Disinfecting and Sanitizing

Group care settings such as child cares, preschools, and school-age programs provide ideal conditions for spreading germs that cause illness. Caregivers use cleaning, sanitizing, and disinfecting to help reduce the number of germs in the environment. Due to some recent changes made by the bleach industry, now is a good time to review your child care’s cleaning and sanitizing/disinfecting practices and make sure the products and procedures you are using are doing the job right.

What three steps are required?
It is important to follow all three steps in order to get rid of germs on surfaces:
1) Clean the surface with plain soap and water.
2) Rinse the soap off the surface with plain water.
3) Sanitize or disinfect the surface.

How did bleach solutions recently change?
In the past, almost all bleach that one could find on store shelves was between 5.25% and 6.0% sodium hypochlorite (the active ingredient in bleach). All the recipes that had previously been published for child cares to make bleach water solutions assumed a concentration of 5.25% to 6.0% bleach. Last year, many bleach manufacturers started making a “concentrated” bleach formula containing 8.25% sodium hypochlorite. There are also bottles of a much weaker bleach solution being sold on store shelves, with a concentration of 2.75% to 3% sodium hypochlorite. Because there are so many different concentrations of bleach, there also need to be different recipes for mixing up bleach and water solutions for sanitizing and disinfecting. The recipe you use will depend on the concentration of bleach you have.

It is critical to look at the bleach bottle label to determine which concentration you have. You will need to find the percent sodium hypochlorite, which should look something similar to this:
If you cannot find a concentration of sodium hypochlorite listed on the label, you should not use that particular product. If you must use that product, you can call the manufacturer and inquire what the percent of sodium hypochlorite is.

Make sure that the bleach you use is plain, unscented bleach. Do not use bleach that contains a fragrance or is marketed as “splashless” or “color-safe.”

Once you have figured out what the concentration is, you can use the chart on page 4 to mix up your solutions. This chart was developed by a workgroup led by the Washington State Department of Health. At this point, final approval of the chart is still pending, and may change, but this is the best information we have to date. Disinfection of non-porous, non-food contact surfaces should be done using a bleach solution that measures between 600 and 800 ppm (parts per million). Sanitizing should be done using a solution that measures between 50 and 200 ppm. Using test strips is a great way to make sure you have the correct concentration.

Besides bleach, are there other products I can use?

If you use a disinfecting or sanitizing product other than bleach and water you need to have approval from your DEL Health Specialist. Talk to your licensor before switching products. There are other alternatives to bleach and water and each has benefits and hazards. Whatever product you choose to use, you should find out what health hazards may be associated with that product. You should check if it is corrosive or can cause skin reactions, if it causes or triggers asthma, if it contains endocrine disrupters (which affect the body’s hormones and can have reproductive effects), or other problems.

- **Hydrogen peroxide products** — many newer products contain accelerated hydrogen peroxide. Many agencies recommend these products as they degrade to oxygen and water. They are non-corrosive in the diluted form, are odorless, and generally do not require rinsing.
- **Quaternary ammonia products** — also called quats, these products are stable in storage and easy to find. They kill a wide variety of bacteria but are not as effective against many viruses. Some have been associated with asthma or are suspected endocrine disrupters. Dwell time varies, but can be as long as 10 minutes and may require a final rinse. An example of a chemical name for a quat is alkyl dimethyl benzyl ammonium chloride.
- **Phenols** — these are usually found in ready-to-use forms. Look for chemical names ending in “-phenol,” “benzophenone-3,” “oxybenzone,” “bisphenol-A,” or “tricolsan.” They work well on dirtier surfaces. Some have been shown to cause cancer and are hazardous to skin and eyes. Triclosan is a suspected endocrine disrupter.
- **Thymol** — these products are made of botanical oils. They are non-corrosive and no rising is usually required. It has a long shelf life, but often requires a 10 minute contact time. Long-term health effects are not well known.

Look for products labeled “free and clear,” phthalate-free, fragrance-free, and dye-free when possible. Find a product that does not have a strong odor. Non-aerosol products are preferable. Also look at the signal words on the label and find a product that does not have the word “danger” listed on the label. For sanitizers that will be used on a food contact surface, make sure that the label states “approved for use on food contact surfaces.”

