

What is an arrhythmia?

A cardiac arrhythmia is the medical term for an irregular heart beat or abnormal heart rhythm.

There are essentially two main things that can go wrong with the heart: the plumbing and the electrics. Many of us are keenly aware of the heart's plumbing problems, yet we remain largely unaware of the electrical faults which cause an arrhythmia.

Arrhythmias can occur in the upper chambers of the heart, (atria), or in the lower chambers of the heart, (ventricles).

Arrhythmias may occur at any age. Some are barely perceptible, whereas others can be more dramatic and can even lead to sudden cardiac death.

There are two basic types of arrhythmia, with variations of each:

Bradycardia – a heart rate that is too slow, usually less than 60 beats per minute.

Tachycardia – a heart rate that is too fast, usually more than 100 beats per minute.

CAUSES:

- ♥ The heart's natural pacemaker (the SA node) develops an abnormal rhythm.
- ♥ The normal conduction pathway is interrupted or blocked.
- ♥ Electrical impulses originate from another part of the heart.

SYMPTOMS:

Some symptoms are barely perceptible; while others are so dramatic that they can cause cardiovascular collapse and death -

- ♥ Premature beats, palpitations or skipped beats;
- ♥ Dizziness;
- ♥ Fatigue;
- ♥ Light-headedness;
- ♥ Fainting or near fainting.

DIAGNOSIS and MISDIAGNOSIS:

So why might misdiagnosis be so prevalent? Syncope (or fainting) in many patients is indicative of a potentially fatal heart rhythm irregularity. A lack of awareness of syncope in the medical community means that syncope often goes unrecognised or, worse, misdiagnosed as epilepsy.

Correct diagnosis is obtained in a number of ways. An electrocardiogram (ECG or EKG) diagnoses arrhythmias by recording the timing of atrial and ventricular contractions. A Holter Monitor is a device that can record 24 hours of ECG signals and an event monitor can last up to about 30 days. For arrhythmias that occur less frequently,

an Implantable Loop Recorder can be inserted under the skin of the chest to record heart activity for more than a year. A simple exercise test on a treadmill may be used in order to provoke an arrhythmia, whereas a tilt-table test might be used to induce fainting. An electrophysiological study (EP study) can also be done to manually stimulate the heart to induce fast heart rhythms, which may be an indication that the patient is prone to dangerous arrhythmias.

TREATMENT:

Bradycardic conditions can be treated with medications that help improve the transmission of impulses through the conduction system. A more common way is with a cardiac pacemaker; a tiny implantable device that is placed just beneath the skin in the upper chest. Small wires (leads) connect the device to the inside of the heart where it provides support if the heart beats too slowly on its own.

For the more dangerous tachycardias – such as ventricular tachycardia (150-250bpm) or the potentially lethal ventricular fibrillation (250+bpm) – anti-arrhythmic drugs and other medications are used, but recent clinical trials have shown that a small device called an Implantable Cardioverter Defibrillator (ICD) is the most effective treatment for these arrhythmias. These are slightly larger than a pacemaker, but implanted in much the same way. An ICD monitors the heart and provides electrical pulses or shocks to slow down a heart that begins to race out of control.

Arrhythmia Alliance

A-A held fifteen Cardiac Update Courses across the UK throughout 2010 and 2011. From Plymouth to Edinburgh and Carmarthen to Cambridge we brought the latest information and training on Stroke Prevention in AF, the GRASP-AF Tool and Syncope Guidelines to over 700 medical professionals, cardiac networks and industry.

Here is what some of the delegates had to say...

"Great presenters... and wonderful staff from Arrhythmia Alliance.

