

Equipment List BLS

Version 12.12.2018

Rooms

- Lecturing room (to accommodate all candidates and instructors)
- Training rooms (1 per 6-8 candidates)
- Faculty room (to accommodate the faculty during breaks and discussions)
- Lunch room
- Toilets (and hygiene)

Equipment per instructor

- **Before the course**
 - Time tables of provider and/or instructor course
 - (BLS provider and instructor course manual if needed)
 - PPP presentations provider and/or instructor (if needed – according CD)
 - Information sheets (A4 pages) for registration site, lecture room, faculty room, training rooms (numbered), toilets, lunch and breaks
- **During the course**
 - Pencil(s)
 - Name badge (different colours for each group, logo ERC and local organisation, first name clearly visible)

Equipment per participant

- **Before the course**
 - Time table provider and/or instructor course
 - Provider and/or instructor manual or information how to download
 - Assessment sheets BLS (informative)
 - Information sheets (A4 pages) for registration site, lecture room, faculty room, training rooms (numbered), toilets, lunch and breaks
- **During the course**
 - Pencil(s) if needed
 - Name badge (neutral colour for instructors, logo ERC and local organisation, first name clearly visible)

Equipment per trainee group

- Minimal one standard adult CPR training manikin (with or without electronic feedback)
- Spare face of each manikin (if applicable)
- Spare lungs or airways depending on type of manikin
- Disinfectant, cleaning tissue or swabs
- One pocket mask (at least) – if possible one mask or one valve per candidate
- One training AED per manikin, preferably a training device
- Electrodes depending on type + spare electrodes
- Spare batteries (may run low during training)

Equipment in general

- LCD Projector (1 or more depending on the CDs proposal)
- Laser pointers (one per computer)
- Laptop PC
- Black or white board or similar in each room plus markers and wipes
- Extension power line
- Multiple power inlet
- List of candidates (to register + place for signature)
- List of candidates per group/per instructor (all on one 1 page)
- List to register for accreditation (CME) points (if applicable)
- Spare badges, markers
- Signposts (A4 pages) for registration site, lecture room, faculty room, training rooms (numbered), toilets, lunch and breaks
- Feedback form for candidates (on top of website survey if needed)
- (Restaurant information copy)
- Drinks, catering: provide welcome coffee in the morning, coffee and cold drinks during breaks and lunch

Equipment List ALS

Version 04.12.2018

Basic Life Support and Defibrillation

Equipment per station

- 1 ALS manikin
- Bag-valve-mask with reservoir
- Oxygen tubing
- Suction (e.g. Yankauer)
- Oropharyngeal airways, sizes 2, 3 and 4
- Monitor / defibrillator with appropriate leads
- Spare recording paper
- Self-adhesive defibrillation pads
- IV cannula
- Rhythm generator
- Spare batteries for cardiac rhythm simulator
- Oxygen mask with reservoir
- Stethoscope
- Suitable support surface for performing skills (e.g. hospital bed, resuscitation trolley)

CASTeach and CASTest and the Deteriorating patient

Equipment per station

- Stethoscope
- Suitable support surface for performing skills (e.g. hospital bed, resuscitation trolley)
- 1 ALS manikin with rhythm simulator
- Spare batteries for cardiac rhythm simulator
- 1 manual defibrillator
- 1 CAS box to include:
 - 1 bag-mask, oxygen tubing and reservoir
 - 2 tracheal tubes
 - 1 laryngoscope
 - 1 oropharyngeal airway
 - 1 nasopharyngeal airway
 - 1 catheter mount
 - 1 x 50ml syringe
 - 1 x 10ml syringe
 - Lubricating spray
 - Tie for tracheal / supraglottic airway
 - 1 suction device
 - 1 rebreathing mask with oxygen tubing and reservoir
 - 1 pair Magill's forceps
 - 2 IV cannulae

- Selection of prefilled drug syringes e.g. adrenaline 1:10 000 1mg, amiodarone 300mg
- 1 set of self-adhesive defibrillation pads
- 1 supraglottic airway device
- Spare batteries for laryngoscope and rhythm simulator
- Spare bulbs for laryngoscope
- Spare defibrillator recording paper
- Surgical gloves
- Capnography monitoring device
- Teaching / Testing sheets

