



Tier One Intervention Curriculum  
Attendance Strategy Elementary Schools  
Fostering a Healthier School Environment – Reducing the Spread of Infectious Illnesses

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# Tier One Intervention Curriculum Attendance Strategy Elementary Schools

## Fostering a Healthier School Environment – Reducing the Spread of Infectious Illnesses



Communities In Schools of North Carolina is leading the national network in providing the most effective student supports and wraparound interventions and supports directly in schools to support students and teachers. Working collaboratively with 400 schools across North Carolina, Communities In Schools impacts the lives of more than 230,000 youth each year. Driven by research-based practices surrounding the best predictors of student success – attendance, behavior, coursework and parent and family engagement – Communities In Schools is changing the picture of education for students across North Carolina. Learn more about Communities In Schools of North Carolina at [www.cisnc.org](http://www.cisnc.org).



The Nonprofit Evaluation Support Program (NESP) is a collaborative effort between two University of North Carolina at Greensboro organizations – The SERVE Center and The Office of Assessment, Evaluation, and Research Services (OAERS). NESP’s mission is to provide program evaluation services and program evaluation capacity building support to nonprofit and community-based organizations while providing authentic learning experiences for future leaders in the field of program evaluation.



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The University of North Carolina at Greensboro (UNCG) is one of the sixteen university campuses of The University of North Carolina. UNCG holds two classifications from the Carnegie Foundation for the Advancement of Teaching, as a “research university with high research activity” and for “community engagement” in curriculum, outreach, and partnerships.

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## Tier One Intervention Curriculum Attendance Strategy Elementary Schools

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### Overview

#### CISNC Introduction

In the 2014-2015 school-year, Communities In Schools of North Carolina (CISNC) introduced a framework that aligns site and student metrics and interventions and supports to four areas that have been shown to have the greatest impact on student success: attendance, behavior, coursework, and parent involvement, or ABC+P. Both combined and individually, attendance, behavior, and coursework are among the best predictors of a student’s academic success and on-time graduation. While collecting data around ABC+P is critically important to understanding the school and student, it is even more important to use the data to drive high impact intervention and support delivery to empower each student to reach their full potential. To this end, Communities In Schools of North Carolina has partnered with the SERVE Center at the University of North Carolina at Greensboro to design curricula specifically for CIS within the ABC+P framework to enhance student outcomes in school and success in life. This document is one of more than 50 modules developed to support local CIS staff and most importantly the students that are served. We encourage you to explore all of the modules available online at [www.cisnc.org](http://www.cisnc.org).

#### Using Evidenced-Based Strategies

There are a multitude of strategies that claim to address attendance, but there are few that actually do so for all students. We suggest that schools use an evidence-based, decision-making model to ensure that high quality information informs the decisions made.

The Institute of Education Sciences (IES) at the U.S. Department of Education defines evidence-based decision making as routinely seeking out the best available information on prior research and recent evaluation findings before adopting programs or practices that will demand extensive material or human resources (including both funding and teacher time) and/or affect significant numbers of students (Whitehurst, 2004).

Evidence-based practice means delivering interventions and supports to students (clients) in ways that integrate the best available evidence from data, research, and evaluation; professional wisdom gained from experience; and contextual knowledge of the particular classroom, school, district, or state that might impact the design or implementation.

This document is written to provide schools with attendance-related strategies based on the best evidence from prior research and recent evaluations in elementary schools. In the context of our review, we propose six strategies designed to help improve elementary school attendance:

- Monitoring Data strategy
- School-Family-Community Partnerships strategy
- Health Related strategy



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- Positive Behavior Interventions and Supports (PBIS) strategies (2)
- School Climate strategy

This document will focus on one easy to implement health-related strategy that can lead to a reduction in the spread of infectious illnesses across the school community.