A grateful thanks to you all for your hard work and making us feel welcome."
VA, Stoke-on-Trent

"Good mix of presentations for a mixed audience, often hard to get the balance right but A-A did an excellent job."
DW, Bristol

"Great medical topics, all current and necessary... the nursing presentation was excellent and showed a different side of arrhythmia care rather than just diagnosis and treatment."
CM, Bradford

"Course was relevant and very informative. Well worth it."
SW, Cambridge

"The standard of speakers was very high and I thoroughly enjoyed the whole event."
CG, Liverpool



Events

"Excellent course, the cost of 13.50 pounds is definitely worthy. Thanks for organising this." WC, London

"Just provide plenty of courses - excellent value with current updated information." LR, Birmingham

Very useful delegate pack of information which I have used to create an Education File for my Cardiac Rehabilitation team."
JM, Newcastle

"The course was excellent. Could not really be improved upon!"
VM, Edinburgh

"As ever practical approach to every day clinical situations very useful."
LS, Oxford

Local Patient Support Group Project

By Caroline Holmes

There are an increasing number of patient support groups being established across the UK. In my role as Affiliate Officer for the UK, I work closely with medical professionals in setting up new groups.

Currently, some of the groups are patient led only, some nurse/physiologist led and some are joint patient and professional led groups. All groups meet on a regular basis with the main aim to learn more about cardiac arrhythmias and exchange experiences.

Affiliation of a patient group to Arrhythmia Alliance has a number of benefits. Most importantly, the link to A-A as an organisation will enhance a group's credibility. It also means that the group has access to advice, support and information that is accredited and endorsed by the Department of Health and the Arrhythmia Alliance Executive Committee. Participation in such a scheme ensures that groups across the UK perform to a nationally recognised standard.

Affiliation is free and there are only a few guidelines that groups must comply with. Groups will remain independent yet will profit from the partnership that is created.

Benefits to Affiliated Groups:

- Accredited information booklets, fully endorsed by the Department of Health
- Involvement in the charity's active projects and campaigns
- Helpline support and advice
- Free hosting and design of group website
- Advertisement of group events and meetings on the A-A website and through the monthly e-bulletins
- Free patient and carer membership
- Signposting of patients to groups
- Funding advice
- Group management guidance and support
- Discounts on events/meetings the charity are involved in, e.g. the annual Patients' Day at the Heart Rhythm Congress
- Help in setting up new groups so that they may be affiliated to the nationally required standards
- Links and contacts with other groups in the UK to promote networking
- Support at group meetings whenever possible

For more information about the project please contact caroline@heartrhythmcharity.org.uk

Heart Rhythm Week 2011

Nearly 4,000 events took place during Heart Rhythm Week 2011. Thank you to all those who took part and made this event the most successful awareness week in our history! If you are interested in joining or finding out more about the events for 2012 please contact joanna@heartrhythmcharity.org.uk



Educating the community

In Poole, Scarborough, Cornwall, Stoke on Trent, Bolton, Castleford, Reading, Birmingham and Bradford and Airedale, patients and carers used their GP practices, libraries and workplaces to hand out and display pulse check guides, posters and checklists.



Hospitals, supermarkets, schools and shopping centres

Across Bristol, London, Scarborough, Warwickshire, Dundee, Derby and Swindon, pulse check events took place, with healthcare professionals taking thousands of people's pulses during the week.

In Bolton pharmacies told people how to check their pulse and what to do if it's irregular. Some stores handed out the pulse check guide with all prescriptions.



Golf and Football Clubs joined us

Support came from leading football and golf clubs including Nottingham Forest, Derby County, Norwich City, St Andrews, Royal Dornach, Gullane and Cruden Bay. During the week, they displayed educational literature to their members.



Birmingham New Street Station

On Thursday 9th June A-A took to Birmingham New Street train station, distributing Know Your Pulse information to more than 3,000 people!



8,000 fans at Warrington Wolves vs Salford Reds

Fans attending the Warrington Wolves vs Salford Reds match on 12th June could have their pulse checked to see if they had an undiagnosed heart rhythm problem. Health checks and advice were offered.

