Te Whatu Ora
Health New Zealand

# Department Specific Procedure

| Emergency Procedure for Defibrillation | |
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| **Applicable to:** Te Whatu Ora Whanganui | **Authorised by:** Clinical Director ED |
| | **Contact person:** Clinical Manager ED |

This procedure is overarched by Te Whatu Ora Whanganui's commitment to honouring our obligations under Te Tiriti o Waitangi and the five Tiriti principles: Tino rangatiratanga; Equity; Active protection; Options; and Partnership, as articulated in Te Tiriti o Waitangi Policy. In seeking to fulfil these obligations, the organisation is guided by the values and strategy outlined in He Hāpori Ora -Thriving Communities.

## 1. Purpose

Defibrillation is the delivery of unsynchronised shocks. It is required when life threatening arrhythmias such as ventricular fibrillation or pulseless ventricular tachycardia occur.

Not in asystole – there is no evidence that it is effective in asystole.

Emergency Department (ED) nurses are able to interpret arrhythmias and may defibrillate patients in VF or pulseless VT without the need to consult a doctor.

## 2. Scope

This procedure applies to all doctors and nurses working in Whanganui Hospital (permanent, temporary and casual), visiting medical officers, and other partners in care, contractors, consultants and volunteers.

## 3. Procedure

### Indications

- The registered nurse or doctor in ED will assess and interpret the cardiac rhythm and client to decide if defibrillation is necessary and initiate emergency procedures.
- To initiate defibrillation immediately in the event of pulseless ventricular tachycardia or fibrillation occurring.

### Equipment required

- Defibrillator
- Emergency drugs/ and Emergency Department trolley

**Procedure**

| Step | Procedure |
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| 1 | If VF or VT suspected, take emergency trolley and defibrillator to bedside of collapsed patient. Assess dangers i.e. Water/metal etc. If possible check the skin for any transdermal patches that may be effected by defibrillation. |
| 2 | Apply adhesive defibrillator pads to the patient's bare chest. One to the R of the upper sternum just below the R clavicle and on the L side of normal apex beat (v5 v6 position). |
| 3 | Turn defibrillator onto defib. |
| 4 | Charge while chest compressions continue. When charge ready stop compressions and check rhythm. The charge is set to the default of 200j biphasic (the maximum setting of the defibrillator). |
| 5 | Ensure that all attending staff are clear of the bed by calling **"stand back" and visually check the patient and bed.** |
| 6 | Press flashing shock button once everyone clear of bed. |
| 7 | Once shock delivered immediately start chest compressions regardless of the rhythm with a ratio of 30:2 fro adults, for two minutes. |
| 8 | Following two minutes of CPR, charge to 200j biphasic, while chest compressions continue, once fully charged stop chest compressions, check rhythm. If VF/VT shock, calling "**stand back" and visually checking the patient and bed.** |
| 9 | Continue steps 4 to 7 until patient either gains ROSC or the resuscitation is halted. Consider drugs: adrenaline after the second shock (every 3-5 mins) and Amiodarone for VF/VT of after the 3rd shock. Consider and correct 4 H's and 4 T's. |
| 10 | Defib pads can remain in place for 24hours. |
| 11 | If defibrillation and trolley finished with – restock and put back into storage places. |

## 4. References

New Zealand Resuscitation Council. (2012). Advanced Resuscitation for Health Professionals. Wyatt & Wilson Print New Zealand.

## 5. Key words

Defibrillation Ventricular tachycardia Ventricular fibrillation Cardiac arrest Resuscitation