



WASH YOUR HANDS!

Resources for Schools

Developed by
Do Bugs Need Drugs?
A Community Program for Wise Use of Antibiotics

August 18, 2010

We are pleased to provide you with *Wash Your Hands! Resources for Schools*; a set of tools for school superintendents, administrators, office staff, aides, teachers, and parents to promote and facilitate handwashing in schools.

Handwashing is a basic life skill that prevents the spread of infections. Schools are ideal settings for the transmission of respiratory infections because students, teachers and staff share the same space and touch the same surfaces throughout the day.

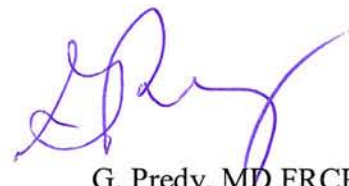
Many good hygiene practices and habits were initiated last year during the H1N1 pandemic. To prevent the spread of infections on an ongoing basis, these need to be continued and incorporated into daily routines.

Wash Your Hands! Resources for Schools was developed by the Do Bugs Need Drugs? program through a grant by Alberta Health and Wellness. We urge you to use this information in your office and to forward it to principals for uptake by staff, students, parents and others in the school community.

Yours sincerely,



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Introduction

Wash Your Hands! Resources for Schools provides information and tools for promoting handwashing and preventing the spread of infections in schools.

This resource was prepared by the Do Bugs Need Drugs? program in collaboration with Alberta Health and Wellness and Alberta Education. Do Bugs Need Drugs? is a community education program about handwashing and responsible use of antibiotics.

Wash Your Hands! Resources for Schools includes:

- Background information on handwashing, respiratory infections, soap, hand sanitizers, and cleaning agents
- Information sheets for school personnel and parents
- Articles for school newsletters
- Checklist for assessing handwashing facilities
- Solutions to common handwashing problems
- Handwashing signs
- Slide set with notes*
- Handwashing video for younger students*
- Handwashing video for older students and adults*

These materials are designed to complement the lesson plans and activities for kindergarten through grade three teachers and students, *Wash Your Hands*, an authorized student support resource of Alberta Education, 2009

Wash Your Hands! Resources for Schools has been reviewed by:

Alberta Education
Alberta Health and Wellness
Alberta Health Services
Alberta School Boards Association
College of Alberta School Superintendents
Indian and Northern Affairs Canada

Do Bugs Need Drugs? is supported by a grant from Alberta Health and Wellness to Alberta Health Services.

*Available on-line at www.dobugsneeddrugs.org/educational-resources/

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*Available on-line at www.dobugsneeddrugs.org/educational-resources

Handwashing

Handwashing Is the Best Way to Stop the Spread of Infections

Handwashing is an important life skill that protects students, teachers, administrators and others in the school community against infections. Over 80% of common infections can be spread by the hands. Both proper handwashing technique and washing at the right times contribute to good health. Handwashing is the best way to stop the spread of infections.

Hands Transfer Germs from the Environment to the Body

The hands play a central role in the transfer of germs from the environment to the body. Germs from contaminated surfaces can easily be picked up by your hands, but just having germs on your hands does not cause illness. When your hands come in contact with your eyes, nose, mouth or other mucous membranes, germs can enter the body and lead to an infection. Keeping your hands away from your face will prevent transfer of germs to the mucous membranes. Frequent and proper handwashing reduces the chance of germs getting into the body and prevents the spread of germs to others.

Respiratory Etiquette

Good respiratory etiquette will help to stop the spread of germs when you are sick. Remember to cover your nose and mouth when you sneeze or cough so that germs will not be spread into the air and onto objects in the environment. Cough into your sleeve or sneeze into a tissue to avoid contaminating your hands. If you cough or sneeze into your hands, wash as soon as possible.

Bacteria and Viruses

Germs: Bacteria and Viruses

The two most common kinds of germs that cause respiratory infections are bacteria and viruses. Most respiratory infections are viral. All colds, laryngitis and influenza and most sore throats and coughs are caused by viruses. The vast majority of cases of bronchitis (chest colds) and sinusitis are due to viruses. Ear infections are most common in young children and can be due to either bacteria or viruses. Pneumonia, which is a serious infection of the lungs and is sometimes fatal, can be caused by either bacteria or viruses.

Good Bacteria and Bad Bacteria

Although advertising would have us believe differently, not all bacteria are harmful. There are over three billion different kinds of bacteria and they make up about 60% of all the living things on earth. One study has estimated that we actually have more bacterial cells in our bodies than human cells. Most bacteria are harmless or even beneficial. Only a very few cause infections.

Use Antibiotics Wisely

Use Antibiotics Only When Really Needed

Antibiotics are medications that work against bacteria, but not against viruses. In addition, not all bacterial infections require antibiotic treatment. With the exception of pneumonia, most respiratory tract infections get better on their own, without antibiotics. Even ear and sinus infections, which may be caused by bacteria, usually clear up just as quickly without antibiotics. The Canadian Paediatric Society recommends watchful waiting for ear infections in children over the age of six months to see if the infection will go away on its own.

Although we sometimes hope that antibiotics will work against viral infections, they don't. There are no medications to cure viral infections, so it is important to protect yourself in other ways. Vaccinations against influenza offer good protection. On a daily basis, the best way to protect yourself and others is to wash your hands.