For more information, see the Green Cleaning, Sanitizing, and Disinfecting Toolkit for Early Care and Education, developed by the University of California, San Francisco School of Nursing’s Institute for Health & Aging, University of California, Berkeley’s Center for Environmental Research and Children’s Health, and Informed Green Solutions, with support from the California Department of Pesticide Regulation. This toolkit is available online at [http://cerch.org/research-programs/child-care/greencleaningtoolkit/](http://cerch.org/research-programs/child-care/greencleaningtoolkit/) or through the Environmental Protection Agency (EPA) at [http://www2.epa.gov/childcare/information-child-care-providers-about-green-cleaning](http://www2.epa.gov/childcare/information-child-care-providers-about-green-cleaning).
Many cleaning chemicals are sold in a concentrated form and need to be diluted with water before they are used. The concentrated product is more likely to cause injury than the diluted product. The concentrated product generally has stronger fumes than the diluted product. This puts the individual mixing the concentrated product at higher risk of exposure. The fumes are also released into the environment where the chemical is being diluted. An example of a concentrated product that needs to be diluted is household bleach. To reduce the risk of harm:

► Read the label instructions and the safety guidance.
► Label all bottles of chemicals. Also label spray bottles containing just water.
► Only dilute chemicals when children are not present. This prevents children from coming in contact with the concentrated product or the strongest fumes.
► Always use the right amount – never just guess at how much to add. For example, if the recipe states to use 1 teaspoon of the chemical in a quart of water, use a measuring spoon, do not use the cap nor rely on just pouring a “small amount.”
► Use personal protective equipment when indicated on the product label. Examples include gloves, goggles or other eye protection, and aprons.
► Try to use pre-mixed products or products that don’t require personal protective equipment. You will need to read the label.
► Use a product dispensing system which is designed to dilute the product for you.
► Don’t work with concentrated products in every room. Choose only one place in your child care to mix chemicals, ideally in a room not used for children, such as the utility room.
► Never mix different chemicals together. Avoid using different types of products on the same surfaces. Some products can combine to form toxic gases.
► Have a Safety Data Sheet on file for every chemical used at the child care.
► Mix chemicals that are corrosive or strong irritants only in an area with a washing station (below).

Emergency Eyewashes

The Washington State Department of Labor and Industries requires an employer to provide an emergency washing facility “[w]hen there is potential for an employee’s eyes and/or major portions of the body to contact corrosives, strong irritants, or toxic chemicals.” (Directive 13.00, WAC 296-800-150, First Aid) (Washington State Dept of L&I, 2011)

To determine if a chemical requires an emergency washing facility, you would need to have a copy of the Safety Data Sheet (SDS) and/or label. If the SDS specifically states the material is corrosive, a strong irritant, or is toxic through the skin, a washing-station would be required. Statements on the SDS may include “may cause burns to skin or eyes” or “do not get in eyes” or “may cause severe eye irritation.” Another thing to look for is a skin notation symbol on the SDS.

The emergency washing facility must be located so that it takes no more than 10 seconds to reach and the travel distance is no more than 50 feet from where the chemical is being used (WAC 296-800-15030). An eyewash should have continuous water flow for at least 15 minutes. A bottle of eyewash solution is not sufficient. There are eyewashes that can easily be attached to an existing faucet (examples shown below).

An example of a chemical for which an eyewash would be required is undiluted bleach. The word CORROSIVE appears on the bottle.
Disinfecting and Sanitizing with Bleach
Guidelines for Mixing Bleach Solutions for Child Care and Similar Environments

Preparation Tips

- Prepare a fresh bleach solution each day in a well-ventilated area that is separate from children.
- Label bottles of bleach solution with contents, ratio, and date mixed.
- Use cool water. Always add bleach to cool water, NOT water to bleach.
- Wear gloves and eye protection.
- Prepare solution in an area with an eye wash.

Disinfecting Solutions

For use on diaper change tables, hand washing sinks, bathrooms (including toilet bowls, toilet seats, training rings, soap dispensers, potty chairs), door and cabinet handles, etc.

<table>
<thead>
<tr>
<th></th>
<th>2.75% Bleach</th>
<th>5.25-6.25% Bleach</th>
<th>8.25% Bleach</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gallon</td>
<td>1/3 cup + 1 Tablespoon</td>
<td>3 Tablespoons</td>
<td>2 Tablespoons</td>
</tr>
<tr>
<td>1 Quart</td>
<td>1 ½ Tablespoons</td>
<td>2 ¼ teaspoons</td>
<td>1 ½ teaspoons</td>
</tr>
</tbody>
</table>

Sanitizing Solutions

For use on eating utensils, food use contact surfaces, mixed use tables, high chair trays, crib frames and mattresses, toys, pacifiers, floors, sleep mats, etc.