### Problem/Rationale

In the United States, infectious illnesses account for millions of school days lost each year for public school students in kindergarten through 12<sup>th</sup> grade. Each year, 38 million school days are lost due to the spread of influenza (CDC). While the nature of school settings can foster the transmission of infectious illness, schools can improve the overall health of the environment and reduce the spread of infectious illnesses by following some basic recommendations by the Centers for Disease Control and Prevention (CDC). Facilitating hand hygiene by supplying appropriate supplies and teaching good practices as well as encouraging students and staff to get annual influenza vaccinations are two of six recommendations by the CDC.

### Purpose

The purpose of this document is to focus on one easy to implement health-related strategy that can lead to a reduction in the spread of infectious illnesses across the school community, thereby reducing the number of days absent due to infectious illnesses.

Students will:

- Understand the importance of washing their hands regularly
- Learn proper hand washing techniques
- Learn how to gauge the amount of time needed for proper hand washing

### Implementation Plan

#### Uses

Schools can use the information provided in this guide to help students develop healthy hand hygiene habits.

- Inform staff of practices and strategies that can reduce the spread of infectious illnesses in the school.
  - Regular and proper hand washing
  - Use of hand sanitizer
  - Student influenza vaccination
- Inform parents of the benefits of each of the above noted strategies
- **Conduct lesson with students to help them develop healthy hand hygiene habits.**



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### Audiences

The primary audience for the lesson is K-3 students. An additional informational presentation has been provided to use with school staff.

### Activities

The activity highlighted is designed to instruct K-3 students on the proper techniques and time period for washing hands to ensure healthy hand hygiene and reduce the spread of infectious illnesses.

Additional strategies listed below support this lesson, including:

- Share information about reducing the spread of infectious illness with staff.
- **Use Hand washing lesson with students.**
- Develop informational letter to parents on benefits of having students vaccinated for influenza.
- Develop informational letter to parents about use of hand sanitizer in the classroom (when soap and water are not available); type of product to be used; and safety information in case of student reaction to hand sanitizer, including who to contact.
- Celebrate Annual global hand washing day is celebrated October 15<sup>th</sup> – start a lesson or do a refresher on this date.

### Materials/Equipment/Space

- Presentation to teachers, school nurse
  - Presentation slides
  - Sample lesson plan with handouts
  - Two (2) sample letters to parents:
    - Use of hand sanitizer (with return signature), and
    - Influenza vaccination information page
  - Safety information (potential student reaction to hand sanitizer)
- **Hand washing activity**
  - Presentation slides
  - Healthy Kids Rules
  - Hand washing song(s)
  - Hand washing activity sheet
  - Hand washing poster
- Hand sanitizer
  - Informational letter to parents about use of hand sanitizer in the classroom (when soap and water are not available)
  - Type of product to be used
  - Safety information in case of student reaction to hand sanitizer, including who to contact



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- Influenza Vaccination
  - Informational letter to parents on benefits of having students vaccinated for influenza

*Note: For presentations, check for access to computer, Smartboard or data projector and screen, relevant power cords, and remote slide advancer.*

### Time

- Presentation to administrators, teachers, nurses – 10-15 minutes at staff meeting
- Hand washing lesson with students – 15 minutes first time; 10 mins practice X 4 days (55 minutes total)
- Informational letters to parents (development, review, approval process) – 2 hours

### Lesson Plan of Activity

Use the following sample lesson with K-3 students early in the year to inform and demonstrate proper hand washing techniques, including the amount of time students should spend washing their hands.

A presentation slide deck is included in Appendix E for the teacher to use in reviewing the steps involved in proper hand washing techniques. Teachers should demonstrate proper hand washing techniques for students and allow students to practice techniques in the location at which students would normally wash their hands at school. Allow student time to practice often during initial weeks of school to establish the habit of proper hand washing. Use prompts to assess student understanding of reasons for washing hands regularly and properly, and observe students to ensure they are developing good hand hygiene habits.

