

Abdominal aortic aneurysm screening: A decision for men aged 65 or over

Screening is a choice. Men aged 65 and over have the following choice:

- **Get screened for abdominal aortic aneurysm**

or

- **Do not get screened for abdominal aortic aneurysm**

This decision aid is to help men aged 65 and over decide if they want to get screened for abdominal aortic aneurysm, also known as AAA or triple A. It is also for relatives, friends and health professionals who want to know more about AAA screening.

Screening is a process that helps to find apparently healthy people who are at increased risk of a disease or condition so that they can be offered further information, tests and treatment.

The UK National Screening Committee supported the launch of the NHS AAA Screening Programme after evidence showed that screening should reduce the number of people who die from abdominal aortic aneurysm.

The NHS AAA Screening Programme invites men in England for screening during the year they turn 65. Men over 65 can contact the Programme to arrange to be screened.

More information can be found on NHS Choices at www.nhs.uk/aaa.

The information in this decision aid can help you understand the advantages and disadvantages of screening, and the possible effects of your decision.



If you have a large abdominal aortic aneurysm, it is recommended that you read the Abdominal aortic aneurysm repair decision aid.

Both the abdominal aortic aneurysm screening and abdominal aortic aneurysm repair decision aids are available online at sdm.rightcare.nhs.uk/pda.

What is an abdominal aortic aneurysm?

The aorta is the main blood vessel that supplies blood to your body. It runs from your heart down through your chest and abdomen.

As you get older, the wall of the aorta can become weak. It can then expand and develop into what is called an abdominal aortic aneurysm or AAA. The condition is most common in men aged 65 and older.

Large aneurysms can be very serious. The wall of your aorta can get very weak and burst. If this happens, your chance of surviving is about 20 out of 100. Open surgery or endovascular repair surgery are the two most common treatments to repair large aneurysms that are found through screening. More than 98 out of every 100 patients survive AAA repair surgery.

Who is at risk?

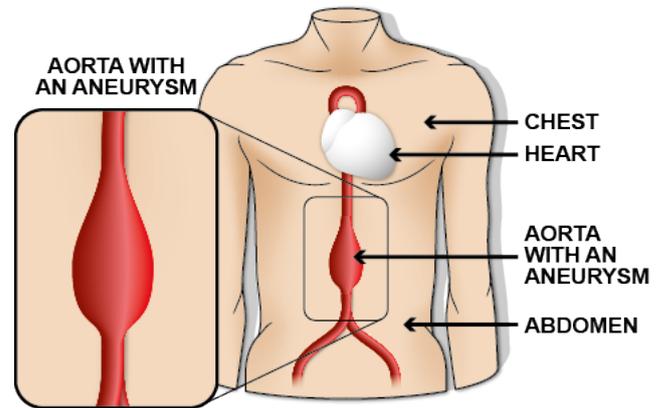
Men aged 65 and older are most likely to get an abdominal aortic aneurysm. Men are around 6 times more likely to have an abdominal aortic aneurysm than women.

You are also more at risk if:

- You smoke – evidence suggests you are 5 to 15 times more likely to develop an aneurysm if you have ever smoked. The risk increases the more you have smoked
- Your brother, sister or parent has or has had an abdominal aortic aneurysm.

Evidence suggests you are about 4 times more likely to develop an aneurysm if you have a close family history of the condition

- You have high blood pressure. Evidence suggests you are nearly twice as likely to develop an aneurysm if you have high blood pressure



Who is screened?

If you have an abdominal aortic aneurysm you will not generally notice any symptoms.

This means that you cannot tell if you have one, as you will not feel any pain or notice anything different.

