The Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention provides general guidelines for the administration of its recommended routine vaccinations, which are aimed at preventing 17 diseases in children and adults. The recommendations are based on scientific evidence combined with the expertise of a group of health care professionals and public health officials. Sections of this guideline were recently updated, including revisions to contraindications and precautions, stricter criteria for selecting an adequate storage unit for vaccines, additional guidance for maintaining the cold chain in case of an unavoidable temperature deviation, and updated recommendations for vaccinations after hematopoietic cell transplant.

Updated Recommendations

CONTRAINDICATIONS AND PRECAUTIONS

**Herpes Zoster.** Contraindications and precautions were added for the herpes zoster virus vaccine (Zostavax). These include previous severe reaction to the vaccine or component, substantial suppression of cellular immunity, and pregnancy as contraindications. Moderate or severe acute illness with or without fever was added as a precaution.

**DTaP and DT, Td.** Precautions were added for the diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP; Tripedia) and the diphtheria and tetanus toxoids vaccine (DT, Td; Decavac). History of arthus-type hypersensitivity reactions after a dose of a tetanus or diphtheria-toxoid containing vaccine (including the meningococcal vaccine) should prompt deferral of these vaccines for at least 10 years.

**Measles, Mumps, Rubella.** Need for tuberculin testing was added as a precaution for the measles, mumps, rubella vaccine.

**Varicella.** The contraindication of substantial suppression of cellular immunity was updated to known severe immunodeficiency.

**Influenza.** Guillain-Barré syndrome that developed less than six weeks after a previous influenza vaccine dose was added as a precaution for the trivalent inactivated influenza vaccine. The contraindication of known severe immunodeficiency was updated to immunosuppression for the live, attenuated influenza vaccine.

**Meningitis.** History of Guillain-Barré syndrome was removed as a precaution for the meningococcal vaccine.

**Rotavirus.** Severe combined immunodeficiency was added as a contraindication, and other altered immunocompetence was included as a precaution for the rotavirus vaccine.

STORAGE UNITS

Additional recommendations for storage units include giving a new unit at least two days of operation, as needed, to establish a stable operating temperature; selecting a storage unit of sufficient size to place the vaccines away from the walls of the unit; and using combined units only to store limited quantities of vaccines. Clinical specimens should not be stored with vaccines if possible, but if stored together, the specimens should be kept on the shelf below the vaccines to prevent contamination if the specimens leak.
Practice Guidelines

RESPONSE TO OUT-OF-RANGE TEMPERATURE READINGS

Vaccines that have been stored at an unacceptable temperature generally should not be administered. However, if the vaccine has already been administered, the physician should seek guidance from the state health department.

VACCINATION AFTER HEMATOPOIETIC CELL TRANSPLANT

Patients who undergo hematopoietic cell transplant are at increased risk of vaccine-preventable diseases and should be routinely revaccinated after transplantation. Most inactivated vaccines should be initiated six months after transplantation. The inactivated influenza vaccine should be administered no later than six months after transplantation (although it may be administered as early as at four months) and annually thereafter. A second dose should be considered if the influenza vaccine is given at four months, and is required in children who are receiving the vaccine for the first time. Three to six months after transplantation, three sequential doses of the pneumococcal conjugate vaccine should be given, followed by a dose of the pneumococcal polysaccharide vaccine. Beginning six months after transplantation, three doses of the \textit{Haemophilus influenzae} type b vaccine should be given, with one month separating each dose. The measles, mumps, rubella vaccine and the varicella vaccine should be given 24 months after transplantation in patients who are immunocompetent. However, the decision to administer the varicella vaccine should be based on assessment of the individual patient’s risk and immune status.

Answers to This Issue’s CME Quiz


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