### Sample Lesson for K-3 Students – *Clean Hands = Healthy Hands*

Activity	Process Notes
Activating activity	<p><i>Initial presentation should take place in the classroom.</i></p> <ul style="list-style-type: none"> <li>• <i>Download hand washing activity sheet (in English and Spanish) that illustrates the steps the CDC recommends for proper hand washing.</i></li> <li>• <i>Note: Turning off the water is included as a sixth step. Teachers can talk with students about turning off the water at the time between wetting and lathering hands (for water conservation practices) or after rinsing and before drying hands.</i></li> </ul>



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<i>Ask students: Why is it important to wash your hands?</i>	Slide #1
<i>Ask students: When do you wash your hands?</i>	Slide #2 <i>Students should be aware of the following incidences when washing hands is appropriate/needed:</i> <ul style="list-style-type: none"> <li>• Before eating</li> <li>• After using the toilet</li> <li>• After blowing your nose, sneezing, or coughing</li> <li>• After petting animals</li> <li>• After playing on the playground</li> <li>• After handling items handled by others</li> <li>• If you have a cut on your hand</li> </ul>
<b>Activity</b>	<b>Process Notes</b>
<i>Tell students:</i> Recommended hand washing for proper removal of germs includes five steps: <ol style="list-style-type: none"> <li>1. <b>Wet</b></li> <li>2. <b>Lather</b></li> <li>3. <b>Scrub</b></li> <li>4. <b>Rinse</b></li> <li>5. <b>Dry</b></li> </ol>	Slide #4  <i>Review the five recommended steps for proper hand washing as noted.</i>
A. <b>Wet</b> your hands with clean, running water (warm or cold), turn off the tap, and apply soap.	Slides #5 - #10 <i>Demonstrate hand washing steps listed on each slide and have students follow along.</i>  <i>Describe each of the steps.</i>
2. <b>Lather</b> your hands by rubbing them together with the soap. Be sure to lather the backs of your hands, between your fingers, and under your nails.	
3. <b>Proper hand washing techniques include scrubbing your hands for at least 20 seconds.</b> <ul style="list-style-type: none"> <li>• Wash all around the hand, including between fingers</li> </ul>	<i>Have students sing or hum a short song (for 20 seconds), such as the "Happy Birthday" song from beginning to end twice, Twinkle Twinkle Little Star.</i>  <i>Note:</i> <ul style="list-style-type: none"> <li>• See link in resources section of the curriculum guide for short songs adapted for timing of hand washing.</li> <li>• Select a few songs and allow class to vote on one song to become their hand washing song.</li> </ul> <i>Provide students with additional instructions about how to wash hands during the 20 seconds, including:</i> <ul style="list-style-type: none"> <li>• Palms</li> <li>• Between fingers</li> <li>• Back of hands</li> <li>• Wrists</li> </ul>
4. <b>Rinse</b> your hands well under clean, running water.	
5. <b>Dry</b> your hands using a clean towel or air dry them. <ul style="list-style-type: none"> <li>• Dry hands thoroughly</li> </ul>	



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- Do not dry your hands on your clothes
- Throw paper towels in the trash bin

*Take students to location where hand washing should occur and allow students to practice, prompting them for each step.*

*Have students sing a chosen song that lasts for 20 seconds to establish the appropriate length of time for hand washing.*



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Activity	Process Notes
<p><i>Ask students about how it feels to have clean hands.</i></p> <p><i>Ask students (again) about when they should wash their hands.</i></p> <ul style="list-style-type: none"><li><i>Ask about times to wash hands at school and at home.</i></li></ul>	
<p><i>Follow-up to establish healthy habit of hand washing.</i></p>	<p><i>Take time to practice hand washing once each day at different times (e.g., before lunch, after restroom breaks, after returning from recess) for one week to reinforce good hand washing habits.</i></p> <p><i>Teachers may want to use the presentation slides one week after the original presentation, allowing students to name/describe the steps in hand washing.</i></p>



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### Tier 2 Intervention and Support Examples

Presuming schools are routinely examining their data, some students will be identified as being chronically absent (missing 10% or more school days) due to health related factors. Some of the health challenges identified in the literature are physical (i.e., asthma) while others are cognitive (i.e., anxiety, depression, school disengagement, etc.).

