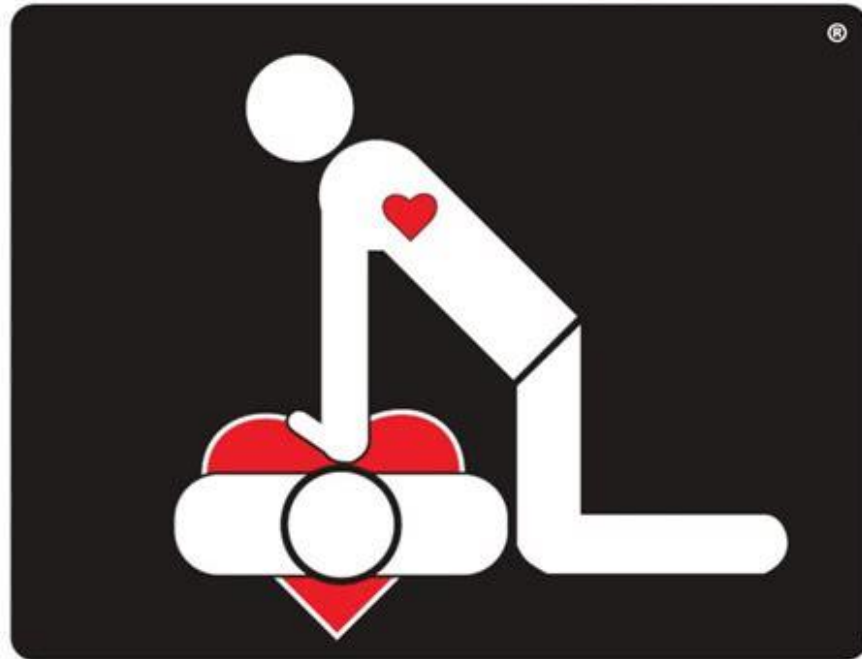
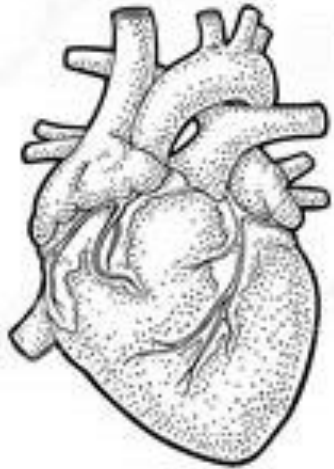


Cardiopulmonary Resuscitation (CPR)



Emily Gorman BSc VTS(ECC) RVN CertVNES CertVNECC
AFHEA RECOVER Certified BLS & ALS Instructor

Principles of CPR



HEART



KIDNEYS

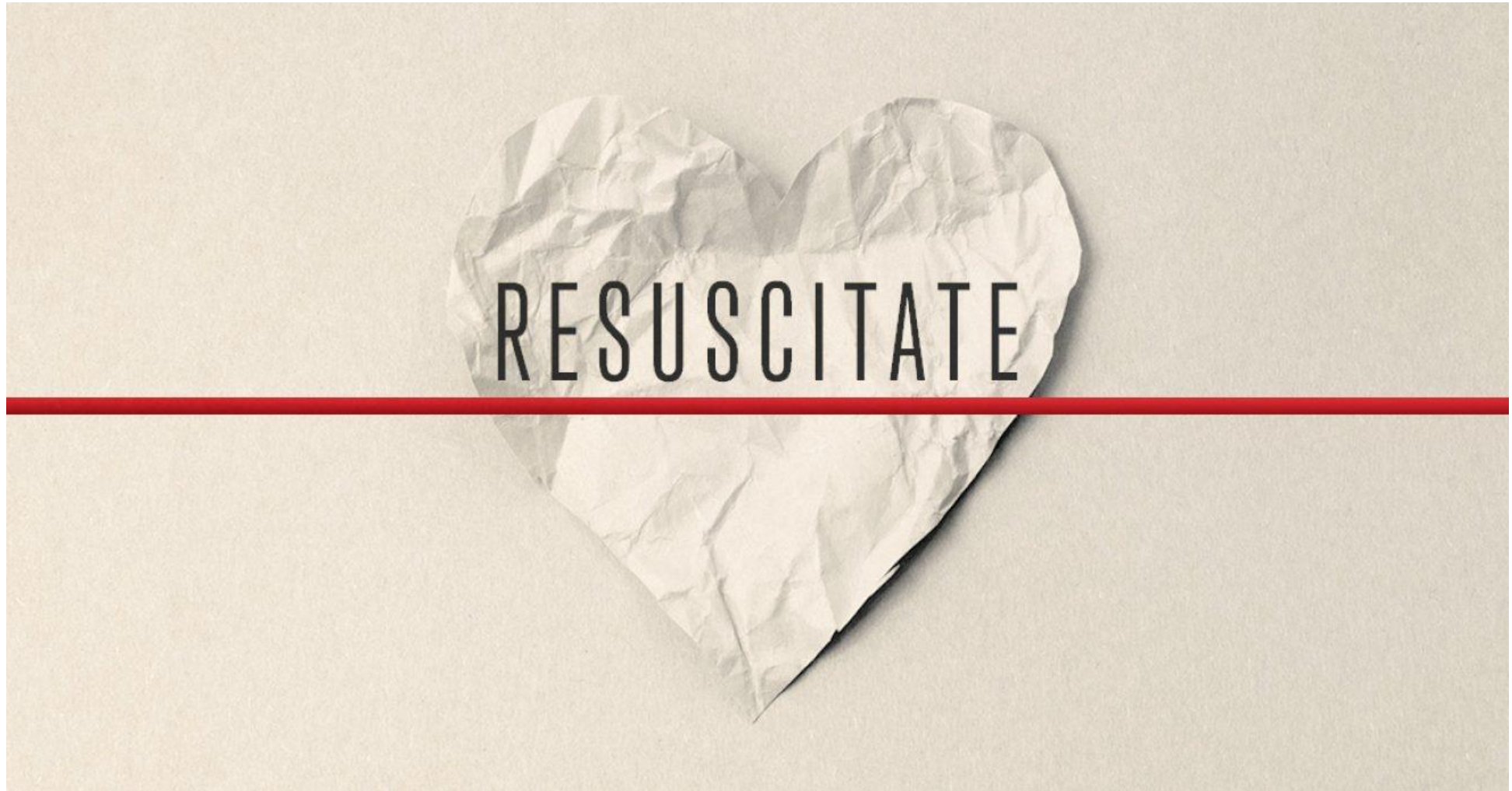


BRAIN

Resuscitation codes



Resuscitation codes



RECOVER guidelines



<https://recoverinitiative.org/>



Yes, I am
superhuman,
but, even I
should only
do chest
compressions
for 2 minutes.

BLS - Chest Compressions



100-120

PLAYLIST




Songs to do CPR to

All of these songs are 100 BPM – the right beat to perform CPR. Pick one to remember in case you ever need to save a life.

