

MenACWY vaccine (UK)



Fast facts

MenACWY vaccine offers protection against four strains of meningococcal bacteria (A, C, W, & Y)

It was introduced in the UK in August 2015 to protect teenagers against a harmful strain of MenW which had been rapidly rising since 2009.

Why do we need to vaccinate adolescents with MenACWY vaccine?

Meningococcal bacteria are the leading cause of bacterial meningitis in the UK.

MenACWY vaccine directly protects vaccinated people from four different types of meningococcal meningitis and septicaemia (groups A, C, W & Y) and also stops them from carrying the bacteria in the back of the nose and throat.

It is particularly important to protect teenagers because as well as being at increased risk of developing the disease, they are also the most likely to carry and spread the bacteria to others. Vaccinating teenagers is therefore essential to prevent the spread of infection amongst the wider population.

Importance of protection against MenW disease:

In 2009, cases of MenW disease began rising steeply in England and Wales. For example, in 2014/15 MenW accounted for 24% of cases of meningococcal disease in England compared to only 1-2% in 2008/9.

The rapid rise in MenW cases has been caused by a particularly virulent (harmful)

strain of bacteria known to cause severe disease in previously healthy people, with a high death rate.

The strain (ST-11) was identified using the MRF Meningococcal Genome Library to be the same strain responsible for high disease rates and very high fatality rates in South America. The strain spread to multiple European countries in addition to the UK, including Ireland, France, the Netherlands and Sweden.

Vaccinating adolescents against MenACWY will protect them and stop the spread of this virulent strain.

The vaccine has already been shown to have had an important impact; halving cases of MenW disease in the UK: <https://www.meningitis.org/blogs/how-mrf-helped-halve-menw-cases>.

Importance of maintaining protection against MenC disease:

Since routine introduction of the MenC vaccine, MenC has been nearly eliminated in the UK. The vaccine has prevented thousands of cases. The reason for this success was not just because the vaccine directly protected babies from disease, but because it was introduced with a catch up campaign, which extended to teenagers and young adults, preventing people in this age group from carrying the bacteria in their throats and transmitting it to others.

Research has since shown that the direct protection young children get from MenC vaccination is relatively short-lived.^{1,2,3} Therefore teenagers who were vaccinated as babies will no longer be directly protected. Boosting teenagers with MenACWY, will renew their protection, which is important as this age group are entering a higher risk age group for this disease. It also keeps disease levels

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amongst the population at low levels by stopping the spread of bacteria.

Who is entitled to receive the vaccine, and where should they get it?

Teenagers and young adults

MenACWY vaccine has been offered to teenagers in school years 9 and 10 (England and Wales), year 11 (Northern Ireland) and S3 (Scotland) since 2015. A catch up campaign targeting older age groups was also initiated, but uptake of the vaccine in older teenagers and young adults was low.

If you are over 14 and did not get this vaccine at school or from your GP you can still get the vaccine until you reach 25 if you live in England, Wales or Northern Ireland. If you live in Scotland and missed out on the vaccine you can still get it if you are under 25 and have never received a MenC containing vaccine or if you are under 25 and attending university for the first time.

University students

Because MenC and MenW can spread rapidly in halls of residence, it is important that new starters make sure they have not missed out on getting their MenACWY vaccine before they enrol on their course.

Ideally first year students should arrange to get MenACWY from their GP at least 2 weeks before they go away to study to make sure that they are protected by the time they get to university.

Any eligible first-year students not immunised before they started should get the vaccine as soon as possible by registering with their university health centre or other GP practice.

Problems accessing MenACWY vaccine in the UK?

We have been contacted by students and other young people who have had difficulty getting the MenACWY vaccine from their GP even though they were eligible for the vaccine. Protecting yourself through vaccination is important, so don't be put off. If you think you are eligible for the vaccine but are experiencing difficulties in accessing it, call our free helpline on 080 88 00 33 44 for assistance.

Who else can get the vaccine free from the NHS?

People with asplenia or splenic dysfunction, those with complement disorders, or those on Eculizumab therapy are at increased risk of meningococcal disease. They are entitled to receive the MenACWY and other meningitis vaccines free of charge on the NHS whatever their age and anyone with any of these medical conditions should contact their GP to ask about vaccination.

What vaccine will be provided?

There are three MenACWY vaccines currently licensed in the UK, Menveo®, Nimenrix® and MenQuadfi®. Menveo® and Nimenrix® have been widely used for over ten years. MenQuadfi® received a European license more recently. MenQuadfi® is currently used to routinely immunise teenagers in the UK.

Are the vaccines safe?