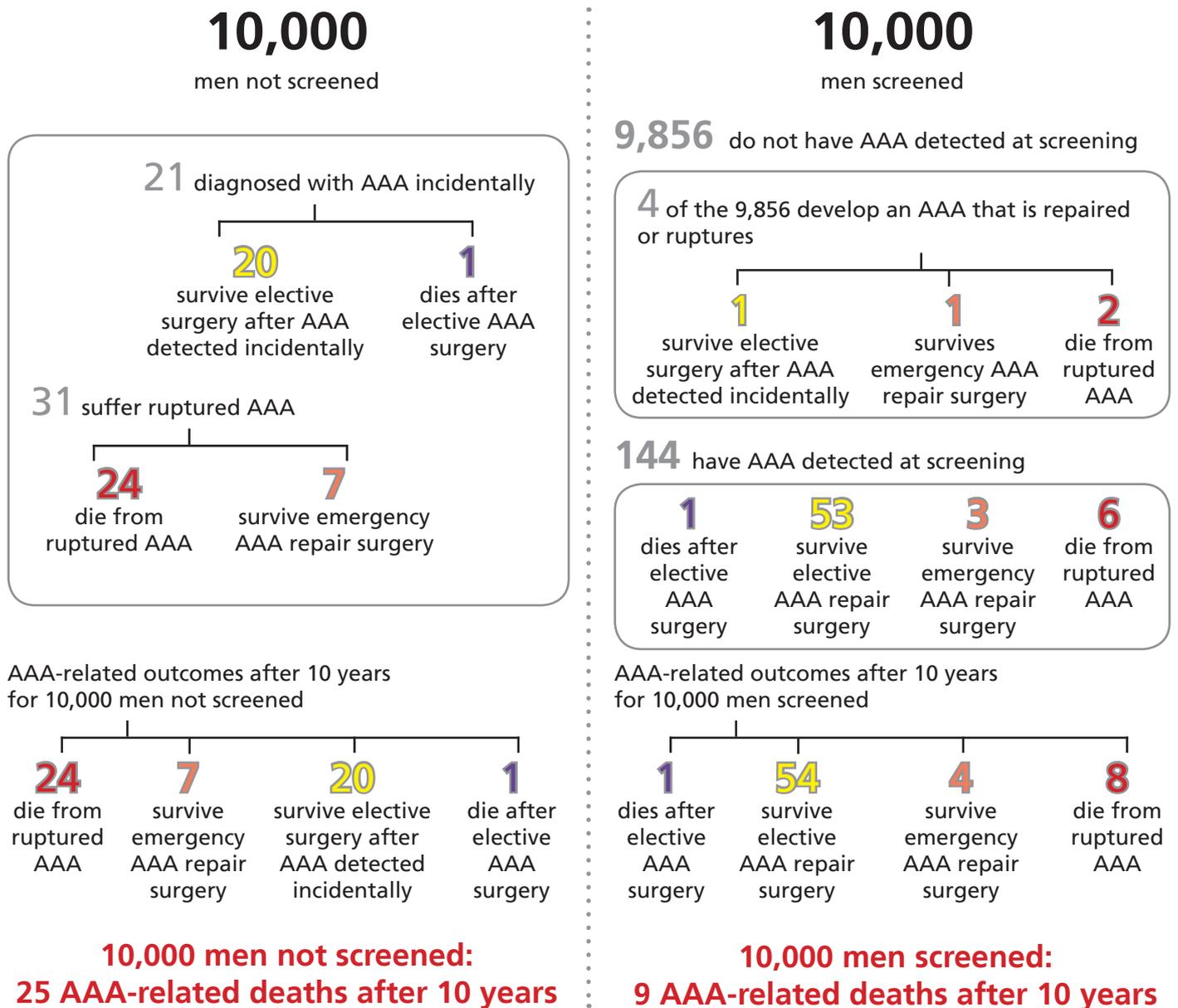
The NHS offers screening in order to find aneurysms early so they can be checked regularly or treated if needed. The easiest way to find out if you have an aneurysm is to have an ultrasound (sonar) scan of your abdomen.

You are more likely to have an AAA if you are a man aged 65 or over. That is why the NHS invites all men for screening in the year they become 65. If you are a man over 65 and have not been screened then you can contact your local screening programme to ask for a screening appointment.

The NHS AAA Screening Programme was introduced after research showed it should reduce the number of deaths from burst aneurysms among men aged 65 to 74.

Men aged under 65 or women are not eligible for screening but should talk to their GP if they are worried about abdominal aortic aneurysm.