Causes of Common Respiratory Infections

Illness	Caused by		Will an antibiotic help?
	Bacteria	Viruses	
Colds	Never	Always	No
Influenza	Never	Always	No
Sore throat	Rarely	Most	Only if no cold symptoms and confirmed by a throat swab
Laryngitis	Never	Always	No
Bronchitis	Rarely	Most	Vast majority of cases will clear without an antibiotic
Sinus infection	Rarely	Most	Vast majority of cases will clear without an antibiotic
Ear infection	Some	Some	Watchful waiting recommended for many children over 6 months of age
Pneumonia	Yes	Yes	Yes, if bacterial

Remember

- Handwashing is the best way to stop the spread of infections
- Practice good respiratory etiquette
- Both bacteria and viruses can cause respiratory infections, but most are caused by viruses
- Antibiotics will work against bacterial infections but not against viruses
- To protect yourself and those around you, get an annual influenza vaccination

Use Plain Soap

Responsible Use of Antibiotics and Antibacterial Products

Antibiotic resistance is a negative medical side effect of antibiotic use. Antibiotic resistance is a genetic property of bacteria that allows them to survive and multiply, even in the presence of an antibiotic. Unnecessary use of antibiotics promotes antibiotic resistance by increasing the number of resistant bacteria in the body and in the environment. Infections that are caused by resistant bacteria are difficult to treat and are sometimes fatal.

Although antibiotic resistance is a concern for the medical community and patients, it also is an issue for consumers as there are many soaps and cleaning products on the market today that contain antibacterial agents that promote resistance.

Soaps

Use plain soap. Plain soap is just as effective as antibacterial soap in preventing illness and does not promote resistance to antibiotics. The objective of handwashing is to remove germs from the hands and rinse them away, rather than to attack all bacteria (good and bad bacteria) with antibacterial agents.

Triclosan Should Be Avoided

Triclosan is the most common antibacterial agent that is added to soaps and cleaning products.¹ Triclosan causes bacteria to become resistant to antibiotics. Avoid using or purchasing soaps that list triclosan as an ingredient as they offer no protective advantage, have the disadvantage of promoting antibiotic resistance and are usually more expensive.

¹ The United States Food and Drugs Administration ordered a review of health and safety issues associated with antibacterial products containing triclosan in April 2010.

Hand Sanitizers

Hand Sanitizers

Only alcohol-based sanitizers are recommended by the Public Health Agency of Canada and Alberta Health Services. Alcohol-based hand sanitizers kill many germs on the hands and are especially useful when soap and water are not available, such as on the playground or on field trips. Importantly, alcohol-based hand sanitizers do not promote antibacterial resistance.

However, alcohol-based hand sanitizers have several limitations. They are not a substitute for handwashing. They do not clean the hands nor do they work if the hands are greasy or dirty. Because these products are flammable and poisonous if consumed, their location in the school needs to be carefully considered. Alcohol-based hand sanitizers should not be placed near a source of heat or over a source of electricity. They are best located in areas where there is no access to soap and water. For example, it is inappropriate to place alcohol-based hand sanitizers near a sink or in the washroom.

Recommendations for Hand Hygiene Products

Hand Hygiene Product	Recommendation
Plain soap	<ul style="list-style-type: none"> • Recommended
Antibacterial soap	<ul style="list-style-type: none"> • Not recommended • The most common antibacterial ingredient is <i>triclosan</i> • Triclosan promotes antibiotic resistance, a serious medical concern • No health benefit - does not work any better than plain soap to prevent infections
Alcohol-based hand sanitizers	<ul style="list-style-type: none"> • Recommended if soap and water are not available • Must be at least 60% alcohol to be effective • Ensure alcohol (ethanol, isopropanol, n-propanol) is the only active ingredient • Should not contain triclosan • Use these guidelines when selecting hand sanitizers for school supply lists
<i>Precautions:</i> Flammable Poisonous if ingested	<ul style="list-style-type: none"> • High alcohol content makes these products flammable and poisonous if ingested • Should not be located near a source of heat or above a source of electricity • Avoid placing in unsupervised locations
Not a substitute for handwashing	<ul style="list-style-type: none"> • Best if placed in locations where handwashing is not immediately available • Inappropriate within the washroom or near a sink
Can be confused with liquid soap	<ul style="list-style-type: none"> • Pump dispensers of liquid hand soap and hand sanitizers look alike • Do not place hand sanitizer near the sink
Alcohol-free hand sanitizers	<ul style="list-style-type: none"> • Not recommended • Lack of evidence of effectiveness • Promote antibiotic resistance

Remember

- Use antibiotics and antibacterial products responsibly
- Use plain soap
- Avoid products containing triclosan
- Alcohol-based hand sanitizers are appropriate when soap and water are not available but are not a substitute for handwashing
- Non-alcohol based hand sanitizers are not recommended

Cleaning Products

When to Clean and When to Sanitize or Disinfect

Plain soaps and plain household cleaning agents are products that lift dirt, grease and microbes from the skin or environmental surfaces and allow them to be washed away. These products work by removing microbes, rather than by trying to kill them. These products do not promote antibiotic resistance.

Disinfectants are chemicals that will kill 99.99% of microbes on hard environmental surfaces. Sanitizers are less strong. They will kill microbes and bring them down to safe levels. Antiseptics are chemicals that will reduce microbial counts on the skin. The term “hand sanitizer” is a misnomer because sanitizers actually are products that are intended to be used on inanimate objects.

