

VARICELLA OUTBREAK CONTROL

The Los Angeles County Acute Communicable Disease Control and Immunization Programs request that providers implement a second dose of varicella vaccine for children exposed to varicella during a school outbreak. In June 2005, the ACIP made provisional recommendations for a second dose varicella vaccine for outbreak control. These ACIP recommendations are under review by the Director of CDC and the Department of Health and Human Services (HHS) and will be official when published in CDC's Morbidity and Mortality Weekly Report (MMWR). However, Los Angeles County has decided to implement these recommendations now to ensure maximum protection of school children.

Children exposed to varicella outbreaks should be offered a second dose of varicella vaccine, provided the appropriate vaccination interval has elapsed since the first dose (3 months for persons aged 12 months through 12 years and at least 4 weeks for persons aged 13 years or older). Children that have already had two doses of varicella vaccine do not need any additional doses.

Attached is the Prevention of Varicella - Provisional Updated ACIP Recommendations for Varicella Use, which is also available at:

http://www.cdc.gov/nip/vaccine/varicella/varicella_acip_recs.pdf.

Prevention of Varicella –Provisional Updated ACIP Recommendations for Varicella Vaccine Use

In June 2005, the Advisory Committee on Immunization Practices (ACIP) expanded recommendations for varicella vaccine to promote wider use of the vaccine for adolescents and adults, HIV-infected children, and a 2nd dose for outbreak control. Also, the ACIP approved a revised definition for evidence of immunity to varicella. These ACIP recommendations are under review by the Director of CDC and the Department of Health and Human Services (HHS) and will be official when published in CDC's *Morbidity and Mortality Weekly Report* (MMWR).

The updated recommendations include the following:

- 1. Middle, high school and college requirements.** ACIP reiterates its previous recommendation that official health agencies should take necessary steps, including developing and enforcing school immunization requirements, to ensure that students at all grade levels (including college) and children in child care facilities are protected against vaccine-preventable diseases, which include varicella. For varicella, this recommendation adds middle, high school and college requirements to the child care and elementary school entry requirements already covered by the 1999 recommendation (<http://www.cdc.gov/mmwr/PDF/rr/rr4806.pdf>). School and child care immunization requirements should be implemented when the varicella vaccine has had time to be well incorporated into practice and supply is adequate.
- 2. Varicella vaccination of HIV-infected children.** Asymptomatic or mildly symptomatic HIV-infected children aged ≥ 12 months with age-specific CD4+ T-lymphocyte counts $\geq 15\%$ and without evidence of varicella immunity should receive two doses of varicella vaccine 3 months apart. Varicella vaccine was previously recommended for asymptomatic or mildly symptomatic HIV-infected children with age-specific CD4+ T-lymphocyte counts $\geq 25\%$ (<http://www.cdc.gov/mmwr/PDF/rr/rr4806.pdf>).
- 3. Prenatal assessment and postpartum vaccination.** Women should be assessed prenatally for evidence of varicella immunity. Upon completion or termination of their pregnancies, women who do not have evidence of varicella immunity should receive the 1st dose of varicella vaccine before discharge from the healthcare facility. The 2nd dose should be administered 4 to 8 weeks later (at the postpartum or other healthcare visit). Standing orders are recommended for healthcare settings where completion or termination of pregnancy occurs to ensure administration of varicella vaccine.
- 4. Vaccination of persons aged ≥ 13 years.** Varicella vaccine was previously recommended for persons without evidence of immunity in this age group who 1) have close contact with persons at high risk for severe disease (health care workers and family contacts of immunocompromised persons) or 2) are at high risk for exposure or transmission (<http://www.cdc.gov/mmwr/preview/mmwrhtml/00042990.htm>). The ACIP now recommends that all other persons aged ≥ 13 years without evidence of immunity be vaccinated with 2 doses of varicella vaccine 4-8 weeks apart (also see revised definition for evidence of immunity). The vaccine may be offered during routine healthcare visits.
- 5. Second dose varicella vaccine for outbreak control.** During a varicella outbreak, persons who have received 1 dose of varicella vaccine should, resources permitting, receive a 2nd dose, provided the appropriate vaccination interval has elapsed since the

first dose (3 months for persons aged 12 months through 12 years and at least 4 weeks for persons aged ≥ 13 years).

Contraindications and precautions to use of varicella vaccine are available at:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/00042990.htm>

ACIP approved **a revised definition for evidence of immunity to varicella**. Evidence of immunity to varicella includes any of the following:

1. Written documentation of age-appropriate vaccination:
 - a. Children vaccinated from age 12 months to age 12 years: 1 dose
 - b. Persons vaccinated at age 13 years or older: 2 doses 4-8 weeks apart,
2. Born in the US before 1966,
3. History of varicella disease based on healthcare provider diagnosis *or* self- or parental- report of typical varicella disease for non-US born persons born before 1966, and all persons born during 1966-1997. For persons reporting a history of atypical mild case, healthcare providers should seek either a) an epidemiologic link to a typical varicella case (e.g., case occurred in the context of an outbreak or patient had household exposure in the previous 3 weeks) or b) evidence of laboratory confirmation, if it was performed at the time of acute disease. When such documentation is lacking, persons should not be considered as having a valid history of disease because other diseases may mimic mild atypical varicella. For persons born during or after 1998, history of disease is no longer considered as evidence of immunity, unless the illness was laboratory confirmed,
4. History of herpes zoster based on healthcare provider diagnosis,
5. Laboratory evidence of immunity* or laboratory confirmation of disease.

* Commercial assays can be used to assess disease-induced immunity, but they lack sensitivity to detect vaccine-induced immunity in all instances (may yield false negative results). gpELISA or FAMA provide more sensitive results, but they are not commercially available.