Airway Management /IO Access

Equipment per station

- 2 adult airway management trainers or intubatable ALS trainers
- 2 anatomical models
- 2 suction devices
- 2 Yankauer suckers
- 1 pocket mask (demonstration only)
- 2 size 1, 2, 3 and 4 oropharyngeal airways
- 2 size 6, 7 and 8 nasopharyngeal airways
- 2 supraglottic airway devices
- Lubrication and / or palate converter for supraglottic airway device
- 2 self-inflating bags with oxygen tubing and reservoir
- 2 adult face masks for attaching to self-inflating bag (medium and large)
- 2 x 50 ml syringes
- 2 x 10 ml syringes
- 2 pairs of Magill's forceps
- 2 bougies
- 2 lubricating sprays
- 2 laryngoscopes (Magill curved blades)
- Spare batteries and bulbs for laryngoscopes
- Cleaning wipes
- 2 ties for tracheal tube / supraglottic airway
- 2 stethoscopes
- 2 catheter mounts
- 2 connectors
- 2 non-rebreathing masks with oxygen tubing and reservoir
- Size 7 and 8 mm tracheal tubes
- Surgical gloves
- 2 capnography monitoring devices
- IO access Gun or drill/ IO needles
- Pressure bags

Monitoring, Rhythm Recognition and 12-lead ECG

Equipment per station

- 1 cardiac rhythm simulator and monitor
- Spare batteries for cardiac rhythm simulator
- 1 defibrillator – useful to obtain rhythm strips to consolidate learning
- 1 flipchart / whiteboard and appropriate pens
- Spare defibrillator recording paper
- Projection device and course CD or 1 overhead projector (plus spare bulb) and rhythm recognition acetates

Bradycardia and Tachycardia

Equipment per station

- 1 ALS manikin
- Defibrillator for teaching cardioversion
- External pacing facility for defibrillator
- 1 cardiac rhythm simulator
- 1 set of self-adhesive defibrillator pads
- Spare defibrillator recording paper
- Spare batteries for cardiac rhythm simulator
- 1 projection device or overhead projector (plus spare bulb) and acetates

Arterial Blood Gas Analysis/Capnography

Equipment per station

- 1 projection device and course CD or overhead projector (plus spare bulb) and ABG acetates
- 1 flipchart / whiteboard and appropriate pens

Special Circumstances

Equipment per station

As per CASTeach equipment plus:

- 1 projection device and course CD or overhead projector (plus spare bulb) and special circumstances acetates
- 1 flipchart / whiteboard and appropriate pens

Equipment List ILS

Version 04.12.2018

This list recommends the minimum material needed to teach one group of candidates. If the course counts more than one group, it is accepted that skill stations must not run parallel, but can be exchanged, to minimise the need for special equipment.

Generic

- 1 ALS manikin (or BLS manikin with advanced airway)
- Optional: Airway management trainer
- Optional: Simulation Monitor (e.g. iPad with SimMon, ALSi or similar apps)
- Surgical gloves in different sizes
- 1 flipchart or whiteboard incl. appropriate pens
- 1 projection device

Airway and Breathing

- Suction unit with adequate catheters
- Oropharyngeal airways in 3 different sizes
- Nasopharyngeal airways in 3 different sizes
- Supraglottic airway device in different sizes
- Lubrication for supraglottic airway device
- Adult face masks for attaching to self-inflating bag (medium and large)
- Bag-mask, oxygen tubing and reservoir
- Cleaning wipes
- Nonrebreathing mask with oxygen tubing and reservoir
- Capnography monitoring device
- Stethoscope

Circulation

- AED trainer or manual defibrillator with ECG leads, including training cable (AED trainer/dummy may be used if BLS manikin with advanced airway is used instead of ALS manikin)
- Self-adhesive defibrillation pads
- IV cannula in different sizes
- Syringes in different sizes
- Infusions
- Adrenaline and amiodarone ampoules

Disability

- Blood glucose meter
- Pupil light

Equipment List EPALS

Version 04.12.2018

Equipment PER CLASS

- 1 flipchart or writing board
- Various sizes of bags and masks (BMV), including small sizes
- Sizes of oropharyngeal and nasopharyngeal airways (or shorten tracheal tubes with safety pins) o PERCLASSsuctionequipment
- Different types of oxygen devices (nasal prongs, masks, non-rebreathing masks with valves...)
- Some sizes and types of ET tubes, laryngoscope, blades, tape, stylet.
- IO needles, EZ-IO device
- Peripheral catheters, syringes, fluids (250 ml 0,9 % NaCl or similar; Glucose 5%; Gloves/aprons - cleaning material, 3-way stopcocks
- SpO₂probe–monitoring.Bloodpressure
- Stethoscope
- Adrenaline & NaCl 0.9 % ampulla
- Umbilical catheter
- 2 towels
- Teamleader jacket
- 1 infant + 1 junior BLS manikin (if difficult adult can replace junior); cleaning material
- 1 infant ALS
- 1 junior ALS (that accommodates airway management and defibrillation) or at least 2 x (if difficult Adult can replace junior)