The examples below are within the sphere of influence of the CIS Student Support Specialist, more specifically, working as a part of an “attendance intervention” team with school nurses, social workers, psychologists, and school leadership. The most relevant strategies are: including nurses as a part of the discussion on absenteeism, facilitating on-site vaccination opportunities, ensuring students have access to preventative health care and implementing psychological approaches for anxiety- and non-anxiety based absenteeism.

**Example #1:** Some students are unable to use hand sanitizers due to allergies. One intervention or support that could be provided as part of an “attendance intervention” team would be conducting a home visit and discussing hand cleansing options with parents. In addition, you could provide them with information about local resources like allergists and other medical professionals.

#### Including School Nurses and/or Family Nurse Practitioner

Kerr, J., Price, M., Kotch, J., Willis S., Fisher, M., & Silva, S. (2012). Does contact by a family nurse practitioner decrease early school absence? *The Journal of School Nursing, 28*(1), 38-46.

**Example #2:** Unvaccinated students miss more days of school than vaccinated students. Therefore, another possible strategy could be the coordination of on-site influenza vaccinations. Working in collaboration with a public health department or hospital-based program, a school could offer free vaccinations to unvaccinated students.

#### Facilitating On-site Vaccination Opportunities

Pannaraj, P. S., Wang, H., Rivas, H., Wiryawan, H., Smit, M., Green, N., & Mascola, L. (2014). School-located influenza vaccination decreases laboratory-confirmed influenza and improves school attendance. *Clinical Infectious Diseases, 59*(3), 325-332.



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### Resources

#### Hand Washing

- Yale University. Clean Hands Posters. Free, downloadable, non-commercial use posters. Retrieve from: <https://www.flickr.com/photos/patrylnch/sets/72157622351945688>
- North Carolina Child Care Health and Safety Resource Center. Hand washing instructions poster. Retrieve from: [http://www.healthychildcarenc.org/PDFs/preschool\\_handwash\\_poster.pdf](http://www.healthychildcarenc.org/PDFs/preschool_handwash_poster.pdf)
- Arizona Emergency Information Network. Hand washing songs. Songs to sing or hum while washing hands. Retrieve from: [https://ein.az.gov/sites/default/files/hand\\_washing\\_songs.pdf](https://ein.az.gov/sites/default/files/hand_washing_songs.pdf)
- University of Nebraska-Lincoln. Hand washing poster and activity handout in English and Spanish. Retrieve from: <http://food.unl.edu/safety/handwashing-spanish>
- North Carolina Department of Public Instruction. How Lou Got the Flu (2<sup>nd</sup> grade lesson). Retrieve from: <http://www.nchealthyschools.org/docs/lessonplans/2/grade2-202.pdf>

#### Hand Sanitizing

- Ohio Department of Health. Facts: About the Use of Alcohol-based Hand Sanitizers in Ohio Schools. Retrieve from: [http://www.lcivs.com/files/forms/Hand\\_Sanitizer\\_Fact\\_Sheet.pdf](http://www.lcivs.com/files/forms/Hand_Sanitizer_Fact_Sheet.pdf)

#### Influenza

- Centers for Disease Control and Prevention (CDC). Everyday Preventive Actions That Can Help Fight Germs, Like Flu. Handout on tips for preventing the spread of germs, particularly as it relates to the spread of the flu. Download a handout at: [http://www.cdc.gov/flu/pdf/freeresources/updated/everyday\\_preventive.pdf](http://www.cdc.gov/flu/pdf/freeresources/updated/everyday_preventive.pdf)
- National Association of School Nurses. Retrieve from: <http://www.nasn.org/>

*Note: All posters, images, and activity guides identified are copyright cleared for non-commercial use.*



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### Measuring Success

#### Hand Washing

Check students' attitudes about hand washing:

- Ask students about how it feels to have clean hands.

Check students' knowledge of good hand hygiene:

- Ask students about why they should wash their hands.
- Ask about times to wash hands at school and at home.