Heart Rhythm Week 2012 ~ Your Heart in Your Hands ~

We would welcome your support for Heart Rhythm Week 21st – 27th May 2012. The theme for the week is Your Heart in Your Hands. You can join by holding an awareness display or event, taking information to your community centre, and sharing your patient experience. Free resources, press materials, support and advice are available for those that want to take part.

Spread the word...

- Are you a supporter of a local club, community or affiliate group, or a local business that would like to be involved in 2012?
- Would you like to speak to us about holding a community event?
- Can we support you in holding a display of information to help people understand their heart health?

Contact :

joanna@heartrhythmcharity.org.uk
to discuss how you can take part in Heart Rhythm Week 2012.

Know Your Pulse Film

Nationally, A-A launched the Know Your Pulse film, a life-saving message in two minutes. This is available for anyone to watch, download and play at centres in their community. Visit www.knowyourpulse.org to view.

Know Your Pulse Campaign Parliamentary Reception, House of Commons

Putting Pulse *into* Practice



“The Know Your Pulse campaign addresses some crucial health agenda priorities, for prevention and stroke. But, there is still as much to do as has already been done.”

Sir Professor Roger Boyle,
former National Director for
Heart Disease and Stroke



The Parliamentary Reception was a tremendous success; more than 120 patients, carers, NHS staff, leading government figureheads, parliamentarians, medical and allied professionals came together to learn, discuss and share in the success of the Know Your Pulse campaign.

“Pulse checks are quick, simple and extremely low cost - yet a very effective tool for detecting potentially life threatening arrhythmias.”

Nadhim Zahawi MP,
Stratford upon Avon



Nadhim Zahawi, Stratford Upon Avon MP welcomed everyone to the reception. He played tribute to the important role of Arrhythmia Alliance, in providing unique and valuable support to arrhythmia patients.

Trudie Lobban MBE, Founder of Arrhythmia Alliance celebrated the charity’s progress towards improving

“I welcome and recognise the hard work that is going into the Know Your Pulse campaign. I’m sure it will help influence commissioners in developing their local AF programmes.”

When the time comes to review the [NHS Health Check] programme, we will be considering whether to extend it to include other tests such as the pulse check.”

Mr Simon Burns,
Minister for Health



services for arrhythmia patients across the globe. She highlighted the need for A-A, and its members, to continue raising awareness of how a simple pulse check can save lives.

Dr Matthew Fay, General Practitioner, Westcliffe Medical Centre, Bradford spoke on behalf of Atrial Fibrillation Association and gave the ‘GP perspective’. He gave an excellent



Government figurehead Mr Simon Burns recognised the important work of A-A and the Know Your Pulse campaign. He congratulated Trudie on joining the Heart Disease Advisory Group and expressed his keenness to work with her and Professor Boyle, to improve heart disease in the future.

The reception closed with a moving message from Trudie, who reminded everyone that the patient is the most important part of the National Health Service. She ended by saying how important it is to continue working in partnership towards improved diagnosis, treatment and management of arrhythmia patients.

speech that explained how easy it is for a GP or nurse to add a pulse check to their practice:

“When you welcome a patient into your room and you shake their hand, take their pulse! It is simple and it only takes 30 seconds to tell if it is regular or not.”

Sir Professor Roger Boyle complimented the important role of A-A working with government, to give the best care to arrhythmia patients.



Afterwards, there were photos and discussion. Some MPs were shown how to take their pulse, whilst others learned how many people were diagnosed with Atrial Fibrillation in their constituency, with the ‘AF Calculator’.

The Parliamentary Reception raised awareness of the Know Your Pulse campaign, and highlighted the importance of pulse checks in detecting potential heart rhythm disorders. Recognition from the government is encouraging for our continued effort to promote pulse checks in GP practices.



Since the reception took place, we have been continuing to raise awareness in parliament through the Email Your MP activity, MP photo opportunities and a parliamentary group, set up to push forward our goal of Putting Pulse into Practice.



PARLIAMANTARY RECEPTION

7th DECEMBER 2011

We will be holding a Parliamentary Reception on Wednesday 7th December 2011 at the House of Commons Terrace Marquee, between 4 and 6pm.

