What to do about *Clostridium difficile* in Schools:
Guidance for School Nurses

**Description**
*Clostridium difficile* is an anaerobic, toxin-producing, spore-forming bacillus that can cause diarrheal disease. Disease can range from mild gastrointestinal disease to pseudomembranous colitis with diarrhea that often reoccurs and can progress to toxic megacolon, sepsis, and death.

Many *C. difficile* infections occur after antibiotic use. Systemic antibiotic exposure is the most important modifiable risk for *C. difficile* infection (CDI). Antibiotics disrupt normal intestinal flora, enabling *C. difficile* to set up housekeeping in the bowel. Antibiotics at high risk for contributing to CDI include: Fluoroquinolones, Carbapenems, Clindamycin and Cephalosporins (2nd, 3rd, and 4th generation).

*C. difficile* is most commonly found in older adults who are patients in hospitals or live in long term care facilities (LTCF). In the past healthy people did not usually become ill with diarrhea even if bacteria were present in their intestines. However, in recent years, otherwise healthy people who were not taking antibiotics and were not hospitalized or living in LTCF have become ill with CDI.

**Mode of Transmission**
*C. diff* is primarily spread through fecal-oral contact with the bacteria or its spores, either by direct person-to-person contact or indirectly through shared contaminated equipment, personal articles/objects or contaminated surfaces. *C. diff* spores can live on environmental surfaces and be infectious for months.

**Incubation Period**
Variable, may be as little as two to three days.

**Infectious Period**
A patient with *C. difficile* is usually considered to be infectious until 48 hours after the last diarrhea stool. *C. difficile* spores can live on environmental surfaces for months.

**School/Nurse Responsibility**
Report to your local health jurisdiction is not required. Although, if a cluster of two or more cases occurs in a single classroom or athletic team, please notify your local health department.

**Control of Spread**
1. Good personal hygiene and hand washing with soap and water for at least 20 seconds should be encouraged, especially after stooling.
2. Alcohol-based hand sanitizer does NOT kill *C. difficile* spores.
3. Gloves should be worn if you expect to have contact with non-intact skin or mucous membranes or any bodily fluid (including stool). Hands should be washed with soap and water immediately after removing gloves.
4. Surfaces *contaminated with stool* should be cleaned and then disinfected with an EPA-registered disinfectant labeled effective against *C. difficile* spores and manufacturer’s directions should be followed. Household bleach diluted 1:10 (new solution every day) is effective against *C. difficile* spores and may be used as a disinfectant. Remember to clean the surface first, rinse it, and then disinfect it with 1:10 bleach solution. Wet contact time is five (5) minutes. Commercially available bleach products (such as Clorox, Dispatch or PDI
bleach wipes) contain a detergent base which is helpful in cleaning as well as disinfecting. Wet contact time for these commercially prepared products is five (5) minutes. *(For more information, see the 2012 edition of the OSPI Infectious Disease Control Guide for School Staff.)*

5. Clean and disinfect health room cots regularly (after each use and at least daily), and use pillow protectors. See “Quick Reference Environmental Cleaning for School Nurses” handout.

6. If soiled linens and clothing are washed on school premises, wash with laundry detergent in hot water (minimum 160°F) or add one cup of liquid bleach or use a detergent that contains dry bleach. Dry *thoroughly* in a hot dryer.

Special Considerations in Sport Settings
1. Instruct students not to share personal hygiene items such as towels, washcloths, razors and soap.

2. Encourage use of a barrier (towel or layer of clothing) between the skin and shared equipment as well as surfaces such as benches.

3. Establish routine disinfectant cleaning of shared surfaces such as wrestling mats and benches in weight-room, shower and pool area. See “Disinfection of Hard Surfaces and Athletic Mats” in Infectious Disease Control Guide for School Staff.

4. Strongly encourage athletes and coaches participating in sports involving close personal contact (e.g. wrestling, football, basketball) to shower immediately after each practice, game or match.

5. Strongly encourage athletes to wash athletic clothing after each use.

Resources
- Office of the Superintendent of Public Instruction (OSPI), Infectious Disease Control Guide for School Staff