Improved protection against Meningococcal C (MenC) meningitis and septicaemia in the UK

Meningitis and septicaemia caused by Group C meningococcal bacteria are life-threatening illnesses which affect mainly babies, young children and teenagers. Nowadays there are just a handful of cases of MenC each year, thanks to the MenC vaccine. Since the vaccine was introduced in 1999 it has prevented over 13,000 cases and 1,300 deaths.

Timings of the childhood MenC vaccinations changed in June 2013 so that children could benefit from longer lasting protection. Babies are now vaccinated against MenC at 3 months of age, 12-13 months of age and again at around 14 years of age (school years 9 or 10 in England and Wales, 11 in Northern Ireland and S3 in Scotland). Before June 2013 babies were immunised at 3 and 4 months of age with a booster dose at 12-13 months.

Because MenC can spread rapidly in halls of residence, new starters at university up to age 25 are also being offered a catch-up vaccination before they enrol on their course starting from late summer 2014. New starters of any age who have never been immunised against MenC should also be vaccinated. Students over the age of 25 who were immunised against MenC at school should still be protected and do not need a booster dose.

All eligible students should arrange to get MenC from their GP at least 2 weeks before they go away to study. After term starts, first-year students who are still not immunised can get the MenC vaccine before 31 October of the same year by registering with their university health centre or other GP practice.

Why did the vaccination programme need to change?

When the vaccine was introduced it was offered to the entire UK population from the age of 2 months to 18 years. The programme was later extended to include everyone under age 25. Since 1999 it has been part of the routine immunisation schedule for babies, directly protecting them from meningitis and septicaemia due to MenC.
We now know that the main factor in the success of the MenC vaccine is that it prevents vaccinated people from carrying MenC bacteria. Teenagers are more likely to carry the bug than any other age group and offering vaccine to all of them in 1999-2001 stopped MenC bacteria from being passed on. This meant that even unvaccinated people were protected from catching the disease – an effect known as herd protection.

Research and careful monitoring of the vaccination programme has taught us that the direct protection young children get from MenC vaccination is relatively short lived\textsuperscript{1-3}. This means that babies who were vaccinated in 1999/2000 will now be teenagers who are no longer directly protected from disease. So, even though cases of MenC are at a historically low level, it is important to vaccinate this age group to protect these vulnerable teenagers and maintain herd protection amongst the population at large.

**Does removing the infant vaccine at 4 months put babies at risk?**

No. Research has shown that one dose of MenC vaccine in the first year of life provides the same protection as two doses\textsuperscript{4}. It is more important to maintain herd protection in the population by limiting exposure to the bug. This way, even babies who are too young to be vaccinated will be protected.

**In England and Wales why are some children being vaccinated in year 9 and others in year 10?**

It is ultimately intended for the vaccine to be administered to children in school year 9 alongside the tetanus, diphtheria and polio (Td/IPV) vaccine booster dose. However, a significant proportion of Td/IPV vaccine is currently given in school year 10. Therefore, for practical reasons there will be flexibility in the timing of areas moving to the new schedule.

**What about my 16 year old who is not eligible for vaccination? Is she at risk?**

The vaccine has reduced cases of MenC to an all time low. Since 2008 there have been fewer than 40 MenC cases per year across the UK. In general the risk is small, but students in their first year at university are nearly 4 times more likely to catch meningococcal disease than someone in the general population. This is why there is a catch up vaccination campaign amongst new starters at university.
We know that it is important to adjust the vaccine schedule to prevent the bacteria from circulating otherwise the disease can come back. We learned this from what happened with Hib, which was the most common cause of meningitis in young children before Hib vaccine was introduced in 1992. The Hib vaccine was tremendously successful, and is technically similar to the MenC vaccine. However, the Hib vaccination schedule had to be changed a decade ago after resurgence in cases. This worked so well that now Hib disease has almost vanished. See www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HaemophilusInfluenzaeTypeB/EpidemiologicalData/HibGraph/.

Once my child has been fully vaccinated against MenC according to the current schedule, can she still get meningitis?

Unfortunately yes. Although meningitis vaccines are excellent, they do not protect against all strains. For example MenB has been the most common kind of meningitis for decades. A new MenB vaccine has recently been recommended for routine use in the UK which should prevent many more cases of meningitis (see www.meningitis.org/MenB). However, even if this vaccine is implemented there will still be some kinds of meningitis that cannot be prevented, so it is important to know the symptoms. Visit www.meningitis.org/symptoms.

Where can I go for further information?

More information on the changes to the MenC vaccination programme is available from the following web links:

England

Scotland

Freefone helpline UK 080 88 00 33 44 Ireland 1800 41 33 44
email helpline@meningitis.org
Visit our website www.meningitis.org
References


