Immunisations: A Guide for Parents

From the makers of

Calpol® Lets Kids be Kids
It can seem like rotten timing when – just as you’re settling into a rhythm with your baby and possibly even getting some sleep – along come her first set of immunisations. Over the next three months you’ll be invited by your GP surgery or baby clinic to have your baby vaccinated against infectious diseases such as whooping cough, diphtheria and polio. It is important that she has her jabs, but it can be upsetting for you if your little one develops a post-vaccination fever, or is generally out of sorts and off colour for a few days afterwards. This leaflet has been developed to give you practical advice about helping your child stay happy and comfortable after they have been vaccinated. If you have any doubts or concerns, always speak to a health care professional.

Contents

Introduction 3
Immunisation schedule 4-5
Preparation tips for parents 6
What happens at the appointment? 7
After the immunisation 8-9
How to measure your child’s temperature 10
After the Meningitis B vaccine 11
After the MMR vaccine 12
Using paracetamol and ibuprofen 13
Guidelines on paracetamol dosing 14
Milestone Timeline 15
Introduction

Thanks to the childhood vaccination programme, children in the UK are now protected against many dangerous diseases including polio, and many other potentially deadly infections such as diphtheria. Meningitis C has also been virtually eliminated since the Men C vaccine was introduced in the UK in 1999 (with a 99% reduction in cases of Meningitis C among those aged under 20 since vaccination started).

“The two public health interventions that have had the greatest impact on the world’s health are clean water and vaccines”

World Health Organization
Your child’s immunisation schedule

It is easy to forget when your baby’s due to have her jabs. Most GP surgeries will send you a reminder to make the necessary appointments and the vaccinations timetable will help you stay on track. The table below shows the timetable for immunisations (correct at time of print - July 2018) but your GP or health visitor should remind you when the next one is due. Try to stick to the immunisation schedule that your GP gives you, to ensure your child is protected as soon as possible.

<table>
<thead>
<tr>
<th>2 months</th>
<th>How is it given?</th>
<th>Possible side effects*</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-in1 (DTaP/IPV/Hib/HepB) vaccine</td>
<td>Combined Injection</td>
<td>• Pain, redness and/or swelling at the injection site • Irritability • Fever</td>
</tr>
<tr>
<td>Pneumococcal conjugate vaccine (PCV)</td>
<td>Separate Injection</td>
<td>• Possible redness and swelling at the injection site. • Mild fever • Decreased appetite • Irritability</td>
</tr>
<tr>
<td>Rotavirus vaccine</td>
<td>Oral Administration</td>
<td>• Possible mild diarrhoea and irritability</td>
</tr>
<tr>
<td>Men B vaccine</td>
<td>Separate Injection</td>
<td>• Fever • Pain, swelling or redness at the injection site • Irritability • Vomiting and/or diarrhoea</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3 months</th>
<th>How is it given?</th>
<th>Possible side effects*</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-in1 (DTaP/IPV/Hib/HepB) vaccine - 2nd dose</td>
<td>Combined Injection</td>
<td>• Pain, redness and swelling at the injection site • Irritability • Fever</td>
</tr>
<tr>
<td>Rotavirus vaccine - 2nd dose</td>
<td>Oral administration</td>
<td>• Possible mild diarrhoea and irritability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4 months</th>
<th>How is it given?</th>
<th>Possible side effects*</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-in1 (DTaP/IPV/Hib/HepB) vaccine - 3rd dose</td>
<td>Combined Injection</td>
<td>• Pain, redness and swelling at the injection site • Irritability • Fever</td>
</tr>
<tr>
<td>Pneumococcal conjugate vaccine (PCV) - 2nd dose</td>
<td>Separate Injection</td>
<td>• Possible redness and swelling at the injection site. • Mild fever • Decreased appetite • Irritability</td>
</tr>
<tr>
<td>Men B vaccine - 2nd dose</td>
<td>Separate Injection</td>
<td>• Fever • Pain, swelling or redness at the injection site • Irritability • Vomiting and/or diarrhoea</td>
</tr>
</tbody>
</table>

*This list of side-effects is not exhaustive; for more information on vaccines and side effects, visit: [http://www.nhs.uk/conditions/vaccinations/pages/reporting-side-effects.aspx](http://www.nhs.uk/conditions/vaccinations/pages/reporting-side-effects.aspx)

For more information on the current immunisation schedule, visit: [https://www.nhs.uk/conditions/vaccinations/pages/vaccination-schedule-age-checklist.aspx](https://www.nhs.uk/conditions/vaccinations/pages/vaccination-schedule-age-checklist.aspx)
### 12 months

