

# Highland Gliding Club



Safety Meeting 11<sup>th</sup> June 2022

- CPR
- Defibrillator Use

**D R S**



<b><u>D</u></b>	<b>DANGER</b>	Are there any hazards / dangerous situations – don't make yourself a casualty!
<b><u>R</u></b>	<b>RESPONSE</b>	Does the patient respond to voice / gentle shaking
<b><u>S</u></b>	<b>SHOUT</b>	FOR HELP! Tell someone to phone 999 Tell someone to fetch defibrillator.

# Calling an Ambulance - 999



- Put Mobile Phone on Speaker – so you can do CPR & talk to Ambulance Control.
- Give brief concise history; gender, age, known issues, what happened, e.g. 56 year old man, complained of chest pain & then collapsed.
- Ambulance Control will ask:
  - Is the patient breathing?
  - Is the patient conscious?
  - What is their weight? (Are they obese?)
  - Postcode for navigation, or directions.  
(GPS co-ordinates of the airfield entrance : 57.586496, -3.321363)  
(Easterton Farm Post Code: IV30 8SP)
- Remove Close friends and Relatives from the scene

# A is for ~~Airframe~~ Airway

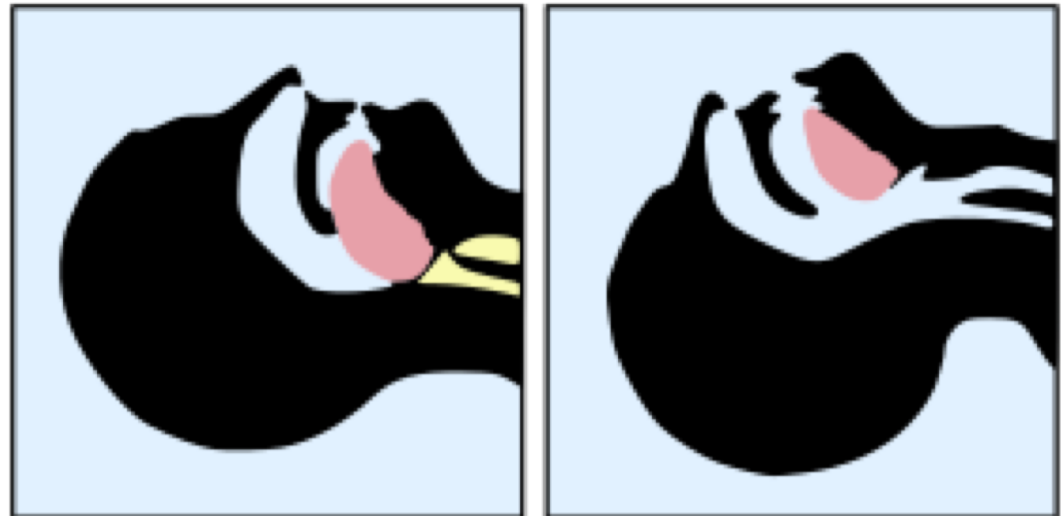


## Is the Airway Clear?

Check for:

- Dental plate / braces
- Food e.g. apple / boiled sweet / etc.
- Patient's Tongue