Generic

- 1 x different sizes of supraglottic devices
- 1 x artificial bones for EZ-IO devices;
OR ALS baby-junior that accommodate IO needle
(or chicken/ turkey legs as an alternative)
- 2 x Heart simulator or other means of presenting ECG rhythms / monitor
- 2 x Defibrillator, gel pads or preferably self-adhesive pads.
- 2 x Teaching-purposeAED
- 2 x Headblocks
- 1 x scoop stretcher
- 1 x vacuum mattress (optional)

Equipment List NLS

Version 04.12.2018

Skill Station: Resuscitaire, chest compressions and pulse oximetry

Equipment per station

Resuscitaire station (hospital setting)

- Resuscitaire with functioning gas supply, pressure relief valve and T-piece circuit.
 - There should also be a timer.
- Exemplar of equipment that would be expected to be used at a delivery for discussion.
 - 3 towels/baby wraps + hat
 - Plastic bag and hat (preterm thermal care)
 - Face masks size 00/1 2 – e.g. Round Silicone 'Laerdal' type
 - Oropharyngeal (Guedel) airways 1 (7 cm) 0 (6 cm), 00 (5 cm) and 000 (4 cm) – one of each
 - Paediatric Yankauer sucker and wide bore (12 or 14 FG) suction catheter
 - Laryngoscopes with large and small blades
 - Tracheal tubes with standard 15 mm connector sizes 2.5, 3.0, 3.5 – one of each
 - Paediatric/neonatal stethoscope
 - (Syringes)
 - (Umbilical line)
 - (Disposable gloves)

Saturation Monitoring

- Functioning pulse oximeter with sensors suitable for use in adult and newborn
- Table or stand so that candidates get a good view of pulse oximeter when applied to instructor and/or manikin
- Manikin

Cardiac compressions (2 sets for standard station set up)

- Manikin – as specified above
- Suitable mask inflation devices (T-piece or bag/mask)
- Stethoscope

Note on Manikins

Infant manikins that permit mask inflation and chest compressions, ideally with an airway which requires the head to be in the correct position for the chest to rise during ventilation. QCPR manikins permit structured debrief of candidate technique with visual feedback.

For example - non-intubatable (e.g.: Laerdal Resusci Baby First Aid, Laerdal Resusci Baby Basic, Laerdal Resusci Baby QCPR or similar)

Skill Station: Vascular Access (Central Venous Access and Drugs)

Equipment per station

- Umbilical Cords
 - One fresh umbilical cord for each candidate, stored in a baby's milk bottle (in 0.9% saline) with a free end protruding through a cut feeding teat
 - Alternative if real cords are not used – artificial silicone rubber cords either as part of a manikin with an umbilicus, or as simulated cords set up in bottles as above.
 - (note – health and safety procedures must be followed if real cords are used and if sharp implements such as scalpels are provided)
- Umbilical catheters or other suitable tubes*
- Three way taps**
- Mosquito artery clamps (At least one for each candidate and preferably two)
- Umbilical vein probes (At least one for each candidate)
- Syringes 5 ml
- Disposable scalpel with size 11 or size 15 blade
 - Instructors may choose not to issue candidates with scalpels
- Umbilical cord tie tape
- Suture for demonstration of fixing by instructor
- Adhesive tape
- Disposable gloves, masks, goggles and aprons
- Incontinence pads and plastic sheet
- Rubbish bags for incineration
- Sharps box, placenta box
- A poster detailing the local sharps policy

If the artificial silicone cords are to be used, there should be one available for every candidate.

Check that whatever tube you intend to use to demonstrate umbilical catheterization will fit with the syringes you use.

** three-way taps may be used for added realism but are not essential. They cannot be used with the feeding tubes mentioned above.

Skill Station: Airway Management

Equipment per station (run as paired stations) – This is a list of the recommended equipment for the airway stations. Items in italics supplement the core set.