Risks and benefits of accepting the invitation to AAA screening for men aged 65-74 over 10 years



All figures calculated using evidence from the following sources:

- Screening men for abdominal aortic aneurysm: 10-year mortality and cost effectiveness results from the randomised Multicentre Aneurysm Screening Study. Thompson SG, Ashton HA, Gao L, Scott RA, Multicentre Aneurysm Screening Study Group. *BMJ*, 2009, vol./is 338/(b2307), 0959-535X; 1468-5833 (2009)
- Office for National Statistics: Mortality Statistics: Deaths registered in 2013 (series DR) Table 5 www.ons.gov.uk/ons/taxonomy/index.html?nscl=Mortality+Rates#tab-data-tables
- Outcomes after Elective Repair of Infra-renal Abdominal Aortic Aneurysm, A report from The Vascular Society, March 2012. www.vascularsociety.org.uk/wp-content/uploads/2012/11/VSGBI-Mortality-Report.pdf
- 2012/13 data from NHS AAA screening programmes in England via Screening Management and Referral Tracking (SMaRT) database. Data reported in November 2013 VSGBI edition of NHS AAA Screening Programme newsletter. aaa.screening.nhs.uk/newsletters

What happens at the screening test?

At your appointment, you will see a screening technician who is specially trained to carry out the AAA screening test. They will explain the test and you can ask questions.

The screening technician will ask for your permission to keep your information on a national computer system. This will include images of your aorta, measurements recorded at the clinic and your answers to questions about your health. Your personal information will only be used by the NHS AAA Screening Programme. It will not be passed on to anyone who is not directly involved in screening or any follow-up treatment required.



The screening test is a simple ultrasound scan that usually takes less than 10 minutes.

An ultrasound scan is a procedure that uses high frequency sound waves to create an image of part of the inside of the body. The procedure is completely safe and it does not hurt.

The screening technician will ask you to lie down and lift up or unbutton your shirt. You will not need to undress. They will put cool jelly on your abdomen and then move an ultrasound scanner over your skin. The scan will show a picture of the aorta on a monitor and the Screening Technician will be able to measure it. They will tell you your result straight away and they will also tell your doctor.

Possible results

There are four possible results

- **Normal** (no aneurysm):
aorta less than 3cm wide
- **Small aneurysm**:
aorta between 3cm and 4.4cm wide
- **Medium aneurysm**:
aorta between 4.5cm 5.4cm wide
- **Large aneurysm**:
aorta 5.5cm wide or larger

Will I always be given a result?

Sometimes the screening technician will not be able to see your aorta clearly, for example due to trapped wind in the abdomen. If this happens, you will be offered another scan, usually on a different day.

What if my result is normal?

A normal screening result means your aorta is less than 3cm wide and you do not have an aneurysm.

You will not need any treatment or checks afterwards. About 985 out of every 1,000 men screened have a normal result.

If you have a normal result, it is very unlikely – a risk of about 1 in 1,000 – that you will develop a large aneurysm later in life that could rupture or require treatment.

What if my result shows I have a small or medium aneurysm?

If you have a small or medium aneurysm it means that your aorta is a bit larger than normal – between 3cm and 5.4cm wide.

About 14 out of every 1,000 men screened have a small or medium aneurysm.

If you have a small or medium aneurysm you will be invited to come back for regular tests to check if it is getting bigger. The tests will be every year if you have a small aneurysm between 3 and 4.4cm wide and every three months if you have a medium aneurysm between 4.5 and 5.4cm wide.

You will not usually need to come back if several tests in a row show that your small/medium aneurysm is not getting larger.

What are the risks if I have a small or medium aneurysm?

The following table shows the average chance of an aneurysm bursting depending on its size. If an aneurysm bursts, your chance of surviving is less than 20 in 100.

Size of aorta	Description	Risk of aneurysm bursting per year
3-5.5cm	Small/medium aneurysm	About 1 in 100
5.5-7cm	Large aneurysm	About 15 in 100
over 7cm	Very large aneurysm	More than 25 in 100

What happens next?

If you have a small/medium aneurysm, you will be offered an appointment with a nurse practitioner who will give you advice on what you can do to help stop your aneurysm getting bigger. This will include eating healthy foods, regular exercise and not smoking.

Your own doctor may also give you pills or change your medication. They may also check your blood pressure.

Can small or medium aneurysms be repaired by an operation?

A repair operation is not recommended for aneurysms less than 5.5cm wide and many small and medium aneurysms never grow to 5.5cm wide or larger. The risk of an aneurysm bursting if it is less than 5.5cm wide is about 1 in 100 per year. This is a smaller risk than the risk of dying following an operation to repair the aneurysm.

However, small and medium aneurysms can become larger over time and grow into large aneurysms 5.5cm wide or larger. If this happens, you will be given an appointment with a surgeon who may recommend an operation.