Open the airway using chin tilt



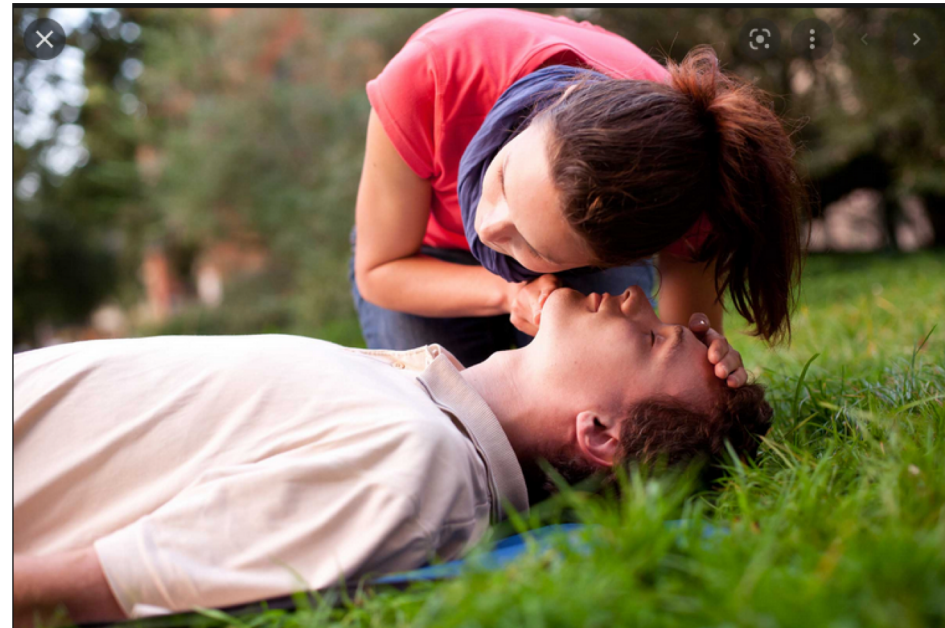
# B is for ~~Ballast~~ Breathing



## Is the Patient Breathing?

Check for:

- Chest rising & falling?
- Listen closely for breathing sounds?
- Can you feel their breath?



# B is for ~~Ballast~~ Breathing



## Provide 2 Rescue Breaths

- Use the Mask provided – non-return valve
- Try to get a good mask-to-face seal.
- Facial Hair may make this difficult!!



# C is for ~~Controls~~ Circulation



## Is there a Pulse?

Check:

- Carotid Artery (Neck) – easy to find...
- Do NOT use radial pulse at wrist.
- One side of the Neck only
- Using 2 fingers (not thumb)





# C is for ~~Controls~~ Circulation

## Commence Chest Compressions

- Interlock fingers.
- Heel of the hand in the centre of the chest.
- Push down hard – 2 inches (5 cm) compression, twice per second (to the beat of Staying Alive).
- Complete 30 compressions, 2 more breaths, repeat....
- Keep repeating until professional help arrives



**30 Compressions : 2 Breaths**

# D is for ~~Dolly~~ Defibrillator



## Once Defibrillator arrives

- Continue with CPR.
- Helper to deploy with Defib in accordance with Instructions.
- The Defib is now in control, Follow the Instructions given.



**CPR IS EASY!**



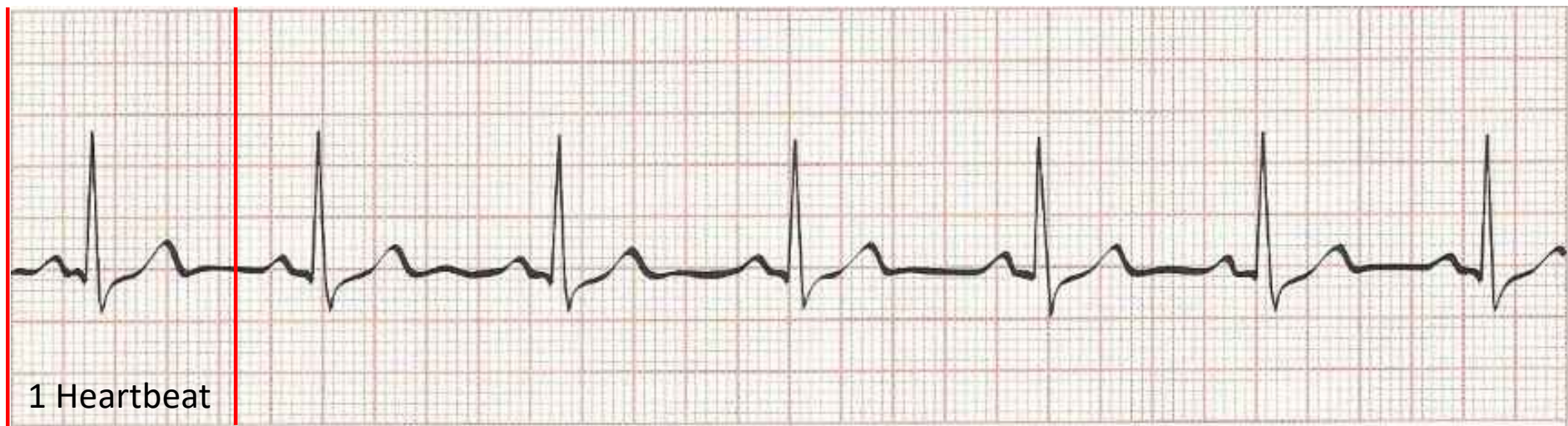


# Defibrillator: Introduction

## Sudden Cardiac Arrest (SCA)

- Normal heart rhythm changes from regular and steady to chaotic and disorganised.
- The heart can no longer pump properly and circulation of blood around the body stops.
- Death is inevitable ... UNLESS action is taken.