Created by **nyhospital** • 46 songs, 2 hr 53 min

[PLAY](#)  

Filter

TITLE	ARTIST	ALBUM	
 Just Dance	Lady Gaga, Colby ...	The Fame Monster...	2017-05-18
 Something Just Like This	The Chainsmokers,...	Something Just Lik...	2017-05-18
 Rumour Has It	Adele	21	2017-05-18



Chest Compressions - Lateral Recumbency

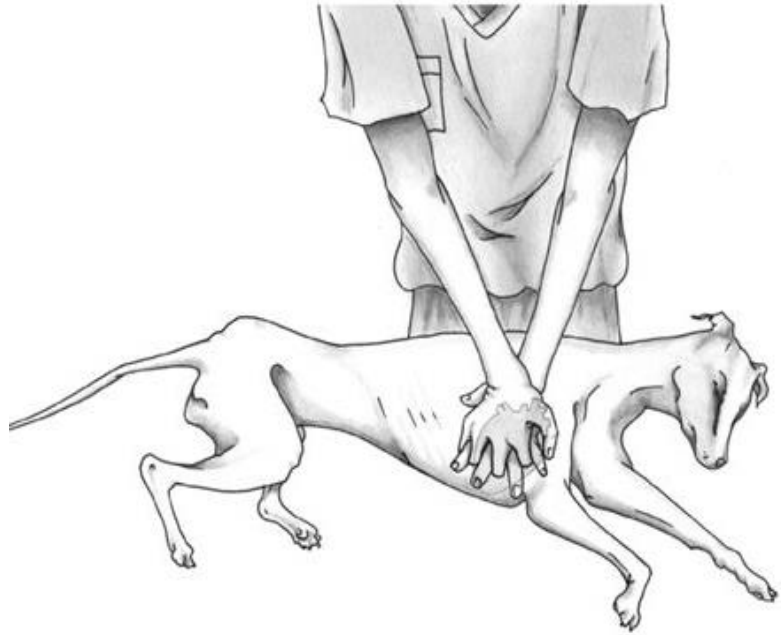


Cardiac pump method



Thoracic pump method (lateral)

Cardiac Pump Method



Cardiac pump - large dogs

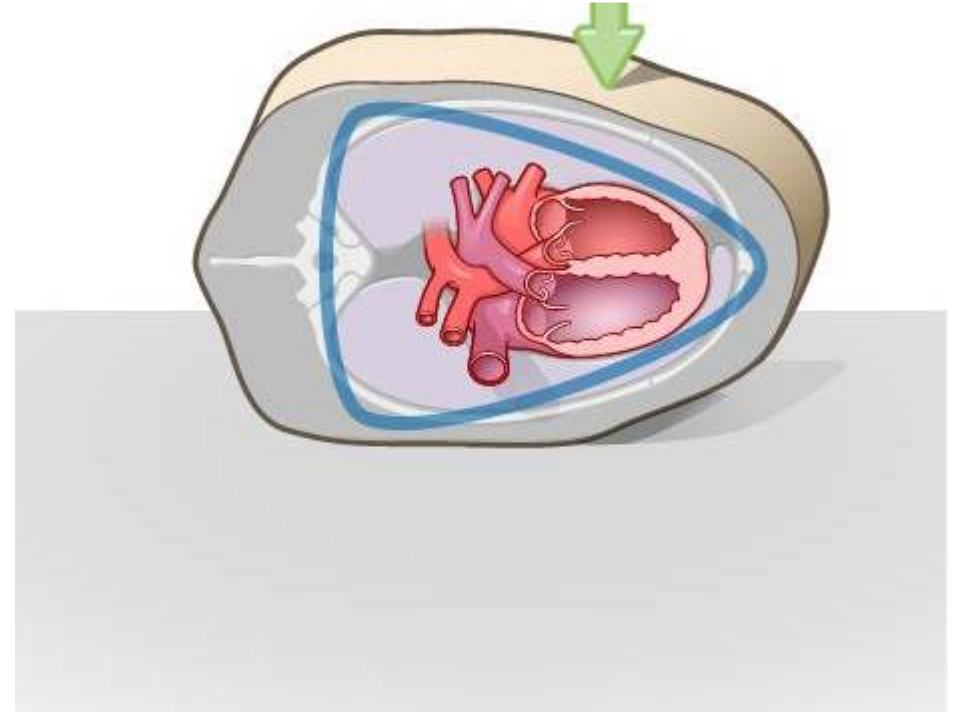


One-handed technique:
Small dogs & cats

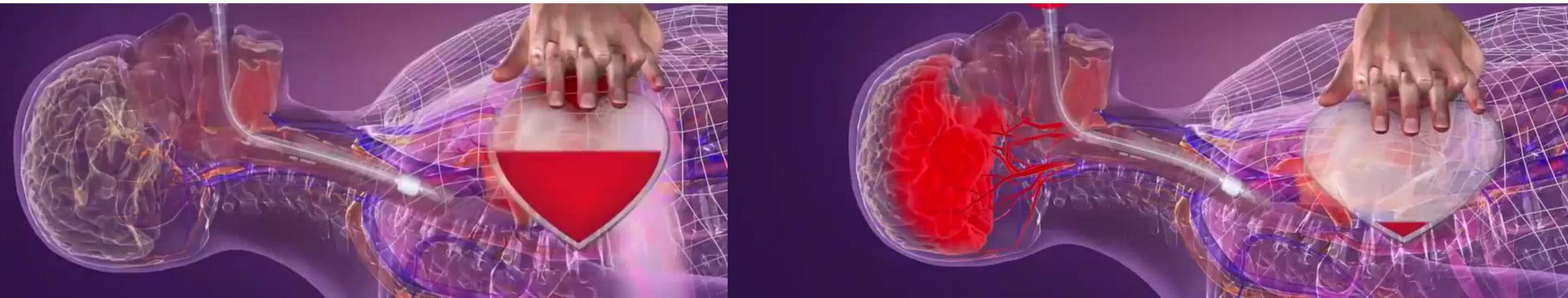


Two-handed technique:
Small dogs & cats

Cardiac Pump Method



Cardiac Pump Method

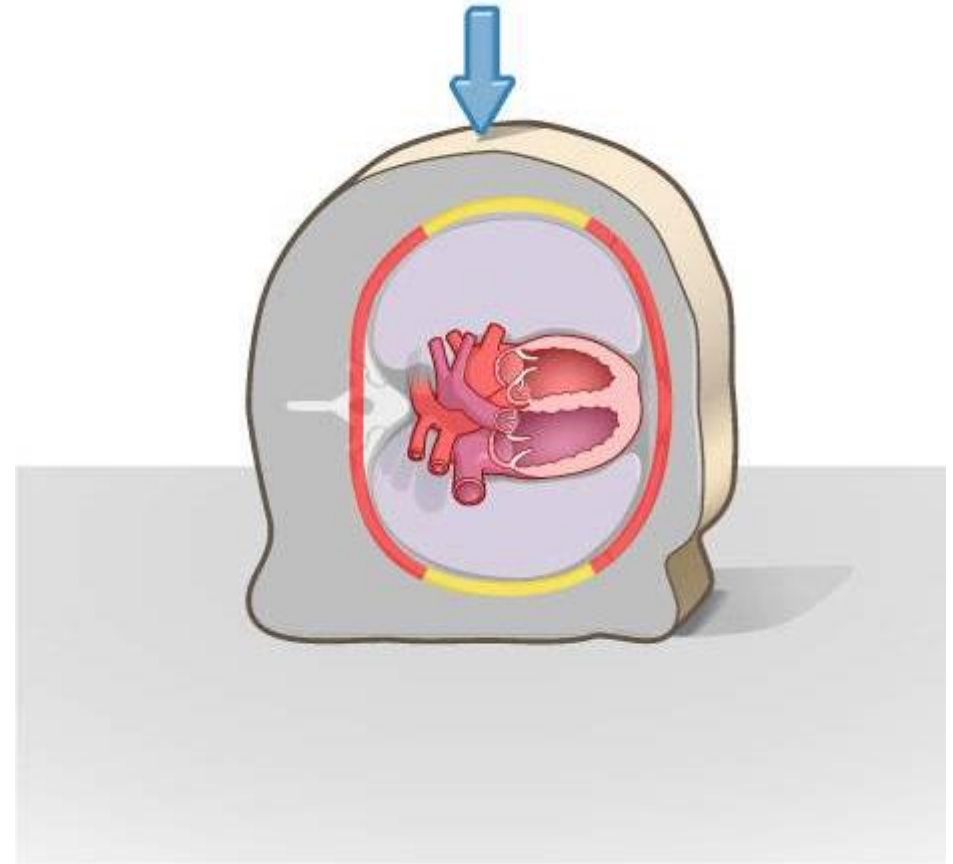


Videos courtesy of ResQPOD ITD available on You tube

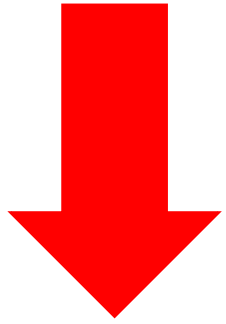
Thoracic Pump Method



Thoracic pump method (lateral)



