Dear Camp Sponsor / Director,

The Connecticut Department of Public Health (DPH) Immunization Program would like to raise awareness about an ongoing mumps outbreak in the Northeast United States and to discuss vaccine-preventable disease reporting and vaccination in the camp setting. Since August 2009, a mumps outbreak that originated in Europe has been ongoing in New York State, New Jersey, and Connecticut. This outbreak began at a New York summer camp for boys in summer 2009, when a child developed mumps soon after returning from travel in the United Kingdom. Subsequently, other camp attendees and staff members developed mumps, and mumps spread to multiple locations after the camp attendees returned home. Although reports of mumps are on the decline, it is possible that mumps may still be circulating this summer.

RECOGNIZING MUMPS
Common symptoms of mumps are:
- swelling and tenderness of the salivary glands, particularly the ones underneath and in front of the ears, called the parotid glands;
- feeling tired and achy; and
- fever.

Mumps is spread through the air by droplets from the mouth, nose or throat of a person with mumps, usually when the person coughs, sneezes or talks. People can spread mumps from 1–2 days before their glands begin swelling through 5 days after the swelling began.

DISEASE REPORTING
Most vaccine-preventable diseases are reportable by law, and often even one case is considered an outbreak. The camp health director or other healthcare provider may want to discuss with staff the symptoms of vaccine-preventable diseases, especially pertussis, measles and mumps (1). The need to report the first sign of illness to the director should be stressed. If one of these diseases is suspected in even one camper or camp employee, or a cluster of people have symptoms that might be caused by one of these diseases, DPH and your local health department should be notified immediately (2). Delays in reporting have led to large outbreaks at camps. If you or your health director and / or camp physician are considering the diagnosis of a vaccine-preventable disease and are ordering testing, then you should report the case at that time. By notifying DPH, as required, DPH can facilitate testing and institution of control measures, if indicated. Also of note, there “shall be available a defined area where ill or injured individuals may rest and receive care until they are either removed to their homes or recovered. This area shall be adequate to provide for the temporary isolation of any suspected communicable diseases and shall have its own toilet facilities not used for other purposes within the camp” (3).

VACCINE-PREVENTABLE DISEASES IN THE CAMP SETTING
Over the last several years, there has been an increase in the number of cases of vaccine-preventable diseases in the U.S. that are linked to foreign travel or residence. Measles, mumps, rubella, pertussis and varicella (chickenpox) spread by direct contact or through coughing and sneezing and can be spread rapidly in camp settings.
There is also a growing presence of international staff working at summer camps in Connecticut. These individuals provide a valuable contribution and enhance the camping experience. However, they may introduce vaccine-preventable diseases that are endemic in their country of origin. Measles and mumps continue to circulate in European countries, particularly the United Kingdom, due to low levels of vaccination in these countries. The best protection against vaccine-preventable diseases is broad vaccination coverage. Therefore, vaccination of all individuals who will be working in or attending summer camps is recommended.

VACCINATION IN THE CAMP SETTING

Immunizations For Campers And Youth Staff (age less than 19 years)

The part of the Public Health Code that applies to campers and staff is 19-13-B27a part (l), which requires that the camp maintain immunization records and that “all staff and campers shall be adequately immunized as specified in Sections 10-204a-1-4 of the Regulations of Connecticut State agencies against diphtheria, tetanus, pertussis, polio, measles, rubella, and any other diseases specified in Section 10-204a” (3,4). Section 10-204a refers to the school immunization requirements; as an aid, attached is the Immunization Requirements for Newly Enrolled Students at Connecticut Schools, 2010–2011 School Year. Individual camp policy may choose to recommend or require additional specific immunizations of their campers.

The Advisory Committee on Immunization Practices (ACIP) recommends that 2 doses of mumps vaccine be required to confer immunity for mumps. Most U.S. residents receive 2 doses of mumps vaccine in the form of the combined measles, mumps, and rubella vaccine (MMR), first at age 12–15 months, and a second dose upon primary or post-secondary school entrance. Experience with outbreaks has shown two doses of mumps vaccine to be more effective than one dose. CT DPH recommends two doses of MMR vaccine in order to ensure maximal protection from measles, mumps and rubella.

Several additional vaccines are recommended for adolescent campers (5). Pertussis-containing vaccine, in the form of the Tdap vaccine is recommended at age 11–12 years, and for anyone older who has not yet received a dose. Meningococcal conjugate vaccine (MCV4) is also recommended at age 11–12 years, and for children through 18 years if not previously vaccinated. Two doses of varicella vaccine are recommended for persons of any age without evidence of immunity (6).