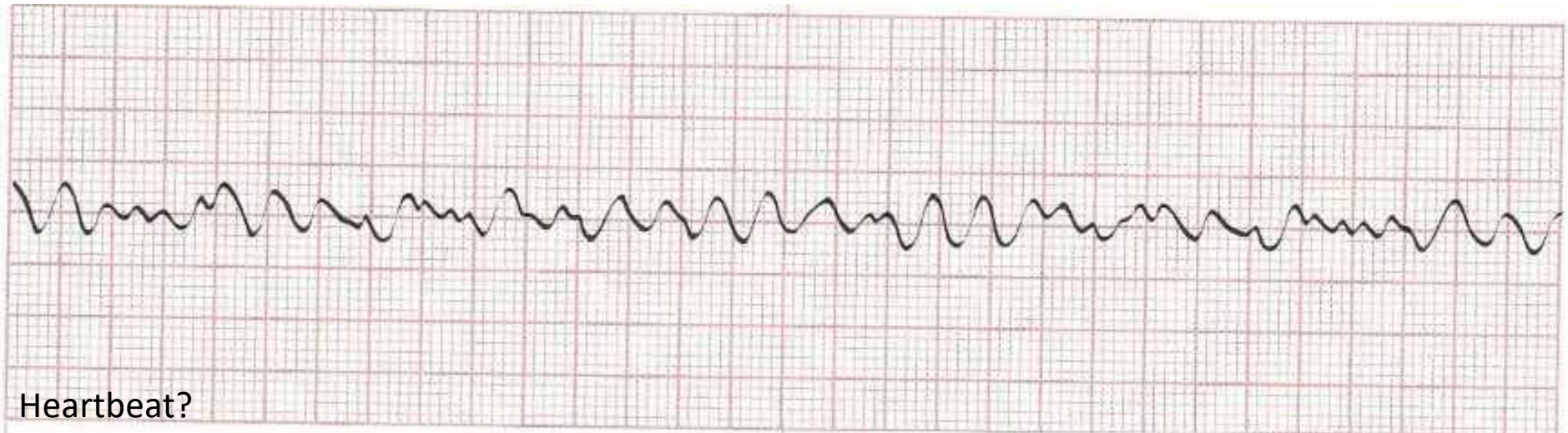
# Normal Electro-Cardiogram (ECG) Sinus Rhythm



- Shows the electrical activity of the heart, each repeating unit represents one contraction of the heart muscle, i.e. one “heartbeat”
- Regular Rhythm
- Normal Rate                      Not too fast..... Not too slow.....

# Abnormal ECG

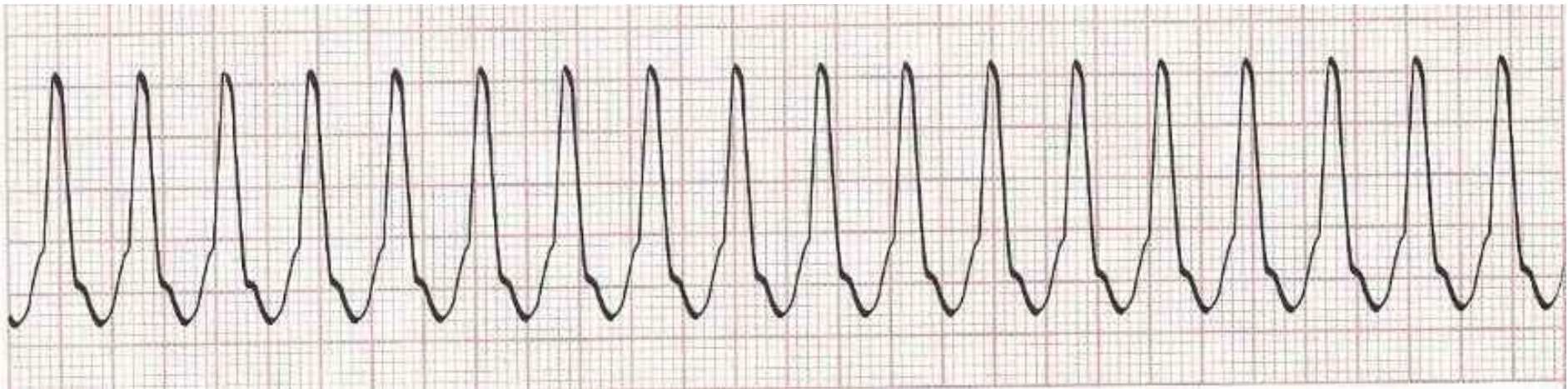
## Ventricular Fibrillation (VF)



- Chaotic, Disorganised Rhythm
- Very Rapid Rate
- Heart unable to operate as a pump, no circulation, patient collapses!

