Dear Camp Sponsor / Director,

The Connecticut Department of Public Health (DPH) Immunization Program would like to raise awareness about a measles outbreak in the United States and to discuss vaccine-preventable disease reporting and vaccination in the camp setting. As of February 27, 2015, the Centers for Disease Control and Prevention (CDC) is reporting 170 people from 17 states and the District of Columbia to have measles; as of this date no cases are reported in Connecticut. The CDC is updating these numbers weekly on their web site at: http://www.cdc.gov/measles/cases-outbreaks.html.

This outbreak highlights 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, 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 measles, pertussis, 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 due to low levels of vaccination. 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). 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 Newly Enrolled
Students at Connecticut Schools, 2014–2015 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 (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, seasonal workers,
and employees, including international staff. The recommendations are based on the current adult
evaccine recommendations of the Advisory Committee on Immunization Practices (ACIP) (7). For
further details and special circumstances, consult ACIP publications or the National Center for
Immunization and Respiratory Diseases (NCIRD) of the CDC (8,9).
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.

  NOTE: Persons who received inactivated (killed) measles vaccine or measles vaccine of unknown type during 1963–1967 should be revaccinated with 2 doses 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 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.

- Varicella (chickenpox) – in the absence of disease history (6).

2. The following immunizations may be indicated for adults in certain circumstances (8):

- 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
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Department of Public Health

Debra L. Johnson
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Connecticut Office of Early Childhood

IMPORTANT LINKS FOR ADDITIONAL INFORMATION:

6. Prevention of Varicella: [http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5604a1.htm?s_cid=rr5604a1_e](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](http://www.cdc.gov/vaccines)