Can I opt out of regular screening tests?

Yes, screening is your choice. You can opt out of screening at any time.

What if my result shows I have a large aneurysm?

If you have a large aneurysm it means that your aorta is much larger than normal – 5.5cm wide or larger. About 1 out of every 1,000 men screened have a large aneurysm.

If your screening test shows you have a large aneurysm you will be given an appointment with a surgeon who may recommend an operation. Your GP will also be told.

The surgeon will talk to you about treatment options and any risks. They will also give you more tests to find out if you are suitable for surgery and answer any questions you have before you decide what treatment you want.

If you have a large aneurysm, we recommend that you read the Abdominal Aortic Aneurysm (AAA) Repair Decision Aid. This is designed to help people with large aneurysms decide which treatment option is best for them.

Are there any risks in having an operation?

Operations to repair large aneurysms found by screening are usually successful. More than 98 out of every 100 patients survive the operation.

However, it is a major operation and the main risk is death or heart attack. The risks of surgery depend mainly on your fitness before the operation. Around 2 out of every 100 patients are likely to die during or shortly after an operation to repair a large aneurysm.

Full recovery to normal levels of activity may take a few months.

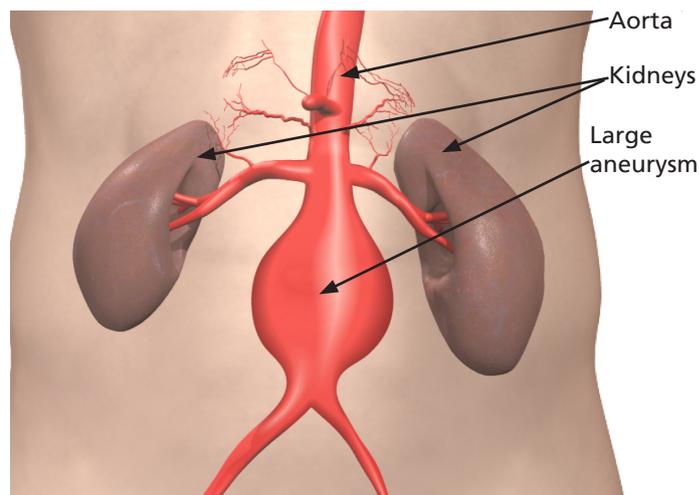


Diagram of an aorta with a large aneurysm

Do I have to have an operation if I have a large aneurysm?

No, having an operation is your choice.

For a few men, an operation may have very high risks that outweigh the risks of the aneurysm bursting. This might be if you have other serious health problems.

What are the implications for driving?

For car drivers, the DVLA should be notified when an AAA reaches 6cm in diameter.

Once an AAA reaches 6.5cm, the person should stop driving. Drivers of lorries and buses should stop driving once an AAA reaches 5.5cm. Licences are reinstated if an AAA is treated successfully.

Can I do anything to stop an aneurysm getting bigger?

You will be given advice on what you can do to help stop your aneurysm getting bigger.

This will include eating healthy foods, regular exercise and not smoking. Your own doctor may also give you pills or change your medication. They may also check your blood pressure.

Compare options

Men aged 65 and over have the following choice: attend AAA screening or decline screening. Below is information about both options. The table lets you compare similarities and differences between the options, side-by-side. Make sure you look and think about both options before making a decision.

