



Public Health  
England

**NHS**

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# Pregnant?

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There are many  
ways to help protect  
you and your baby



Immunise against:

**Flu** (Influenza)

**Whooping cough**  
(Pertussis)

**German measles**  
(Rubella)

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**i**mmunisation



**This leaflet describes  
the vaccinations  
that help protect  
you and your baby  
during and after  
pregnancy.**

## **How do vaccines work?**

Vaccines help your body's natural defence system (the immune system) to develop protective antibodies. Antibodies fight disease and produce longer term protection.

So, if you are vaccinated against a particular disease and you come into contact with it at a later date, your immune system will respond to the infection more quickly.

Vaccination can help prevent disease or make the illness less serious. Antibodies developed while pregnant pass to your unborn baby and help to protect them in their first few months of life.

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# Vaccination during pregnancy

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## Influenza (Flu)

### What is Flu?

Flu is a highly infectious disease with symptoms such as fever, chills, aches and pains in the joints and muscles, headaches and extreme tiredness. Flu is usually worse than a bad cold and you may need to spend a few days in bed recovering. Although serious infections are less common in healthy adults, they can sometimes lead to hospitalisation, permanent disability and even death.

### Why is flu more serious in pregnancy?

This is because of the normal changes that take place during pregnancy. Your immune system is naturally weakened to ensure that your pregnancy is successful, but you may be less able to fight off infections. As your baby grows, you can't breathe as deeply, increasing the risk of infections such as pneumonia. Together, these changes can increase the risk for pregnant women, especially during late pregnancy and if there are other risk factors such as diabetes.

**» A pregnant woman who catches flu is more likely to need admission to hospital than a woman who isn't pregnant.**

Having the flu vaccination means that you are less likely to get ill with flu, and it reduces the risk of you having serious complications such as pneumonia. For these reasons, all pregnant women are recommended to have the flu vaccine.

### **What is the risk for my baby from flu?**

Flu can be serious for unborn and new-born babies and can lead to premature birth, low birth weight, stillbirth or even death in the first weeks of life.

### **What does vaccination involve?**

The flu vaccination is an injection into the arm. It is usually available from the end of September and is free for pregnant women.

It is safe to have at any time in pregnancy and takes around 14 days to provide protection following vaccination.



The side effects of the flu vaccine are mild compared to the disease itself and are seen in all people, not just pregnant women. Soreness and redness at the injection site are most common. You may also get a headache, muscle aches, fever or tiredness; these usually last for a day or two after the vaccination as it starts to work.

You will need a flu vaccination every time you are pregnant during any flu season.

### **What are the benefits for my baby?**

By having the vaccination, you reduce the chance of getting flu during your pregnancy and so the risk of complications from flu is reduced. Your baby will also develop some immunity to flu as antibodies are passed from you to your baby through the placenta. This will provide some protection during the first few months of life. As you will continue to be protected throughout the flu season, you are less likely to catch flu and pass it on to your new baby.

### **Is the flu vaccination safe to have during pregnancy?**

The flu vaccines offered to pregnant women contain only killed (inactivated) flu viruses and cannot cause flu. Since 2009, a number of countries have offered the flu vaccine routinely to all pregnant women. Studies show that inactivated flu vaccines can be safely and effectively administered during all stages of pregnancy for both mother and baby.

## **What should I do if I think I have caught flu?**

Contact your GP urgently and mention that you are pregnant. There is a medicine that you can take that can help relieve some of the symptoms, but you need to take it as soon as possible after symptoms start for it to work. The best way of protecting yourself and your baby against flu is to have the vaccine before the start of the flu season, usually around September, but you can still have the vaccine at any time during the winter season.

**» Flu can be a serious infection for pregnant women and their babies. Pregnant women should have a free flu vaccine during each pregnancy. It can be given at any stage of pregnancy and as early as possible in the flu season.**

## **Whooping cough (Pertussis)**

### **What is whooping cough?**

Whooping cough is a highly infectious disease that can be very serious for babies under one year of age. Most young babies with whooping cough will be admitted to hospital.