To find out more and to express your interest in attending the event please contact Sara Newbold before the 7th November 2011 sara.newbold@heartrhythmcharity.org.uk / 01789 451 831

WHRW World Heart



IAPO announced WHRW in their newsletter sent to more than 2,000 recipients.

The Belgium Heart Rhythm Association announced WHRW on their website with 60,000 people visiting this site. More than 50 articles about the event were shown in Belgium's local and national press with 79 medical centres across the country participating in supporting activities. Several TV and radio broadcasts also took place.

World Heart Rhythm Week 2011 Highlights:



A-A Argentina - Pronetac

Arrhythmia Alliance Argentina in collaboration with the Rotary Club in San Nicolas and the 'Pupi' Foundation (Javier Zanetti football players Foundation) organised a 'Healthy Walk' on Saturday 11th June in San Nicolas city. The walk, which was 3km involved about 40 people, including families, who assisted at the popular dining house where they offered the walkers breakfast and lunch in both the neighbourhoods of Astul Urquiaga and Somisa.

A-A South Africa - PACE

In South Africa 'every twelve seconds someone has a stroke' and to create a publicity stunt at Nelson Mandela Square during WHRW PACE organised

the crowd which was building up person by person every twelve seconds to illustrate that in one hour 300 people could be affected by a stroke. For the duration of the whole week, PACE also organised live radio shows.



Kingdom of Saudi Arabia

The Kingdom of Saudi Arabia (KSA) participated in WHRW by raising awareness amongst healthcare professionals in key hospitals and clinics across KSA. Medtronic in



Rhythm Week 2011

collaboration with Saudi Heart Rhythm Society printed 150 WHRW posters with the logo of the Saudi Heart Rhythm Society which were distributed to all key hospitals and clinics across KSA. They also produced heart shaped pins as give aways for all healthcare professionals.

The twelve hospitals and clinics which took part in this campaign were from cities such as Riyadh, Jeddah, Makkah, Dammam and Dharan.

The feedback from healthcare professionals was very positive and they are very much looking forward to next year where they will be conducting more activities that will involve patients in raising awareness and reaching a larger audience.

The Saudi Heart Rhythm Society and Arrhythmia Alliance are currently looking at ways of a possible collaboration.

Apollo's Heart Rhythm Week did not only concentrate on creating awareness by free consultations but also aimed to build confidence of sufferers in the treatments available for heart rhythm disorders.

The Madras Medical Mission in India's Chennai conducted screenings, walkathons and consultations. A public lecture was made on arrhythmias by eminent cardiologists and a 2km walkathon from Marina was organised during the week. Electrophysiologists in India suspect that at least 50,000 Chennaities may have undiagnosed arrhythmias!

Australia

The Wesley Hospital, Brisbane, Australia organised a Know Your Pulse campaign to show the general public and hospital catering and cleaning staff how to take their pulse. It was a very successful event with many people asking for further information.

Ireland

Putting Pulse into Practice in Cork, Ireland Dr Ben Glover and his team had an information stand in the main foyer of the Bon Secours Hospital, Cork, Ireland for WHRW. The hospital also organised an open evening for general practices in and around Cork of which 38 GPs attended the event.

India

All eleven Apollo Hospitals in India's cities of Delhi, Chennai, Hyderabad and Kolkata, observed WHRW 2011.

Apollo's renowned cardiologist and electrophysiologist, Dr. Karthigesan gave free consultations and pulse checks from 10am to 8pm, the entire week.

Coming
Soon...
A-A

International Website
Featuring:

- ~ Translated patient information
- ~ World Heart Rhythm Week
- ~ International News and Events
- ~ Dedicated web pages for A-A affiliates and partners

If you would like to feature on the international website please contact heather@heartrhythmcharity.org.uk



Photo from
Left to right
Ellmary Quinlan
(Nurse Tutor)
Anne Dowling
(Cardiac Nurse)
Br. Ben Glover
Consultant Cardiologist
and Electrophysiologist
and Mary Connor
(Cardiac Nurse)

Restart the Heart –

Making Your Community Heart Safe

Restart The Heart (RTH) is a national campaign led by Arrhythmia Alliance to support the placement of life saving defibrillators in communities. We have been raising awareness in local communities situated outside the eight minute travelling time of the emergency services.

