



BRIEF GUIDE TO VACCINATION

This brief guide aims to **provide parents with some information on vaccinations and the reactions they may cause**, including fever, in the hope of offering reassurance and above all a **reminder that vaccines offer invaluable benefits in the prevention of many terrible infectious diseases**, both for the individual child and society as a whole.¹



HOW VACCINES WORK

Vaccines are made from the same viruses or bacteria that cause the disease, but they have been suitably “weakened” or killed to make them safe. In some cases they use components of viruses or bacteria that are just as effective and safe. They stimulate the child’s immune system to respond without their becoming ill. They then develop a preventive defence (antibodies) that will protect them in the event of future contact with the same infectious agents.²



WHO SHOULD BE VACCINATED

All children should be vaccinated in order to be protected from certain infectious diseases, including tetanus, diphtheria, polio, rubella, measles, mumps, whooping cough, hepatitis, and meningitis, which can have serious or even fatal consequences.² Nowadays, the availability of vaccines has increased dramatically, helping to prevent a much wider range of infections



WHEN AND HOW VACCINES ARE GIVEN

Every vaccine has its own method of administration (oral, intramuscular, subcutaneous, intranasal, in order to achieve the best possible efficacy and tolerability)⁴, and its own administration schedule, as stated in the current National Vaccination Prevention Plan.⁵ For effective protection it is essential to adhere to the recommended treatment regimen.





POSSIBLE CONTRAINDICATIONS

There are only a very limited number of situations in which vaccinations are contraindicated.

If the child is ill on the day that the vaccination is booked, it will have to be postponed. However, a mild infection of the upper respiratory tract with no fever is not a contraindication.

If the child has chronic underlying diseases, allergies or has experienced adverse reactions after a previous vaccination, consultation with a paediatrician is recommended before the vaccination.



WHY SIDE EFFECTS MAY OCCUR AND HOW TO DEAL WITH THEM

Vaccines are among the safest, most strictly regulated medicinal products, but like all medicines, they can cause extremely rare systemic reactions (anaphylactic shock or convulsions), and local effects, which are usually mild and of short duration (fever, redness, swelling, and irritability).

As for the former, it is good practice to keep the child under observation for a quarter of an hour after administration, so that prompt treatment can be given if necessary³.

Sometimes a small, painless lump can be detected at the site where the injection was given; this is nothing to be alarmed about: it is caused by a local reaction and usually disappears spontaneously within a few weeks, without leaving scars.⁶



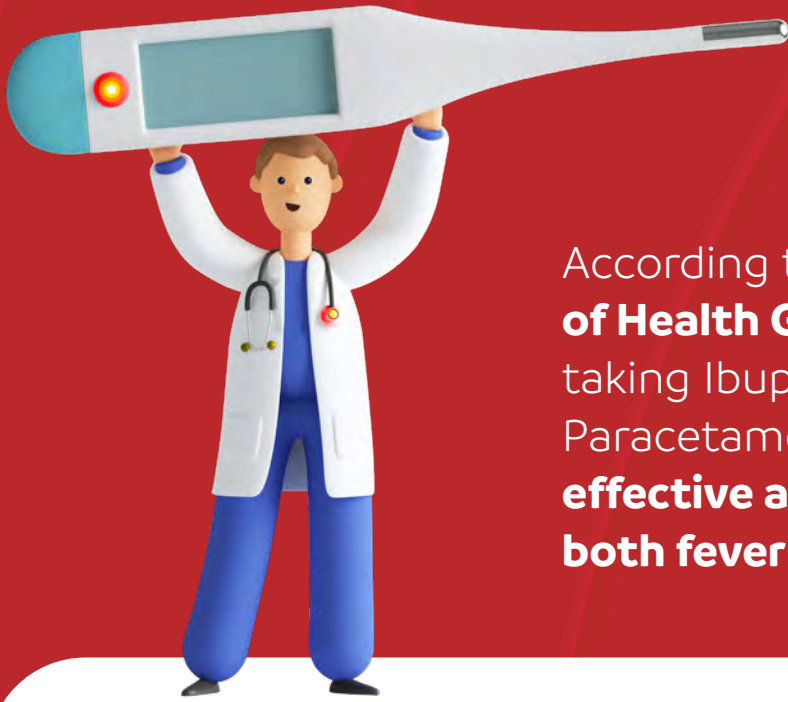
FEVER AND LOCALISED PAIN FOLLOWING A VACCINATION

It is important to remember that fever is primarily a defence mechanism and should therefore be considered as an ally of the child rather than an enemy. The onset of fever following a vaccination should not cause alarm: it normally results in a temperature of around 38 - 38.5 °C and is short-lived (no more than 24-48 hours).⁷

It should be remembered that some vaccinations, such as measles, mumps, rubella, can cause fever (sometimes accompanied by a mild rash) which can even appear 7-10 days after the vaccination was given. However even this normally lasts no more than 24-48 hours.⁷

Pain can also be an undesirable effect of vaccinations: it is usually concentrated around the injection site, regardless of the appearance of redness or swelling, and does not last.





According to the **Ministry of Health Guidelines**, taking Ibuprofen or Paracetamol has proved **effective and safe for both fever and pain.**

IBUPROFEN⁸

- available as an oral suspension (100 mg/5 ml and 200 mg/5 ml)
- suppositories (60 mg in the early years and 125 mg for older children)
- soft, chewable tablets of 100 mg.

Recommended for children from 3 months of age and weighing 5.6 kg or over for the symptomatic treatment of fever and mild to moderate pain.

Dose depends on body weight: normally 5-10 mg/kg per administration (3 times a day, at 6-8 hours intervals) without exceeding a total daily maximum of 20-30 mg/kg.


PARACETAMOL⁹

- available as a syrup (120 mg/5 ml)
- suppositories (62.5 mg for babies, 125 mg for children from the early years, 250 mg for children weighing 11 to 20 kg and 500 mg for children weighing 21 to 40 kg)
- drops (100 mg/ml, for children weighing more than 3.2 kg and less than 12 kg)
- effervescent granules (sachets of 500 mg)
- tablets (500 mg).

The oral dose is 10 to 15 mg/kg every 4-6 hours depending on the case.

Maximum dose (3 months of age and older): 80 mg/kg/day.

For new-borns and infants under 3 months of age the dose is lower and should always be agreed with the paediatrician.

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- For post-vaccination fevers, do not exceed two daily doses, and consult a physician if the fever does not go away.
 - For children with particular health conditions (dehydration, concomitant or chronic diseases, administration of other medicinal products, etc.), administration should be prescribed by a paediatrician.
 - Always pay attention to the different concentrations of drugs in different pharmaceutical forms. If in doubt, always consult your paediatrician.

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