<table>
<thead>
<tr>
<th></th>
<th>2.75% Bleach</th>
<th>5.25-6.25% Bleach</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1 Gallon</td>
<td>1 Tablespoon</td>
<td>2 teaspoons</td>
<td>1 teaspoon</td>
</tr>
<tr>
<td>1 Quart</td>
<td>1 teaspoon</td>
<td>½ teaspoon</td>
<td>¼ teaspoon</td>
</tr>
</tbody>
</table>

Disinfection of non-porous non-food contact surfaces can be achieved with 600 parts per million (ppm) of chlorine bleach. To make measuring easier, the strengths listed in this table represent approximately 600-800 ppm bleach for disinfecting, and approximately 100 ppm for sanitizing. Chlorine test strips with a measuring range of 0-800 ppm or higher can also be used to determine the strength of the solution.

Contact your local health jurisdiction for further instructions on cleaning and disinfecting if specific disease or organisms are identified as causing illness in your program.

Use only plain unscented bleach that lists the percent (%) strength on the manufacturer’s label. Read the label on the bleach bottle to determine the bleach strength. For example, Sodium Hypochlorite...6.25% or 8.25%.

Steps to Follow

- Clean the surface with soap and water before disinfecting or sanitizing.
- Rinse with clean water and dry with paper towel.
- Apply chlorine bleach and water solution to the entire area to be disinfected or sanitized.
- Air dry for at least 2 minutes.

*NOTE: This chart is a draft and is subject to change following final approval from the Washington State Department of Health.

This chart was created by the Disinfection Workgroup led by the Washington State Department of Health. Workgroup members consist of staff from the Department of Early Learning, Snohomish Health District, Local Hazardous Waste Management Program in King County, Washington State Department of Ecology, the Coalition for Safety and Health in Early Learning, and the Washington State Department of Health. Date: September 22, 2014.
Enteroviruses and Enterovirus D68
Although the word enterovirus may sound scary, it is just another word for a type of virus that causes symptoms similar to the common cold. Enterovirus D68 (EVD-68), however, is a specific enterovirus that can lead to more serious respiratory symptoms, especially in children with asthma or breathing problems.

What are the symptoms of enterovirus D-68?
EV-D68 can cause mild to severe respiratory illness. Mild symptoms may include fever, runny nose, sneezing, cough, and body and muscle aches. Severe symptoms may include wheezing and difficulty breathing.

How is enterovirus D-68 spread?
EV-D68 spreads like a cold virus – through contact with respiratory secretions from coughs and sneezes of infected people.

How to reduce the risk of infection in child cares:
To reduce the risk of children in your care getting sick from enterovirus D-68, do the same things you would do to prevent colds or other respiratory illnesses. Remind children to:
- Wash hands often, especially after toileting and diaper changing and before eating
- Avoid touching their eyes, nose, and mouth with their hands
- Avoid kissing, hugging, and sharing cups or eating utensils

Remind staff to:
- Clean and sanitize frequently touched surfaces, such as toys, desks, and doorknobs
- Clean and disinfect diaper changing tables after each use
- Wash infant hands often, especially after diapering and before eating

Learn more about enteroviruses, including EV-D68 by clicking on the following links:
News release from Public Health - Seattle-King County (9/19/14) or Haga clic aquí para información en español

Ebola
The Ebola illness has been in the news recently and it has caused many of us to be fearful. Although there is much concern over this disease spreading, it is important to remember that:
- The general public’s risk of getting an Ebola infection in this country is extremely low.
- There are no confirmed cases of Ebola in Washington State.
- Public Health has taken many steps to keep the public safe.

To help ease the tension over this disease, get to know the facts about Ebola. The Washington State Department of Health’s website has information on Ebola, including a fact sheet about Ebola, available in several languages, that you can share with families.

Learn more about Ebola by clicking on the following links:
CDC (Centers for Disease Control and Prevention)
Washington State Department of Health Ebola Current Situation
Influenza
The 2014-2015 influenza season (flu) is here. The flu virus can easily spread from one person to the next, and can cause serious illness that could result in hospitalization or even death. To best protect against the flu, the American Academy of Pediatrics recommends all children ages six months and older get vaccinated. Encourage all child care staff, children, and parents to get the flu vaccine so they are protected and don’t spread the virus to others.

Vaccine developers make a guess as to which flu viruses will be circulating each year. Some years the vaccine matches better than others. Even if a vaccine is not a “good match,” the vaccine can still reduce the severity or length of the illness or your chance of getting sick.

The Washington State Department of Health has flu resources, including a flu vaccine finder and general flu information.

Learn More with a Free Class!
A FREE one hour online class sponsored by the American Academy of Pediatrics' PediaLink center can be accessed at: www.healthychildcare.org/flu.html. You can print out your certificate and complete a continuing education proposal form to receive STARS credit.