To assess student changes in hand washing practices, teacher may want to create a roster to indicate how often and at what times students exhibit good hand washing habits:

- Number of students demonstrating good hand washing practices
- Frequency of hand washing

#### Hand Sanitizer

To assess student use of hand sanitizer in the classroom, teacher may want to create a roster to indicate how often and at what times students use the hand sanitizer:

- Number of students using hand sanitizer appropriately

#### Influenza Vaccinations

- Change in number of students who have an annual influenza vaccination (self-reported data from parents/guardians)

#### Overall Assessment of Impact

- Reduction in the number of days students are absent from school from infectious illnesses



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### Appendices

#### A. Glossary

Following are some key terms used in the Attendance Curriculum Guides.

**Average Daily Attendance (ADA):** the presence of a student on days when school is in session. A student is counted as present only when he/she is actually at school, present at another activity sponsored by the school as part of the school’s program, or personally supervised by a member of the staff. ADA is based on the sum of the number of days in attendance for all students divided by the number of days in the school month. No state allotments are based on ADA (Public Schools of North Carolina, 2014).

**Average Daily Membership (ADM):** the total number of school days within a given term – usually a school month or school year – that a student’s name is on the current roll of a class, regardless of his/her being present or absent, is the “number of days of membership” for that student. Average Daily Membership is a calculation using data from the Principal’s Monthly Report. The calculation uses the number of days in the school month and the number of Non-violation (NVIO) Membership Days (Public Schools of North Carolina, 2014).

**Chronic Absenteeism:** “typically based on the total number of days of school missed, including both excused and unexcused absences” (Balfanz and Byrnes, 2012).

**Excessively Absent:** defined in some locales as missing 20 days or more of school (Balfanz and Byrnes, 2012).

**Expulsions:** students who are expelled are to be withdrawn from school (Public Schools of North Carolina, 2014).

**Germs (pathogens):** types of microbes that can cause disease.

**Hand hygiene:** a general term that applies to routine hand washing, antiseptic hand wash, antiseptic hand rub, or surgical hand antiseptics.

**Hand sanitizer – alcohol-based:** for alcohol-based hand sanitizers, the Food and Drug Administration (FDA) (5) recommends a concentration of 60 percent to 95 percent ethanol or isopropanol, the concentration range of greatest germicidal efficacy.

**Hand washing:** the vigorous, brief rubbing together of all surfaces of lathered hands, followed by rinsing under a stream of water. Hand washing suspends microorganisms and mechanically removes them by rinsing with water. The fundamental principle of hand washing is removal, not killing.



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**Influenza:** a viral infection that attacks your respiratory system — your nose, throat and lungs.

**Lawful Absence:** when satisfactory evidence of a lawful absence is provided to the appropriate school official, the absence should be coded as lawful (Public Schools of North Carolina, 2014).

**Medically Fragile and Teacher-In-Treatment:** the 1H absence code should only be used for students who have been identified as medically fragile or for students who are enrolled at one of the six Teacher-In-Treatment sites (Public Schools of North Carolina, 2014).

**Microbes:** tiny living organisms that may or may not cause disease.

**School Refusal:** refers to student absenteeism because of (short-term or long-term) emotional stressors related to school attendance (most common occurrence is in students aged 5, 6, 10, and 11) (American Family Physician).

**Suspensions:** absence of a student which results from the suspension or expulsion of that student for misconduct may not be used for a compulsory attendance violation action (Public Schools of North Carolina, 2014).

**Truancy:** “typically defined as a certain number of or certain frequency of unexcused absences” (Balfanz and Byrnes, 2012).

**Unlawful Absences:** students who are willfully absent from school without a lawful excuse are to be considered unlawfully absent (Public Schools of North Carolina, 2014).

**Vaccine:** a product that stimulates a person’s immune system to produce immunity to a specific disease, protecting the person from that disease. Vaccines are usually administered through needle injections, but can also be administered by mouth or sprayed into the nose.