# Abnormal ECG

## Ventricular Tachycardia (VT)



- Regular Rhythm
- Very Rapid Rate
- Rate too high for Heart to operate efficiently as a pump, no circulation, patient collapses!

# TIME IS CRITICAL



## Sudden Cardiac Arrest (SCA)

- Chances of survival reduce by 10% for **EVERY** minute before CPR instigated and/or Defibrillation.
- Conditions for Defibrillation are only optimal during the first few minutes after the onset of an abnormal rhythm.
- The ambulance will not arrive within this optimal timescale.

**DOING NOTHING IS NOT AN OPTION**  
**USE THE DEFIBRILLATOR**



# Defibrillator: How it Works

The Defib delivers an electric shock to the heart which:

- Stops the abnormal, chaotic rhythm, e.g. VF or VT.
- Allows the heart to re-establish the normal, regular rhythm (hopefully!).
- The heart can now pump effectively again and circulation of blood around the body re-starts.

# Automated External Defibrillator



- AUTOMATIC !!!
- Provides easy to follow voice instructions.
- Analyses the hearts rhythm, and:
  - ❑ Will Shock if appropriate.
  - ❑ Will NOT Shock if rhythm normal.

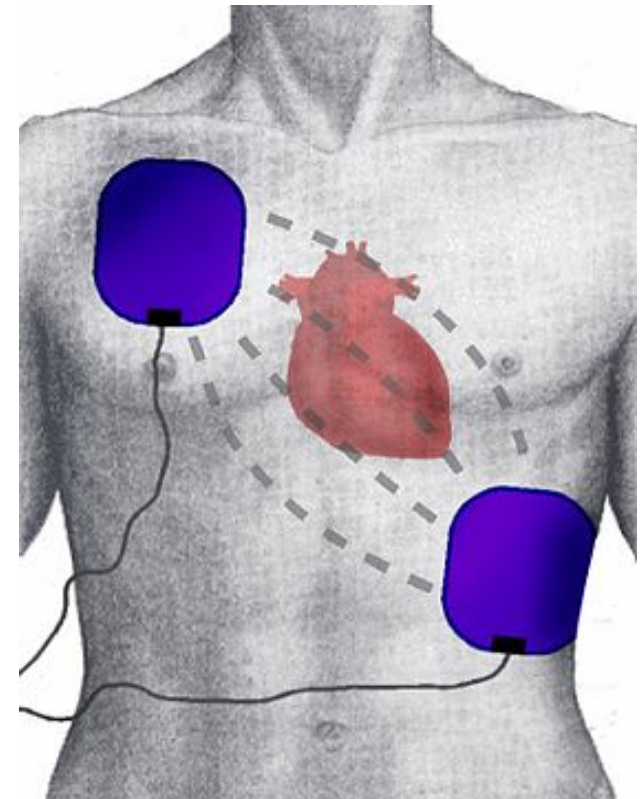
**CANNOT CAUSE HARM**





# Defibrillator: How to use it

- Patient lying on back.
- Expose the patients Chest – cut / rip away clothes.
- Pads require good contact with the skin:
  - May have to shave a hairy chest (razor & scissors in the bag with defib.)
  - Pads positioned as shown.
- Metal can cause short circuits / burns:
  - Remove any necklaces/jewellery that are close to the pads
  - Underwire bras.
  - Body piercings





# Defibrillator: How to use it

- Remove and medication patches in the area and clean any residue from the skin (swab in bag with razor & scissors).
- Pads must be  $>1''$  (25mm) away from a pacemaker or implanted device.

**Switch on defibrillator and follow the instructions!**





# Defibrillator: WARNING

Before delivering the shock the defib will prompt you to **STAND CLEAR**:

- This avoids you being shocked as well!
  - This is **PAINFUL** and could;
  - Trigger an abnormal rhythm in your heart
- Being on a metal floor, or wet surface is not a concern as long as you are not touching the patient when the shock is delivered.

