



## CARDIOPULMONARY RESUSCITATION IN RABBITS

**AIM: Maintain life until spontaneous breathing and circulation can be restored**

### AIRWAY

#### Ensure patent airway

- **Intubate** immediately or **check for kinks/blockages**
- May require laryngoscope and suction of blood/fluid
- **Tie** firmly in place
- **Confirmation** -visualisation, palpation, chest wall movement, capnography

#### What if I can't intubate?

- Supraglottic airway tube
- Emergency **tracheotomy** if Upper Respiratory Tract pathology
- Try tight fitting **facemask with oxygen** (but may end up inflating stomach)
- Do not intubate if respiratory obstruction
- CNS stimulation – e.g. toe pinches

### BREATHING

#### Positive pressure ventilation

- **100% oxygen**
- **12 - 30 breaths per minute**
- Breaths should achieve normal chest wall expansion
- **Ambu bag** connected to ET tube
- **Breathing system** – circuit with a re-breathing bag attached for compressions

**Rapid abdominal elevation** (*1 second duration*) at **regular intervals** (~every 5 seconds) – the weight of the abdominal contents pushing briefly against the diaphragm gently forces expiration, and can stimulate voluntary breathing.

### CIRCULATION

#### Must achieve adequate myocardial and cerebral blood flow

- External chest **compressions**
  - animal in **lateral recumbency**
  - **100 - 120 circumferential cardiac compressions per minute**
  - compress chest wall by 25 - 33%
- Internal cardiac massage

### Evaluating basic life support

- Feel for **pulses** - *doppler*
- check mucous membrane **colour and CRT**, (oxygen saturation - *pulse oximeter*)
- check for **animals' own efforts**
- check **respiratory efficiency** – (*capnography*)

### Anaesthetic related arrest

- call for help! → switch off volatile → check patency of ET tube → check flowmeters → check breathing system → give several breaths of 100% O<sub>2</sub> → antagonize if possible (*atipamezole* for *alpha-2s*, *naloxone* for *opioids*, *flumazenil* for *benzodiazepines*, *non-specific reversal* with *doxapram*)