**Vaccination:** the act of introducing a vaccine into the body to produce immunity to a specific disease.



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## B. References

- American Family Physician. Retrieved from: <http://www.aafp.org/afp/2003/1015/p1555.html>
- Balfanz, R. and Byrnes, V., (2012). The Importance of Being in School: A Report on Absenteeism in the Nation's Public Schools. Baltimore, MD: Johns Hopkins University Center for Social Organization of Schools. Retrieved from: [https://ct.global.ssl.fastly.net/media/W1siZiIsIjIwMTQvMDgvMTUvMjE1dnkya3BzOF9GSU5BTENocm9uaWNBYSNlbnRlZWlzbVJlcG9ydF9NYXkxNi5wZGYiXV0/FINALChronicAbsenteeismReport\\_May16.pdf.pdf?sha=ffcb3d2b](https://ct.global.ssl.fastly.net/media/W1siZiIsIjIwMTQvMDgvMTUvMjE1dnkya3BzOF9GSU5BTENocm9uaWNBYSNlbnRlZWlzbVJlcG9ydF9NYXkxNi5wZGYiXV0/FINALChronicAbsenteeismReport_May16.pdf.pdf?sha=ffcb3d2b)
- Centers for Disease Control and Prevention (CDC). Everyday Preventive Actions That Can Help Fight Germs, Like Flu. Handout on tips for preventing the spread of germs, particularly as it relates to the spread of the flu. Download a handout at: [http://www.cdc.gov/flu/pdf/freeresources/updated/everyday\\_preventive.pdf](http://www.cdc.gov/flu/pdf/freeresources/updated/everyday_preventive.pdf)
- Kerr, J., Price, M., Kotch, J., Willis S., Fisher, M., & Silva, S. (2011). Does contact by a family nurse practitioner decrease early school absence? *The Journal of School Nursing*, 28(1); 38-46.
- Pannaraj, P. S., Wang, H., Rivas, H., Wiryawan, H., Smit, M., Green, N., & Mascola, L. (2014). School-located influenza vaccination decreases laboratory-confirmed influenza and improves school attendance. *Clinical Infectious Diseases*, 59(3), 325-332.
- Public Schools of North Carolina. School Attendance and Student Accounting Manual 2014-2015. Raleigh, NC: Department of Public Instruction, School Business Services. Retrieved from: <http://www.ncpublicschools.org/docs/fbs/accounting/manuals/sasa.pdf>
- Whitehurst, G. J. (2004, April). *Making education evidence-based: Premises, principles, pragmatics, and politics*. Evanston, IL: Northwestern University Institute for Policy Research, Distinguished Public Policy Lecture Series. Retrieved from: <http://www.northwestern.edu/ipr/events/lectures/DPPL-Whitehurst.pdf>



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**C. Research Alignment**

Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
<p>Lau, C. H., Springston, E. E., Sohn, M., Mason, I., Gadola, E., Damitz, M., &amp; Gupta, R. S. (2012). Hand hygiene instruction decreases illness-related absenteeism in elementary schools: A prospective cohort study. <i>BMC Pediatrics</i>, 12(1), 1-7.</p>	<p>Decrease illness-related absences by giving students access to hand hygiene facilities and repetitive instruction in use.</p>	<p>Two Chicago public elementary schools; classrooms were systematically assigned to an intervention or control group by grade; final sample size of 773 students.</p>	<p>Both the percent total absent days and percent illness-related absent days were significantly lower in the group receiving short instruction in addition to hand hygiene facilities during flu season, <math>p=.002</math> and <math>p&lt;.001</math> respectively.</p>	<p>Hand sanitizer and hand washing facilities were made available to all students. Dispensers of alcohol-free hand sanitizer were mounted near the doorway inside every classroom and near entrances. Posters describing when to use hand sanitizer were hung up throughout the schools. Intervention classrooms were given a protocol for hand sanitizer use and received regular instruction in hand hygiene.</p>
<p>Morton, J. L., &amp; Schultz, A. A. (2004). Healthy hands: Use of alcohol gel as an adjunct to hand-washing in elementary school children. <i>The Journal of School Nursing</i>, 20(3), 161-167.</p>	<p>Using an alcohol gel as an adjunct to hand-washing in reducing absenteeism due to infectious illness.</p>	<p>Two hundred and fifty three (253) elementary school children randomized by classroom (K-3) into an experimental or control group.</p>	<p>Sixty-nine (69) children were absent due to illness in the control group and thirty-nine children became ill while in the experimental group. Alcohol gel as an adjunct to hand-washing was shown to be effective in reducing absenteeism due to infectious illness by 43%.</p>	<p>Reminders were given to children in the experimental group during daily morning announcements. School nurse visited classrooms to reinforce hand hygiene education.</p>