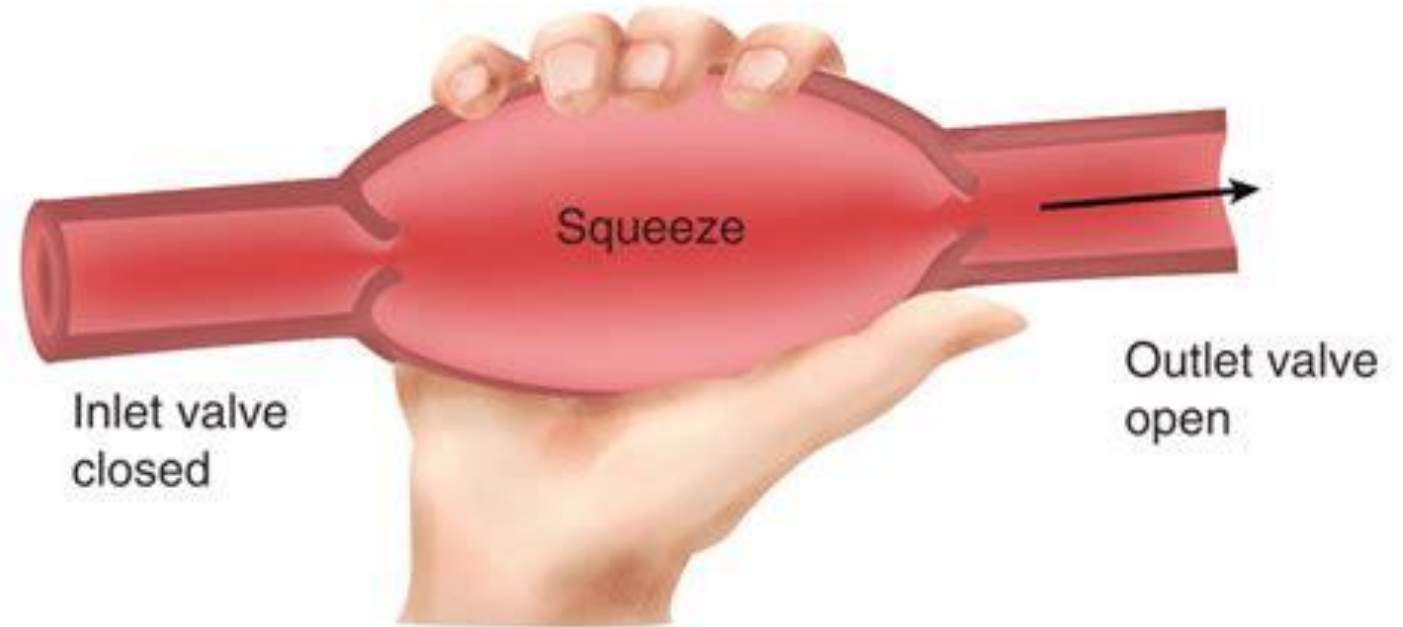
Thoracic Pump Method



Compress



Recoil



Chest Compressions - Dorsal Recumbency



Chest compressions - body positioning



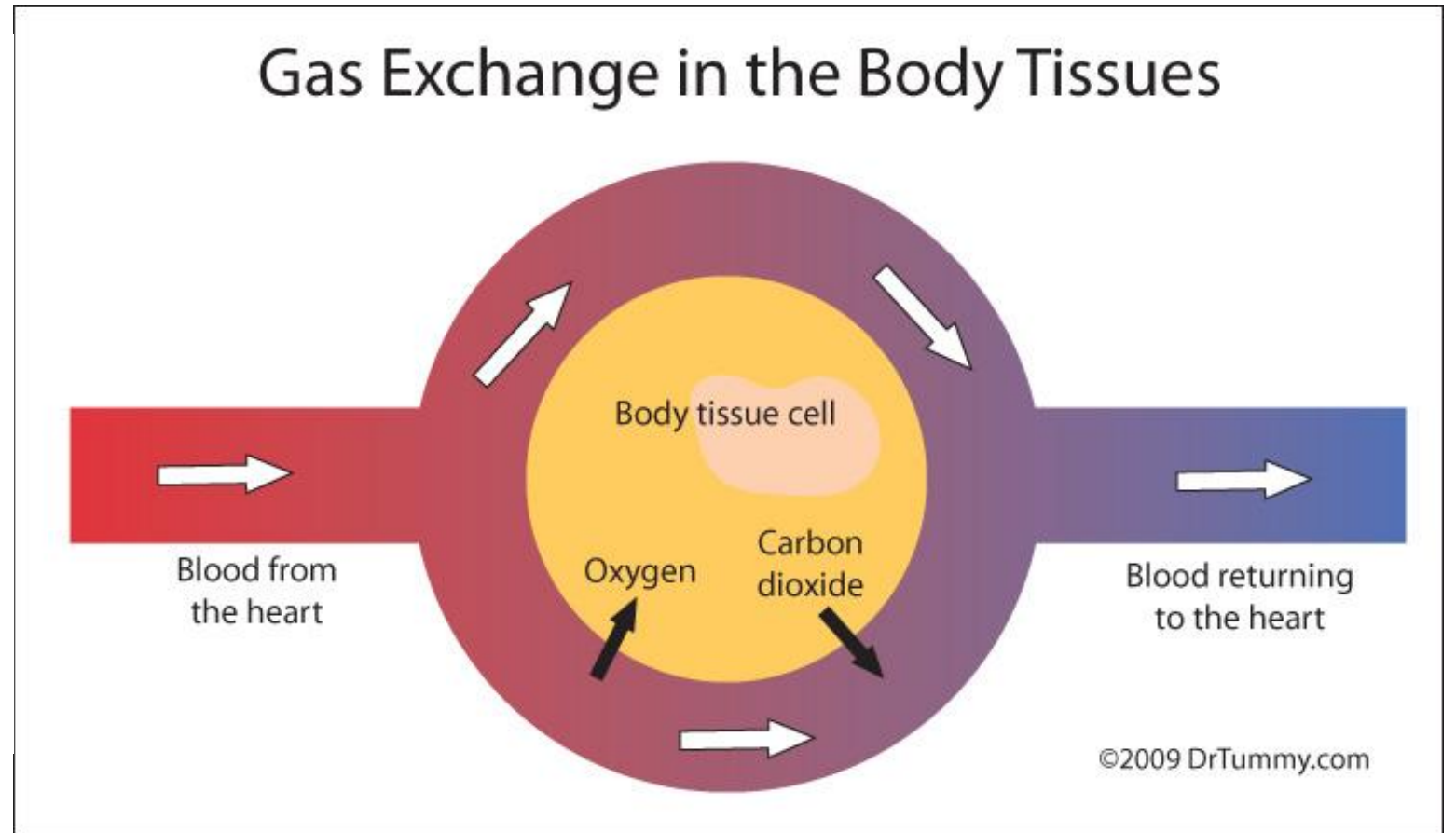
Chest compressions - body positioning



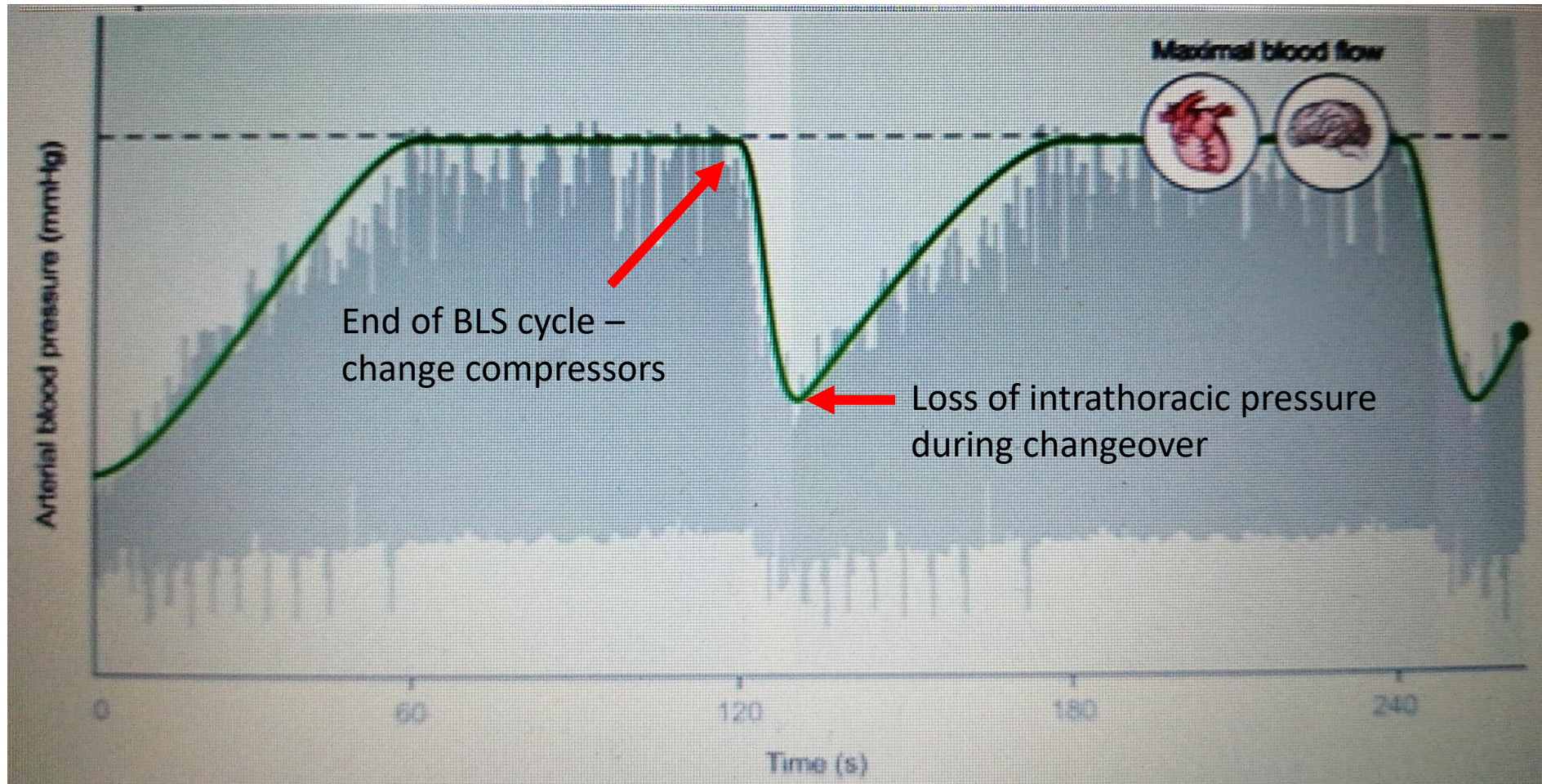
Chest compressions - efficacy



Capnograph



Chest compressions - efficacy



Intubation