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Type</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hib (4th dose)/Men C (1st dose)</td>
<td>Combined Injection</td>
<td>• Pain, redness or swelling at the injection site • Fever • Irritability • Loss of appetite</td>
</tr>
<tr>
<td>MMR vaccine (Measles, Mumps and Rubella)</td>
<td>Combined Injection</td>
<td>• Measle-like rash • Fever • Loss of appetite</td>
</tr>
<tr>
<td>Pneumococcal conjugate vaccine (PCV) - 3rd dose</td>
<td>Separate Injection</td>
<td>• Possible redness and swelling at the injection site. • Mild fever • Decreased appetite • Irritability</td>
</tr>
<tr>
<td>Men B vaccine - 3rd dose</td>
<td>Separate Injection</td>
<td>• Fever • Pain, swelling or redness at the injection site • Irritability • Vomiting and/or diarrhoea</td>
</tr>
</tbody>
</table>

### 2-9 years

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Type</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza (annual)</td>
<td>Nasal Spray or separate injection (if spray unsuitable)</td>
<td>• Runny or blocked nose • Headache • General tiredness • Loss of appetite</td>
</tr>
</tbody>
</table>

### 3 years, 4 months or soon after

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Type</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-in-1 (DTaP/IPV) - pre-school booster</td>
<td>Combined Injection</td>
<td>• Loss of appetite • Irritability • Mild fever • Discomfort, swelling and redness at the injection site</td>
</tr>
<tr>
<td>MMR vaccine (Measles, Mumps and Rubella) - 2nd dose</td>
<td>Combined Injection</td>
<td>• Measle-like rash • Fever • Loss of appetite • Less chance of side effects after the second dose of MMR vaccine than the first</td>
</tr>
</tbody>
</table>

### Girls 12-13 years

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Type</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Papillomavirus (HPV) vaccine</td>
<td>2 injections given between 6 months and 2 years apart</td>
<td>• Soreness, redness or swelling at the injection site • Headaches • Bruising or itching at the site of the injection • High temperature • Nausea</td>
</tr>
</tbody>
</table>

### 14 years

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Type</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-in-1 (Td/IPV) - teenage booster</td>
<td>Combined Injection</td>
<td>• Mild fever • Pain, redness and swelling at the injection site • Nausea • Headache • Dizziness</td>
</tr>
<tr>
<td>Men ACWY vaccine</td>
<td>Combined Injection</td>
<td>• Redness, hardening and itching at the injection site • Headache • Nausea • Fatigue</td>
</tr>
</tbody>
</table>
Preparation tips

Try not to dress your child in chunky, padded or tight-fitting clothes with lots of buttons and straps - they take time to remove and put back on. Clothes that can be rolled up easily (like romper suits with poppers, or loose and short sleeved T shirts) are a good choice!

Allow plenty of time to get to your appointment. If you rush, you may get stressed - your little one could sense that and become anxious. This will also allow you plenty of time to ask the nurse questions.

The NHS advise using infant paracetamol to reduce the risk of fever after the Men B vaccination. If you do not have any at home already, visit your local pharmacy or supermarket to buy some. See pages 8-11 for more information about post-immunisation fever.
What happens at the appointment itself?

The injections themselves are usually given by the practice nurse attached to your GP practice or baby clinic. Talk through any questions or concerns you have with the nurse. If your tot is poorly, you may be advised to wait a week before she has her immunisations. If she has a minor sniffl the nurse will take her temperature and assess whether she is fit enough to be vaccinated. Remember to take your baby’s health record book along, so the nurse can note what vaccinations have been given.

The nurse or doctor will check that you know which diseases the vaccinations protect against and that you understand what side effects may occur and how to treat them. If your child has had previous vaccinations, let the nurse know before the injection about any reactions your child experienced.

Of course it is natural to be worried when your little one is having a jab, particularly their first but try to stay calm. Your child may sense that you are anxious and may become worried or restless. If you are nervous about seeing your child having an injection, ask a nurse or another member of staff to hold them for you.

If your baby is receiving the Meningitis B vaccination along with their other routine immunisations at 2 or 4 months old you could pick up some liquid infant paracetamol from your local pharmacy or supermarket to use when you get home to reduce the risk of fever.

“There's just a little scratch coming…”
After the immunisation...

What happens directly afterwards?
Just in case your baby reacts to the injection, you'll be asked to stay in the surgery for about 10 minutes after the immunisation. It's normal for babies and young children to be upset for a little while after an immunisation by injection and your baby may be irritable and clingy for a day or two after her jabs. Don't worry if you see some mild redness or swelling at the injection sites, this is perfectly normal and should soon calm down. If she's running a post-vaccination fever, you can help ease her discomfort by:

- Offering her plenty of feeds - little and often works best if she's off her food.
- Letting her wear just her vest and ensuring her bedroom is a comfortable temperature and well ventilated.
- Keep the room well aired and at a comfortable temperature
- Giving her plenty of kisses and cuddles.
- Fever is also quite common in young children, but is usually mild. See page 9 for more information on post-immunisation fever.

