

## What vaccines babies get first year



### Why the first year matters so much

Infants face a narrow window of vulnerability. Maternal antibodies provide some early protection, but that shield fades, and babies have not yet had time to develop broad immunity through exposure or vaccination. The first-year schedule is therefore front-loaded on purpose: it protects against diseases that can cause hospitalization, dehydration, breathing problems, meningitis, or other serious complications in very young children.

The timing is also practical. Well-baby visits in the first year are frequent, which allows clinicians to give several vaccines in a structured way while also checking growth, feeding, development, and overall health. This is why the schedule feels concentrated: the risk is concentrated too.

### What babies usually get at birth and in the first 1-2 months

At birth: most babies receive the first dose of hepatitis B vaccine soon after delivery, often within 24 hours. This early dose helps prevent hepatitis B infection, which can become chronic and damage the liver later in life.

At 1-2 months: the birth dose may be followed by another hepatitis B dose

depending on the product used and the exact schedule your baby is following. Some babies also receive RSV protection during RSV season if they meet current eligibility criteria. RSV protection may be given as an immunization or antibody-based product rather than a traditional vaccine.

If your baby is born early or has a medical condition that changes timing, your pediatric team may use a slightly different plan while still aiming for protection as early as safely possible.

## **The core 2-month vaccine visit**

The 2-month visit is often the busiest vaccine appointment of infancy. Common vaccines at this age include:

Hepatitis B, if the series is still in progress

Rotavirus vaccine, given by mouth

DTaP, which protects against diphtheria, tetanus, and pertussis

Hib, which helps prevent Haemophilus influenzae type b disease

Polio vaccine, given as inactivated polio vaccine in the routine schedule

Pneumococcal conjugate vaccine, which helps protect against invasive pneumococcal disease

These are the building blocks of early infant immunization. They target infections that can spread easily and become severe in babies whose immune systems are still immature. Rotavirus is especially important because it helps lower the risk of severe vomiting and diarrhea that can lead to dehydration.

## **What happens at 4 months and 6 months**

At 4 months, babies usually receive the next set of follow-up doses for vaccines that began at 2 months. This often includes DTaP, Hib, polio, pneumococcal, and rotavirus, depending on the schedule being used.

At 6 months, many babies receive additional doses again, and this is also the time when yearly influenza vaccination begins once a baby is old enough. Influenza vaccine is recommended for many infants starting at 6 months of age, with dosing depending on the child's prior influenza vaccination history. Some babies may also be eligible for COVID-19 vaccination depending on age and

current recommendations.

This repeated dosing may look redundant, but it is immunologically important. Infant vaccines often require a primary series to train the immune system, followed by boosters to strengthen and extend protection.

### **Around 12 months: a new phase of protection**

Near the first birthday, the schedule usually shifts toward vaccines that cover diseases for which babies become newly eligible as they age. Common examples include measles, mumps, and rubella vaccine; varicella vaccine; hepatitis A vaccine; and additional doses of pneumococcal or Hib vaccine depending on the product and the child's earlier doses. Some children also receive influenza vaccine seasonally and may continue COVID-19 vaccination if recommended.

This is a meaningful milestone. Around 12 months, babies begin transitioning from the early infant schedule into the toddler schedule, and their immune protection becomes broader and more durable. If your baby is a little late on one visit, clinicians can usually help catch up without restarting the series.

### **What side effects are common, and what is not**

Most vaccine reactions in infants are mild and short-lived. Common effects include fussiness, sleepiness, low-grade fever, temporary decreased appetite, or soreness where the shot was given. Oral rotavirus vaccine may occasionally be followed by mild digestive upset.

These reactions usually resolve on their own. They are generally a sign that the immune system is responding, not that the vaccine caused the illness it is meant to prevent.

More concerning reactions are uncommon. Seek prompt medical advice if your baby has trouble breathing, swelling of the face or lips, persistent inconsolable crying, marked lethargy, or any symptom that feels severe or out of proportion. For a young infant, fever deserves particular attention, especially fever in the first months of life.

### **How to prepare for vaccine visits**

Preparation is mostly about comfort and logistics. Bring your baby's immunization record if you have it, feed your baby as usual unless your clinician advises otherwise, and ask whether acetaminophen is appropriate in your situation before giving any medicine. Many families find it helps to plan for extra cuddling, a quiet remainder of the day, and a way to track temperature if needed.

It can also help to ask the clinician what to expect at the next visit, which vaccines are due later, and whether your baby qualifies for RSV protection. If your baby was born early or has ongoing medical issues, ask how the schedule may differ.

Good vaccine planning is not just about the shots themselves; it is also a chance to review feeding, growth, sleep, and any concerns that have come up since the last visit.