# **Combination Vaccines**

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Combination vaccines reduce the number of shots your child needs while protecting against several serious diseases.

#### Fewer Shots—Same Protection

Combination vaccines take two or more vaccines that could be given individually and put them into one shot. Children get the same protection as they do from individual vaccines given separately—but with fewer shots.

So, at a doctor's visit, your child may only get two or three shots to protect him from five diseases, instead of five individual shots. Fewer shots may mean less pain for your child and less stress for you. The measles, mumps, and rubella vaccine (MMR) and diphtheria, tetanus, and pertussis vaccine (DTaP) each protect your child against three diseases. However, these two vaccines are not considered true combination vaccines because in the United States, you cannot get separate vaccines for all of the diseases that MMR and DTaP protect against.

## Some examples of common combination vaccines for children are:

- Comvax, which combines Hib and Hep B
- Twinrix, which combines Hep A and Hep B
- Pediarix, which combines DTaP, Hep B, and IPV (polio)
- ProQuad, which combines MMR and varicella (chickenpox)
- Kinrix, which combines DTaP and IPV (polio)
- Pentacel, which combines DTaP, IPV (polio), and Hib

To learn about the diseases that vaccines prevent, visit: <a href="http://www.cdc.gov/vaccines/vpd-vac/fact-sheet-parents.html">http://www.cdc.gov/vaccines/vpd-vac/fact-sheet-parents.html</a>



Combination vaccines combine protection against 2 or more diseases into one shot.

## Fewer Shots—On Time Protection

Combination vaccines help parents, doctors, and nurses keep children up-to-date on vaccines.

Combining vaccines into fewer shots may mean that more children will get recommended vaccinations on time. And that means fewer delays in disease protection for children.











## **Safety And Effectiveness**

Before a combination vaccine is approved for use, it goes through careful testing to make sure the combination vaccine is as safe and effective as each of the individual vaccines given separately. And, just as with individual vaccines, there are systems in place to watch for any rare reactions to combination vaccines that can be detected only after the vaccine is used widely.

## **Side Effects**

Side effects from combination vaccines are usually mild. They are similar to those of the individual vaccines given separately.

Sometimes combination vaccines cause slightly more pain or swelling where the shot was given. But if your child got the shots individually, he or she might have pain or swelling in two or three spots, instead of just one.

If your child has moderate or serious side effects from a combination vaccine, tell your child's doctor. If the separate vaccines are available, the doctor may be able to give additional doses of certain vaccines separately.

## **Growing Future For Combination Vaccines**

As scientists develop and test new vaccines to protect children against more diseases, more combination vaccines may become available. This will allow children to get additional protection with fewer shots.

To learn more about combination vaccines, go to <u>www.cdc.gov/vaccines</u> or talk with your healthcare professional.

## **Recommendations for the MMRV Vaccine**

The MMRV vaccine combines the MMR (for measles, mumps, and rubella) vaccine with the chickenpox vaccine.

Some children who get the first MMRV shot at 12 through 23 months of age may have a higher chance of a seizure caused by fever after the shot. But, this is not common. These "febrile" seizures are scary for parents, but they are not harmful to children.

Because of this slightly higher risk of seizures, CDC recommends that children under 4 years old get the first dose of MMR and chickenpox vaccines separately.

The Centers for Disease Control and Prevention, American Academy of Family Physicians, and the American Academy of Pediatrics strongly recommend children receive combination vaccines whenever possible.