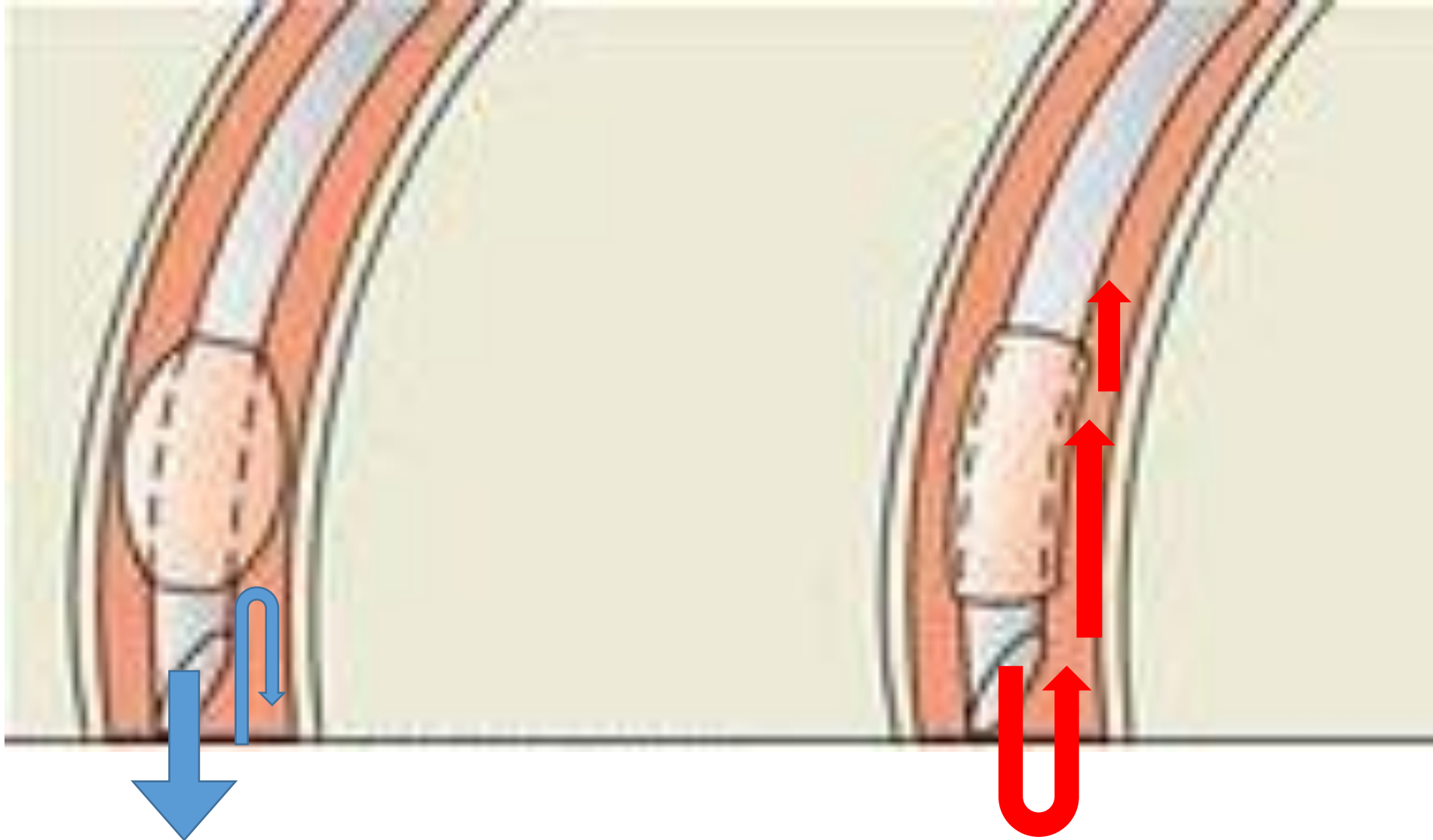
Intubation - cuff inflation



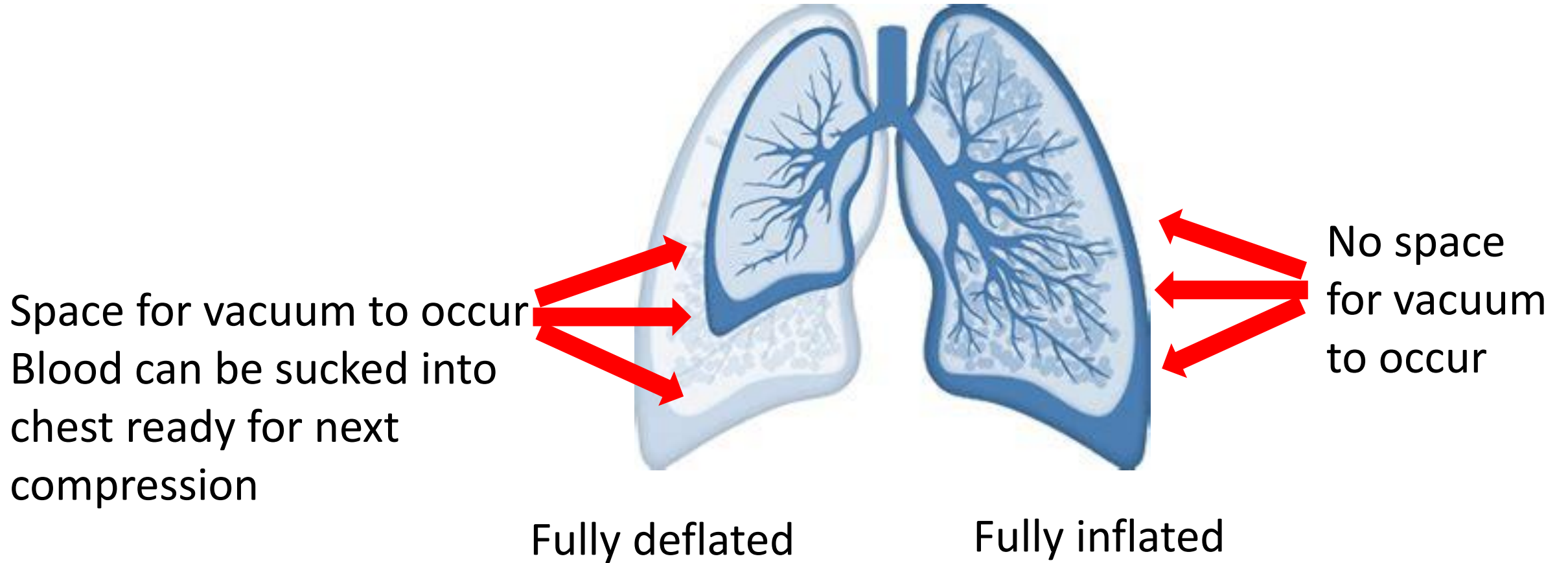
Aspiration pneumonia



Intubation - cuff inflation



BLS - Ventilation



Ventilation



BLS - RECAP

- Length of BLS cycle?
- Rate of chest compressions?
- How do you secure the airway?
- Rate of ventilation?
- Inspiratory time?



ALS

Advanced Life Support

3 Initiate Monitoring