Whooping cough can cause long bursts of coughing and choking making it hard to breathe. The 'whoop' noise is caused by gasping for breath after each burst of coughing. Young babies don't always make this sound so it can be difficult to recognise.

Whooping cough commonly lasts for around two to three months. For young babies it can lead to pneumonia and permanent brain damage. In the worst cases, it can cause death.

Around 300 babies are admitted to hospital every year with whooping cough. Other complications of the infection include:

- temporary pauses in breathing as a result of severe difficulty with breathing
- weight loss due to excessive vomiting
- seizures or brain damage
- encephalitis (swelling of the brain)

### **Why do I need the whooping cough vaccine?**

In 2012 there was an increase in the number of people getting whooping cough in the UK, 400 of these were babies under three months of age and of these 14 babies died.

To help prevent more deaths, a whooping cough vaccination programme for pregnant women started during 2012. You will be offered the whooping cough vaccine by your GP or maternity services from your 20<sup>th</sup> week of pregnancy. Your body will produce antibodies to whooping cough which are passed through the placenta to your baby. Your baby then has some protection against whooping cough when it is born. This protection will wear off and your baby should have their whooping cough vaccine at 8 weeks of age.

## When should I get vaccinated?

The best time to get vaccinated to protect your baby is from the 20<sup>th</sup> week of your pregnancy or soon after your scan. If you miss the recommended time you can have the vaccine any time in your pregnancy. The vaccine is a single injection in your arm.

Because protection from whooping cough vaccine wears off over time, you should have the vaccine even if you had it when you were younger or if you have had whooping cough. You should also have it again, if you had it in a previous pregnancy, as vaccination is needed in each pregnancy.

The whooping cough vaccine can be given at the same time as the flu vaccine but do not wait until the winter season to have them together. Your baby will get the best protection if you have the vaccine from the from the 20<sup>th</sup> week of your pregnancy.

If you haven't heard from your GP or midwife, then make an appointment to have the vaccination at your earliest opportunity.



## **I thought babies were given the whooping cough vaccine?**

In the UK, babies are given the whooping cough vaccine at 8, 12 and 16 weeks of age. They are not given their whooping cough vaccines earlier than 8 weeks as they may not respond as well. Babies need three doses of the vaccine to build up full protection.

**» You can help to protect your new-born baby by having the whooping cough vaccine soon after the 20<sup>th</sup> week of your pregnancy.**

## **What are the benefits for my baby?**

The only way to protect your baby from getting whooping cough in the first two months of life

is by having the whooping cough vaccine yourself.

The protection that you will get from the vaccine passes to your baby through the placenta and protects your baby from whooping cough until they are old enough to have their own vaccine.

Studies have shown that the vaccine is very effective in preventing whooping cough in new-born babies.



The protection that you will get from the vaccination also means that you are less likely to catch whooping cough and pass it on to your baby.

### **Is the whooping cough vaccine safe to have during pregnancy?**

Studies have shown the whooping cough vaccine is very safe for you and your baby. You may have some of the common mild side effects. These include: swelling, redness and tenderness at the injection site.

The vaccine will also boost your protection against tetanus, polio and diphtheria.

It is much safer for you and your baby to have the vaccine than to risk your new-born catching whooping cough.

 **Whooping cough can be a very serious illness for young babies. You can help to protect your baby by having the vaccine from the 20<sup>th</sup> week of your pregnancy.**

**Remember, even if you've had whooping cough vaccine while pregnant, the protection that this will give to your baby will wear off so it is important that your baby has their own vaccines at 8, 12 and 16 weeks of age.**

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## Vaccination before or after pregnancy

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If you are planning to become pregnant you should make sure you are up to date with all vaccinations.

### **Rubella (German measles)**

Catching rubella during pregnancy can be very serious for your baby, causing a condition called congenital rubella syndrome (CRS). CRS can lead to deafness, blindness, cataracts (eye problems) or even heart problems. It can also result in the death of the baby or the possibility of a termination.

You will be protected from rubella if you have previously had the infection or if you have ever had two doses of a rubella-containing vaccine (eg rubella, measles-rubella or measles-mumps-rubella in school, as a child, or at your GP). If you are not sure whether you have had rubella infection or the vaccine, you can check with your GP.

