GUIDELINES FOR CHICKENPOX OUTBREAK PREVENTION AND CONTROL IN SCHOOL OR CHILDCARE SETTINGS

THE DISEASE
The varicella zoster virus (VZV) causes chickenpox (varicella), a vaccine preventable, generalized rash illness that is spread by coughing, sneezing or direct contact. VZV also causes shingles (herpes zoster), a localized rash in a person who has already had chickenpox, and is spread through direct contact with the shingles rash and through the air. People who have never had chickenpox can develop chickenpox after exposure to a person with chickenpox or shingles. A person is considered to have immunity to chickenpox if she or he has had the disease, or received the varicella (chickenpox) vaccine.

One dose of chickenpox vaccine is not fully protective in all people and immunity induced by a single dose of varicella vaccine has been shown to wane after a number of years. As of June 2006, it has been recommended that all persons who have only been vaccinated once (mostly children) receive a second dose of varicella vaccine during routine healthcare visits or when exposure is likely, such as during an outbreak of chickenpox in their school. We anticipate beginning with the 2008-2009 school year; a school-aged vaccinated child will only be considered fully immune if he/she has had two doses of varicella-containing vaccine.

CHILDREN WITH CHICKENPOX OR SHINGLES
Children with uncomplicated chickenpox who have been excluded from school or childcare may return when the rash has crusted. This may be several days in mild cases and several weeks in severe cases or in immunocompromised children. Some vaccinated children will develop mild “breakthrough” varicella but must still be excluded. Immunocompromised and other children with a prolonged course should be excluded for the duration of the vesicular eruption. Since transmission from herpes zoster (shingles) does occur, the precautions should be the same as for varicella. Persons with non-disseminated zoster on antiviral therapy for 24 hours may return. (See attached guidelines for evaluating chickenpox rash in recipients of varicella vaccine in Day Care and School settings)

NOTIFICATION
School administrators are required to report to the CT Department of Public Health (CTDPH) on demographics and the vaccination status of all cases they or their health personnel hear about by submitting a completed Varicella Case Report Form to CTDPH. The form can be downloaded readily from the DPH website: The link can be found at: http://www.dph.state.ct.us/BCH/infectiousdise/immuniza.htm. The completed form should be faxed directly to the state Immunization Program at (860-509-7945).
CARE OF EXPOSED SUSCEPTIBLE PERSONS

Vaccination:
In an unvaccinated household, the varicella attack rate can be 90%. Varicella vaccine given up to 5 days after exposure can prevent infection. In schools and childcare settings vaccination of susceptible children during an outbreak has prevented disease even when more than 5 days post exposure has elapsed. Vaccine should be offered as soon as possible, even if the outbreak is identified late. Individuals 13 years or older require 2 doses of vaccine to be fully immunized given at least four weeks apart, but may return to school after the first dose is administered. In outbreak situation, a second dose of vaccine is recommended for all those children who have only received one dose to control the outbreak.

OUTBREAK MANAGEMENT

Definitions:
Outbreak: Three or more cases of varicella in one facility within a three-week period.
Chickenpox outbreaks in some settings (e.g., child care facilities, schools) can last 3-6 months.

Exposure: For control purposes, a person is deemed exposed in a school outbreak if they have spent at least 4 hours in the vicinity (e.g., classroom, cafeteria) of an infected person. This does not mean, however, that there is no risk for persons with less exposure.

Letters:
The exposure letter (attached) should be distributed to all unvaccinated children and staff upon the first known case of chickenpox or shingles unless documentation exists confirming immunity of all persons. During an outbreak, an outbreak letter (attached) should be distributed to all in the school, regardless of previous vaccination status.

Exclusion:
Chickenpox disease should be addressed similarly to other highly contagious vaccine preventable diseases (e.g., measles, rubella, mumps, pertussis, H. influenzae). Please see attached “Guidelines for Health Care Personnel in Evaluating Chickenpox-like Rash in Recipients of Varicella Vaccine in Day Care and School Settings.”

1) Exclude immediately immunocompromised persons (including those susceptible & pregnant) when there is at least one case of chickenpox/shingles.
2) Exclude all non-compliant (unvaccinated) children required to have chickenpox (varicella) immunity by regulation.
3) Exclude exposed children with signed medical or religious exemptions, and infants <1 year or >1 year but not yet vaccinated from day 8 of initial exposure until 21 days after the last case.

An excluded child may return to school immediately upon receiving one dose of vaccine, but immunocompromised persons should only return as per written directions by their physician.