Attend screening	Decline screening
<p style="text-align: center;">Screening results</p>	<p style="text-align: center;">Screening results</p>
<p>Screening finds aneurysms early so they can be monitored or treated. About 985 out of every 1,000 men screened are reassured that they have a normal screening result and are not offered any further tests.</p> <p>About 15 out of every 1,000 men screened have an aneurysm and are either invited back for regular tests or given an appointment with a surgeon to discuss treatment options.</p>	<p>Most people who have an aneurysm do not notice any symptoms. This means men who decline screening usually cannot tell if they have an aneurysm and avoid having to make a decision about whether to have a large aneurysm treated.</p> <p>They also avoid the worry that might come from learning they have a small aneurysm, even though it may never cause any problems.</p>
<p style="text-align: center;">Health</p>	<p style="text-align: center;">Health</p>
<p>About 9 out of every 10,000 men who attend screening die due to an AAA within 10 years. The ultrasound screening test itself is completely safe and does not affect health.</p>	<p>About 25 out of every 10,000 men who decline screening die due to an AAA within 10 years.</p>
<p style="text-align: center;">Treatment outcomes</p>	<p style="text-align: center;">Treatment outcomes</p>
<p>If you have a large aneurysm detected by screening, you are likely to be offered the choice of planned surgery to repair it. More than 98 out of every 100 patients survive planned surgery to repair an aneurysm. About 1 out of every 10,000 men who attend screening will die following planned surgery to repair an aneurysm and their aneurysm may never have burst if left untreated.</p>	<p>If you decline screening you will probably not know you have an aneurysm unless it bursts. If an aneurysm bursts, your chances of survival are about 20 out of 100. About 25 out of every 10,000 men who decline screening will die within 10 years as a result of an abdominal aortic aneurysm. If these men had been screened, their aneurysms may have been detected and repaired successfully following planned surgery.</p>
<p style="text-align: center;">Lifestyle</p>	<p style="text-align: center;">Lifestyle</p>
<p>About 985 out of every 1,000 men screened have a normal result and screening does not affect their lifestyle. About 15 out of every 1,000 men screened have an aneurysm and are offered advice on what they can do to help stop the aneurysm getting bigger, including eating healthy foods, regular exercise and not smoking. Men with aneurysms 6.5cm wide or larger are advised to stop driving. Licences are reinstated if their aneurysms are repaired successfully.</p>	<p>Men who decline screening usually cannot tell if they have an aneurysm. They will not receive any advice on what they could do to help stop an aneurysm getting bigger.</p>

My values

Before making a decision it is important that you consider the consequences of each of the available options. Choosing how you feel about each of the questions below will help you think about how important these potential consequences are to you.

I would want to know if I have an abdominal aortic aneurysm

Potential trade-off:

- learning that you have an aneurysm may cause anxiety.

I would not want to know if I have an abdominal aortic aneurysm

Potential trade-off:

- if you are screened, it means an aneurysm may be found early so it can be monitored or treated. Most men who are screened are reassured that their aorta is normal and they do not have an aneurysm

I would be willing to have major surgery if screening shows I may need it

Potential trade-off:

- men who attend screening are more likely to undergo planned major surgery to repair an abdominal aortic aneurysm than men who do not attend. About 1 out of every 10,000 men who attend screening will die following planned surgery to repair an aneurysm and their aneurysm may never have burst if left untreated.

I would not be willing to have major surgery if screening shows I may need it

Potential trade-off:

- men who do not attend screening are more likely to suffer a burst abdominal aortic aneurysm. Within 10 years, about 9 out of every 10,000 men who are screened and 25 out of every 10,000 men who are not screened will die due to an abdominal aortic aneurysm.

My decision

Given what you know now about the options and your own personal views and medical history, select which option you are considering at this point (tick one box).

Attend screening	<input type="checkbox"/>
Decline screening	<input type="checkbox"/>

The following questions will help determine how sure you are about your choice.

	Yes	No
Do you feel sure about the best choice for you?		
Do you know the benefits and risks of each option?		
Are you clear about which advantages and disadvantages matter most to you?		
Do you have enough support and advice to make a choice?		

Find your local AAA screening service

England is covered by a total of 41 local AAA screening services (see map, right).

To find contact details for your local service:

- Visit: www.nhs.uk/aaa
- Email: PHE.screeninghelpdesk@nhs.net
- Telephone: 020 3682 0890
- Scan the QR code below with your smartphone



Local AAA Screening Programmes

- Bedfordshire, Luton & Milton Keynes
- Black Country (BC)
- Bristol, Bath & Weston
- Cambridgeshire, Peterborough & West Suffolk
- Central England (Cen Eng)
- Central Yorkshire
- Cheshire & Merseyside
- Coventry & Warwickshire
- Cumbria & Lancashire
- Derbyshire
- Dorset and Wiltshire
- Essex
- Five Rivers
- Gloucestershire & Swindon
- Greater Manchester
- Hampshire
- Hereford and Worcester
- Hertfordshire
- Kent and Medway
- Leicestershire
- Lincolnshire
- Norfolk and Waveney
- North and East Yorkshire & North and North East Lincolnshire
- North Central London (NCL)
- North East London (NEL)
- North West London (NWL)
- Northamptonshire
- Nottinghamshire
- Peninsula

