

The  
**COVID-19**  
vaccine

# COVID-19 AstraZeneca vaccine and rare blood clots

## Information about your vaccination

The UK vaccination programme has been very successful with tens of millions of people vaccinated and many thousands of lives already saved.

### What is the concern?

Recently there have been reports of an extremely rare condition involving blood clots and unusual bleeding after vaccination. This is being carefully reviewed but the risk factors for this condition are not yet clear.

Although this condition remains extremely rare there appears to be a higher risk in people shortly after the first dose of the COVID-19 AstraZeneca (AZ) vaccine. Around 4 people develop this condition for every million doses of the COVID-19 AZ vaccine given.

This is seen slightly more often in younger people and tends to occur between 4 days and 4 weeks following vaccination.

An increased risk has not yet been seen after other types of COVID-19 vaccines but this is being carefully monitored.

For more information visit [www.nhsinform.scot/covid19vaccine](http://www.nhsinform.scot/covid19vaccine)

## What are the benefits and risks of the vaccination?

Age	Risk from COVID-19	Benefit of vaccination	Risk of vaccination
50 years and over or with underlying medical conditions	<p><b>Low</b></p> <ul style="list-style-type: none"> <li>• catching infection</li> <li>• passing on infection</li> </ul> <p><b>Very high</b></p> <ul style="list-style-type: none"> <li>• hospitalisation</li> <li>• intensive care admission</li> <li>• death</li> </ul> <p><b>Moderate</b></p> <ul style="list-style-type: none"> <li>• Long COVID</li> </ul>	<p><b>One dose more than 80% reduction</b></p> <ul style="list-style-type: none"> <li>• deaths</li> <li>• hospitalisation</li> <li>• intensive care</li> </ul> <p><b>Two doses more than 95% reduction</b></p> <ul style="list-style-type: none"> <li>• deaths</li> </ul>	<p><b>Uncommon</b></p> <ul style="list-style-type: none"> <li>• sore arm</li> <li>• feeling tired</li> <li>• headache</li> <li>• general aches</li> <li>• flu-like symptoms</li> </ul> <p><b>Extremely rare</b></p> <ul style="list-style-type: none"> <li>• clotting problems</li> </ul>
30 to 49 years of age	<p><b>High</b></p> <ul style="list-style-type: none"> <li>• catching mild infection</li> <li>• passing on infection</li> </ul> <p><b>Low</b></p> <ul style="list-style-type: none"> <li>• hospitalisation</li> <li>• intensive care admission</li> <li>• death</li> </ul> <p><b>Moderate</b></p> <ul style="list-style-type: none"> <li>• Long COVID</li> </ul>	<p><b>One dose between 60% and 70% reduction</b></p> <ul style="list-style-type: none"> <li>• catching infection</li> <li>• passing on infection</li> </ul> <p><b>Two doses more than 85% reduction</b></p> <ul style="list-style-type: none"> <li>• catching and passing on infection</li> </ul>	<p><b>Common</b></p> <ul style="list-style-type: none"> <li>• sore arm</li> <li>• feeling tired</li> <li>• headache</li> <li>• general aches</li> <li>• flu-like symptoms</li> </ul> <p><b>Extremely rare</b></p> <ul style="list-style-type: none"> <li>• clotting problems</li> </ul>
18 to 29 years of age	<p><b>Very high</b></p> <ul style="list-style-type: none"> <li>• catching mild infection</li> <li>• passing on infection</li> </ul> <p><b>Very low</b></p> <ul style="list-style-type: none"> <li>• hospitalisation</li> <li>• intensive care admission</li> <li>• death</li> </ul> <p><b>Moderate</b></p> <ul style="list-style-type: none"> <li>• Long COVID</li> </ul>	<p><b>One dose between 60% and 70% reduction</b></p> <ul style="list-style-type: none"> <li>• catching infection</li> <li>• passing on infection</li> </ul> <p><b>Two doses more than 85% reduction</b></p> <ul style="list-style-type: none"> <li>• catching and passing on infection</li> </ul>	<p><b>Very common</b></p> <ul style="list-style-type: none"> <li>• sore arm</li> <li>• feeling tired</li> <li>• headache</li> <li>• general aches</li> <li>• flu-like symptoms</li> </ul> <p><b>Extremely rare</b></p> <ul style="list-style-type: none"> <li>• clotting problems</li> </ul>

## What should I do next?

### **If you are aged 50 years or over or have underlying medical conditions**

All older adults (including health and social care workers aged 50 years and over), care home residents, health and social care workers\* and adults with certain medical conditions were prioritised in the first phase of the programme because they were at high risk of the complications of COVID-19.

