TABLE 148-3 CONTRAINDICATIONS AND PRECAUTIONS FOR COMMONLY USED VACCINES IN ADULTS (CONTINUED)

Vaccine Formulation	Contraindications and Precautions
Pneumococcal polysaccharide	None, other than those listed for all vaccines
Pneumococcal conjugate	None, other than those listed for all vaccines
Hepatitis A	**Precaution**
	Pregnancy
Hepatitis B	**Contraindication**
	History of immediate hypersensitivity to yeast
Meningococcal conjugate	**Contraindication**
	History of severe allergic reaction to dry natural rubber (latex) (certain vaccine formulations; see text)
Meningococcal polysaccharide	**Contraindication**
	History of severe allergic reaction to dry natural rubber (latex)
Zoster	**Contraindications**
	Age <50 years
	Pregnancy
	Known severe immunodeficiency
	History of immediate hypersensitivity reaction to gelatin[a] or neomycin
	Precaution
	Receipt of specific antiviral agents (i.e., acyclovir, famciclovir, or valacyclovir) within 24 h before vaccination

[a]Extreme caution must be exercised in administering MMR, varicella, or zoster vaccine to persons with a history of anaphylactic reaction to gelatin or gelatin-containing products. Before administration, skin testing for sensitivity to gelatin can be considered. However, no specific protocols for this purpose have been published. [b]Recommendations for safely administering influenza vaccine to persons with egg allergies are reported in the annual ACIP recommendations for influenza vaccination (*www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html*).

Abbreviations: DT, diphtheria toxoid; DTaP, diphtheria, tetanus, and pertussis; GBS, Guillain-Barré syndrome; HPV, human papillomavirus; MCV4, quadrivalent meningococcal conjugate vaccine; MMR, measles, mumps, and rubella; Td, tetanus and diphtheria toxoids; Tdap, tetanus and diphtheria toxoids and acellular pertussis; TT, tetanus toxoid.

HISTORY OF IMMEDIATE HYPERSENSITIVITY TO A VACCINE COMPONENT A severe allergic reaction (e.g., anaphylaxis) to a previous dose of a vaccine or to one of its components is a contraindication to vaccination. While most vaccines have many components, substances to which individuals are most likely to have had a severe allergic reaction include egg protein, gelatin, and yeast. In addition, although natural rubber (latex) is not a vaccine component, some vaccines are supplied in vials or syringes that contain natural rubber latex. These vaccines can be identified by the product insert and should not be administered to persons who report a severe (anaphylactic) allergy to latex unless the benefit of vaccination clearly outweighs the risk for a potential allergic reaction. The much more common local or contact hypersensitivity to latex, such as to medical gloves (which contain synthetic latex that is not linked to allergic reactions), is *not* a contraindication to administration of a vaccine supplied in a vial or syringe that contains natural rubber latex. Vaccines routinely indicated for adults that, as of December 2012, were sometimes supplied in a vial or syringe containing natural rubber include Havrix hepatitis A vaccine (syringe); Vaqta hepatitis A vaccine (vial and syringe); Engerix-B hepatitis B vaccine (syringe); Recombivax HB hepatitis B vaccine (vial); Cervarix HPV vaccine (syringe); Fluarix, Fluvirin, Agriflu, and Flucelvax influenza vaccines (syringe); Adacel and Boostrix Tdap (tetanus and diphtheria toxoids and acellular pertussis) vaccines (syringe); Td (tetanus and diphtheria toxoids) vaccines (syringe); Twinrix hepatitis A and B vaccine (syringe); and Menomune meningococcal polysaccharide vaccine (vial).

PREGNANCY Live-virus vaccines are contraindicated during pregnancy because of the theoretical risk that vaccine virus replication will cause congenital infection or have other adverse effects on the fetus. Most live-virus vaccines, including varicella vaccine, are not secreted in breast milk; therefore, breast-feeding is not a contraindication for live-virus or other vaccines. Pregnancy is not a contraindication to administration of inactivated vaccines, but most are avoided during pregnancy because relevant safety data are limited. Two inactivated vaccines, Tdap vaccine and inactivated influenza vaccine, are routinely recommended for pregnant women in the United States. Tdap vaccine is recommended during each pregnancy, regardless of prior vaccination status, in order to prevent pertussis in neonates. Annual influenza vaccination is recommended for all persons 6 months of age and older, regardless of pregnancy status. Some other vaccines, such as meningococcal vaccines, may be given to pregnant women in certain circumstances.

IMMUNOSUPPRESSION Live-virus vaccines elicit an immune response due to replication of the attenuated (weakened) vaccine virus that is contained by the recipient's immune system. In persons with compromised immune function, enhanced replication of vaccine viruses is possible and could lead to disseminated infection with the vaccine virus. For this reason, live-virus vaccines are contraindicated for persons with severe immunosuppression, the definition of which may vary with the vaccine. Severe immunosuppression may be caused by many disease conditions, including HIV infection and hematologic or generalized malignancy. In some of these conditions, all affected persons are severely immunocompromised. In others (e.g., HIV infection), the degree to which the immune system is compromised depends on the severity of the condition, which in turn depends on the stage of disease or treatment. For example, measles-mumps-rubella (MMR) vaccine may be given to HIV-infected persons who are not severely immunocompromised. Severe immunosuppression may also be due to therapy with immunosuppressive agents, including high-dose glucocorticoids. In this situation, the dose, duration, and route of administration may influence the degree of immunosuppression.

VACCINE INFORMATION STATEMENTS

A VIS is a one-page (two-sided) information sheet produced by the CDC that informs vaccine recipients (or their parents or legal representatives) about the benefits and risks of a vaccine. VISs are mandated by the National Childhood Vaccine Injury Act (NCVIA) of 1986 and—whether the vaccine recipient is a child or an adult—must be provided for any vaccine covered by the Vaccine Injury Compensation Program. As of July 2011, vaccines that are covered by the NCVIA and that are licensed for use in adults include Td, Tdap, hepatitis A, hepatitis B, HPV, trivalent inactivated influenza, trivalent live intranasal influenza, MMR, 13-valent pneumococcal conjugate, meningococcal, polio, and varicella vaccines. When combination vaccines for which no separate VIS exists are given (e.g., hepatitis A and B combination vaccine), all relevant VISs should be provided. VISs also exist for some vaccines not covered by the NCVIA, such as pneumococcal polysaccharide, Japanese encephalitis, rabies, zoster, typhoid, and yellow fever vaccines. The use of these VISs is encouraged but is not mandated.