- Resuscitaire with functioning gas supply, pressure relief valve and T-piece circuit
 - Or equivalent device to permit T-piece ventilation e.g. Neopuff
- Two of each size, round soft silicone Laerdal type masks – size 00, 0/1 and 2
- *Two of each size – Fisher Paykel preterm masks – 35 mm, 42 mm*
- Two of each size, oropharyngeal airways 000 (4 cm), 00 (5 cm), 0 (6 cm)
- Tracheal tube with standard 15 mm connector – sizes 2.5, 3.0, 3.5, 4.0
 - These are not used in the station except to discuss size + use of meconium aspirator
- Meconium Aspirator – to fit ETT tubes
- Two paediatric Yankaeur suckers, or other wide bore suction catheters (12 or 14 FG)
- Two Laerdal style (~ 500 ml) self-inflating bags with blow off valve
- *One Laerdal 240 ml self-inflating bag*
 - *(Optional – to show it cannot achieve inflation breaths of 2-3 s)*
- Two BLS manikins (e.g. Laerdal Resusci Baby First Aid, Laerdal Resusci Baby Basic)
 - Should have airway occlusion with inappropriate head position i.e. hyperflexion/extension
- Two manikins with anatomical airways (e.g. Laerdal ALS manikin, Baby Anne)
 - Should permit inspection under direct vision and insertion of OPA
 - Airway Lubricant for this manikin
- *Two preterm manikins (e.g. Laerdal preterm Anne)*
- Two laryngoscopes each with straight blades size 0 and 1 (i.e. Oxford, Wisconsin or Miller blades)
- Four towels/baby wraps + hat for mature infants + plastic bag & hat (to show preterm thermal care)
- Two paediatric/neonatal stethoscopes
- *Supraglottic Airway Device (e.g. size 1 i-Gel)*
 - *For discussion at end of station, or if time permits to demonstrate insertion using the ALS manikin*
- Note on Manikins: The equipment used should be capable of allowing practice in all relevant manoeuvres. Therefore should permit
 - Head positioning & Jaw Thrust
 - Application of correct size mask with satisfactory seal
 - Inflation/Ventilation breaths only if head is in the correct position (at least one type of manikin) o Inspection + suction under direct vision
 - Sizing and insertion of an OPA
 - Ability to insert a supraglottic device

Simulations

Equipment per station (Hospital setting)

- Resuscitaire with functioning timer, gas supply, pressure relief valve and T-piece circuit.
 - Should have light + overhead heater – although may not be actually turned on
- 3 towels/baby wraps + hat – term babies
- Plastic bag and hat - preterm babies
- BLS manikin (e.g. Laerdal Resusci Baby First Aid, Laerdal Resusci Baby Basic)
 - This manikin should ideally only allow lungs to inflate if head in the correct position
- Baby manikin with anatomical airway +/- umbilicus
 - This manikins should allow all invasive airway manoeuvres
- *Preterm manikin*
- Self-inflating bag (~ 500 ml) with blow off valve
- Round soft silicone Laerdal masks (or similar) – size 00, 0/1 and 2
- *Preterm mask (35 or 42 mm)*
- Oropharyngeal (Guedel) airways 0 (6 cm), 00 (5 cm) & 000 (4 cm)
- Paediatric Yankauer sucker, and wide bore (12 or 14 FG) suction catheter
- A laryngoscope with straight blade – size 1 Miller/Wisconsin (or similar)
- Tracheal tube with standard 15 mm connector sizes 3.0 or 3.5 + meconium aspirator
 - A complete set of tubes can be supplied but are not used by candidates to achieve airway by intubation.
This tube is for one simulation, and if meconium aspiratory is supplied/used
- Paediatric/neonatal stethoscope
- Saturation probe
 - *oximeter is not essential*
- Suitable umbilical lines + Syringes (+ mock drugs – optional).

Homebirth Simulation

The following equipment is usually available at a planned home birth and can be used to run out of hospital simulations. Manikins used would be the same as for the hospital based simulations

- Changing Mat*
- 3 towels/baby wraps and hat
- Self-inflating bag (~ 500 ml) with blow off valve
- Round soft silicone Laerdal masks (or similar) – size 00, 0/1 and 2 – one of each
- Paediatric/neonatal stethoscope
- Laryngoscope handle (straight large and small disposable blades)
- Oropharyngeal (Guedel) airways 0 (6 cm), 00 (5 cm) and 000 (4 cm)
- Portable suction device with Paediatric Yankauer sucker, and wide bore (12 or 14 FG) suction catheter OR Double chamber Uno mouth-operated mucus extractors or similar
- Name tapes if the baby is to be transferred in to hospital*
- Syringes 5 and 10 ml – two of each
- Naso gastric tube size 8 FG and size 10 FG*
- Suitable adhesive tape
- Sharps box
- Sterile Wipes*

* Items not used in any other station in NLS

Testing station

Equipment per station (hospital setting)

- Resuscitaire with functioning timer, gas supply, pressure relief valve and T-piece circuit.
 - Should have Light + overhead heater – although may not be actually turned on
- One paediatric/neonatal stethoscope
- Three blankets or wraps + hat
- BLS manikin (e.g. Laerdal Resusci Baby First Aid, Laerdal Resusci Baby Basic)
 - This manikin should ideally only allow lungs to inflate if head in the correct position
- ALS Baby manikin with anatomical airway
 - This manikin should allow all invasive airway manoeuvres
- One self-inflating bag (~ 500 ml) with blow off valve
- Round soft silicone Laerdal masks (or similar) – size 00, 0/1 and 2 – one of each
- One paediatric Yankauer sucker, or wide bore (12 or 14 FG) suction catheter
- Laryngoscope with size 1 blade
- Guedel airways 0 (6 cm), 00 (5 cm) and 000 (4 cm) – one of each
- Oximeter probe (Oximeter not essential)
- Standard testing sheets