Additional Information

For additional information on immunizations, please call the CT DPH Immunization Program at (860) 509-7929. The remainder of this letter details recommended vaccines for adults, which is intended to guide camp sponsors / directors looking for information on what he/she might consider when developing camp immunization policies for adult staff.

Recommended Immunizations For Adult Staff And Employees (age 19 and older)

The following immunizations should be considered for all adult summer camp staff and employees, including international staff. The recommendations are based on the current adult vaccine recommendations of the ACIP (7). For further details and special circumstances, consult ACIP publications or the National Center for Immunization and Respiratory Diseases (NCIRD) of the Centers for Disease Control and Prevention (CDC) (8,9).

Recommendations for administration of vaccines for adult summer camp counselors and seasonal camp workers are organized into three broad categories:

1. The following immunizations are strongly recommended:
• Measles, mumps, and rubella vaccines for people born on or after January 1, 1957, because these vaccine-preventable diseases are highly communicable and the risk of transmission is high. The recommended form of administration is the MMR vaccine. At a minimum this would require:
  – 2 doses of measles containing vaccine, 2 doses of mumps containing vaccine and 1 dose of rubella containing vaccine (MMR), with the first dose administered no more than 4 days before the 1st birthday and with the two doses given at least 28 days apart; or
  – Protection against measles, mumps, and rubella confirmed in writing by a physician, physician assistant or advanced practice registered nurse based on specific blood testing by a certified laboratory.

• Tetanus toxoid vaccine because the camp environment increases the risk of exposure to Clostridium tetani spores.
  – 1 booster dose of tetanus-containing vaccine within the past 10 years.
  – Tdap (adolescent and adult tetanus, diphtheria and acellular pertussis) vaccine is the preferred tetanus-containing vaccine for those who have not yet had a dose; however, Td (adult tetanus and diphtheria) may be used.

• Pertussis containing vaccine, because pertussis is a highly-communicable disease and the risk of transmission is high.
  – A single booster dose of Tdap (tetanus, diphtheria and acellular pertussis) vaccine within the past 10 years for those who have not yet had a dose.

2. The following immunizations are recommended for all adults:
• Varicella (chickenpox) – in the absence of disease history (6); and
• Poliovirus – if not previously vaccinated with either inactivated or live oral vaccine.

3. The following immunizations may be indicated in certain circumstances (8):
• Hepatitis B— for health workers and lifeguards.
• Meningococcal vaccine—for first year college students that live in dormitories and travelers who have not previously been vaccinated.

Thank you for your efforts to keep camps free of vaccine-preventable disease.

Sincerely,

Kathy Kudish, DVM, MSPH
Epidemiologist, Immunization Program

Debra L. Johnson
Chief, Community Based Regulation Section

IMPORTANT LINKS FOR ADDITIONAL INFORMATION:
1 DPH Infectious Disease Fact Sheets: http://www.ct.gov/dph/cwp/view.asp?a=3136&q=388278
2 Infectious Disease Reporting: http://www.ct.gov/dph/cwp/view.asp?a=3136&Q=453590&PM=1
4 Public Health Code 10-204a: http://www.dir.ct.gov/dph/PHC/docs/3_School_Related_Immunizati.doc
6 Prevention of Varicella: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5604a1.htm?s_cid=rr5604a1_e
8 Advisory Committee on Immunization Practices: http://www.cdc.gov/vaccines/recs/acip/default.htm
9 CDC’s National Center for Immunization and Respiratory Diseases: http://www.cdc.gov/vaccines
IMMUNIZATION REQUIREMENTS FOR NEWLY ENROLLED STUDENTS AT CONNECTICUT SCHOOLS
2010-2011 SCHOOL YEAR

PRESCHOOL
(Children entering after age 3 but before age 5)

- DTaP: 4 doses
- Polio: 3 doses
- MMR: 1 dose on or after the 1st birthday
- Hep B: 3 doses
- Varicella: 1 dose on or after the 1st birthday or verification of disease
- Hib: 1 dose on or after the 1st birthday

KINDERGARTEN

- DTaP: At least 4 doses. The last dose must be given on or after 4th birthday
- Polio: At least 3 doses. The last dose must be given on or after 4th birthday
- MMR: 1 dose on or after the 1st birthday
- Measles: Second dose of measles vaccine (or MMR), given at least 4 weeks after the first dose
- Hib: Children less than 5 yrs of age need 1 dose at 12 months or older. Children 5 and older do not need proof of Hib vaccination
- Hep B: 3 doses
- Varicella: 1 dose on or after the 1st birthday or verification of disease