The vaccines have a good safety profile. As with all drugs, vaccines can cause side effects. Side effects of MenACWY vaccines are similar to other routine vaccines and may include

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soreness/redness/swelling or hardness of skin at the injection site, fever, headache, nausea, muscle aches, tiredness/fatigue, loss of appetite, generally feeling unwell.

Globally, the vaccines have been used extensively amongst pilgrims attending Hajj to combat meningitis outbreaks that have occurred among Hajj pilgrims in the past. MenACWY vaccine is compulsory for people attending Hajj, and since 2010, there have been 2-3 million Hajj pilgrims each year worldwide.

Is it a risk to other people once someone has had the vaccine?

No, quite the contrary. Vaccinating adolescents not only protects them, but reduces their risk of acquiring the bacteria, which commonly live in the nose and throat. By getting vaccinated, adolescents are also protecting younger and older people who are vulnerable to the infections.

What are the ingredients in the vaccine?

Each different group (A,C,W and Y) of meningococcal bacteria has a different type of sugar capsule surrounding the bug. The MenACWY vaccines contain fragments of the sugar capsules of all four groups. The sugar fragments are linked to a protein which makes the vaccine stronger and longer lasting.

All of the vaccine components have been processed and inactivated and are not part of any living bacteria, but can still stimulate the immune system.

Once you are vaccinated with MenACWY, your immune system can recognise and kill bacteria with the same sugar capsule that is contained in the vaccine, so if you

are exposed to these types of bacteria you do not become ill.

Other ingredients in the vaccines are used to ensure it has the same level of acidity and salt concentration as your body.

Are there any safety reasons not to have the vaccine? What about allergies?

People who have previously had an anaphylactic reaction to any of the vaccine components listed above should not get the vaccine.

Anaphylaxis to current vaccines is very rare and is estimated to occur in one in a million doses given, although another study⁴ found no reports of anaphylaxis following more than 5 million preschool and infant immunisations over an entire year in the UK and Ireland.

People with severe immune system problems cannot have live vaccines, but the MenACWY vaccines are not live. Food allergies are not a reason to avoid vaccination.

People often worry that eczema, asthma, epilepsy and a family history of reactions to vaccinations are a reason to avoid vaccinations, but this is not true⁵.

Is there a separate MenW vaccine like MenC?

No. There is currently no licensed vaccine that just protects against MenW.

Is it safe (or necessary) for people who have had meningococcal disease?

Yes. The vaccine is safe for people who have previously had meningococcal disease, and the vaccine cannot give them the disease. There are very few safety reasons for not vaccinating and these are outlined above.

There are many different types of meningococcal disease. Although someone who has been ill in the past may have some immunity against the strain that caused disease, they would not be protected against other types. Vaccination is necessary for broader protection and to boost any existing immunity generated from a previous infection.

Is it safe if you are pregnant?

Yes. Meningococcal vaccines may be given to pregnant women. There is no evidence of risk from vaccinating pregnant women or those who are breast-feeding.

What about those who are too young/old to freely qualify for the MenACWY vaccine. Should they get the vaccine privately?

Babies are at the highest risk of contracting meningococcal disease with peak incidence at around 5 months of age, but there is no current recommendation for babies to be vaccinated with MenACWY. The MenB vaccine Bexsero, which is given to children at 2, 4 and 12 months, should provide some protection against the particular ST-11 MenW strain that has been causing severe disease⁶.

Children older than 5 months of age are still at risk of disease, but their risk is substantially lower than that of younger babies. In the UK, in 2018 the incidence of meningococcal disease amongst the under ones was 9 per 100,000 (one baby in 11,111), reducing to 3 per 100,000 in children aged 1-4 (one child in 33,333).⁷

Vaccinating adolescents should also stop the bacteria from being passed on to others. This means that even unvaccinated people including babies should eventually also be indirectly protected from catching the disease – an effect known as population protection (or herd protection).

However, meningococcal disease is such a deadly and disabling disease that some may wish to be protected however small the risk of them contracting disease. The vaccine is available privately for those who wish purchase it.

How much will the vaccine cost if I want to get it privately?

As a guideline, the purchase price of the MenACWY vaccines for vaccine providers is £30 per dose excluding VAT.

A fee is also charged for administering the vaccine and this can be different according to clinic, so overall prices vary.

Once my teenager has had their MenACWY vaccine, can they still get meningitis?

Unfortunately yes, although it will be less likely. Meningitis vaccines are excellent but they do not protect against all strains.

For example, MenB has been the most common cause of bacterial meningitis for decades and while babies are now

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routinely vaccinated against MenB, there is currently no recommendation for this vaccine to be offered to teenagers, and there are still some kinds of meningitis

that cannot be prevented so it is important to know the symptoms, see:

<https://www.meningitis.org/meningitis/check-symptoms>.

References

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