The course is titled: "Influenza Prevention & Control: Strategies for Early Education & Child Care"

Pertussis (Whooping Cough)
Pertussis is a disease that usually starts out with cold-like symptoms and can lead to severe coughing spells and even death. California has recently declared another pertussis epidemic! This means that Washington State could see an increase in cases over the next year. Because our state has experienced a pertussis epidemic recently (during 2011 to 2012), we know how hard it can affect the most vulnerable population—our infants and children. They may not be old enough to be immunized and depend on the rest of us to keep the pertussis-causing bacteria away from them.

What can you do to prepare if pertussis comes out our way again? Here are some suggestions:

⇒ Get the Tdap vaccine. According to the Communicable Disease Center, the best way to prevent pertussis is to get vaccinated. Talk with your health care provider if you have questions. Immunization is especially important for those who care for infants as babies are most at risk for severe complications and death.

⇒ Spread the word. Encourage your child care families to talk to their medical providers about getting vaccinated for pertussis. Everyone should consider the vaccine, especially expectant mothers who should have a Tdap booster with each pregnancy!

⇒ Know what to do. Pertussis is a reportable disease according to child care laws. Therefore, if you are aware of a case of pertussis in your child care facility, whether it be an employee or a child, notify your health department right away. Their staff will provide guidance so it doesn’t spread.

⇒ Stay informed. Educate yourself about pertussis, how to protect yourself and those in your child care. By being informed you can also be a key resource for your child care families. For more information read CDC Pertussis Fast Facts.

Learn More with a Free Class!
A FREE 2 STARS hour distance learning class is available in November 2015 from Snohomish Health District. Register today! See page 9 for details.

The course is titled: “Pertussis: What Child Care Providers Should Know”
There is nothing sweeter than to see a child’s face light up when they are in contact with an animal. Child care affords many ways to expose children to the wonders of living creatures.

Examples of ways that children sometimes come in contact with animals in child care are:

- Visiting a petting zoo or family farm
- Having a guest presenter bring in animals
- Watching baby chicks hatch and grow in the classroom
- Having a chickens or other farm animals on the child care property
- Having children bring their pets in for show and tell
- Having caged pets, such as birds, hamsters, or fish
- Having a resident animal such as a cat or dog

Any one of these circumstances provides children with both entertainment and great educational opportunities. It is very important to keep in mind, however, that animals, as healthy as they may be, carry with them germs that may be harmful, especially to children under the age of 5 years. Some choices for animal interactions are safer than others. For this reason, child care providers need to be careful when considering an animal experience for the children in their care.

**Something to keep in mind...**

The Department of Early Learning has guidelines to keep the health of the children a priority. One of these regulations requires child care providers to have the following when animals are anywhere on the premises:

- An animal or pet policy
- Written notification to parents regarding the health risks associated with the animals, and
- Signed documentation that the parents understand these risks

To read more about the rules click on the links below or refer to:

- Center WAC 170-295-5170
- Home WAC 170-296A-4800 to 4900
- School-age WAC 170-297-4800 to 4900

**We can help you...**

Contact the Communicable Disease Outreach team

- with questions regarding having pets or animals in your child care.
- for assistance in writing a pet policy for your pet or writing a visiting pet or animal experience policy.
- to get a free large laminated copy of the Animal poster (see page 8).
- to sign up for a Free STARS class – Animals in Child Care available in April 2015.
Animals ... 
... and Your Child’s Health

Amphibians and Reptiles
including frogs, toads, newts, lizards, salamanders, turtles, tortoises, and snakes

Birds
including parrots, parakeets, canaries, cockateils, finches, chickens, ducks, and geese

Cats
including adult cats and kittens

Dogs
including adult dogs and puppies

Exotic Animals
including sugar gliders, hedgehogs, wallabies, wolf-dog hybrids, and wild animals

Farm Animals
including cows, horses, ponies, pigs, goats, sheep, llamas, and alpacas

Guinea Pigs and Pocket Pets
including ferrets, gerbils, hamsters, rats, mice, rabbits, and chinchillas

Animals carry germs, even when they appear healthy. Germs can be carried on the animal’s hair, mouth, manure, drinking water, or enclosure.