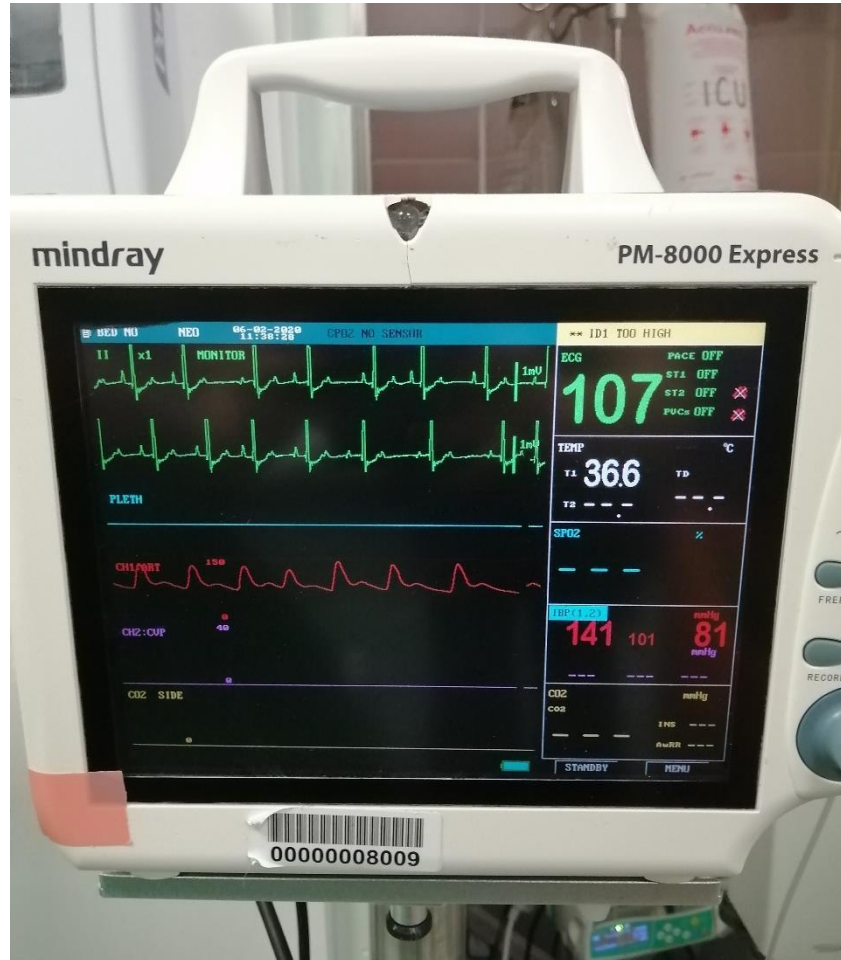
- Electrocardiogram (ECG)
- End Tidal CO₂ (ETCO₂)
 - >15 mmHg = good compressions

4 Obtain Vascular Access

5 Administer Reversals

- Opioids – Naloxone
- α₂ agonists – Atipamezole
- Benzodiazepines – Flumazenil

ALS - Monitoring



ALS - Monitoring - ECG



Lellow
Left (LF)

Red
Right
(RF)

Black
(LF) is
Smoke

White
Is Right!
(RF)

Green is
left
behind...
(LH)

