February 23, 2015

DIRECTIVE:	JOB CORPS INFORMATION NOTICE NO. 14-34

TO: ALL JOB CORPS NATIONAL OFFICE STAFF
ALL JOB CORPS REGIONAL OFFICE STAFF
ALL JOB CORPS CENTER DIRECTORS
ALL JOB CORPS CENTER OPERATORS
ALL NATIONAL TRAINING AND SUPPORT CONTRACTORS
ALL OUTREACH, ADMISSIONS, AND CTS CONTRACTORS

FROM: LENITA JACOBS-SIMMONS
National Director
Office of Job Corps

SUBJECT: Measles Information Update

1. Purpose. To inform Job Corps staff and students about the recognition and prevention of measles based upon the most recent guidance from the Centers for Disease Control and Prevention (CDC).

2. Background. In January 2015, 102 people from 14 states were confirmed to be infected with measles. Most of these cases were part of a large, multi-state outbreak linked to an amusement park in California.

In the decade before the live measles vaccine was licensed in 1963, an average of 549,000 measles cases and 495 measles deaths were reported annually in the United States. However, it is likely that, on average, 3 to 4 million people were infected with measles annually; most cases were not reported. Of the reported cases, approximately 48,000 people were hospitalized for measles and 1,000 people developed chronic disability from acute encephalitis caused by measles annually. Measles is still common in other countries and the virus can spread rapidly in areas where people are not vaccinated. Worldwide, an estimated 20 million people get measles and 146,000 people die from the disease each year – that equals about 440 deaths every day or about 17 deaths every hour.

Measles (rubeola) is one of the most contagious of all infectious diseases; approximately 9 out of 10 susceptible persons who have close contact with a measles patient will develop measles. The measles virus is transmitted by direct contact with infectious droplets or by airborne spread when an infected person breathes, coughs, or sneezes. Measles virus can remain infectious on surfaces and in the air for up to two hours after an infected person leaves an area.

Measles starts with a fever, runny nose, cough, pink eyes, and sore throat, and is followed by a red rash that spreads all over the body from the head to the trunk to the lower extremities. The rash usually appears about 14 days after a person is exposed; however, the incubation period

ranges from 7 to 21 days. Patients are considered to be contagious from 4 days before to 4 days after the rash appears.

Common complications from measles include pneumonia, croup, ear infections, and diarrhea. Even in previously healthy individuals, measles can cause serious illness requiring hospitalization. One out of every 1,000 measles patients will develop acute encephalitis, which often results in permanent brain damage. One or two of every 1,000 children who become infected with measles will die from respiratory and neurologic complications. Subacute sclerosing panencephalitis (SSPE) is a rare, but fatal degenerative disease of the central nervous system characterized by behavioral and intellectual deterioration and seizures that generally develop 7 to 10 years after measles infection.

There is no specific antiviral therapy for measles. Medical care is supportive to help relieve symptoms and treat complications such as bacterial infections.

Measles can be prevented with measles-containing vaccine, which is primarily administered as the combination measles-mumps-rubella (MMR) vaccine. Single-antigen measles vaccine is not available. One dose of MMR vaccine is approximately 93 percent effective at preventing measles; two doses are approximately 97 percent effective. In the United States, widespread use of measles vaccine has led to a greater than 99 percent reduction in measles cases compared with the pre-vaccine era.

3. Action. Center health staff should consider measles in students presenting with fever, rash, and cough, coryza (nasal discharge) and conjunctivitis – the three "C"s. Review the student's immunization records and ask whether they have recently traveled internationally or if there is measles in their community. Suspected measles cases should be reported to the local health department within 24 hours.

Laboratory confirmation is important. Detection of measles-specific IgM antibody and measles RNA by Real-Time Polymerase Chain Reaction (RT-PCR) are the most common methods for confirming measles infection. Clinicians should obtain both a serum sample and a throat swab (or nasopharyngeal swab) from patients suspected to have measles as advised by the local health department.

Infected students should be isolated for four days after they develop a rash. Students may be transported home by family members or center staff with evidence of measles immunity. Public transportation must not be used. Health staff should follow respiratory precautions in healthcare settings. Regardless of presumptive immunity status, all health staff entering the room should use respiratory protection consistent with airborne infection control precautions (use of an N95 respirator or a respirator with similar effectiveness in preventing airborne transmission). Because of the possibility, albeit low, of MMR vaccine failure in health staff exposed to infected patients, they should all observe airborne precautions in caring for patients with measles.

MMR vaccine is typically first administered at 12 or 15 months of age, followed by a second dose at 4-6 years. For unimmunized Job Corps students, two doses of MMR vaccine are required at least 28 days apart. For students with documentation of a single dose of MMR

vaccine, a second dose should be administered. This vaccine should not be given to pregnant or immunocompromised students. Approximately 5 percent to 15 percent of susceptible people who receive MMR vaccine will develop a low-grade fever and/or mild rash 7 to 12 days after vaccination. However, the person is not infectious, and no special precautions, such as exclusion from school or work, need to be taken.

PRH 6.10 R1 (d) requires MMR vaccination—two doses should be documented in the student's immunization record. PRH 6.12 R7 (c) states that the center physician may grant waivers of immunization requirements for valid medical and/or religious reasons. Such a waiver shall be clearly documented by the center physician in the student's health record and include an explanation as to why the decision was made.

In addition to medical and religious exemptions, personal belief exemptions are allowed by law in 20 states, but the center physician makes the final decision on granting a waiver. For the PRH-required vaccines, including MMR, separation is indicated if a waiver is not granted and the student continues to refuse vaccination.

Students without evidence of immunity who have been exempted from measles vaccination for medical, religious, or other reasons and who do not receive appropriate post-exposure prophylaxis within the appropriate timeframe should be excluded from center until 21 days after the onset of rash in the last case of measles. Post-exposure prophylaxis may provide some protection or modify the clinical course of disease. Options include MMR vaccine, if administered within 72 hours of initial measles exposure, or immunoglobulin (IG), if administered within 6 days of exposure.

If a health staff member without evidence of immunity is exposed to measles, MMR vaccine should be given within 72 hours, or IG should be given within 6 days when available. Exclude health staff members without evidence of immunity from center starting on day 5 after first exposure to day 21 after last exposure, regardless of post-exposure vaccine administration.

4. Resources. For the most current information on measles infection, visit the following CDC websites:

- http://www.cdc.gov/measles/index.html - overview
- http://www.cdc.gov/measles/hcp/index.html - health care professionals
- http://www.cdc.gov/measles/vaccination.html - vaccination
- http://www.cdc.gov/measles/resources/index.html - multimedia resources

Addressees are to ensure that this Information Notice is distributed to all appropriate staff.

5. Expiration Date. Until superseded.

6. Inquiries. Inquiries should be directed to Carol Abnathy at (202) 693-3283 or abnathy.carol@dol.gov, or Johnetta Davis at (202) 693-8010 or davis.johnetta@dol.gov.