

Hand Hygiene in Schools

Reducing Student Absences While Preparing for Pandemic Flu

Keeping hands clean is one of the simplest and most effective methods for preventing the transmission of common colds, influenza, and food-borne illnesses. Handwashing facilities need to be conveniently accessible to students and staff and their frequent use encouraged by school staff members. The prospect of a major pandemic of flu raises the importance of routine handwashing at school. However, the evidence suggests that good hand hygiene is not routinely practiced in many schools.

In a normal year the Centers for Disease Control and Prevention (CDC) estimates that 52.2 million cases of the common cold affect Americans under the age of 17, resulting in nearly 22 million school days lost. Diarrhea, a common symptom of infectious food-borne diseases, is second only to colds as a cause of lost working time and is responsible for approximately 25 days being lost from work or school for every 100 members of the population every year. On average, five percent to 20 percent of the U.S. population acquires influenza each year, and young children are among the populations at high risk for serious flu complications. The World Health Organization (WHO) and the U.S. Department of Health and Human Services (HHS) recommend that schools implement effective infection prevention measures to help limit the spread of influenza well in advance of a pandemic.

Infections are frequently transmitted from person-to-person in preK-12 school settings due to the close environment, sharing of supplies and equipment, and inadequate hand hygiene. Handwashing behaviors are often established during early childhood, but may not sufficiently persist into adolescence and adulthood. Observational research among older school children reveals an overall compliance rate of approximately 50-60 percent. In one study, only 58 percent of female and 48 percent of male middle and high school students washed their hands after using the bathroom. Of these, only 33 percent of the females and eight percent of the males used soap.

CDC recommends that every person routinely practice cleaning hands with soap and warm water for 15-20 seconds whenever hands are visibly soiled; after using the bathroom, sneezing or coughing, or handling animals or waste; after caring for or touching a cut or sore; before eating and preparing food; and more frequently when someone is sick. (Health care and food services settings require more stringent measures.)

Several studies have demonstrated that appropriate hand hygiene can significantly reduce absenteeism from school due to gastro-intestinal or respiratory illness. One

Federal Officials Call on Educators to Prepare for and Help Prevent Major Flu Outbreaks

In March 2006, cabinet secretaries from the federal Departments of Education, Agriculture, Interior, and Health and Human Services addressed the critical roles schools play in both preventing and responding to pandemic flu outbreaks. Secretary Spellings said that school officials have to be prepared for short- and long-term shutdowns, as well as the possibility of school buildings being used as temporary hospitals or as quarantine or vaccination centers. "Pandemic flu doesn't fit neatly under one governmental department's responsibility," Spellings said. "The fact is, it's all of our responsibility—policymakers, educators, parents, health-care providers—all of us." The Education Department is making \$24 million available to school districts for pandemic flu planning, and the government has also issued preparation checklists that stress the need for coordination among state, federal, and local officials and the importance of prevention. "The school itself plays a big role," a flu expert from the University of Washington said. "It's just a massive mixing ground for respiratory illness."

intervention with scheduled opportunities for cleaning hands four times throughout the school day produced a 50 percent reduction in school absences.

When soap and water are not available and hands are not visibly soiled, CDC guidance adds that alcohol-based, waterless disposable hand wipes or gel sanitizers may be used in place of handwashing on most occasions. Not all sanitizers are effective, however. A 60 percent minimum alcohol concentration is necessary to kill most harmful bacteria and viruses.

Many students fail to wash their hands because handwashing facilities or supplies are not available or are inconveniently located. Graffiti, vandalism, lack of upkeep, and general misuse are common restroom maintenance problems. In a national survey of parents of middle and high school students, 14 percent said their children report that their school restrooms lack basic supplies like toilet paper, hand soap, or hand towels.

Restroom safety, cleanliness, and hygiene are also important measures of school climate. Vandalism gives visitors a bad impression and erodes the feeling of security on the entire campus. The condition of the restroom is a good indicator of whether students respect the school and themselves. Durable, vandal-resistant equipment that can withstand high traffic volume and frequent abuse are available, as well as programs to correct underlying problems with a school's social environment.

State boards of education and state education agencies can ensure that: 1) education curricula at all levels teach students hand hygiene knowledge, skills, and behaviors; 2) all students and staff members are provided convenient access to adequate handwashing facilities and supplies in restrooms, classrooms, and cafeterias; and 3) all school staff members actively promote handwashing compliance.

State Actions

★ **California** has perhaps the strongest state requirement governing school restrooms. Education Code §35292.5 requires every public and private school to have restroom facilities that are open during school hours and kept maintained and cleaned, fully operational, and stocked with soap and paper supplies. Schools failing to meet the standard may incur a financial penalty from the state and may open themselves to lawsuits.

★ **Utah** Administrative Rule R392-200: Design, Construction, Operation, Sanitation, and Safety of Schools contains detailed requirements to ensure convenient opportunities for hand hygiene. Available online at www.rules.utah.gov/publicat/code/r392/r392-200.htm.

★ The **Minnesota** Department of Health offers a comprehensive, online Handwashing Tool Kit that includes school checklists, communications tools to use during disease outbreaks, age-appropriate curricula, and project ideas for students. It is available online at www.health.state.mn.us/handhygiene/toolkit/index.html.

Resources

In recent years a variety of organizations and coalitions have prepared evidence-based messages promoting handwashing in schools. They include:

- ★ The National Coalition for Food Safe Schools (NCFSS), which offers a complete action guide for schools, including needs assessment and planning tools. The kit is available online at www.foodsafeschools.org.
- ★ CDC and the Soap and Detergent Association (SDA), which together offer the “Healthy Schools, Healthy People—It’s a SNAP” middle school program, available online at www.itsasnap.org.
- ★ The Partnership for Food Safety Education (PFSE), which has produced a variety of tools, resources, and educational materials under the “Fight Bac!” slogan, available online at www.fightbac.org/main.cfm.
- ★ The Clean Hands Coalition (CHC), which sponsors the annual Clean Hands Week each September. For more information visit www.cleanhandscoalition.org.
- ★ The National Clearinghouse for Educational Facilities (NCEF), which maintains an extensive online collection of information on planning, designing, funding, building, improving, and maintaining schools, available at www.edfacilities.org.
- ★ The federal government’s *School District (K-12) Pandemic Influenza Planning Checklist*, available online at www.pandemicflu.gov.