There are only a few specific times when environmental surfaces need to be disinfected or sanitized.² Disinfectants should be used to clean up body fluids such as blood, sputum, vomit, urine or feces. Because of the likelihood of contamination with fecal bacteria, surfaces in washrooms that are frequently touched should be disinfected or sanitized on a regular schedule. These surfaces include water taps, sinks, soap dispenser buttons/levers, hot air dryer buttons, door handles, flush levers, the lock on the inside of the stall door, toilets and urinals. Proper food handling reduces the need for extensive disinfection in food preparation areas. Specific disinfection procedures may be needed if a public health issue arises, but most of the time, simply cleaning the surface and washing away dirt, grease and microbes will prevent the spread of germs.

Disinfecting Wipes

Disinfecting wipes are intended to be used on hard, non-porous surfaces and are not for use on the skin.

Many commercial disinfecting wipes have benzalkonium chloride as the active ingredient. Read the directions carefully. For these wipes to act as disinfectants enough wipes need to be used so that the surface remains wet for at least ten minutes. Use of products containing benzalkonium chloride or other quaternary ammonium compounds (quats) is discouraged because they promote antibiotic resistance.

Remember that disinfecting is only needed in specific instances. Most of the time, cleaning with plain soap and water is best.

² Canadian Centre for Occupational Health and Safety. Sanitation and Infection Control for Cleaning Staff. Available at: http://www.ccohs.ca/oshanswers/hsprograms/cleaning_staff.html

Canadian Food Inspection Agency. Everyday Safe Food Handling Practices. Available at: <http://www.inspection.gc.ca/english/fssa/concen/tipcon/eveprae.shtml>

Good Handwashing Technique

Good handwashing technique involves first, removing germs from the hands and second, avoiding recontamination when leaving the washroom. The six steps to proper handwashing are listed below. Of these, the most common problem is failing to wash all parts of the hands, a step that should take about 20 seconds. Most people scrub with soap for only nine or ten seconds.

How to Wash Your Hands

1. Wet your hands
2. Apply soap. Use plain soap.
3. Rub hands together. It takes about 20 seconds to rub all parts of your hands:
 - Palms
 - Between your fingers
 - Backs
 - Wrists
 - Thumbs
 - Fingertips
 - Nails
4. Rinse for 10 seconds or until all the soap is gone
5. Dry your hands with a clean disposable towel
6. Use the towel to turn off the tap and let yourself out the door.

Remember to leave the washroom neat and tidy.

Note: View the adult and children's handwashing videos to see good handwashing technique. (Available on-line at: www.dobugsneeddrugs.org/schools)

Note: To see how to wash all parts of your hands (step 3), see the Soaping Up sign. The photographs show an easy way to wash your fingertips and nails.

Hand Drying

Drying with a clean disposable towel is preferable to using a hot air dryer. The friction of drying the hands with a towel removes 42% more germs than washing alone. Since germs are easily transferred onto the towel, towels should not be shared.

Importantly, paper towels provide a mechanism for turning off the tap and opening the washroom door without recontaminating the hands. If hot air dryers are the only means of drying the hands in the washroom, look for alternate solutions to turning off the taps (such as using the wrist or using a buddy system) and opening the door (such as leaving the door propped open).

Washroom Supplies and Custodial Concerns

Washrooms should be monitored regularly for soap and towels and restocked as needed. Students should be encouraged to keep the washroom neat and tidy as this will alleviate custodial concerns about misuse of washroom supplies.

When to Wash Your Hands

Hands should be washed whenever they are likely to be contaminated and before activities when they might introduce germs into the body. Here are some important times when hands should be washed:

- Before eating or preparing food
- After using the toilet or helping a child with toileting
- After blowing your nose or helping a child with a runny nose
- After handling objects that are shared with others
- After recess or coming in from outdoors
- Before inserting or removing contact lenses
- Before flossing your teeth
- Before and after attending to cuts, scrapes, burns or other breaks in the skin
- After contact with body fluids such as blood, sputum, vomit, urine or feces.

Key Messages

1. Handwashing is the best way to stop the spread of infections.
2. Bacteria and viruses are different. Antibiotics will not work against viral infections.
3. Use antibiotics and antibacterial products responsibly to prevent antibiotic resistance.

Information Sheet for School Principals

Why is Handwashing Important in Your School?

Handwashing is the best way to stop the spread of infections. Because eighty percent of common infections can be spread by the hands, frequent and proper handwashing will reduce absenteeism and keep staff and students healthy. Handwashing is an important life skill that protects the health of everyone in the school community.

Wash Your Hands! Resources for Schools is intended to promote and facilitate handwashing in schools. The following tools are included in the resource to help with this process:

Checklist

A checklist for assessing handwashing in schools lists issues that can impact handwashing by students and staff. Use this as a guide for assessing your handwashing facilities and policies. Remember that the washrooms in your school may not all be alike, so look at each one separately. Include sinks in classrooms.

Practical Solutions to Handwashing Problems

This table provides practical solutions to some of the issues that may be preventing good handwashing in school washrooms.

Information Sheets

Information sheets such as this one are also provided for office staff, lunch room aides, teachers who use objects that are shared with many others (music, computer room and gym teachers; librarians), school bus drivers, school councils and parents.

Articles for School Newsletters

Five seasonally appropriate articles are provided that cover respiratory infections, handwashing, soaps, cleaning agents and hand sanitizers.