UK

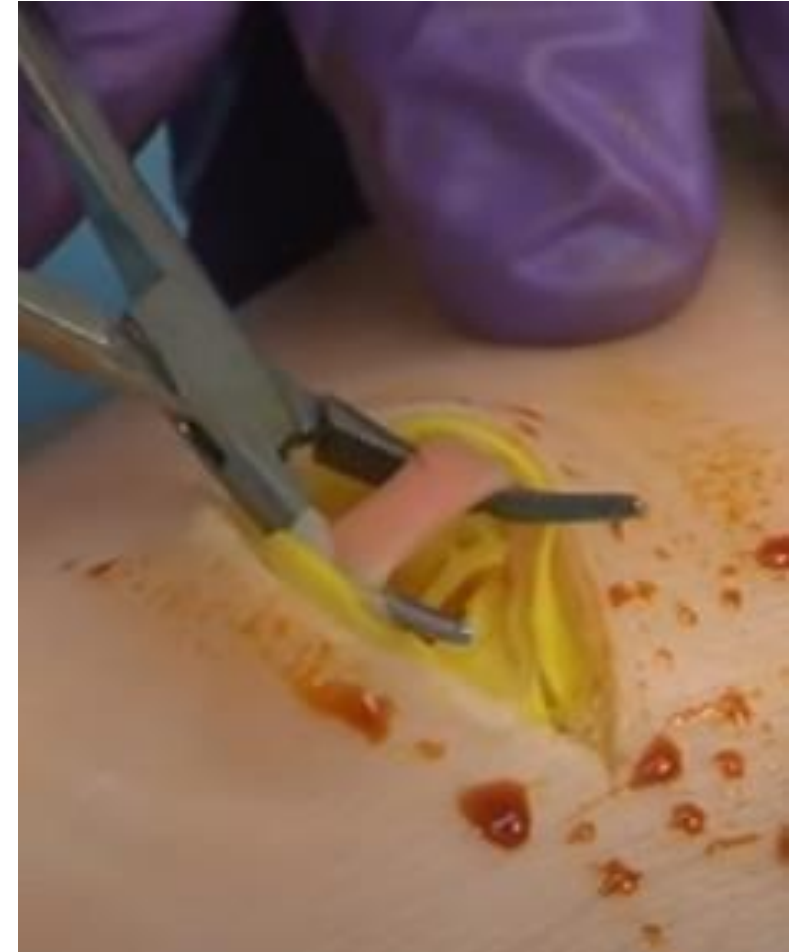
Over Fire
Red (LH)

US

ALS - Monitoring - Capnograph



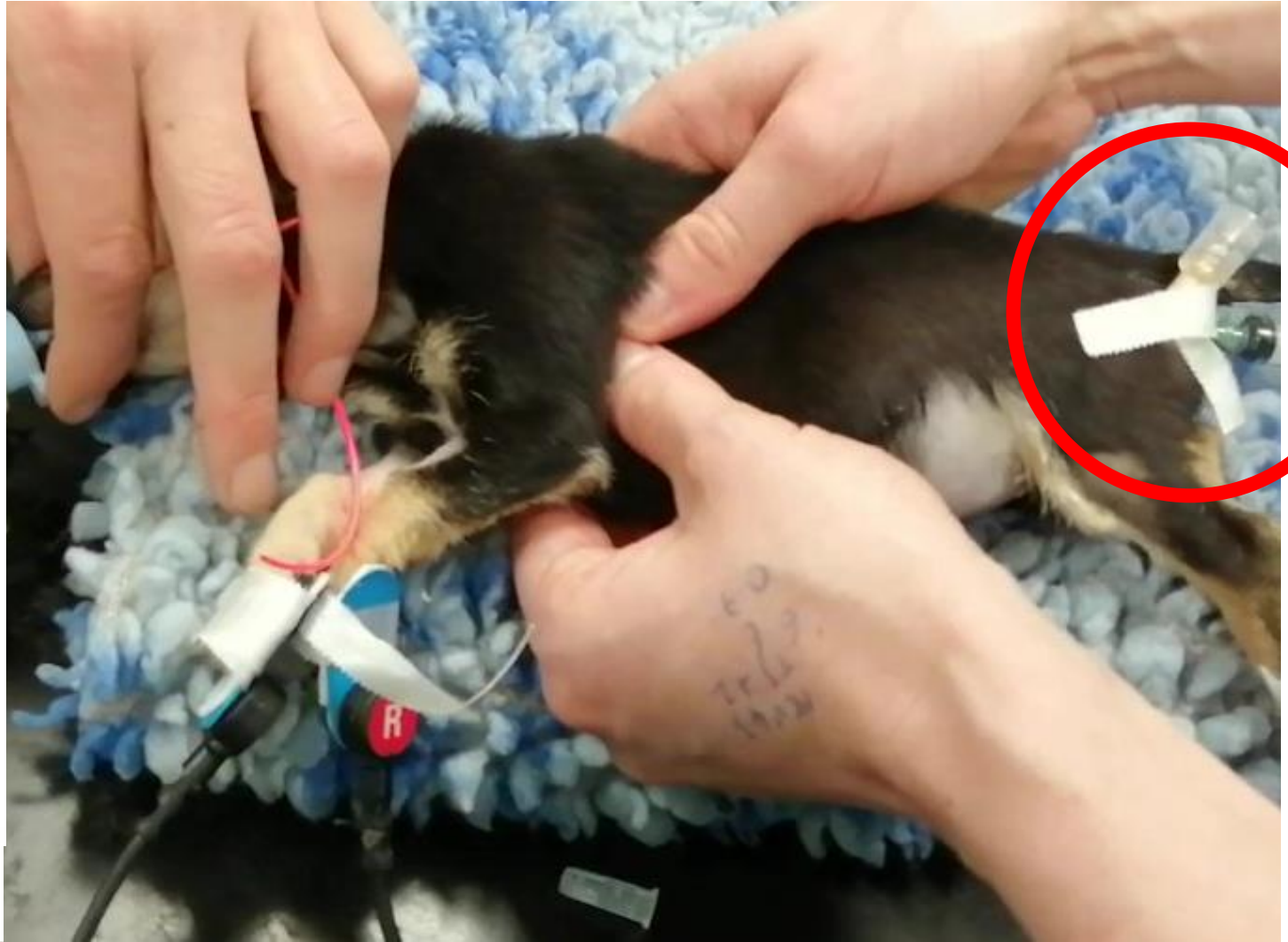
ALS - Vascular access



Vascular access



Intra-tracheal



ALS - Drug administration

ADRENALIN/EPINEPHRINE:

- Vasoconstriction
- Every other cycle (q4mins)
- Low v High dose



ATROPINE:

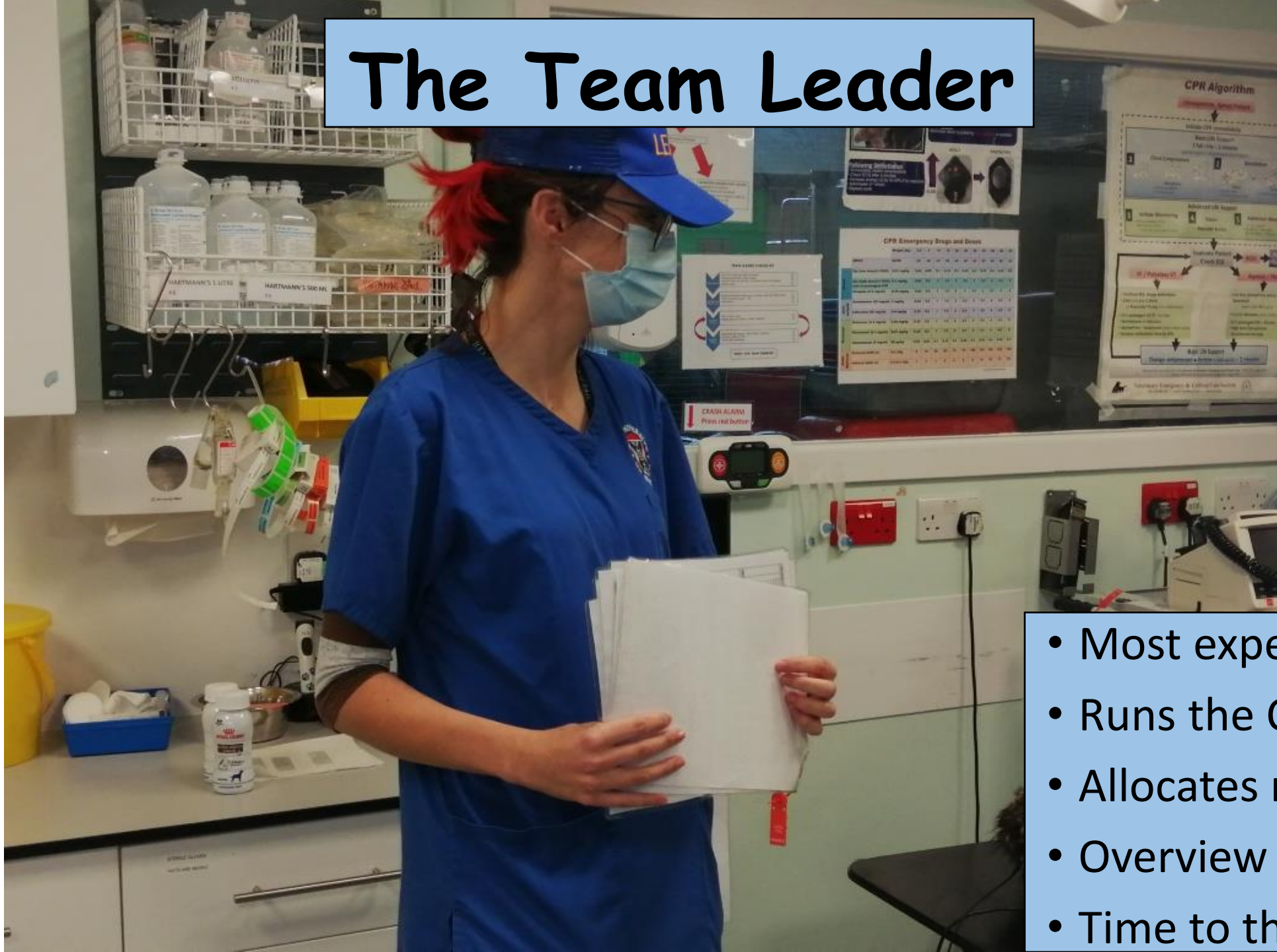
- Positive chronotrope (>HR)
- Every other cycle (q4mins)
- Give if high vagal tone



