Dear Camp Sponsor / Director,

The Connecticut Department of Public Health (DPH) Immunization Program would like to raise awareness about ongoing measles outbreaks in the United States and to discuss vaccine-preventable disease reporting and vaccination in the camp setting. As of May 24, 2019, the Centers for Disease Control and Prevention (CDC) has reported that 940 people from 26 states have had measles this year, including 3 in Connecticut. The CDC is updating these numbers weekly on their web site at: http://www.cdc.gov/measles/cases-outbreaks.html.

These outbreaks highlight the fact that measles is still common in many parts of the world including some countries in Europe, Asia, the Pacific, and Africa. Travelers with measles continue to bring the disease into the U.S. Measles can spread when it reaches a community in the U.S. where groups of people are unvaccinated.

RECOGNIZING MEASLES

The symptoms of measles generally appear 10 to 14 days after a person is infected.

Measles typically begins with

- high fever, (usually in excess of 102° Fahrenheit)
- cough,
- runny nose (coryza), and
- red, watery eyes (conjunctivitis).

Three to five days after symptoms begin, a rash breaks out. It usually begins as flat red spots that appear on the face at the hairline and spread downward to the neck, trunk, arms, legs, and feet. Small raised bumps may also appear on top of the flat red spots. The spots may become joined together as they spread from the head to the rest of the body. **When the rash appears, a person’s fever may spike to more than 104° Fahrenheit.**

After a few days, the fever subsides and the rash fades.
DISEASE REPORTING

Most vaccine-preventable diseases are reportable by law. The camp physician, advanced practice registered nurse or other healthcare provider may want to discuss with staff the symptoms of vaccine-preventable diseases, especially measles, pertussis, and mumps (1). The need to report the first sign of illness to the health care personnel 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 the diagnosis of a vaccine-preventable disease is being considered and testing is being ordered, the case should be reported at that time. By notifying DPH, DPH can facilitate testing and institute control measures, if indicated. At the camp, there should 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. The 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.

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) are 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 due to low levels of vaccination in some areas. 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)

Camps are required to maintain immunization records and to ensure 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). Medical and religious exemptions are allowed by law, but anyone filing an exemption will be excluded in the event of a disease outbreak. Section 10-204a refers to the school immunization requirements; as an aid, attached is the *Immunization Requirements for Enrolled Students in Connecticut Schools, 2019–2020 School Year*. Individual camp policy may choose to recommend or require additional specific immunizations of their campers.

Measles can be prevented with the MMR (measles, mumps, and rubella) vaccine. One dose of MMR vaccine is about 93% effective at preventing measles if exposed to the virus, and two doses are about 97% effective. Most U.S. residents receive 2 doses of MMR, first at age 12–15 months, and a second dose upon primary or post-secondary school entrance.
Two doses of MMR are required at kindergarten entry and all grade levels above for children attending school in Connecticut.

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, with a booster dose at age 16 years. Two doses of varicella vaccine are recommended for persons of any age without evidence of immunity (5).

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 camps 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, seasonal workers, and employees, including international staff. The recommendations are based on the current adult vaccine recommendations of the Advisory Committee on Immunization Practices (ACIP) (6). For further details and special circumstances, consult ACIP publications or the National Center for Immunization and Respiratory Diseases (NCIRD) of the CDC (7,8).

The following immunizations are strongly recommended:

- MMR vaccine for people born on or after January 1, 1957, because these vaccine-preventable diseases are highly communicable and the risk of transmission is high. At a minimum this would require:
  - At least 1 dose of MMR, administered no more than 4 days before the 1st birthday; 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.

  NOTE: Persons who received inactivated (killed) measles vaccine or measles vaccine of unknown type during 1963–1967 should be revaccinated with at least 1 dose of MMR vaccine.

- 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.

- Tetanus-containing 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.

- Varicella (chickenpox) – in the absence of disease history (5).

The following immunizations may be indicated for adults in certain circumstances (6):

- Hepatitis B— for health workers and lifeguards.

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

Sincerely,

Kathy Kudish, DVM, MSPH
Immunization Program Manager
Connecticut Department of Public Health

Kristin Gerard, MPH
Epidemiologist, Immunization Program
Connecticut Department of Public Health

IMPORTANT LINKS FOR ADDITIONAL INFORMATION:

1. DPH Infectious Disease Fact Sheets: https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Infectious--Vaccine-Preventable-Disease-Fact-Sheets


5. Prevention of Varicella: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5604a1.htm?s_cid=rr5604a1_e


9. CDC’s National Center for Immunization and Respiratory Diseases: http://www.cdc.gov/vaccines
IMMUNIZATION REQUIREMENTS FOR ENROLLED STUDENTS IN CONNECTICUT SCHOOLS
2019-2020 SCHOOL YEAR