Slide Set with Notes

A short slide set with notes that can be viewed privately or presented to staff or student councils is available on-line. No medical expertise is required to give this presentation. (www.dobugsneeddrugs.org/schools)

Handwashing Videos

A handwashing video for younger students and another handwashing video for older students and adults are available for viewing on-line or to download. The videos show the steps of proper handwashing and how to avoid recontaminating the hands when leaving the washroom. (www.dobugsneeddrugs.org/schools)

Handwashing Sign

A handwashing sign showing the six steps of good handwashing is provided. The sign is suitable for photocopying.

Soaping Up Resource Sheet

This resource includes photographs showing how to wash all surfaces of the hands.

Information Sheet for School Principals (cont.)

What Can You Do?

Be a good role model; let students and staff observe you washing your hands.

Make time for students to wash their hands during the day, such as when they come in from recess and before eating. Provide help and support for lunch room aides so that students can wash their hands before eating.

Remind students, teachers and staff to wash their hands with public address announcements. Post signs in hallways, classrooms, washrooms and staff areas.

Distribute this manual and Information Sheets to staff. Ensure school personnel understand the importance of handwashing in preventing infections. Encourage responsible use of antibiotics and antibacterial products among school personnel including custodial staff. Ask staff to set good examples for students.

Show the handwashing videos to students and staff. Repeat throughout the year.

Include the provided newsletter articles in your school newsletters.

Organize a Lunch and Learn session for school staff. Use the slide set provided and show the handwashing video.

Inform Kindergarten through Grade Three teachers of the lesson plans and activities that are available at www.dobugsneeddrugs.org/schools (authorized for use in Alberta schools by Alberta Education).

Work with your School Council to establish good handwashing policies and procedures in your school.

Encourage staff to get an annual influenza vaccination.

Discuss with custodial staff the need for handwashing supplies to always be available. Help custodial staff understand why handwashing is important for them too.

Use soap and cleaning products in your school that do not promote antibiotic resistance.

If hand sanitizers are used at your school, make sure they contain alcohol as the only active ingredient and that bottles and dispensers are appropriately located to reduce the risk of fire and poisoning. If hand sanitizers are on your school supply list, provide parents with instructions about product selection.

When renovating, consider ways to make proper handwashing easier in your school washrooms.

www.dobugsneeddrugs.org

Handwashing & Hygiene in the School Office

The school office is Information Central. Many students, teachers, parents and visitors come through the school office every day. Good handwashing and office hygiene will protect you and keep the school office from becoming a hub for the spread of respiratory infections.

What Can You Do?

Set a good example for students, teachers and coworkers.
Make handwashing a regular habit.

Use plain soap.

Include handwashing reminders in public address announcements.

Post handwashing signs in the school office, hallways, classrooms, washrooms and staff areas.

View and review the handwashing video and slide set with notes.

Provide information for parents about preventing respiratory infections, handwashing and hand hygiene products. If hand sanitizers are on the school supply list, provide instructions about product selection.

Hand sanitizers should:

Contain at least 60% alcohol

Have alcohol as the only active ingredient

Be located away from sources of heat or electricity

Not be left unsupervised

Not be placed near a sink as they can be mistaken for soap

Keep office surfaces such as telephones, desks, pens, etc. clean by wiping them down with a plain cleaning agent or soap and water.

There is no need to disinfect office surfaces. Do not use disinfecting wipes or antibacterial cleaning agents. Do not use disinfecting wipes for your hands.

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Handwashing in the Lunch Room

Wash Your Hands Before You Eat

Throughout the day hands pick up germs from other people and from objects in the environment. When your hands come in contact with your nose, mouth or eyes, germs are transferred to your body and can cause infections. One of the most important times to wash your hands is before you eat. Handwashing is the best way to stop the spread of infections.

What Can You Do?

Remind students to wash their hands before eating.

Post signs in lunch areas that show the steps of proper handwashing.

Ask your principal, other administrative staff and teachers to help promote handwashing before lunch.

Reinforce proper handwashing by showing the handwashing video to students as often as needed.

Ask students to use the buddy system if spring type taps prevent good handwashing.

Remind students to leave the washroom neat and tidy.

Be a good role model. Always wash your hands before eating. Use good technique.

View the Handwashing in Schools slide set and notes.

Educate new lunchroom aides by having them view the handwashing video and slide set.

www.dobugsneeddrugs.org

Hygiene in Music Rooms, Computer Rooms, Gymnasiums and Libraries

Why is Handwashing Important in Your Classroom?

In schools and elsewhere, surfaces that are touched by many people are places where germs can be transferred. Special attention is needed in music and computer rooms, libraries and gymnasiums because equipment in these areas is handled by many people every day. Students and staff need to be aware of the “invisible” germs on these surfaces and to practice responsible behaviours that will protect themselves and others from illness. Remember to wash your hands after handling shared objects. Keep your hands away from your face to prevent transfer of germs to the nose, mouth and eyes.

What Can You Do?

Clean frequently handled equipment and surfaces as often as possible.

Use cleaning products that do not promote antibiotic resistance.

Use plain cleaning agents or soap and water. Do not use disinfecting wipes or antibacterial cleaning agents.

Ask students to help with cleaning.

Be especially diligent in wiping down equipment when a student is visibly ill.

Label musical instruments with student's names to avoid sharing.

Do not share mouthpieces.

Provide time for students to wash their hands after class.

Display handwashing signs.

Send home information sheets regarding expectations for hygiene and use of instruments, equipment, etc.

Review the handwashing video with students and staff.