So what other side effects could you expect?
Occasionally, some mild side effects will occur where the injection was given, including:
- Swelling
- Redness
- A small hard lump
Though it may be sore to touch, these symptoms will usually pass in 2-3 days and you don't have to worry about them.
What about febrile seizures (fits)?

In most cases, febrile seizures are linked to the start of a fever caused by an infection but in very rare cases they can occur after a child has a vaccination. Although febrile seizures can be frightening, they aren’t usually a cause for concern. In very rare cases, a seizure can be a sign of a more serious condition, such as meningitis, which requires emergency medical treatment. Dial 999 immediately to request an ambulance if your child:

- Is having a fit for the first time
- Is having a seizure that’s lasting longer than five minutes and showing no signs of stopping.
- You suspect the seizure is being caused by another serious illness - for example, meningitis
- Is having breathing difficulties.

You know your baby best, so trust your instincts and seek medical attention if you are concerned about these or any other symptoms.

What temperature constitutes a fever?

Fever in children is usually defined as a temperature of over 38°C.

You should contact your GP, health visitor or practice nurse if your child is:

- Under 3 months old and has a temperature of 38°C (101°F) or higher
- 3 to 6 months old and has a temperature of 39°C (102°F) or higher
- Any age, and, as well as fever, has other signs of being unwell

Helping your child feel more comfortable when they have a fever

Calpol® has been trusted by parents and healthcare professionals for over 50 years. If your child has a fever and is distressed and uncomfortable, give them Calpol Infant suspension which is suitable from just 2 months (weighing over 4kg and not premature). This will start to work on fever in 15 minutes, allowing you to breathe a sigh of relief. Remember to always read the label to find out the correct dose and frequency for your child’s age.

CALPOL® Infant Suspension (2+ months, over 4kg & not premature) contains paracetamol. For pain and fever. Always read the label.
How to measure your child’s temperature

Fever (raised temperature) is common after vaccination. If you think that your little one has a temperature, the best first step is to check using a thermometer.

Digital thermometers are widely available and will provide a fast and accurate reading of your child’s temperature. However, there are a few other factors that could affect the reading which are important to consider. For instance, if your child has been:

- wrapped up tightly in a blanket or wearing lots of clothes
- cuddling a hot water bottle
- in a very warm room
- having a bath
- Very active

In this case, let them cool down for a few minutes (without allowing them to become cold or shivery), and take their temperature again to see if there has been any change.

**Under the armpit**

Hold your child comfortably on your knee and place the thermometer under their armpit. Gently but firmly hold their arm against their body to keep the thermometer in place for the time stated in the manufacturer’s instructions.

**Under the tongue**

Taking an oral temperature is easy in an older, cooperative child. Younger children and babies may bite the thermometer if it is placed in their mouth.

**In the ear**

Ear thermometers are quick and don’t disturb the child. But they can give misleading readings if they’re not correctly placed in the ear.
Specific advice for after the Meningitis B vaccination

How can I reduce the risk of fever?

Giving your child paracetamol soon after vaccination and not waiting for a fever to develop - will reduce the risk of your child having a fever. This may also help to relieve any pain at the site of the injection.

You should give the first dose of paracetamol as soon as possible after your two-month vaccination visit. You should then give the second dose 4-6 hours later and the third dose 4-6 hours after that. You will need to follow the same steps after your child’s four-month vaccinations.

The Men B vaccination is usually given at your baby’s first and third immunisation appointments at 2 months and 4 months of age, and a booster at 12 months.

Just a heads-up, fever is particularly common with Men B vaccination:

Although fever can be expected after any vaccination, it is very common when the Men B vaccine is given with the other routine vaccines at two and four months. The fever tends to peak around six hours after vaccination and is nearly always gone completely within two days.

The fever shows your baby’s body is responding to the vaccine (but don’t worry - not getting a fever doesn’t mean it hasn’t worked). The level of fever depends on the individual child and does not indicate how well the vaccine has worked.

Current advice states that paracetamol should be used to treat post-immunisation fever in babies after their Men B injections at 2 and 4 months; in this instance, ibuprofen is not currently recommended. Your nurse will give you more information about paracetamol at your vaccination appointment and you may be given a leaflet to take away with you with written instructions.
After the MMR vaccination

Because MMR consists of three different vaccines (measles, mumps and rubella) within a single injection, these can each cause different side effects at different times post-injection. The side effects of the MMR vaccination are usually mild. It’s important to remember they’re milder than the potential complications of measles, mumps and rubella.

