Communicable Diseases Prevention, Control and Reporting in School Setting

- Introduction

New Jersey Administrative Code, Title 6A-2 and N.J.A.C. 10:122 (Manual of Requirements for Child Care Centers) mandate that each school district/child care center shall immediately report any communicable diseases that are identified as reportable pursuant to N.J.A.C. 8:57 – 1, whether confirmed or presumed, by telephone to the health officer of the jurisdiction in which the school is located. These regulations pertain to youth camps, child care centers, preschools, schools and institutions of higher education. This document has been prepared to guide in both identification and response to outbreaks occurring in the school setting.
Overview

- Communicable diseases are transmitted from person to person by various routes. A basic understanding of how these diseases are transmitted and common prevention measures can help decrease the spread of infections. Early identification of signs and symptoms of communicable disease is of paramount importance to increase the health of the school population and decrease school absenteeism.
In the school environment, many communicable diseases are transmitted from one individual to another. Effective control measures include education, avoidance of risk factors, sanitation, vaccination, early recognition of symptoms, health assessment, prompt diagnosis and adequate isolation or treatment.
Communicable Disease
Transmission Routes

- **Airborne**
  
  Infection occurs when the germ from an infected person becomes suspended in the air and is then inhaled by another person. Although diseases like smallpox and SARS (severe acute respiratory syndrome) have been spread by airborne route, the most common diseases spread by this route are tuberculosis, measles and chickenpox.
Respiratory Droplet

- Infection occurs when the germ from an infected person’s nose or throat comes into contact with the mucous membranes (the eyes, nose or mouth) of another person by coughing, sneezing or spitting. Such transfers occur only at distances of less than 6 feet.
Fecal – Oral Route

- Infection is spread from the stool or fecal matter of an infected person to another person, usually by contaminated hand-to-mouth contact, or by way of contaminated objects, when effective hand washing is not done after toileting or through poor personal hygiene.

- Examples: Diarrheal Illnesses, Hepatitis A, Pinworms (most common type of intestinal worm. While the infected person sleeps, the female pinworms lay thousands of eggs in the folds of skin surrounding the anus).
Foodborne Route

- Foodborne illnesses occur as a result of eating food that has been improperly handled, prepared or stored.
- Examples: Diarrheal diseases, Hepatitis A
Waterborne

- Waterborne illnesses are spread by drinking or playing in water that has been contaminated with infectious germs from hands or objects used by students in the water, or by body excrement from humans or animals in water, such as in reservoirs or swimming pools. The contaminated water may be swallowed or come into contact with the person’s skin or mucous membranes.

- Examples: Diarrheal diseases, skin infections, Hepatitis A
Bloodborne infections are spread through very specific and close contact with an infected person’s body fluids, such as unprotected sexual contact, sharing needles or drug paraphernalia, by a pregnant mother to her unborn child, blood transfusions (rarely), Tattooing or piercing in non-approved establishments and puncture wounds (needle-stick injuries).

Examples: Hepatitis B, C, and D (swelling of the liver and can be contracted only if you are already infected with Hepatitis B). HIV/AIDS
Sexually Transmitted Infections

- These infections are spread from person to person through heterosexual and homosexual activity. Some diseases such as HIV, and hepatitis B, C and D, can be transmitted both by bloodborne and sexual routes.

- Examples: Gonorrhea, Chlamydia, Herpes, Genital Warts (Human papillomavirus-HPV)
Guidance

Roles and Responsibilities

- Health education for students, staff and parents is an essential component in the prevention and control of communicable diseases.
- Health education such as effective hand washing technique for students and teachers. Provide parent information on recognizing signs and symptoms of communicable illness and when to keep ill children home.
Health Services

- Provide school-based or school linked access to communicate disease prevention services, referrals to health care providers, and training to assess, coordinate and report to local health department.

- Develop policies and procedures that align with Township of Union Public Health Law regarding exclusion of ill students and staff with specified communicable diseases and conditions. Develop, implement and reassess on annual basis the Exposure Control Plan for Bloodborne Pathogens in the school setting per OSHA (Occupational Safety and Health Administration) Rule.
Promote meaningful partnerships among schools, families and communities to enhance the prevention of communicable disease in youth.