Review the slide set and notes with staff.

www.dobugsneeddrugs.org

Information Sheet for Bus Drivers

Why is Handwashing Important?

School buses are high traffic areas; handrails, seats and door handles are touched by many students every day. Shared surfaces are places where germs can be transferred from one person to another. The hands are very efficient at picking up germs from surfaces in the environment, but you don't get sick just by having germs on your hands. When the hands come in contact with the nose, mouth or eyes, germs can enter the body to cause illness. Keeping surfaces and hands clean stops the spread of infections.

What Can You Do?

Establish a daily routine for cleaning handrails, seats and door handles and other frequently touched surfaces.

Use cleaning products that do not promote antibiotic resistance.

Disinfecting or sanitizing is not needed unless directed by public health.

Alcohol-based hand sanitizers will kill many germs on the hands without promoting antibiotic resistance.

Make sure alcohol content is at least 60% and that alcohol is the only active ingredient.

Keep alcohol-based hand sanitizers in a safe place as they are flammable and poisonous if consumed.

Display respiratory etiquette and handwashing signs on buses as reminders to students and drivers.

Have tissues and a trash bag available for student use. Empty trash bags frequently.

Encourage students to use good respiratory etiquette.

Get an annual influenza vaccination. Encourage co-workers to do the same. Ask your employer to have a staff influenza vaccination clinic.

Have a staff education day using the slide set and notes and the handwashing video.

Develop an orientation program for new staff about handwashing and hygiene on buses.

www.dobugsneeddrugs.org

Information Sheet for School Councils

Why is Handwashing Important in Your School?

Handwashing is the best way to stop the spread of infections. Handwashing is a basic life skill that will protect the health of students and their families at school and at home.

For students to wash their hands properly, it needs to be easy for them to do. Although school washrooms often have barriers to good handwashing, many of these problems can be easily addressed. Discussion among parents, staff and students can identify barriers and solve most of the issues preventing good handwashing. School councils can be instrumental in developing policies or recommendations regarding handwashing, hand sanitizers, soap and towels. School councils working together with principals and teachers can make changes to improve the health of the school community.

A checklist for assessing handwashing facilities in your school washrooms and a table of practical solutions to handwashing problems are included in this manual. Using these tools as a guide, your school council can facilitate handwashing in your school.

What Can You Do?

View the handwashing video and slide set with notes at a Council meeting.

Evaluate the handwashing facilities in your student and staff washrooms using the checklist provided.

Work with school administration and staff to solve barriers to proper handwashing.

Hold an information session for parents.

Inform school staff about the Kindergarten - Grade 3 resource, authorized for use in Alberta schools by Alberta Education, available on the Do Bugs Need Drugs? website.

Work with school administration and teachers to develop handwashing policies or recommendations.

www.dobugsneeddrugs.org

Handwashing at Home

Throughout the day hands pick up germs from other people and from objects in the environment. When your hands come in contact with your nose, mouth or eyes, germs are transferred to your body and can cause infections. At school, at home and in the community, handwashing is the best way to stop the spread of infections.

What Can You Do?

Ask your children if they have seen the handwashing video in school.

Teach your children the appropriate times to wash their hands.

Hang signs showing the steps of handwashing in bathrooms and in other areas where there are sinks as reminders.

Encourage your children to leave the bathroom neat and tidy at home, as well as in school and in other public places.

Be a good role model. Know when to wash your hands. Use good handwashing technique.

Review the adult handwashing video and the children's handwashing video.

Educate other members of your family, as well as friends and neighbors.

Use plain soap. Plain soap works just as well as antibacterial soap to prevent infections without the negative medical side effect of promoting antibiotic resistance.

Be an informed consumer. Know which soaps, hand sanitizers and cleaning agents are best for you and your family.

www.dobugsneeddrugs.org

When to Wash Your Hands

- Before eating or preparing food
- After using the toilet or helping a child with toileting
- After blowing your nose or helping a child with a runny nose
- After handling objects that are shared with others
- After recess or coming in from outdoors
- Before inserting or removing contact lenses
- Before flossing your teeth
- Before and after attending to cuts, scrapes, burns or other breaks in the skin
- After contact with body fluids such as blood, sputum, vomit, urine or feces.

Handwashing at Home (cont.)

Hand Hygiene Product	Recommendation
Plain soap	<ul style="list-style-type: none"> • Recommended
Antibacterial soap	<ul style="list-style-type: none"> • Not recommended • The most common antibacterial ingredient is <i>triclosan</i> • Triclosan promotes antibiotic resistance, a serious medical concern • No health benefit - does not work any better than plain soap to prevent infections
Alcohol-based hand sanitizers	<ul style="list-style-type: none"> • Recommended if soap and water are not available • Must be at least 60% alcohol to be effective • Ensure alcohol (ethanol, isopropanol, n-propanol) is the only active ingredient • Should not contain triclosan • Use this information when selecting hand sanitizers for school supply lists
<p><i>Precautions:</i></p> <p>Flammable</p> <p>Poisonous if ingested</p> <p>Not a substitute for handwashing</p> <p>Can be confused with liquid soap</p>	<ul style="list-style-type: none"> • High alcohol content makes these products flammable and poisonous if ingested • Should not be located near a source of heat or above a source of electricity • Avoid placing in unsupervised locations
	<ul style="list-style-type: none"> • Best if placed in locations where handwashing is not immediately available • Inappropriate within the washroom or near a sink
	<ul style="list-style-type: none"> • Pump dispensers of liquid hand soap and hand sanitizers look alike • Do not place hand sanitizer near the sink
Alcohol-free hand sanitizers	<ul style="list-style-type: none"> • Not recommended • Lack of evidence of effectiveness • Promote antibiotic resistance

How to Wash Your Hands

1. Wet your hands.
2. Apply soap. Use plain soap.
3. Rub hands together. It takes about 20 seconds to rub all parts of your hands including: palms, between your fingers, backs, wrists, thumbs fingertips and nails.
4. Rinse for 10 seconds or until all the soap is gone.
5. Dry your hands with a clean disposable towel.
6. Use the towel to turn off the tap and let yourself out the door.

