

## Using the East Hagbourne Defibrillator

### Where is the defibrillator?

Our defibrillator is located in the lobby of the Fleur-de-Lys, in an unlocked cabinet.  
The front door of the Fleur is locked outside trading hours, so people will have to knock.

### When should it be used?

The defibrillator is for use in cases of **cardiac arrest** - timing is crucial, if used quickly it can save lives.  
It's not all about defibrillation, basic **CPR** is needed to keep the person alive until help arrives.

### The symptoms:

**Heart Attack** (300,000 per year in the UK)

- Happens when the blood supply is interrupted, e.g. a blood clot.
- Classic Symptoms: crushing pain in chest, down arms, back, neck, jaw.
- Difficulty breathing, pale, grey, eventually blue colour.
- The person remains conscious and breathing - **CPR and defibrillation are not needed.**
- Call 999 immediately

**Cardiac Arrest** (150,000 per year in the UK)

- The heart stops pumping blood around the body
- The person collapses and needs to be helped immediately.
- Call 999, but don't walk away.
- **CPR together with the defibrillator can save their life**
- It can happen any time, it's unpredictable

In 'half-way' cases, if the person is still conscious, CPR and defibrillation are not needed

Without immediate first aid until the ambulance arrives the survival rate is very low, around 4%.  
Effective and immediate assistance can increase this to as much as 75%.

*A bit of demographics: if the population of East Hagbourne is 1200, and that of UK is 64.1M, the expected number of cases in East Hagbourne per year is 3 per year, so not trivial.*

### What to do if someone collapses and is unconscious:

**Dial 999 (or 112), Start CPR, Use defibrillator, Continue until Ambulance Arrives**

Follow general first aid principles:

**Danger:** Keep safe yourself, watch out for hazards e.g. electricity, take charge and manage any people around and get them to help (clear space, call ambulance).

- **Call 999 and listen to their instructions** - they will guide you through the process (they know where the defibrillator is if it is needed)

**Response:** Does the person respond? Talk to them, touch, shake gently, pinch them.

- If no response **send for the defibrillator (but don't interrupt or delay CPR!)**

**Airways:** Check for obstructions, close mouth and tilt head back, don't poke around, turn head to drain any fluid.

**Breathing:** Is the person breathing normally?

- Listen, watch for 10 seconds - look for at least 2 good breaths.
- If the person is breathing, the heart is working?

If the person is **unconscious** and **unresponsive**

- **Start CPR immediately and use defibrillator if available**

## **Cardiopulmonary resuscitation (CPR)**

- A first aid technique if someone is not breathing normally, ie 2 or more in 10 seconds.
- Chest compressions and rescue breaths keep blood and oxygen circulating in the body.

If someone is not breathing normally and is not moving or responding to you after an accident, call 999 or 112 for an ambulance. Then, if you can, start CPR straight away.

- Instructions can be given over the telephone.

Instructions also here: <http://www.nhs.uk/Conditions/Accidents-and-first-aid/Pages/CPR.aspx>

## **Hands-only CPR:**

If you have not been trained in CPR or are worried about giving mouth-to-mouth resuscitation to a stranger, you can do chest compression-only (or hands-only) CPR.

### **To carry out a chest compression:**

Place the heel of your hand on the breastbone at the centre of the person's chest. Place your other hand on top of your first hand and interlock your fingers.

Position yourself with your shoulders above your hands.

Using your body weight (not just your arms), press straight down by 5–6cm on their chest.

*This takes quite a lot of pressure for adults, for children use less force, babies just two fingers*

Repeat this until an ambulance arrives.

Try to perform chest compressions at 100-120 chest compressions a minute.

There is sufficient oxygen in the blood to keep a person alive for about 10 minutes.

If you feel confident and have been trained, you can add **rescue breaths**

## **Rescue Breaths:**

For very young children give five breaths immediately, otherwise,

After every 30 chest compressions, give two breaths.

Tilt the casualty's head gently and lift the chin up with two fingers. Pinch the person's nose. Seal your mouth over their mouth and blow steadily and firmly into their mouth. Check that their chest rises. Give two rescue breaths.

Continue with cycles of 30 chest compressions and two rescue breaths until they begin to recover or emergency help arrives.

## **Using the Defibrillator:** (also called **AED**: automated external defibrillator)

<http://www.sja.org.uk/sja/first-aid-advice/first-aid-techniques/using-a--defibrillator-aed.aspx>

### **How it works:**

You can use an AED with no training. The machine analyses someone's heart rhythm and then uses visual or voice prompts to guide you through each step.

The AED will not function unless it determines there is a need, so don't worry about using one!

- The heart has its own natural pacemaker, but this can be knocked out of action if there is heart damage.
- The defibrillator can test for electrical signals from the heart. If it detects a normal activity it will not allow a shock.
- If it detects chaotic electrical signals it will call for a shock to be administered. This stops the chaotic operation and allows the heart's pacemaker a chance to restart.

### **How to use it:**

First, make sure someone has called for an ambulance, and give CPR until someone can bring you a defibrillator.

Ambulances have them on board, but using an AED in the minutes before an ambulance arrives can double someone's chances of survival.

As soon as you've got an AED, switch it on. It will give you a series of visual and verbal prompts informing you of what you need to do. Follow these prompts until the ambulance arrives or someone with more experience than you takes over.

Fixing the pads: Take the two electrode pads out of the sealed pack. Remove or cut through any clothing and wipe away any sweat from the chest.

(The kit includes scissors and a razor in case the person is very hairy - the pads must be in good contact with the skin)

Remove the backing paper and attach the pads to their chest

- Place the first pad on their upper right side, just below their collarbone as shown on the pad
- Then place the second pad on their left side, just below the armpit. Position the pad lengthways, with the long side in line with the length of their body.

(You can use an AED on children over one year old and adults)

(For a very small child you might need to put one pad on the chest and one on the back)

Once you've done this, the AED will start checking the heart rhythm. Make sure that no-one is touching the person.

Continue to follow the voice and/or visual prompts that the machine gives you until help arrives.

- It will prompt you when to resume or stop CPR

### **The recovery position**

If a person is unconscious but is breathing and has no other life-threatening conditions, they should be placed in the recovery position.

- Cover them up to keep them warm
- Don't move them if you suspect they may have spinal injury.

See how here:

<http://www.nhs.uk/conditions/accidents-and-first-aid/pages/the-recovery-position.aspx>

Putting someone in the recovery position will ensure their airway remains clear and open. It also ensures that any vomit or fluid will not cause them to choke.

djr 20151029