The Crash Team



The Team Leader

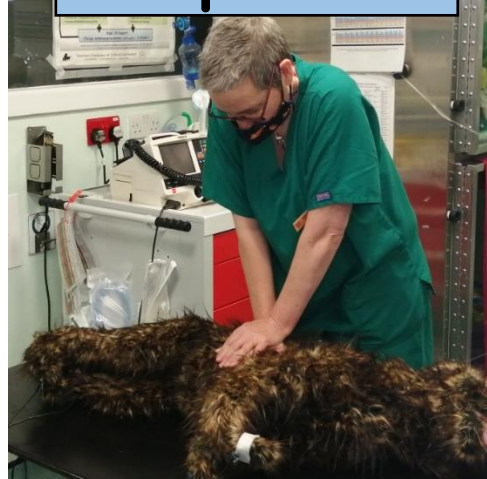


- Most experienced
- Runs the CPR attempt
- Allocates roles
- Overview
- Time to think

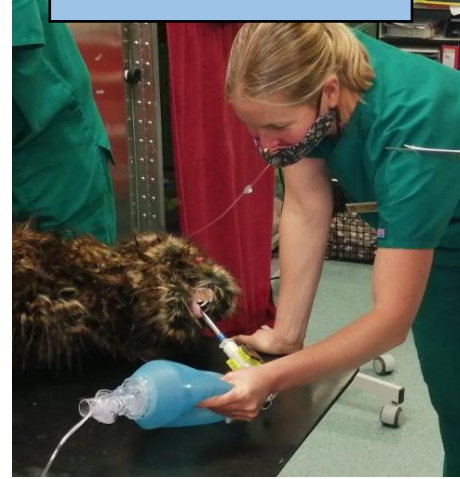
CPR roles

- Compressor
- Ventilator
- Timekeeper/scribe
- Second compressor/runner
- Owner communicator

