

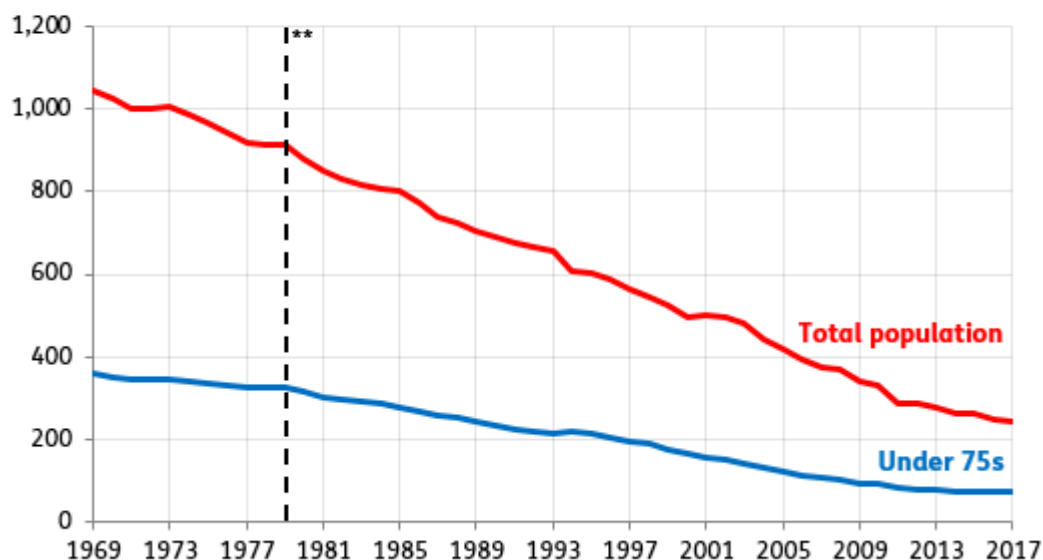
## Defibrillators in the Community

Over the past 50 years the death rate from heart disease has declined almost every year, for both the whole population, and the population aged under-75. At the beginning of my career in the 1970's, I would witness deaths from heart attacks regularly, both in hospitals and then in general practice. However, the changes in our nation's behaviour towards smoking cigarettes, better management of high blood pressure and other risks such as raised cholesterol levels and aggressive surgical management of coronary vascular disease, has greatly reduced the premature loss of people, sometimes in the prime of life.

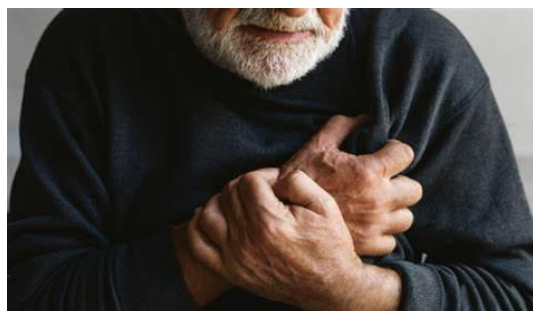
The chart provided by the British Heart Foundation below illustrates the tremendous progress that has been made, especially in the decade up to 2010, during which the death rate from heart attacks almost halved.

### Heart disease death rates are falling

Age-standardised death rate per 100,000 from heart disease\*, UK



Coronary Vascular Disease has traditionally been seen as a “man’s problem”. However, it is the leading cause of death in women, worldwide. Somewhat concerning has been more recent reports that following the coronavirus pandemic, millions of people have not been able to get the routine care they need and that ambulances take too long to reach heart attack patients. (data from the Office for Health Improvement and Disparities). As of June 2023, there have been nearly 100,000 excess deaths in England involving CVD since the beginning of the pandemic.



Encountering someone who is experiencing a heart attack remains a relatively uncommon event for most people during their daily lives. However, being faced with an individual who is experiencing severe chest pain and suddenly loses consciousness, is a very unsettling event for a bystander.

Out-of-hospital cardiac arrest (OHCA) is a time-critical condition, in which citizens need to act quickly by making an emergency call and initiate bystander cardiopulmonary resuscitation (CPR). In the UK there are over 30,000 out-of-hospital cardiac arrests a year, where bystanders and emergency medical services attempt to resuscitate the victim. However, the survival rate is low – less than 1 in 10 people in the UK survive an OHCA.

Through increased publicity, rates of bystander Cardio-Pulmonary Resuscitation are increasing, yet mortality after out-of-hospital cardiac arrest remains high. With longer ambulance response times, CPR by laypeople prior to ambulance arrival is increasingly important.

Furthermore, recognising that the heart has stopped and may need an electric shock to treat something called ventricular fibrillation, is something that requires the additional use of a device to detect it and decide when to administer the treatment.



Providing a shock, using a defibrillator, to people with out-of-hospital cardiac arrest before the arrival of emergency medical services increases their chance of survival. The UK survival rate is around 8%, which is lower than in other developed countries.



An Automatic External Defibrillator is a user-friendly machine that delivers a shock to the heart, helping it return to its normal rhythm. It guides you through each step with clear voice instructions, so that you can act quickly and confidently in an emergency.

Early CPR and defibrillation can double the chances of surviving an OHCA.

The British Heart Foundation is working to improve peoples' chances of surviving a cardiac arrest by working with the NHS, the Ambulance Service and Microsoft to create "The Circuit" – a national network of defibrillators. The Circuit will link a UK-wide network of defibrillators to every ambulance service in the country and the public in a bid to help save more lives from OHCA.

As the Village of Lymsham and the Eastertown Hamlet have lately installed two machines for use in emergency, it helps if everyone knows where they are located and how to use them. I suggest that anyone reading this article should follow the links below to helpful videos produced by the British Heart Foundation and feel confident to use an AED in an emergency.

<https://youtu.be/H4FjPn48aG0>

[Learn CPR in 15 minutes | RevivR | BHF - BHF](#)

Dr Peter Smith – November 2024

Bystander Efforts and 1-Year Outcomes in Out-of-Hospital Cardiac Arrest. N Engl J Med. 2017;376(18):1737–1747.

The effects of public access defibrillation on survival after out-of-hospital cardiac arrest: a systematic review of observational studies. Circulation. 2017.