The Medicines and Healthcare products Regulatory Agency (MHRA) and the Joint Committee on Vaccination and Immunisation (JCVI) advise that you should still receive any of the available COVID-19 vaccines. The benefits of vaccination in protecting you against the serious consequences of COVID-19 outweigh any risk of this rare condition. You should also complete your course with the same vaccine you had for the first dose.

If you have already had a first dose of the COVID-19 AZ vaccine without suffering any serious side effects you should have the second dose on time as you may still be at high risk of the complications of COVID-19. Having the second dose will give you higher and longer-lasting protection.

If you are aged 30 or over you may be offered any of the available COVID-19 vaccines even if you have a history of blood clots or a diagnosis of thrombophilia (which means your blood can clot too easily). Whether or not you are on long-term anticoagulation medicines (which help prevent blood clots), you remain at risk of COVID-19 disease and should consider getting any of the available vaccines (provided there's not a different medical reason for you not having them). This also applies to those who experience blood clots, without thrombocytopenia (low platelet count), after the first dose of the COVID-19 AZ vaccine.

There is no evidence that people with a history of thrombosis or known risk factors for thrombosis are more at risk of developing the very rare antibody-mediated complication reported after the COVID-19 AZ vaccine. For the majority of people, the risk of recurrent thrombosis due to COVID-19 infection is far greater than the risk of this syndrome.

You should not get the COVID-19 AZ vaccine if you have a history of other extremely rare antibody-mediated syndromes involving past major thrombosis (blood clots) combined with thrombocytopenia. This includes a previous episode of heparin-induced thrombocytopenia and some people with antiphospholipid syndrome (those with thrombosis and thrombocytopenia). You may be offered an alternative COVID-19 vaccine. A history of thrombosis (blood clots) on its own does not mean you cannot have the COVID-19 AZ vaccine.

### **If you are a healthy person aged 30 to 49 years**

The MHRA and the JCVI advise that all adults in this age group (including health and social care workers) should still receive any of the available COVID-19 vaccines. The benefits of vaccination in protecting you against the serious consequences of COVID-19 outweigh any risk of this rare condition. You should also complete your course with the same vaccine you had for the first dose.

## **If you are a healthy younger person aged 18 to 29 years**

The MHRA and the JCVI continue to monitor the benefits and safety of the COVID-19 AZ vaccine in younger people. You should carefully consider the risk to both you and your family and friends of COVID-19 before making a decision.

Currently the JCVI has advised that it is preferable for people under 30 to have a vaccine other than the COVID-19 AZ vaccine. If you choose to have another COVID-19 vaccine you may have to wait to be protected. You may wish to go ahead with the COVID-19 AZ vaccination after you have considered all the risks and benefits for you.

## **What about the second dose?**

If you have already had a first dose of the COVID-19 AZ vaccine without suffering any serious side effects you should complete the course. This includes people aged 18 to 29 years who are health and social care workers, unpaid carers and household contacts of those who are severely immunosuppressed. It is expected that the first dose of the vaccine will have given you some protection, particularly against severe disease.

\*This includes unpaid carers and family members of those who are severely immunosuppressed. Further information can be found at the following link:  
**[nhsinform.scot/covid19vaccine](https://nhsinform.scot/covid19vaccine)**

### **What should I look out for after vaccination?**

**Although serious side effects are very rare, if you receive the COVID-19 AZ vaccine and experience any of the following from around 4 days to 4 weeks after vaccination, you should seek medical advice urgently.**

- A new, severe headache which is not helped by usual painkillers or is getting worse
- A headache which seems worse when lying down or bending over
- An unusual headache that may be accompanied by:
  - blurred vision, nausea and vomiting
  - difficulty with your speech
  - weakness, drowsiness or seizures
- New, unexplained pinprick bruising or bleeding
- Shortness of breath, chest pain, leg swelling or persistent abdominal pain

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