Act as a liaison to health services in following the district policy regarding the reporting of communicable diseases in giving accurate information as permitted by confidentiality policies.
<table>
<thead>
<tr>
<th>Disease</th>
<th>Recommended School Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>No exclusion. Standard Precaution</td>
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<tr>
<td>Varicella (Chickenpox)</td>
<td>Exclude until lesions have crusted or dried with no further drainage (Minimum 6 days after rash appears).</td>
</tr>
<tr>
<td>Acute Respiratory Illness (ARI)</td>
<td>Fever free for 24 hrs. without fever reducing medication</td>
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<tr>
<td>Disease</td>
<td>Recommended School Control Measures</td>
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<tr>
<td>----------------------------------------</td>
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<tr>
<td>Conjunctivitis, Purulent (With discharge)</td>
<td>Excluded until examined and cleared by a medical provider</td>
</tr>
<tr>
<td>Conjunctivitis, Nonpurulent</td>
<td>No exclusion</td>
</tr>
<tr>
<td>Gastrointestinal Illness (LBM/vomiting)</td>
<td>Excluded until s/s resolved</td>
</tr>
<tr>
<td>Fever (only)</td>
<td>Fever free for 24 hrs without fever reducing medication.</td>
</tr>
<tr>
<td>Fifth Disease (Slapped Face)</td>
<td>No exclusion</td>
</tr>
<tr>
<td>Head Lice</td>
<td>Excluded until “nits-free” (School policy)</td>
</tr>
</tbody>
</table>
Disease

- Hepatitis
- Influenza-like Illness
- Measles
- Meningitis (Viral & Bacterial)

Recommended school control measures

- 1 week after the onset of jaundice or illness & fever free
- Fever free for 24 hours without meds
- 4 days after onset of rash, fever-free and child is able to participate in activities.
- Until adequately treated, 24 hrs after initiation of effective antimicrobial therapy.
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<tr>
<td>Mumps</td>
<td>5 days after onset of parotid swelling</td>
</tr>
<tr>
<td>Pertussis</td>
<td>After 5 days of antibiotic therapy completed. Not treated, 21 days from cough onset.</td>
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<tr>
<td>Norovirus</td>
<td>24-48 hrs. after symptoms resolved</td>
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<tr>
<td>Strep Throat</td>
<td>24 hrs. after treatment has been initiated</td>
</tr>
<tr>
<td>Disease</td>
<td>Recommended Measures</td>
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<td>----------------------------------------</td>
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<tr>
<td>Tinea Capitis (Ringworm - scalp)</td>
<td>Until after treatment has been started</td>
</tr>
<tr>
<td>Tinea Corporis (Ringworm – body)</td>
<td>Until after treatment has been started</td>
</tr>
<tr>
<td>Varicella-Herpes Zoster (Shingles)</td>
<td>Until all lesions have dried and crusted unless lesions can be covered</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>Until LHD and physician state the student in not infectious.</td>
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</table>
Reporting communicable disease in school serves many purposes. The immediate goal is to control further spread of the disease. Often in school setting it is difficult to determine whether or not an outbreak exist. An outbreak may be occurring if:

- A single case of a highly infectious disease (e.g. measles or pertussis) exist, or is suspected to exist.
- Several children who exhibit similar symptoms are in the same classroom, the same wing of a facility or they attended a common event.
- There is an increase in school absences with many parents reporting similar symptoms.
- Two or more students are diagnosed with the same reportable disease.
Recommended measures to control outbreaks:

- Exclude sick staff/students.
- Frequent hand washing with soap and water especially before and after handling food or eating, after using the bathroom or assisting with toileting, after playing from outside, after gym, after contact with animals, after cleaning spills or objects contaminated with body fluids, before and after giving first aid.

*** Hand sanitizers should not be substituted for soap and water hand washing during GI outbreak. Alcohol based sanitizes have shown to be ineffective against spore forming bacteria such as C. difficile, or virus such as Norovirus.
If applicable, suspend school/community dining and recreational activities where ill and well students would otherwise mingle.

- Restrict use of equipment and toys to use within a specific area and do not allow children to share without cleaning and disinfecting.
- Staff assigned to affected classrooms should not rotate to unaffected classrooms.
- Reinforce respiratory etiquette to students and staff.
- Use gloves when in contact with blood, feces or body fluids.
Cleaning and disinfecting should be increased in frequency during an outbreak in the following areas:

* Frequently touched surfaces including toys, tables, lavatory surfaces, cubbies, mats, keyboards, kitchen prep areas, desks, phones, handrails, doorknobs and equipment in the immediate vicinity of children.

* Common areas such as gym, cafeteria, restrooms.

*** Please refer to LHD and Township of Union Board of Education Policy.
References:

- NJDOH January 2014
  http://nj.gov/health/cd/find.shtml Communicable Disease Chapters
- Centers for Disease Control and Prevention
  http://www.cdc.gov