PRESCHOOL

DTaP: 4 doses (by 18 months for programs with children 18 months of age)
Polio: 3 doses (by 18 months for programs with children 18 months of age)
MMR: 1 dose on or after 1st birthday
Hep B: 3 doses, last one on or after 24 weeks of age
Varicella: 1 dose on or after 1st birthday or verification of disease
Hib: 1 dose on or after 1st birthday
Pneumococcal: 1 dose on or after 1st birthday
Influenza: 1 dose administered each year between August 1st-December 31st
(Hepatitis A: 2 doses given six calendar months apart, 1st dose on or after 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: 2 doses separated by at least 28 days, 1st dose on or after 1st birthday
Hep B: 3 doses, last dose on or after 24 weeks of age
Varicella: 2 doses separated by at least 3 months-1st dose on or after 1st birthday; or verification of disease
Hib: 1 dose on or after 1st birthday for children less than 5 years old
Pneumococcal: 1 dose on or after 1st birthday for children less than 5 years old
Hepatitis A: 2 doses given six calendar months apart, 1st dose on or after 1st birthday

GRDES 1-6

DTaP/Td: 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: 2 doses separated by at least 28 days, 1st dose on or after 1st birthday
Hep B: 3 doses, last dose on or after 24 weeks of age
Varicella: 2 doses separated by at least 3 months-1st dose on or after 1st birthday; or verification of disease
Hepatitis A: 2 doses given six calendar months apart, 1st dose on or after 1st birthday

GRADE 7

Td/tp/Td: 1 dose for students who have completed their primary DTaP series. Students who start the series at age 7 or older only need a total of 3 doses of tetanus-diphtheria containing vaccine, one of which must be Tdap
Polio: At least 3 doses. The last dose must be given on or after 4th birthday
MMR: 2 doses separated by at least 28 days, 1st dose on or after 1st birthday
Meningococcal: 1 dose
Hep B: 3 doses, last dose on or after 24 weeks of age
Varicella: 2 doses separated by at least 3 months-1st dose on or after 1st birthday; or verification of disease
Hepatitis A: 2 doses given six calendar months apart, 1st dose on or after 1st birthday

Revised 1/3/2019
Tdap/Td: 1 dose for students who have completed their primary DTaP series. Students who start the series at age 7 or older only need a total of 3 doses of tetanus-diphtheria containing vaccine, one of which must be Tdap.

Polio: At least 3 doses. The last dose must be given on or after 4th birthday.

MMR: 2 doses separated by at least 28 days, 1st dose on or after 1st birthday.

Meningococcal: 1 dose

Hep B: 3 doses, last dose on or after 24 weeks of age.

Varicella: 2 doses separated by at least 3 months-1st dose on or after 1st birthday; or verification of disease

- DTaP vaccine is not administered on or after the 7th birthday.
- Tdap can be given in lieu of Td vaccine for children 7 years and older unless contraindicated.
- Hib is required for all Pre-K and K students less than 5 years of age.
- Pneumococcal Conjugate is required for all Pre-K and K students less than 5 years of age.
- Hep A requirement for school year 2019-2020 applies to all Pre-K through 7th graders born 1/1/07 or later.
- Hep B requirement for school year 2019-2020 applies to all students in grades K-12.
- Spacing intervals for a valid Hep B series: at least 4 weeks between doses 1 and 2; 8 weeks between doses 2 and 3; at least 16 weeks between doses 1 and 3; dose 3 must be administered at 24 weeks of age or later.
- Second MMR for school year 2019-2020 applies to all students in grades K-12.
- Meningococcal Conjugate requirement for school year 2019-2020 applies to all students in grades 7-12.
- Tdap requirement for school year 2019-2020 applies to all students in grades 7-12.
- If two live virus vaccines (MMR, Varicella, MMRV, Intra-nasal Influenza) are not administered on the same day, they must be separated by at least 28 days (there is no 4 day grace period for live virus vaccines). If they are not separated by at least 28 days, the vaccine administered second must be repeated.
- Lab confirmation of immunity is only acceptable for Hep A, Hep B, Measles, Mumps, Rubella, and Varicella.
- VERIFICATION OF VARICELLA 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.

For the full legal requirements for school entry visit: https://portal.ct.gov/DPH/Immunizations/Immunization--Laws-and-Regulations

If you are unsure if a child is in compliance, please call the Immunization Program at (860) 509-7929.

**New Entrant Definition:**

*New entrants are any students who are new to the school district, including all preschoolers and all students coming in from Connecticut private, parochial and charter schools located in the same or another community. All pre-schoolers, as well as all students entering kindergarten, including those repeating kindergarten, and 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 Vaccines:**

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<th>Vaccine</th>
<th>Brand Name</th>
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<tbody>
<tr>
<td>DTaP-IPV-Hib</td>
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<tr>
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<td>DTaP-IPV-Hep B</td>
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<table>
<thead>
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<th>Vaccine</th>
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<td>Prevnar 13</td>
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<td>DTaP-IPV</td>
<td>Kinrix, Quadracel</td>
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<tr>
<td>Influenza</td>
<td>Fluzone, FluMist, Fluviron, Fluarix, FluLaval, Flucelvax, Afluria</td>
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</tbody>
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