- **About a week to 11 days post-injection** the measles vaccine may cause a fever, a measles-like rash, and loss of appetite. Children with vaccine-associated symptoms are not infectious to others.

- **3-4 weeks post-injection** the mumps vaccine may cause mumps-like symptoms in some children (swollen glands).
Using paracetamol and ibuprofen in children

Of course, there are practical steps you can take to help soothe your baby’s discomfort. Extra kisses and cuddles can work wonders in the short term, but your tot may need something longer-lasting to ease fever and discomfort. Calpol® Infant Suspension can help (suitable from 2 months+, weighing over 4kg and not premature). It contains liquid paracetamol to provide gentle support for your baby’s first immunisations. It’s strawberry-flavoured and is available in three varieties: Original, Sugar-free and Sugar-free colour-free. The handy, ready-dosed sachet format is ideal if you want to have pain relief on standby in your baby’s change bag. Alternatively, Calprofen ibuprofen Suspension can also be used for pain and fever relief (suitable from 3 months+, weighing 5kg). Also strawberry flavoured, Calprofen lasts up to 8 hours but is not recommended after the Men B vaccine. Always read the label and store out of the sight and reach of children.

Paracetamol-containing treatments, such as CALPOL® Infant Suspension:

- Suitable from 2 months (weighing more than 4kg and not premature)
- Tough on pain and fever but gentle on little tummies
- Strawberry flavour
- Gets to work on fever in just 15 minutes

Ibuprofen-containing treatments, such as CALPROFEN® Ibuprofen Suspension:

- Ibuprofen-only medicine from the makers of CALPOL®
- Suitable from 3 months (weighing more than 5kg)
- Gets to work on fever in just 15 minutes and works for up to 8 hours
Guidelines on paracetamol dosing*

Infant paracetamol suspension (120mg/5ml) has a good safety profile and is an effective method of short-term pain and fever relief in children when used appropriately.

For use after Men B vaccinations (at 2 and 4 months):

<table>
<thead>
<tr>
<th>Age of baby</th>
<th>How Much</th>
<th>How often (in 24 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 6 months (usually at 2 and 4 months)</td>
<td>One 2.5ml (60mg) dose as soon as possible after vaccination</td>
<td>Up to 4 times</td>
</tr>
<tr>
<td>One 2.5ml (60mg) dose 4-6 hours after first dose</td>
<td>One 2.5ml (60mg) dose 4-6 hours after second dose</td>
<td></td>
</tr>
</tbody>
</table>

Do not give to babies under 2 months old. Consult your doctor.

<table>
<thead>
<tr>
<th>Child’s age</th>
<th>How Much</th>
<th>How often (in 24 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-3 months</td>
<td>2.5ml</td>
<td>Up to 4 times</td>
</tr>
<tr>
<td>For pain and other causes of fever</td>
<td>If necessary, after 4-6 hours, give a second 2.5ml dose.</td>
<td></td>
</tr>
<tr>
<td>• Only give if your baby weighs over 4kg and was born after 37 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Leave at least 4 hours between doses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Do not give more than two doses. This is to ensure that fever that may be due to a serious infection is quickly diagnosed. If your child is still feverish after two doses, talk to your doctor or pharmacist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-6 months</td>
<td>2.5ml</td>
<td>Up to 4 times</td>
</tr>
<tr>
<td>2.5ml (5ml + 2.5ml)</td>
<td>Up to 4 times</td>
<td></td>
</tr>
<tr>
<td>6-24 months</td>
<td>5ml</td>
<td>Up to 4 times</td>
</tr>
<tr>
<td>2-4 years</td>
<td>10ml (5ml +5ml)</td>
<td>Up to 4 times</td>
</tr>
<tr>
<td>4-6 years</td>
<td>Up to 4 times</td>
<td></td>
</tr>
<tr>
<td>• Do not give more than 4 doses in any 24 hour period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Leave at least 4 hours between doses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Do not give this medicine to your child for more than 3 days without speaking to your doctor or pharmacist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Remember that dosing instructions for ibuprofen are different, always read the Patient Information Leaflet for dosing information.
Milestone timeline

1-4 weeks
- Your baby enjoys looking at faces
- Startled by loud noises

4-6 weeks
- Starts to smile

4-12 weeks
- Lifts their head

6-8 weeks
- Vaccines start and a full health check

3-5 months
- Reaches out for objects

4-6 months
- Starts making noises

5 months
- Can hold objects

6 months
- Hand to hand co-ordination
- Starts to eat solids

6-8 months
- Sits without support

6-9 months
- Teething starts

7 months
- Responds to your voice

9-12 months
- Starts trying to crawl
- Can pull themselves upright

10-18 months
- Walks alone

Next steps along your journey!