

Vaccine Adverse Effects

Despite the well documented safety of immunizations, recipients can still suffer rare adverse effects. The vast majority of these are mild with no lasting sequelae. In very rare instances more serious reactions to vaccines can occur.

Adverse reactions to vaccines can be divided into three main categories: local, systemic, and allergic. The most common reactions a child will experience will be of the local type.

Local reactions occur more commonly with inactivated vaccines. They consist of localized redness, pain and tenderness, and swelling at the site of the injection. These are generally self-limited and have no permanent sequelae.

Systemic reactions are more generalized and non-specific; fever, headache, malaise, myalgia, and anorexia. Because they are non-specific they may not even be caused by the vaccine. These symptoms may represent a viral infection for example that was just in the early stages when the child was immunized. Systemic reactions occur more often after receiving live attenuated vaccines. As a result if the symptoms are related to these vaccines they may not appear for 7-21 days.

The last types of reactions are allergic in nature. Severe allergic reactions (anaphylaxis) are very rare, but life threatening. They occur at a rate of <1/500,000 doses. Screening prior to immunization administration (see Recording and Documents for screening forms) helps reduce the chances of anaphylaxis.

Providers should report any clinically significant event that is a result of a vaccination. The Vaccine Adverse Event Reporting System has been in place since 1990 for providers to make these reports. This system allows both private and public immunization providers to report adverse effects of vaccines and will keep the results in a centralized database. The telephone number to call for answers to questions and to obtain VAERS forms is (800) 822-7967, or visit the VAERS website: www.vaers.hhs.gov. VAERS now accepts reports of adverse reactions through their online system.

MANAGEMENT OF ADVERSE REACTIONS

For most local reactions, cold compresses, analgesics/antipyretics, and antipruritics will suffice. Table 4 offers a good summary of the treatments for vaccine reactions including anaphylaxis.

For proper vaccine storage and handling, visit the link below:

http://www.vdh.state.va.us/epidemiology/Immunization/VFC/documents/forms/vacc_storage_chart.pdf