Ideally you should have had two doses of a rubella containing vaccine before you became pregnant. If you have not, then measles, mumps and rubella vaccine (MMR) can be given up to one month before pregnancy. MMR is a live (weakened) vaccine so is not given during pregnancy. Although there is no evidence that having the MMR vaccine during pregnancy causes harm to babies, it is recommended that you wait to have it until after your baby is born.

## **Why do I need the MMR vaccination after pregnancy?**

This will protect you and your baby in any future pregnancy and give you longer term protection against measles, mumps and rubella. You will need two doses of the vaccine if you haven't had it before. Your practice nurse will give the first vaccine at the same time as your post-natal check and will give the second dose a month later. You should avoid becoming pregnant for one month after the vaccinations, so you need to have a reliable method of contraception.

If you are not sure if you have had MMR vaccination, you can check with your GP at your post-natal check.

## **Can I breastfeed my baby following vaccination?**

Yes, it is safe to breastfeed your baby after you have had MMR, flu and whooping cough vaccinations. In fact, if you have the whooping cough vaccine while you are pregnant, your breastmilk will have protective antibodies in it so you can continue to share your protection with your baby by breastfeeding.

## **Rash in pregnancy**

### **What should I do if I come in contact with someone with a rash, or if I have a rash?**

You must let your midwife, GP or obstetrician know immediately if you have a rash illness or have any contact with another person with a rash at any time during your pregnancy.

Please avoid any antenatal clinic, maternity setting or other pregnant women until you have been assessed.

Any illness where you have a fever and a rash may be due to you having an infectious disease which could harm your unborn baby. You may be offered tests to find out if you have been infected. The health professional that assesses you will need to know:

- how many weeks pregnant you are
- when the contact with someone with a rash illness was
- the date that you first developed or had contact with someone with a rash
- a description of the rash (is it a raised, bumpy rash or is it blisters filled with fluid?)
- what infections you have had in the past eg chicken pox, measles
- what vaccinations you have previously had

 **If you come into contact with someone with a rash or if you develop a rash while you are pregnant, get advice from your GP or midwife as soon as you can.**

**If you delay reporting a rash illness it may not be possible to give you an accurate diagnosis or any recommended treatment.**

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## Other vaccines to discuss with your midwife

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### Hepatitis B

At birth, babies born to mothers who have the hepatitis B infection should have hepatitis B vaccine as soon as they are born. Arrangements should be made with your GP for your baby to have a further three doses of vaccine and a blood test when he or she is one year old to test for infection.

### BCG

Babies born to a parent (or who have a grandparent) from a country where TB is common, should have BCG vaccine to protect them from TB.

 **Having the recommended vaccinations during pregnancy (and after your baby is born) is one of the most effective things that you can do to reduce the risk of vaccine preventable infections for you and your baby.**

**Ensuring your baby gets vaccinated at 8, 12 and 16 weeks means that this protection will continue during their most vulnerable years.**

### Links to further information

[www.nhs.uk/Conditions/vaccinations/Pages/vaccination-schedule-age-checklist.aspx](http://www.nhs.uk/Conditions/vaccinations/Pages/vaccination-schedule-age-checklist.aspx)

[www.gov.uk/government/collections/immunisation](http://www.gov.uk/government/collections/immunisation)

[www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book](http://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book)

[www.medicines.org.uk/emc/](http://www.medicines.org.uk/emc/)

# Pregnancy vaccination record

Record your pregnancy vaccinations below to ensure that you and your baby don't miss out on protection against flu, whooping cough and rubella (German measles).

Vaccine	When to have it	Date given
<b>Flu</b>	During flu season at any time during your pregnancy.	
<b>Whooping cough</b>	From the 20 <sup>th</sup> week of pregnancy, after your scan.	
<b>MMR dose 1*</b>	After your baby is born, at your 6 week postnatal check (with GP or practice nurse).	
<b>MMR dose 2*</b>	Four weeks after first dose (as above).	

\*If no previous vaccination



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