Measles, Mumps, Rubella (MMR) Outbreak Response Planning for Post-Secondary Institutions

Introduction:
Vaccine preventable disease outbreaks, such as measles and mumps, continue to occur on college and university campuses across New York State (NYS) and the nation. In the event of an outbreak, colleges and universities must be prepared to respond in concert with local and state health departments to help prevent further disease transmission. Assuring that student immunization records are maintained and that protocols are in place to respond to an outbreak will facilitate a timely and effective response. The following guidance is provided to help colleges and universities develop a MMR outbreak response plan.

Definitions:
- Immunization Requirements for Post-Secondary Institutions:
  NYS Public Health Law Section 2165 requires all students attending post-secondary institutions who were born on or after January 1, 1957 and registered for six or more credit hours to demonstrate proof of immunity against measles, mumps, and rubella.
  - Students who are 18 years of age or older may consent to vaccination in NYS and should be offered vaccine if they lack proof of immunity. Parental consent is not required or necessary.
  - Medical exemptions may be granted to students if a licensed physician or nurse practitioner certifies that such immunization may be detrimental to the person’s health or is otherwise medically contraindicated.
  - Religious exemptions may be granted if an individual holds genuine and sincere religious beliefs which are contrary to the practice of immunization.

- Communicable disease reporting requirements:
  Reporting of suspected or confirmed communicable diseases is mandated under the NYS Sanitary Code (10NYCRR 2.10). Although physicians have primary responsibility for reporting, school nurses, laboratory directors, infection control practitioners, daycare center directors, health care facilities, state institutions and any other individuals/locations providing health care services are also required to report communicable diseases.
  - A case of measles or rubella is required to be reported to the local health department (LHD) immediately.
  - A case of mumps is required to be reported to the LHD within 24 hours. It is recommended that mumps cases be reported as soon as possible.

- Outbreak:
  An outbreak is an increase in the number of cases of a disease above what is normally expected in a defined population.
  - Measles is highly contagious and only one case of measles in a college or university is considered an outbreak.
  - One case of rubella is considered an outbreak.
  - Sporadic (one or two) cases of mumps may occur on campus. An outbreak is defined as three or more cases occurring within a 25-day period in a defined setting, such as a college or university campus.
Outbreak Response Activities:
In the event of an outbreak of measles, mumps or rubella on campus, the LHD, supported by the New York State Department of Health (NYSDOH), will provide guidance to the college or university on specific actions that need to be taken to manage the outbreak and control the spread of disease. Public health authorities follow outbreak control recommendations outlined in the NYSDOH’s Outbreak Control Guidelines for Vaccine Preventable Disease and the Centers for Disease Control and Prevention (CDC)’s Manual for the Surveillance of Vaccine-Preventable Diseases. The college or university will need to collaborate with the LHD and the NYSDOH. Colleges and universities need to be familiar with and plan for recommended outbreak control actions to ensure a timely and effective response when an outbreak occurs.

The following section lists specific actions that need to be taken during an outbreak, along with guidance for colleges and universities on how to plan for and implement these actions.

- **Communicate with the LHD.**
  - Maintain up-to-date contact information and phone numbers for the LHD in the county where the college or university is located. This should include after-hours contact information.
    - The LHD will provide guidance to assist with the investigation and implementation of recommended control measures to prevent further spread of disease.
    - The LHD will consult with the NYSDOH Bureau of Immunization to inform the response effort on campus.
    - The LHD will assist with expedited testing through the Wadsworth Center, NYS’s public health laboratory.