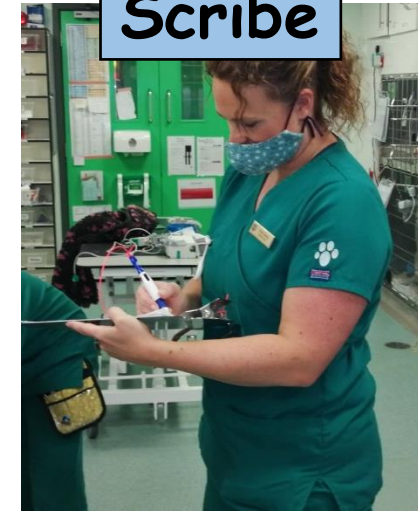
Compressor



Ventilator



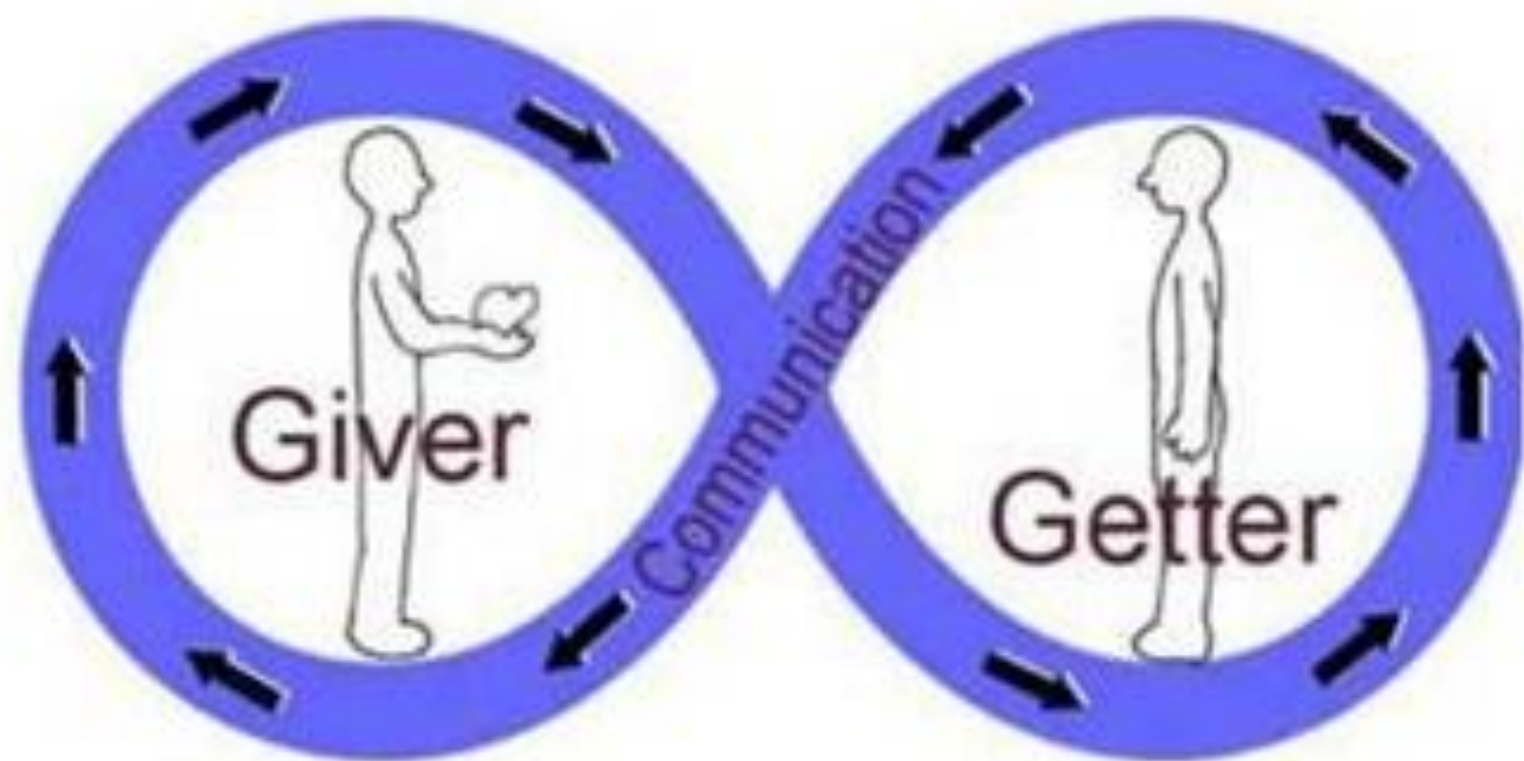
Scribe



Team work



Closed Loop Communication



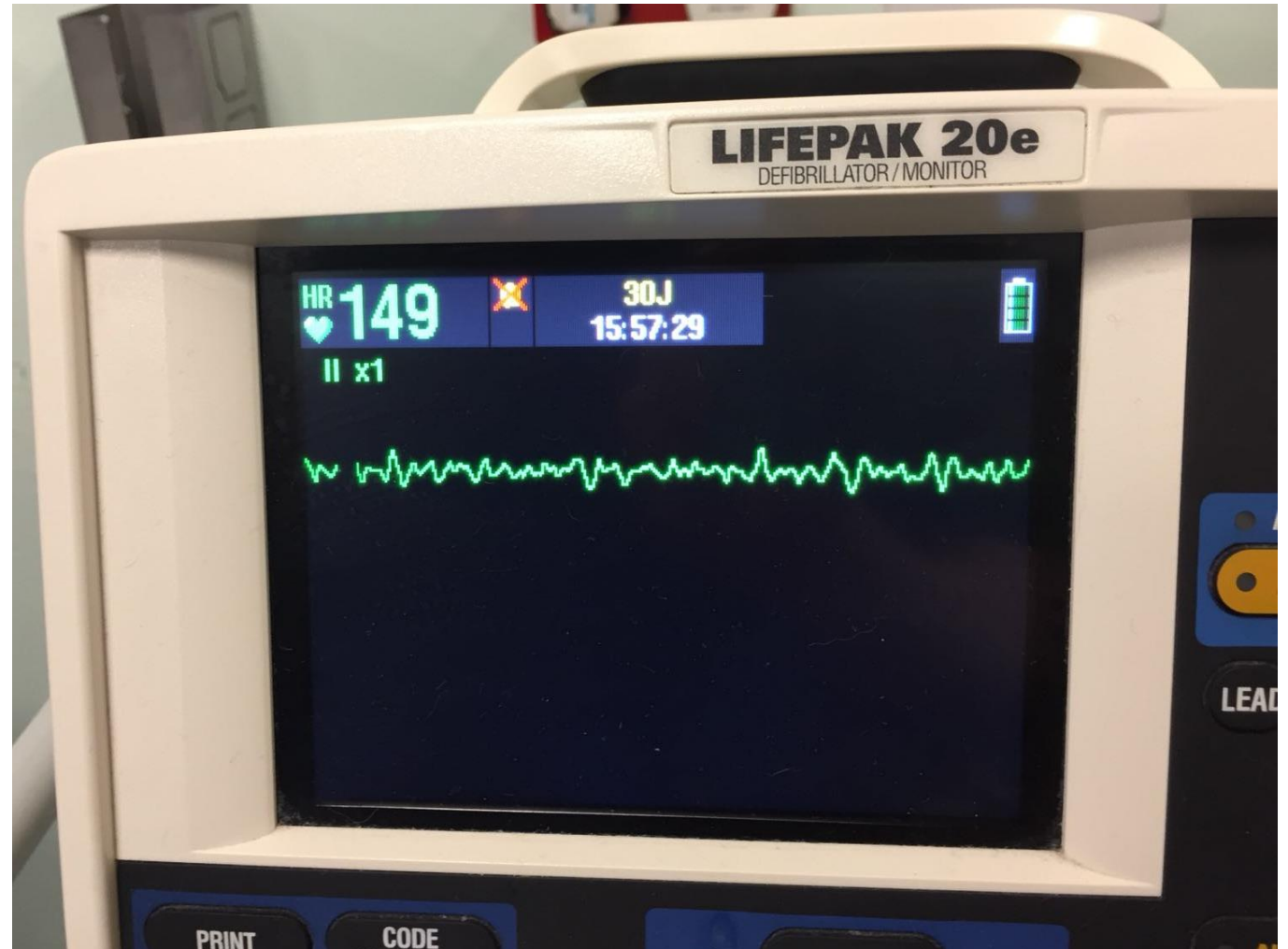
Team Leader:

1. Give request
2. Listen for verbal confirmation that request was heard
3. Awaits confirmation that task is completed
4. Confirms receipt of a completed assignment

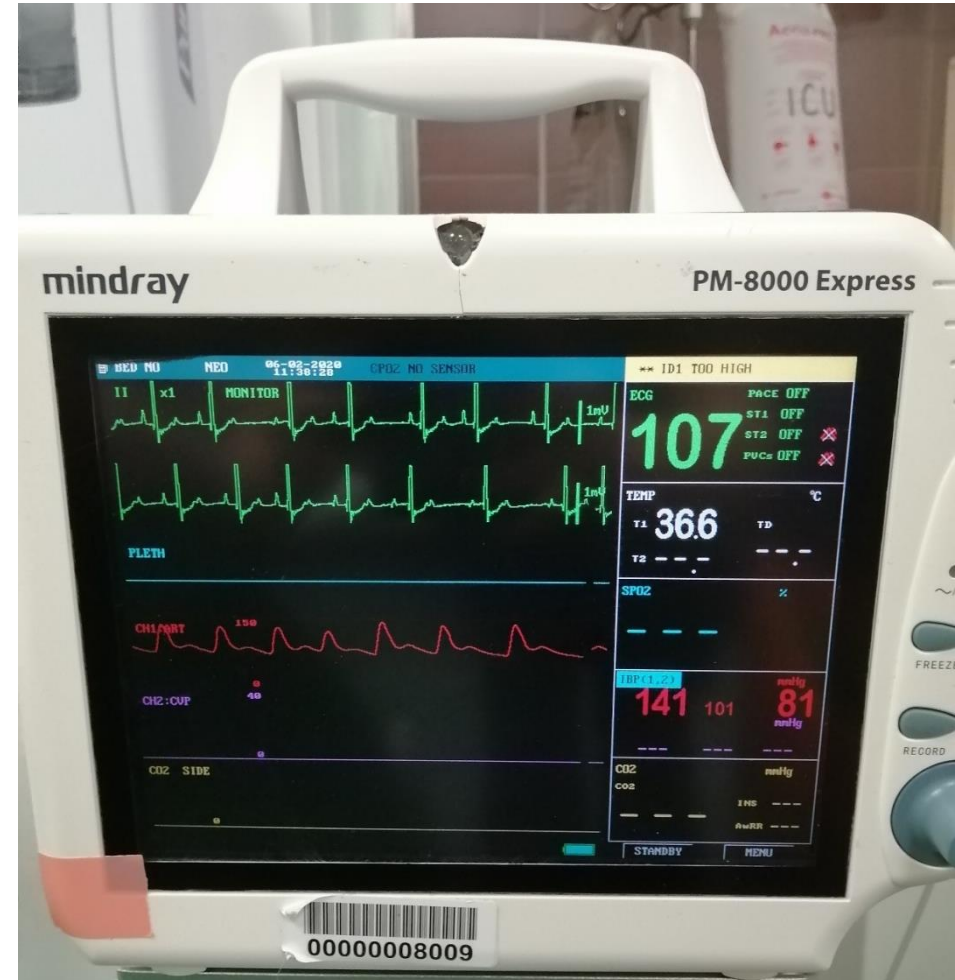
Team Member:

1. Confirms that request is heard
2. Inform team leader when task begins/ends
3. Verifies orders for drugs/treatments before given

Rhythm/pulse check



Recognition of ROSC



Let's do this!



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