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Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
<p>Pannaraj, P. S., Wang, H., Rivas, H., Wiryawan, H., Smit, M., Green, N., &amp; Mascola, L. (2014). School-located influenza vaccination decreases laboratory-confirmed influenza and improves school attendance. <i>Clinical Infectious Diseases</i>, 59(3), 325-332.</p>	<p>Decrease influenza rates and improve school attendance by school-located influenza vaccinations.</p>	<p>Eight elementary schools in Los Angeles County; 4,455 total students; 2,368 students in intervention group and 2,087 students in control group.</p>	<p>Vaccination of at least a quarter of the school population resulted in decreased influenza rates and improved school attendance. Unvaccinated children missed more school days than vaccinated children (4.3 vs 2.8 days per 100 school days, <math>p &lt; .001</math>).</p>	<p>Influenza vaccines were offered free-of-charge to all children 5 years and older who were attending intervention schools. School located vaccine clinics were held on site at each intervention school.</p>
<p>Sandora, T. J., Sih, M. C., &amp; Goldman, D. A. (2008). Reducing absenteeism from gastrointestinal and respiratory illness in elementary school students: A randomized controlled trial of an infection-control intervention. <i>Pediatrics</i>, 21(6), 1555-1562.</p>	<p>School-based cluster-randomized controlled trial. Intervention classrooms received alcohol-based hand sanitizer and wipes to disinfect classroom surfaces.</p>	<p>Two hundred and eighty five (285) students randomly assigned to control or intervention group.</p>	<p>The adjusted absenteeism rate for gastrointestinal illness was significantly lower in the intervention group compared to the control group. A multifactorial intervention including hand sanitizer and surface disinfection reduced absenteeism in elementary students.</p>	<p>Eight week period; intervention teachers given disinfecting wipes and disinfected the students' desk daily; intervention teachers also given alcohol-based sanitizer; students were instructed on proper hand hygiene techniques using the sanitizer.</p>



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Fostering a Healthier School Environment – Reducing the Spread of Infectious Illnesses

Citation	Brief Summary of Strategy	Sample Size	Impact/Evidence of Effectiveness	Implementation
<p>Tousman, S., Arnold, D., Helland, W., Roth, R., Heshelman, N., Castaneda, O., &amp; Bileto, S. (2007). Evaluation of hand washing program for 2<sup>nd</sup> graders. <i>The Journal of School Nursing</i>, 23(6), 342-248.</p>	<p>A multiple-week learner-centered hand washing program to improve hand hygiene behaviors of 2<sup>nd</sup> graders in a northern Illinois public school system.</p>	<p>Nineteen (19) second grade classes in seven schools, with a sample of 406 participants. The control group consisted of 19 first grade classes at the same seven (7) schools.</p>	<p>According to parents, 64% noticed an increase in the frequency of their child's hand washing behavior. Absenteeism rates were 34% lower during weeks 3 and 4 of the intervention. Absenteeism rates indicated a statistically significant decrease for the intervention classes compared to the control classes, <math>p=.027</math>.</p>	<p>Members of the handwashing coalition staff visited each of the 19 classrooms and implemented the hand-washing program for approx. 30 minutes. Each week the coalition staff lead an open ended discussion, a learning demonstration and activity, distribute handouts and provide a summary of key learning points/self-monitoring.</p>



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**D. Student Support Specialist Presentation Slides**

**E. Sample Lesson Plan Presentation Slides**



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