GRADES 1-6

- DTaP/Td/Tdap: At least 4 doses. The last dose must be given on or after 4th birthday. Students who start the series at age 7 or older only need a total of 3 doses.
- Polio: At least 3 doses. The last dose must be given on or after 4th birthday
- MMR: 1 dose on or after the 1st birthday
- Measles: Second dose of measles vaccine (or MMR), given at least 4 weeks after the first dose
- Hep B: 3 doses
- Varicella: 1 dose on or after the 1st birthday or verification of disease

GRADE 7-12

- DTaP/Td/Tdap: At least 4 doses. The last dose must be given on or after 4th birthday. Students who start the series at age 7 or older only need a total of 3 doses.
- Polio: At least 3 doses. The last dose must be given on or after 4th birthday
- MMR: 1 dose on or after the 1st birthday
- Measles: Second dose of measles vaccine (or MMR), given at least 4 weeks after the first dose
- Hep B: 3 doses
- Varicella: 1 dose on or after first birthday or verification of disease

**VARICELLA VACCINE:** For students <13 years of age, 1 dose given on or after the 1st birthday. For students 13 years of age or older, 2 doses given at least 4 weeks apart

**VERIFICATION OF DISEASE:** Confirmation in writing by a MD, PA, or APRN that the child has a previous history of disease, based on family or medical history

Revised 1/11/2010
Important Reminders:

- DTaP vaccine is not given on or after 7th birthday
- DTaP may be given for all doses in the primary series
- Tdap should be given in lieu of Td vaccine for children 10 years and older unless contraindicated. Tdap is only licensed for one dose.
- Hib is not required for children 5 years of age or older
- Hep B requirement for school year 2010-2011 applies to all students in grades K-12
  Spacing intervals for a valid Hep B series are at least 4 weeks between dose #1 and dose #2; 8 weeks between dose #2 and dose #3; at least 16 weeks between dose #1 and dose #3; dose #3 should not be given before 24 weeks of age.
- Second measles (or MMR) for school year 2010-2011 applies to all students in grades K-12
- Varicella requirements went into effect for any child born on or after 1/1/1997 and for students entering 7th grade after August 2000. For 2010-2011, this requirement applies to all students in grades K-12.
- Laboratory confirmation of immunity is only acceptable for Hepatitis B, Measles, Mumps, Rubella, and Varicella

New Entrant Definition:

*New entrants are any students who are new to the school district, including preschoolers and all students coming in from Connecticut private, parochial and charter schools located in the same or another community. All students entering kindergarten, including those moving from any public or private pre-school program, even in the same school district, are considered new entrants. The one exception is students returning from private approved special education placements – they are not considered new entrants.

Commonly Administered Combination Vaccines:

<table>
<thead>
<tr>
<th>Vaccine:</th>
<th>Contains:</th>
<th>Brand Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTaP-IPV-Hib</td>
<td>Diphtheria-tetanus-pertussis-injectable polio-Haemophilus influenza type B</td>
<td>Pentacel</td>
</tr>
<tr>
<td>DTaP-HIB</td>
<td>Diphtheria- tetanus-pertussis-Haemophilus influenza type B</td>
<td>TriHibit</td>
</tr>
<tr>
<td>Hib-Hep B</td>
<td>Haemophilus influenza type B-hepatitis B</td>
<td>Comvax</td>
</tr>
<tr>
<td>DTaP-IPV-Hep B</td>
<td>Diphtheria-tetanus-pertussis-Injectable polio-hepatitis B</td>
<td>Pediarix</td>
</tr>
<tr>
<td>MMR</td>
<td>Measles-mumps-rubella</td>
<td>MMR II</td>
</tr>
<tr>
<td>MMRV</td>
<td>Measles-mumps-rubella-varicella</td>
<td>ProQuad</td>
</tr>
<tr>
<td>PCV 7</td>
<td>Streptococcus pneumoniae (7serovars)</td>
<td>Prevnar</td>
</tr>
<tr>
<td>PCV13</td>
<td>Streptococcus pneumoniae (13 serovars)</td>
<td>Prevnar 13</td>
</tr>
<tr>
<td>DTaP-IPV</td>
<td>Diphtheria-tetanus-pertussis-injectable polio</td>
<td>Kinrix</td>
</tr>
<tr>
<td>Tdap</td>
<td>Tetanus-diphtheria-pertussis</td>
<td>Adacel/Boostrix</td>
</tr>
<tr>
<td>Td</td>
<td>Tetanus-diphtheria</td>
<td>Td</td>
</tr>
</tbody>
</table>