Remember to leave the washroom neat and tidy.

Respiratory Infections and the Start of School

When school starts in the fall most students are healthy, but by the end of October many students and their families are coping with runny noses, coughs and sore throats.

Preventing Respiratory Infections

Most respiratory infections are viral. All colds and influenza and most sore throats and coughs are caused by viruses. There are no medications that will cure viral infections, so prevention is very important. To prevent respiratory infections and to stop the spread of infections:

- Wash your hands. Handwashing is the best way to stop the spread of infections.
- Get an annual influenza immunization to protect yourself and others around you.
- Keep your hands away from your face so that germs on your hands are not transferred to your eyes, nose and mouth.
- Cover your coughs and sneezes to prevent spreading germs into the air and onto surfaces in the environment.

How to Wash Your Hands

The principles of good handwashing are to remove germs from your hands and to leave the washroom without recontaminating your hands. It's easy. Here are the steps to good handwashing:

1. Wet your hands
2. Apply soap. Use plain soap.
3. Rub hands together. It takes about 20 seconds to rub all parts of your hands:
 - Palms
 - Between your fingers
 - Backs
 - Wrists
 - Thumbs
 - Fingertips
 - Nails
4. Rinse for 10 seconds or until all the soap is gone
5. Dry your hands with a clean disposable towel
6. Use the towel to turn off the tap and let yourself out the door

Remember to leave the washroom neat and tidy.

What's Making You Sick?

Most of us know that respiratory infections are caused by germs, but do you know whether it's bacteria or viruses that are causing the illness? Check what you know with the following quiz.

Quiz: What causes these infections?

Illness	Caused by	
	Bacteria	Viruses
Colds		
Influenza		
Laryngitis		
Bronchitis (Chest Cold)		
Sore Throat		
Sinus Infection		
Ear Infection		
Pneumonia		

Answers

- Colds, influenza, and laryngitis are always viral.
- Bronchitis (chest cold) and sore throats are almost always caused by viruses.
- Sinus infections and ear infections can be either viral or bacterial. They most often follow a viral infection like a cold or influenza.
- Pneumonia, which is the most serious of all these infections, can be caused by either viruses or bacteria.

If you didn't answer the quiz correctly, you're not alone. Here are some common misconceptions.

Misconception: Symptoms lasting more than a week mean the infection is bacterial.

Facts: Viral respiratory infections can last for more than a few days. The runny nose and cough that come with a cold can go on for more than two weeks. Bronchitis can last for three weeks or longer.

Misconception: Green nasal discharge indicates a bacterial infection.

Facts: The green color that appears in nasal discharge or phlegm is part of normal recovery from any respiratory infection. It results from clearing inflammation from the respiratory passages and occurs both with bacterial and viral infections.

Misconception: Bronchitis is a bacterial infection.

Facts: Bronchitis is almost always viral. The chest cough and coloured discharge comes from a viral infection of the large airways leading to the lungs.

Treatment and Prevention

Knowing which kind of germ is causing a respiratory infection determines the best treatment and prevention. Antibiotics are medications that work against bacteria, but not against viruses. In addition, not all bacterial infections need antibiotics. With the exception of pneumonia, most respiratory tract infections get better just as quickly on their own. Even ear and sinus infections, which can be bacterial, may not require antibiotic treatment.

To prevent respiratory infections: wash your hands, keep your hands away from your face, cough into your sleeve and sneeze into a tissue.

Newsletter Article: January - February

Handwashing is the Best Way to Stop the Spread of Infections

Reminders to wash your hands can hardly be avoided during influenza season, but how do you know that handwashing really stops the spread of infections?

Handwashing Works!

Dr. Margaret Ryan, a physician with the United States Navy, ordered naval recruits stationed in San Diego, California to wash their hands at five specific times during the day. *Results?* 45% fewer colds and other respiratory infections after the handwashing regimen was put in place.

More Evidence that Handwashing Works!

In a large population-based study in Karachi, Pakistan, squatter settlements were divided into three groups. One group received regular soap, the second group was given antibacterial soap and the third group did not receive any soap. *Results?* The groups that received soap had significantly fewer infections: 50% reduction in cases of pneumonia, 53% fewer cases of diarrhea and 34% fewer cases of impetigo (a skin infection). Importantly, there was no advantage to using antibacterial soap. Plain soap was just as effective in preventing infections.

When to Wash Your Hands

The hands are very efficient at picking up germs from the environment, but you don't get sick just by having germs on your hands (unless you have a cut or scrape). Germs get into the body through the pink linings of the eyes, nose or mouth or other mucous membranes. Handwashing reduces the chance that germs will be transferred to your body to cause an infection.