There are at least 30 different diseases that can be passed from animals to humans, including:
- Campylobacter
- Cryptosporidia
- E. coli (STEC)
- Giardia
- Leptospirosis
- Psittacosis
- Rabies
- Ringworm
- Salmonella
- Toxoplasmosis
- Worms

Children are at a higher risk of serious illness. To help prevent illness when interacting with animals or visiting petting zoos:
- Wash hands with soap and running water after touching animal or their environment; make sure petting zoos have adequate handwashing facilities
- Know the health risks associated with the particular animal
- Keep animal environments clean and remove waste regularly
- Clean animal cages and equipment away from child areas or food preparation areas
- Take pets to the vet regularly and ensure they have the necessary vaccines
- Make sure children are well supervised around animals
- Keep children away from areas where animals relieve themselves
- Make sure children keep their hands and objects (such as pacifiers) away from their mouths while interacting with animals
- Don’t kiss animals
- Avoid certain animals in child care or households with children under the age of 5 years, including chicks, reptiles, amphibians, and ducklings
- Do not bring strollers, toys, pacifiers, or baby equipment into animal enclosures.
- Use extra precautions when going to petting zoos

For more information, contact Snohomish Health District Communicable Disease Outreach program at 425.339.5278 or visit www.snohd.org.
**Distance Learning Classes**

Snohomish Health District provides distance learning classes for Snohomish County child care providers on a variety of disease and illness prevention topics. These STARS-approved classes are being offered at **NO COST** this year. They are designed to take about 2 hours to complete. On the class start date you will receive the curriculum via email. You will have until the end of the month to complete and return the test and evaluation (either via email or US mail). Once the test has been reviewed, you will receive a certificate via email. Further detailed instructions will be provided when you register.

**How Do I Register?** It’s simple! Email your name and the course or courses you wish to take to the appropriate email address below. Can’t decide? Register for all of them and decide after you’ve seen the material!

**NOTES:** While it is acceptable to repeat classes previously taken, we strongly discourage repeating a class within a 3 year period and encourage taking a wide variety of classes. Due to staffing and time constraints, tests and assignments will be processed for providers who either live or work in SNOHOMISH COUNTY ONLY. Thank you for your understanding.

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**2015 Communicable Disease Class Schedule**

<table>
<thead>
<tr>
<th>Start date</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 1</td>
<td>Disease Prevention for Infant and Toddler Care</td>
</tr>
<tr>
<td>Feb 2</td>
<td>Preventing Reportable Illnesses</td>
</tr>
<tr>
<td>Mar 2</td>
<td>Disaster Preparedness for Child Cares</td>
</tr>
<tr>
<td>Apr 1</td>
<td>Preventing Diseases from Animals in Child Care Settings</td>
</tr>
<tr>
<td>May 1</td>
<td>Cleaning and Sanitizing in Child Cares</td>
</tr>
<tr>
<td>Jun 1</td>
<td>Summertime Illness Prevention</td>
</tr>
<tr>
<td>Jul 1</td>
<td>Immunization Tracking</td>
</tr>
<tr>
<td>Aug 3</td>
<td>Teaching Illness Prevention to Young Children</td>
</tr>
<tr>
<td>Sep 1</td>
<td>Preschool Illness Prevention Basics</td>
</tr>
<tr>
<td>Oct 1</td>
<td>Pandemic Flu Preparedness</td>
</tr>
<tr>
<td>Nov 2</td>
<td>Pertussis: What Child Care Providers Should Know</td>
</tr>
<tr>
<td>Dec 1</td>
<td>Medication Management for Child Care</td>
</tr>
</tbody>
</table>

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**2015 Healthy Communities Class Schedule**

<table>
<thead>
<tr>
<th>Start date</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 2</td>
<td>Promoting Health by Reducing Screen Time</td>
</tr>
<tr>
<td>Apr 1</td>
<td>5-2-1-0 Child Care!</td>
</tr>
<tr>
<td>Jul 1</td>
<td>Cavity Free Kids</td>
</tr>
<tr>
<td>Sep 1</td>
<td>Providing Healthy Whole Foods on a Budget</td>
</tr>
<tr>
<td>Dec 1</td>
<td>Taking Care of You: Provider Wellness</td>
</tr>
</tbody>
</table>

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**Call or Email Us!**

Main line
425.339.5278
childcarehealth@snohd.org

Public Health Nurse
Alba Suárez
425.339.5228
asuarez@snohd.org

Environmental Health Specialist
Micha Horn
425.339.8712
mhorn@snohd.org

We are available by phone or to visit your child care. We can help with:
- Reportable Disease Control
- Outbreak Investigation
- Illness Prevention Advice
- Exclusion Policies
- Safe Food Preparation
- Cleaning and Sanitizing
- Pet Policies
- Handwashing Practices

To notify the Snohomish Health District of a reportable illness, call 425.339.5278