- **Isolate and monitor ill students while they are considered infectious, to reduce transmission of disease on campus.**
  - Note: Measles is an extremely infectious airborne disease and a student with suspect illness must not share airspace with other individuals.
  - Students should consider returning home during the isolation period.
    - If the student has measles, the student must be transported without exposing other non-immune individuals. Public transportation is not allowed. Individuals who transport the ill student should be immune to measles.
  - Provide accommodations for students who cannot return home.
    - Identify potential housing accommodations for ill students prior to an outbreak.
    - Students should be housed in a private room with a separate bathroom. For measles, this should be in a separate residence away from the general population.
    - Meals and other necessities must be provided. For measles, only staff with demonstrated immunity to measles can deliver food.
    - Staff should communicate with the ill student on a regular basis to assess their well-being.
Identify and notify students and faculty who may have been exposed to the case and are at risk for disease.
   - Work with the LHD and the NYSDOH to implement prevention and control measures recommended for those exposed to the identified disease. These may include the following:
     - Assess the immune status of exposed individuals.
     - Offer post-exposure prophylaxis (vaccine or immunoglobulin) to susceptible individuals when indicated (measles or rubella exposure). Post-exposure prophylaxis (PEP) must be provided within a limited timeframe to protect the exposed individual from becoming ill.
     - Quarantine susceptible individuals who do not receive PEP.
       - Appropriate accommodations for these individuals must be provided, as previously described.
       - Quarantine must be for the entire incubation period specific to the exposure. The incubation period is the time from exposure to the disease to the onset of symptoms. The incubation period for measles is up to 21 days, for mumps it is up to 25 days and for rubella it is up to 23 days.
       - Individuals who are quarantined will need to be monitored for signs and symptoms of illness, whether they remain on campus or have gone home. Monitoring should consist of daily communication with the susceptible individual. If they become ill the LHD should be notified immediately.
     - Provide education to all exposed individuals on the signs and symptoms of illness. If an exposed individual becomes ill they should seek medical care. The LHD should be notified immediately.
   - Although the risk of disease is decreased, individuals with presumed immunity who are exposed can still develop disease.

Identify students who do not have acceptable documentation of immunity and are considered susceptible.
   - Maintain a list of students who do not have acceptable documentation of immunity to measles, mumps, and rubella. The list of susceptible students should be created annually at the beginning of the school year and kept up-to-date throughout the year.
   - In the event of an outbreak, the list should be readily available so that all susceptible students on campus can be quickly identified and recommended public health actions can be implemented as quickly as possible to protect students and prevent disease spread.
   - Have a plan to exclude susceptible students from campus until one full incubation period after the last case has been isolated as per NYSDOH guidance.
     - Have a plan to support the student’s educational needs while excluded from campus.
   - Provide susceptible students with information on prevention, signs and symptoms of illness, and what to do if they become ill.
Offer to vaccinate students, if they have no contraindications to vaccination.

- Students without documentation of immunity or receipt of MMR vaccine should receive their first dose of MMR vaccine.
- Students with a history of one dose of MMR vaccine should receive their second dose.
- Note: During a mumps outbreak, a decision to provide a 3rd dose of MMR vaccine should be made in consultation with the LHD and the NYSDOH.
- Vaccination may not prevent mumps if already exposed but can provide protection for future exposures.

Excluded students may be readmitted to campus once they have been vaccinated.

**Conduct ongoing disease surveillance to identify other ill students or staff.**

- It is important to identify individuals who are ill as soon as possible so that appropriate actions can be taken.
- Students or staff with signs and symptoms consistent with measles, mumps or rubella should see a healthcare provider to receive the appropriate evaluation, testing, and care.
  - Individuals seeking healthcare who may have a highly infectious disease such as measles or rubella should notify the healthcare facility prior to their arrival so that appropriate infection control measures can be implemented and exposure to non-immune individuals prevented.

**Evaluate and test ill students.**

- The healthcare providers in student health services should be familiar with the appropriate testing for measles, mumps and rubella.
- Student health services should have required testing supplies available and should be familiar with how to handle, package, and send tests to Wadsworth Center (NYSDOH laboratory) for expedited testing.
- The LHD can provide guidance on obtaining the appropriate laboratory tests and sending them to Wadsworth Center.

**Communicate important messages on prevention and control of disease with the campus community and with parents.**

- The college or university should develop and maintain educational materials and resources for measles, mumps and rubella, as well as communication templates for the student body, staff and faculty. This will facilitate consistent messaging addressing prevention, control measures and the response of the college.
- Communication methods commonly used by students, such as text, e-mail or social media should be considered.
- Utilize the college or university website to provide education and updates on the outbreak.