Wash your hands whenever they are likely to be contaminated and whenever they are likely to transfer germs to the body. This includes:

- Before eating or preparing food
- After using the toilet or helping a child with toileting
- After blowing your nose or helping a child with a runny nose
- After handling objects that are shared with others
- After recess or coming in from outdoors
- Before inserting or removing contact lenses
- Before flossing your teeth
- Before and after attending to cuts, scrapes, burns or other breaks in the skin
- After contact with body fluids such as blood, sputum, vomit, urine or feces.

WASH YOUR HANDS!



Newsletter Article: March - April

Handwashing, Soaps, Hand Sanitizers and Cleaning Agents

Soap

The purpose of handwashing is to wash away the germs that cause infections as well as the dirt and grime that attract germs. Use plain soap. Plain soap works just as well as antibacterial soap to prevent infections and does not have the negative medical side effect of promoting antibiotic resistance. Infections that are caused by antibiotic resistant bacteria are difficult to cure and are sometimes fatal.

Good Bacteria and Bad Bacteria

Despite what television and magazine advertising would have us believe, not all germs are bad. If all of the living things on the face of the earth were gathered together, over 60% would be bacteria. There are more than 3 billion kinds of bacteria. Most are harmless and many are beneficial. They help with digestion and the immune system and are an integral part of our environment. There is no need to sterilize your home, office or other living spaces. Cleaning is sufficient. You are not doing surgery in your kitchen!

Antibacterial Products

Triclosan is the most common antibacterial ingredient that is added to soaps and cleaning agents. Triclosan promotes antibiotic resistance. In 2000 there were 23 products on the market that contained triclosan. Now there are thousands, ranging from soaps to window cleaners to lipstick. Read product labels carefully and avoid those that list triclosan as an ingredient.

Hand Sanitizers

Hand sanitizers are a quick way to kill germs on the hands. Only alcohol-based sanitizers are recommended by the Public Health Agency of Canada and Alberta Health Services. These products need to contain at least 60% alcohol to be effective. Importantly alcohol-based hand sanitizers kill both bacteria and viruses and do not promote antibiotic resistance. They are especially useful when it is difficult to get to a sink, such as in the car or in a park or playground.

Some caution is needed with these products because they are both flammable and poisonous if ingested. They should not be placed near a source of heat or left unsupervised. Further, some alcohol-based hand sanitizers also contain triclosan, so read labels carefully. Last, these products do not clean the hands nor do they work if the hands are greasy or dirty. Alcohol-based hand sanitizers are not a substitute for handwashing.

WASH YOUR HANDS! USE PLAIN SOAP!

Newsletter Article: May - June

Avoiding Contamination in Public Washrooms

Handwashing is the best way to stop the spread of infections. However, good handwashing technique is useless if the hands become re-contaminated when leaving the washroom.

Use the paper towel to turn off the tap and to open the washroom door. Simply placing the wastebasket near the door has been found to encourage this practice. If the wastebasket cannot be moved, take the towel with you and discard it in the trash in the hallway, office or classroom.

Use good handbag hygiene! Floors in public washrooms are pretty dirty. Up to one million bacteria per square inch have been found on the bottom of women's purses that had been on the floor in public washrooms. Avoid putting your handbag on the washroom floor, and if you do, don't touch the bottom of your purse, or put it on your kitchen counter when you go home!

Which washroom surfaces are most contaminated? Scientists from the University of Arizona examined surfaces in public washrooms to see where germs were most often hiding. Highly contaminated surfaces included the lock on the inside of the cubicle door, the urinal flush lever, and the hot water tap. Contamination was heavy because people touch these surfaces before being able to wash their hands.

Imagine where germs may be hiding in the washroom. Think about what you can do to avoid re-contaminating your hands on the way out the door!

WASH YOUR HANDS!

HOW TO WASH YOUR HANDS



1 WET YOUR HANDS



2 APPLY SOAP



3 RUB HANDS TOGETHER



4 RINSE YOUR HANDS



5 DRY YOUR HANDS



6 TURN OFF TAP WITH PAPER TOWEL

LEAVE THE WASHROOM NEAT AND TIDY



Soaping Up



1



4



2



5



3



6

1. Palms
2. Between fingers
3. Backs
4. Wrists
5. Thumbs
6. Fingertips
7. Nails



7

CHECKLIST for evaluating handwashing resources in your school

In the washroom, are students able to (1) wash properly and (2) avoid recontamination?

Item	Hygiene principle	Observation	Possible solutions
Soap	<ul style="list-style-type: none"> • Soap is needed to wash germs from the hands. Water alone does not work. 	Available? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Plain soap	<ul style="list-style-type: none"> • Plain soap works just as well as antibacterial soap to prevent illness. • Plain soap does not contain triclosan, which has the negative medical side effect of promoting antibiotic resistance. 	Soap does not contain triclosan? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Paper towels	<ul style="list-style-type: none"> • Paper towels remove 42% more germs than washing alone. • Paper towels are necessary to avoid recontamination if taps are not automatic and if hands are needed to open the washroom door. 	Paper towel dispenser? <input type="checkbox"/> Yes <input type="checkbox"/> No Paper towels available? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Hot air dryer	<ul style="list-style-type: none"> • Hands are left warm and moist, ideal conditions for the re-growth of organisms. • If paper towels are needed to avoid recontamination, hot air dryers are not recommended. 	Hot air dryer is the only way to dry hands? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Taps	<ul style="list-style-type: none"> • Hands can be recontaminated when turning off manual taps. • Push-type taps require repeated contact as they do not stay on long enough for proper handwashing. 	Manual taps? <input type="checkbox"/> Yes <input type="checkbox"/> No Push-type taps? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Warm water	<ul style="list-style-type: none"> • Warm water works better than cold water to remove dirt, grime, germs and soap. • Cold water is a deterrent to good handwashing. 	Available? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Taps accessible	<ul style="list-style-type: none"> • Handwashing is important for all students. 	Step or stool available if needed? <input type="checkbox"/> Yes <input type="checkbox"/> No Water faucet attachment blocks access to taps? <input type="checkbox"/> Yes <input type="checkbox"/> No	



CHECKLIST (cont.)