Statistics

- SCA strikes without warning killing 100,000 people in the UK every year – that's 250 people a day
- In the UK, less than 5% of victims survive out of hospital
- SCA kills more people than lung cancer, breast cancer and AIDS combined
- SCA can happen to anyone, regardless of age or fitness
- Combined with Cardiopulmonary Resuscitation (CPR), defibrillation is the only effective treatment

Promoting Heart Safe Communities

Restart The Heart works in collaboration with the Ambulance Service and local Community First Responder team.

Our campaign promotes and compliments the current emergency service frameworks; facilitating timely and effective treatment, and saving lives.

Advances in medical technology mean that AEDs can be used by anyone. Restart the Heart supports the placement of life saving equipment in the centre of communities; with immediate access, available 24 hours a day, 365 days of the year. With in-built visual guidance and voice prompts, as well as telephone support from emergency operators, the general public can feel confident to use an AED.

Join our campaign to make every community Heart Safe. Help us to help you.

Over the course of the year we have received a lot of interest about the campaign, including over 50 community groups and from the London Borough of Hillingdon.

To facilitate the placement of the AEDs we are working in partnership with South Central Ambulance Service which covers Berkshire, Buckinghamshire, Hampshire and Oxfordshire and West Midlands Ambulance Service which covers Herefordshire, Shropshire, Staffordshire, Warwickshire, West Midlands and Worcestershire.

For further details about making your community Heart Safe contact Wendy Adams on 01789 450 682, alternatively email wendy.adams@heartrhythmcharity.org.uk

Fundraising for Life Saving Equipment in Schools

Through a programme of education, awareness and fundraising events A-A is working in partnership with

schools across the country to help place Automated External Defibrillators (AEDs) at the heart of the community - in their schools.

Schools that are engaging with this unique programme are already accredited with the National Healthy Schools Award, a government initiative that promotes better education, awareness and understanding of how simple lifesaving skills can be used to engage pupils of all ages and backgrounds.

The Healthy Schools AED Education Programme offers a full bespoke AED and CPR package, including:

- Educational resources
- Industry approved Mini-Anne Training kits including DVD
- Presentations
- Lesson plans

For more information on how you can obtain a defibrillator for your school, contact info@heartrhythmcharity.org.uk

Fundraising Events

Have you ever thought about organising a fundraising event or participating in an event on behalf of Arrhythmia Alliance? Maybe hosting a coffee morning, holding a cake sale or participating in a sporting event?

Over the past year a number of you have given up your time to raise money on behalf of Arrhythmia Alliance and here are a few highlights:

Sisters Louise Convey and Victoria Pitstra participated in an endurance event; the Buachaille Dash, on Saturday



Louise Convey and Victoria Pitstra

25th June 2011 in memory of Victoria's identical twin sister, Charlotte, who died from an undiagnosed heart rhythm disorder.

£1000 was raised from the event.

Emma Dodds and nine others raised £2200 by participating in the Belfast Marathon on

2nd May 2011 in memory of her husband who died aged 31 from Sudden Cardiac Death.



Grendon High Combined School raised £188 from a Year 6 Cake Sale.

Well done to all those who have fundraised on behalf of Arrhythmia Alliance.

giftaid it

Over the past 12 months we have received a number of donations, which we are extremely grateful for. Did you know you can make your donation worth a **quarter** more with a Gift Aid Declaration? Gift Aid is a government scheme which allows us to claim tax back from Inland Revenue. For every £1 donated, we can claim an extra 25p and in addition HMRC will automatically pay us a further 3p for every £1 donated by you.

