressing skin changes and potentially life-threatening airway and/or breathing and/or circulation problems.
- Look for:
- Sudden onset of Airway and/or Breathing and/or Circulation problems.
- Usually, skin and/or mucosal changes (flushing, urticaria, angioedema).

Initial treatment of anaphylaxis

- Use an ABCDE approach to recognise and treat anaphylaxis. Treat life-threatening problems as you find them. The basic principles of treatment are the same for all age groups.
- All clinical staff should be able to call for help and initiate treatment of anaphylaxis.
 National public health agencies recommend that staff who give immunisations should have annual updates in the treatment of anaphylaxis.
- A single responder must always ensure that help is coming. If there are several rescuers, several actions can be undertaken simultaneously.

Equipment and drugs available

In all clinical settings, resuscitation equipment and drugs (at a minimum, access to 1 mg/ml [1:1 000] adrenaline for IM use at the appropriate dose) must be immediately



available to help with rapid resuscitation of a patient with anaphylaxis. Clinical staff should be familiar with the equipment and drugs they have available and should check them regularly.

Patients with anaphylaxis in any setting should expect as a minimum:

- recognition that they are seriously unwell
- an early call for help
- initial assessment and treatments based on an ABCDE approach
- prompt treatment with intramuscular adrenaline

Patient positioning

- All patients should be placed in a comfortable position. The following factors should be considered:
- Fatality can occur within minutes if a patient stands, walks or sits up suddenly. Patients must not walk or stand during acute reactions. Use caution when transferring patients who have been stabilised.
- Patients with Airway and Breathing problems may prefer to be in a semirecumbent position, as this will make breathing easier.
- Lying flat, with or without leg elevation, is helpful for patients with low blood pressure (Circulation problem).
- Patients who are breathing normally and unconscious should be placed on their side (recovery position). Monitor breathing continuously and prepare to intervene if this changes.
- Pregnant patients should lie on their left side to prevent aortocaval compression.
- Remove the trigger if possible

Cardiorespiratory arrest during anaphylaxis

- Recognise that cardiorespiratory arrest has occurred if the person becomes unresponsive or unconscious, and breathing is absent or abnormal.
- Start cardiopulmonary resuscitation (CPR) immediately and follow current guidelines. High-quality CPR with minimal interruption for other interventions improves the chances of survival from cardiac arrest.
- Rescuers should ensure that help is on its way, as early advanced life support is essential.
- Once cardiac arrest has occurred, absorption of adrenaline given by the intramuscular route will not be reliable and attempts to give it may interrupt or distract from delivery of high-quality CPR.
- rolonged resuscitation may be successful (as with hypothermia)

Anaphylaxis during pregnancy

- Pregnant patients should lie on their left side to prevent aortocaval compression
- If the mother is breathing normally and has a cardiac output maximal venous return is achieved in the full lateral (recovery) position. She can be then be placed in a head-down position instead of lifting the legs.



Refractory anaphylaxis

 All healthcare professionals should be able to identify patients with Breathing and/or Circulation problems of anaphylaxis which do not respond to initial treatment with IM adrenaline, and to escalate care quickly by calling for support from the ambulance service for urgent transfer to hospital.

Drugs used in the initial treatment of anaphylaxis Adrenaline (Epinephrine)

- Intramuscular adrenaline is the first-line treatment for anaphylaxis.
- A single dose of IM adrenaline is well-tolerated and poses minimal risk to an individual having an allergic reaction.
- If features of anaphylaxis persist despite two doses of IM adrenaline, follow the refractory anaphylaxis algorithm and call for expert support to allow an intravenous adrenaline infusion to be started.
- Adrenaline should be given to all patients with life-threatening features (i.e.
 evidence of Airway/Breathing/Circulatory involvement). If these features are absent
 but there are other features of a systemic allergic reaction, the patient needs careful
 observation and appropriate symptomatic treatment using the ABCDE approach.
- Adrenaline must be readily available in clinical areas where anaphylaxis could occur.

IM adrenaline (give as soon as possible)

- IM adrenaline is the first-line treatment for anaphylaxis in all healthcare settings.
- Attach monitoring as soon as possible: this will help assess the patient's response to adrenaline.
- The best site for IM injection is the anterolateral aspect of the middle third of the thigh.
- The needle used for injection must be sufficiently long to ensure that the adrenaline is injected
- into muscle: use a green (21G) or blue (23G) needle.
- Repeat the IM adrenaline dose after 5 minutes if there is no improvement in the patient's condition.
- If there is no improvement in Breathing or Circulation problems despite two doses of adrenaline, follow the algorithm for refractory anaphylaxis.
- Pallor can occur following adrenaline, due to vasoconstriction. This might be misinterpreted as ongoing cardiovascular compromise or anaphylaxis and thereby can increase the risk of adrenaline overdose. This is a particular concern in small children, who may remain pale following 2–3 doses of adrenaline.
- A significantly raised BP is a key indicator of adrenaline overdose.



 Measure vital signs (respiratory rate, oxygen saturations, heart rate, BP, level of consciousness) and auscultate for wheeze to monitor the effect of treatment and assess if further doses of adrenaline are required.

Adrenaline IM dose Use 1 mg/mL [1:1000] adrenaline

• Adult and child* > 12 years: 500 micrograms IM (0.5 mL of 1 mg/ml

adrenaline)

6 - 12 years: 300 micrograms IM (0.3 mL)
 6 months - 6 years: 150 micrograms IM (0.15 mL)

• < 6 months: 100 – 150 micrograms IM (0.1 to 0.15 mL)

• *Give 300 micrograms IM (0.3 mL) in a child who is small or prepubertal

Adrenaline auto-injector devices

- Auto-injectors are often prescribed to patients at risk of anaphylaxis for early self administration or injection by a carer or family member in the event of an anaphylactic reaction. Depending on the brand, they are available in three doses of adrenaline:
- 150 micrograms (0.15 mg), 300 micrograms (0.3 mg) and 500 micrograms (0.5 mg).
- Healthcare professionals should be familiar with their use.
- In all healthcare settings, giving adrenaline from an ampoule by syringe and needle is preferred in an emergency, since auto-injectors will not allow delivery of an age/weight appropriate dose in most patients.

Refractory anaphylaxis

- Refractory anaphylaxis is defined as anaphylaxis requiring ongoing treatment (due to persisting respiratory or cardiovascular symptoms) despite two appropriate doses of IM adrenaline.
- When treating refractory anaphylaxis, a rapid ABCDE assessment should be undertaken, and priority given to treating the greatest threat to life.
- Critical care support should be sought early (dial 999 for the ambulance service in a community
- setting).
- If an IV infusion cannot be administered safely (e.g. due to a patient being outside a hospital environment), continue to give IM adrenaline after every 5 minutes while life-threatening cardiovascular and respiratory features persist.

Resus UK - www.resus.org.uk

Other emergency situations-

Raise the alarm - call 999



Utilise onsite emergency response – fire alarms, fire extinguishers (Reception, Kitchen, Back hall way)

Evacuation of clients & therapists through Main front door— head count & check building empty

Crowd management – meeting point on seafront grass.

Carry out first aid & medical assistance

Ensure Team have read the policy & have updated First Aid in the Workplace every 3 years.