In the washroom, are students able to (1) wash properly and (2) avoid recontamination?

Item	Hygiene principle	Observation	Possible solutions
Washroom door	<ul style="list-style-type: none"> Hands can be recontaminated by touching the washroom door when exiting. 	Door must be touched to exit? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Waste can outside the door	<ul style="list-style-type: none"> Placing the waste can near or outside the washroom door encourages using a paper towel to open the door on exiting. 	Waste can near or outside door? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Signs in washrooms	<ul style="list-style-type: none"> Handwashing signs are good reminders about the importance of handwashing. 	School washrooms have handwashing signs and reminders? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Handwashing recommendations or policy	<ul style="list-style-type: none"> Written policies or recommendations about handwashing help everyone at the school to understand the importance of proper handwashing in preventing illness. 	School has written recommendations or policy about handwashing for: Students <input type="checkbox"/> Yes <input type="checkbox"/> No Teachers <input type="checkbox"/> Yes <input type="checkbox"/> No Staff <input type="checkbox"/> Yes <input type="checkbox"/> No Lunch room aides <input type="checkbox"/> Yes <input type="checkbox"/> No Music teachers <input type="checkbox"/> Yes <input type="checkbox"/> No Computer room staff <input type="checkbox"/> Yes <input type="checkbox"/> No Gym teachers <input type="checkbox"/> Yes <input type="checkbox"/> No Librarians <input type="checkbox"/> Yes <input type="checkbox"/> No Custodial staff <input type="checkbox"/> Yes <input type="checkbox"/> No	
School personnel are positive role models	<ul style="list-style-type: none"> School personnel know the basics of how and when to wash both to protect themselves and to set a good example. 	School personnel have seen a handwashing video or demonstration? <input type="checkbox"/> Yes <input type="checkbox"/> No	
K-Gr 3, teachers aware of resources	<ul style="list-style-type: none"> The kindergarten-grade 3 teachers in your school are aware of the authorized resources for teaching handwashing to students 	Teachers aware of resource? <input type="checkbox"/> Yes <input type="checkbox"/> No	



PRACTICAL SOLUTIONS TO HANDWASHING PROBLEMS

Problem	Hygiene Principle	Solution
Soap or paper towels not available	Handwashing by students, teachers and staff is the best way to stop the spread of infections in schools.	Inform custodial staff and/or principal. Suggest that the school administration hold an information session for custodial staff about the importance of handwashing. Handwashing protects custodial staff too.
Taps go off automatically and water does not run long enough	Water needs to run long enough to rinse off soap and germs.	Have students wash hands with a buddy so they can assist each other with the tap. Students should use a paper towel to push in the tap if they have already washed their hands.
Warm water not available	Cold water is a deterrent to handwashing.	Discuss with school administration. If it is not possible to have warm water, use cold. Cold water is less comfortable but will work (with soap) to remove germs from the hands.
Children cannot reach the taps or sink	Handwashing is important for all children.	Provide a stool or step that does not tip.
Need to conserve water. Taps should not be left running.	Good handwashing technique includes using a paper towel to turn off the taps. This prevents recontamination of the hands from dirty taps.	Suggest that students get their paper towel before washing their hands so that it is available when they need to turn off the taps. The towel can be tucked under the arm or into a pocket until it is needed.
Paper towel dispenser is far away from the sink		
Paper towel dispenser has a lever or button	Hands can be recontaminated by touching the lever or button to dispense a paper towel.	Show students how to use an elbow or forearm to dispense the towel or suggest they get the paper towel before washing their hands.

PRACTICAL SOLUTIONS TO HANDWASHING PROBLEMS (CONT.)

Problem	Hygiene Principle	Solution
Wastebasket is not near the door	Hands can be recontaminated by touching the washroom door or handle. Good handwashing technique includes using the paper towel to open the washroom door. To avoid making a mess, it's best to have the wastebasket near the door.	Move the wastebasket close to the door or prop open the door. If neither are possible, suggest that students take the towel with them and throw it away in the classroom.
Handwashing takes too much time	Handwashing prevents illness and reduces absenteeism. In the long run it saves time.	Establish routine times for students to wash their hands. Before lunch and after recess are ideal. Teach good handwashing technique and remove barriers so that students become proficient.
Custodial staff concerned about the mess in the washroom	Washrooms should be neat and tidy.	Reinforce the final message of good handwashing with the students to properly throw away their paper towel in the wastebasket.
Don't know if antibacterial soap is in use	Plain soap does not promote antibiotic resistance and is equally effective in preventing the spread of germs.	Ask about the soap that is used in your school. Read the ingredients. If the soap contains "triclosan" it is antibacterial soap. Antibacterial soap has negative medical side effects and does not work any better than plain soap. If antibacterial soap is in use, suggest switching to plain soap. Plain soap is generally less expensive.