If you have not completed a Gift Aid Declaration, please get in touch so that we can send you a form in the post or via email.

Knitted Together

We are asking members of the public to knit and donate a variety of knitted items which will be sold at future fairs and fêtes to raise vital money for Arrhythmia Alliance.



Knitted Together

The money raised will go towards raising awareness and promoting timely and effective diagnosis, treatment and quality of life for individuals affected by heart rhythm disorders and sudden cardiac death.

Our first stall held at Shipston on Stour Wool Fair on the 30th May 2011 was a huge success. We sold an array of donated knitted items which included hearts, small teddy bears and character dolls to name but a few.

With less than a year until the London 2012 Olympics why not set your own challenge? If you have never knitted before or if you would like to rekindle your love of knitting why not pick up your knitting needles and start knitting for Arrhythmia Alliance.

If you would like to get involved in the Knitting Initiative and be at the heart of our fundraising, please contact Fiona on the details below.

A warm and woolly Christmas!

With Christmas approaching, we want to create a warm and woolly Christmas and we need you to pick up your knitting needles to help us decorate as many Christmas trees as possible.



We require a variety of knitted Christmas decorations from baubles to mini Santa's. All donated knitted decorations will be for sale and all money raised will go to Arrhythmia Alliance.

If you would like to help decorate our Christmas tree we have a huge range of patterns catering for beginners, intermediate and experienced knitters. Alternatively you may have some patterns which you would like to share.

To receive the Christmas decorations knitting patterns or for fundraising ideas please contact Fiona on 01789 451 826 or email: fiona@heartrhythmcharity.org.uk

All donated knitted items can be posted to Fiona Ahearn, PO Box 3697, Stratford upon Avon, Warwickshire, CV37 8YL.

Gold Challenge



We are delighted to announce that Warwickshire County Council has named A-A as the charity that will deliver their Olympic Initiative for 2012. Promoting the Gold Challenge to the county's 5,000,000 residents and over 250 schools.

The Gold Challenge is organised in partnership with the British Olympics Association, Paralympics GB and Sport England. Programme participants are sponsored to undertake a minimum of three hours training in at least five Olympic or Paralympic sports, or to complete an endurance event. The challenge needs to be completed by December 31st 2012.

Getting involved is easy, for further information and to register; email Gold@heartrhythmcharity.org.uk or call 01789 450787 and a representative will get in touch to support your registration and help you with your team's challenge. Teams will be required to commit to a minimum of 15hrs of sport by the 31st December 2012.

If you would like to get in touch with the Fundraising team speak to Wendy or Fiona on 01789 450 787.

Alternatively email fiona@heartrhythmcharity.org.uk



Caroline and Fiona

GOLD CHALLENGE

CHOOSE YOUR CHALLENGE
CHOOSE YOUR CAUSE

For further information and to register contact Fiona Ahearn on **01789 450 787** or email fiona@heartrhythmcharity.org.uk

Be an Olympian!

Participate in our Gold Challenge

- Raise money for A-A by participating in 15hrs of sport during 2012
- Get your friends and family to sponsor you in any of the 26 Olympic sports
- Anyone can participate in the Gold Challenge regardless of physical ability, level of fitness or geographical location
- You can take part in the Gold Challenge as an individual or as part of a team challenge



Arrhythmia Alliance
The Heart Rhythm Charity
www.heartrhythmcharity.org.uk
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Donate between **£1** and **£10** by using **JustTextGiving**

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Text HART46 followed by the amount to 70070

Text message is free for all network providers.

Knitted Together WANTED



Please create and donate any homemade knitted teddies, character dolls, hearts or Christmas decorations.

For more information about the "Knitted Together" project or to send your knitted donations please contact Fiona Ahearn Tel **01789 450 787** or email fiona@heartrhythmcharity.org.uk

Know Your Pulse

IT COULD
SAVE YOUR LIFE



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NEW
Heart Rhythm
Toolkit
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